

SCIAMACHY Operations Concept III. Instrument States and Onboard Tables (PFM)

PO-TN-DLR-SH-0001/3 Issue 5, Rev. 0 15th October 2003

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Change Record

Issue	Rev.	Date	Page	Description of Change
Draft		15.November 95	all	New document
1	0	30 November 95		Incorporation of comments provided by IfE, FSS-TPD-SRON, Dornier, DARA
2	0	25 July 96	all	update of measurement state parameters and addition of calibration state properties
3	0	30 January 99	all	major modifications to contents and parameter tables
				measurement parameter tables depicted with EEPROM-version & updated SW- version due to NCRs and DCRs
				engineering parameter tables included
3	1	30 May 01	See detailed change sheet	Implementation of all DCR's issued until March 2001, correction of faulty entries and
				editorial changes
3	2	22 July 01	See detailed change sheet	Implementation of DR-SCIA-0002DO/01 and TN117 iss.4
3	3	30 November 01	See detailed change sheet	Final implementation of TN117 iss.5 incl. state duration for ID59&61,. changed state duration for ID47&51,
3	4	09 January 02	See detailed change sheet	Final implementation of TN117 iss.5 for all Scanner basic positions of ASM UNUSED
4	0	20 March 03	all	Implementation of 'Final Flight' definitions
5	0	15 October 2003	all	OCR's and major edditorial rework

Signatures

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approved:	M.Gottwald	DLR-IMF-AP	15.10.03	



Change description for Iss.3 rev.1

Page affected	Reason for change	Description of change
v	Identification of changes	New table
10	Table adapted to SW 22.004	State summaries for ID 48;52;62 changed
13	editorial	Text supplemented with explanations
14	Tracing of implementation of DCR's	New table
17	Correction of range	Range for relative Scan Profile Factor now =-128 +127
38 & 39	editorial	Doubled tables removed
56	Correction of EEPROM table entry	Value corrected at ID 56 & 57 in phase 2 for elevation basic scan profile identifier to '5'
60	Correction of EEPROM table entry	Value corrected at ID 61 in phase 2 for duration of phase to '00010000'
61	editorial	Change marking at ID 61 in phase 2 for duration of phase removed
70 to 73	Table appearance	Swap sequence of detector channels (see headers: '2b; 2a')
74	editorial	Character set for unit PET now symbol > = usec
84	editorial	Ref. to TN-SCIA_1000FO/117 included
86	Correction of EEPROM table entry	Values forID61 in timing columns changed
88	editorial	DCR-list amended (DR-SCIA-0076DO/97 in ICU_SW V.2.03)
90 to 96	Correction of EEPROM table entries	Exchange of EEPROM tables (DR-SCIA-0076DO/97 in ICU_SW V.2.03
104	editorial	Character set for unit angle now symbol $> = \mu rad \& \pi$
104	Correction of range	Range for Scan Rate now =-0,0327628 to +0,0327627
104	editorial	DCR-list amended
106	Correction of EEPROM table entries	Column Elevation Basic Scan Position exchanged
108	editorial	Character set for unit angle now symbol $> = \mu rad \& \pi$
108	Correction of range	Range for Acceleration now =-327628 to +327627
116	Table appearance	Swap sequence of detector channels (see headers: '2b; 2a')
118	editorial	DCR-list amended
124	Correction of EEPROM table entries	Cluster index 19 and 20 corrected
125	editorial	Change marking Cluster index 19 and 20 removed
128	editorial	Note: number of entries displayed is '53'
140	editorial	DCR-list amended
141	editorial	Inhibit Monitoring table: DCR-list amended
157		Table 6.3: new limits for fault ID 105; 106, 112 implemented
	only partly implemented	in RAM-table
167;171;173	DR_SCIA_0009DO/99	Table 5.4; 10,4; 14.4: fault ID 161 disabled in RAM-table
197	editorial	DCR-list supplemented by DR_SCIA_0004DO/00
207	DR_SCIA_0004DO/00	Fault ID 398 & 399: 2 parameters changed value to = '2'
217	DR_SCIA_0004DO/00	Fault ID 795: 1 parameter changed value to = '9'
223	editorial	Note added & DCR-list supplemented by DR_SCIA_0008DO/99 & by DR_SCIA_0001DO/01
225	DR_SCIA_0008DO/99 DR_SCIA_0001DO/01	SF Quad. Thresh. A to = '00165'; B to = '00045' Enc. Zero Offset A: AZ to = '-1,887788'; ELV to = '-0,335696'
228	editorial	Note added & DCR-list supplemented by DR_SCIA_0011DO/98 & by DR_SCIA_0003DO/99
231	DR_SCIA_0003DO/99	Setpoint temp. 1 to = '-11,00'; Sensor_Gain_factor 1 to = '-1,41'
234	editorial	Descriptive text updated
262	editorial	DCR-list supplemented by DR_SCIA_0114DO/97
265	DR_SCIA_0114DO/97	ENABLE_SYNC & TIME_CODE: new fault ID's added
272	editorial	Descriptive text updated



Page affected	Reason for change	Description of change
273 to 278	Table appearance	Swap sequence of detector channels (see headers: '2b; 2a')
278	Value format	Sun_table: channel 2b & 2a PET now = '0,3125'
279	Correction for RAM_version	SLS-table corrected for DR_SCIA_0015DO/98
294	Value correction	Swath- end of line 1: 'scan speed 16°/sec.'
322	Editorial	ILOS: Descriptive text changed

Change description for Iss.3 rev.2

Page affected	Reason for change	Description of change
vi	Identification of changes	Table supplemented to cover iss.3 rev.2
14	Tracing of implementation of DCR's	Table supplemented to cover iss.3 rev.2
223	Tracing of implementation of DCR's	DR-SCIA-0002DO/01 added
225	Implementation of DR-SCIA-	Parameters for alpha0 encoder zero offset changed
	0002DO/01	Parameter values for alignment errors inserted

Change description for Iss.3 rev.3

Page affected	Reason for change	Description of change
vi	Identification of changes	Table supplemented to cover iss.3 rev.3
10	Implementation of changed state duration in table 1	DUR changed for ID 47; 51; 56;59;61
14	Tracing of implementation of DCR's	Table supplemented to cover iss.3 rev.3
51;53;57;59; 61	Implementation of changed state duration	Duration of measurement single phases changed for ID 47; 51; 56;59;61 in §5.1.1
84	Tracing of implementation of DCR's	TN-SCIA-1000FO/117 iss.5 added DCN_SCIA_301101_DLR-IMF added
87	Implementation of changed state duration	SDPU Duration, WM & State Duration changed for ID 47; 51; 56;59;61 in §5.1.5
102	Tracing of implementation of DCR's	TN-SCIA-1000FO/117 iss.5 added
105	TN-SCIA-1000FO/117 iss.5	ASM basic profile 0 changed
275	Implementation of changed state duration	SDPU Duration, WM & State Duration changed for ID 47; 51; 56;59;61 in §A1.3
290	Editorial correction	µrad instead of mrad
291	TN-SCIA-1000FO/117 iss.5	ASM basic profile 0 changed
312;315;318 -,320	Implementation of changed state duration	State Duration changed for ID 47; 51; 56;59;61 in annex A.2

Change description for Iss.3 rev.4

Page affected	Reason for change	Description of change
vi	Identification of changes	Table supplemented to cover iss.3 rev.4
102	Tracing of implementation of DCR's	TN-SCIA-1000FO/117 iss.5 added
105	TN-SCIA-1000FO/117 iss.5	ASM basic profile 1, 4, 10, 11, 12 basic position changed
291	TN-SCIA-1000FO/117 iss.5	ASM basic profile 1, 4, 10, 11, 12 basic position changed



Change description for Iss.4 rev.0

Page affected	Reason for change	Description of change
document	New issue	Implementation of 'Final-Flight'- settings

Change description for Iss.5 rev.0

Page affected	Reason for change	Description of change
document	New issue	Implementation of OCR's and major editorial rework



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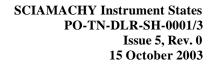
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Abbreviations List

AO Announcement of Opportunity

AOP Announcement of Opportunity Provider
ASAR Advanced Synthetic Aperture Radar
CTI Configuration Table Interface
DCR Documentation Change Request
DMOP Detailed Mission Operations Plan

DSS Dornier Satellitensysteme

EEPROM Electrical Erasable Programmable Read Only Memory

ENVISAT European Environmental Satellite

ESA European Space Agency

ESOC European Space Operations Centre
ESTEC European Space Technology Centre
FOCC Flight Operations Control Centre
FOS Flight Operations Segment

GM Global Mission HK Housekeeping

HLOP High Level Operations Plan
ICD Interface Control Document
ICU Instrument Control Unit
IFOV Instantaneous Field of View
IOM Instrument Operations Manual
IST Integrated System Team
LTM Long-Term Monitoring

MCMD Macrocommand

MERIS Medium Resolution Imaging Spectrometer

MMS Matra Marconi Space
NCR Non Conformance Report
OCR Operation Change Request

OLTM Operational Long-Term Monitoring

PDCC Payload Data Control Centre
PDS Payload Data Segment
PEP Payload Exploitation Plan
PET Pixel Exposure Time
PFM Protoflight Model

PMTC Power Mechanism and Thermal Control Unit

PPF Polar Platform

RAM Random Access Memory RD Reference Document

RDMOP Restituted Detailed Mission Operations Plan

ROP Reference Operations Plan

RTCS Relative Time Command Sequence

SCIAMACHY Scanning Imaging Absorption Spectrometer for Atmospheric Chartography

SIRD SCIAMACHY Instrument Requirements Document

SJT SCIAMACHY Joint Team SLS Spectral Line Source

SO&C Sun Occultation & Calibration

SOST SCIAMACHY Operations Support Team

SPEVAL Spacecraft Evaluation STM Short-Term Monitoring

S/W Software TC Telecommand

TCFOV Total Clear Field of View







TM Telemetry
TN Technical Note
WLS White Light Source



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1 Scope and Purpose of the Document

This Technical Note (TN) is the third volume in the trilogy of the SCIAMACHY Operation Concept TNs describing the basic knowledge about SCIAMACHY operations planning. It served prior to launch as input to the development of the ENVISAT ground segment, in particular to those systems that are required for mission planning and timelining. During in-flight operations this TN is the repository to trace the configuration of the measurement state definitions. In that respect, the TN is strongly related to the other two TNs which outline the concept of mission scenarios (SCIAMACHY Operations Concept: I. Mission Scenarios, PO-TN-DLR-SH-0001/1) and timeline generation (SCIAMACHY Operations Concept: II. Timeline Generation Rules and Reference Timelines, PO-TN-DLR-SH-0001/2). Although each individual TN can be treated as a separate document, the full picture of the operations concept can only be obtained by dealing with all three TNs.

The 5th issue of the TN is prepared based on the parameter settings as defined for the implementation of the 'FINAL-FLIGHT'-states and subsequent corrections. These parameter settings reflect a set of state parameters based on the evaluation of measurements executed during the SODAP and CAL/VAL-phase of SCIAMACHY in 2002 and the issue of some OCR's between December 2002 and October 2003. The presently defined states and sets of parameters reflect the knowledge base of the instrument performance and operation at time of issue of this document in compliance with the scientific requirements. This onboard version of the parameter settings differs greatly from the EEPROM-version in nearly every respect resulting in a very large number of changes.

Also the present Issue 5 Rev. 0 of this TN representing the 'FINAL-FLIGHT'-states will further undergo the iterative process of optimising instrument measurement states and state parameters, which will continue throughout the life of SCIAMACHY. The involved parties will continue to use the established procedures for implementation and configuration control for updates of parameters, whenever these are required from a scientific or technical point of view. This issue is not addressed here but is covered in several dedicated interface documents issued by ESA and SCIAMACHY project management.

Issue 5 of this TN, which provides the state definitions for final flight states and instrument engineering parameter settings, differs from issue 4 mainly in the following areas

- update/redefinition of measurement and calibration/monitoring states to reflect the instrument status at time of issue of this TN
- inclusion of all OCR's issued
- high number of corrections of editorial nature

Note: in this issue the comparison between the final EEPROM-version ICU_SW V.2.03 and the present status of the inflight RAM is presented. In the preface of each parameter table in chapters 5 to 7 reference is given only to changes initiated via OCR after the definition of the first 'Final-Flight'-configuration. Chapter 8 shows references to all documents, which initiated updates to engineering parameter tables.



2 Reference Documents

- RD 1 Instrument Operation Manual, DSS/FS, MA-SCIA-0000DO/01, Issue F
- RD 2 SCIAMACHY Operations Concept: I. Mission Scenarios, DLR-DFD, PO-TN-DLR-SH-0002/1, Issue 3 Rev. 0, 15 October 2001
- RD 3 SCIAMACHY Operations Concept: II. Timeline Generation Rules and Reference Timelines, DLR-DFD, PO-TN-DLR-SH-0001/2, Issue 3 Rev. 0, 31 October 2001
- RD 4 SCIAMACHY Scientific Requirements, University of Bremen/DARA, PO-RS-DAR-SH-0002, Issue Draft 1,
- RD 5 SCIAMACHY Instrument Requirements Document, DARA, PO-RS-DAR-EP-0001, Issue 3 Rev 1, 12 December 1995
- RD 6 PMTC/Scanner Algorithm Parameters, Dornier, TN-SCIA-0000DO/13 Issue C, 21 December1999
- RD 7 PMTC/Scanner Operation and Commanding, Dornier, TN-SCIA-0000DO/10 Issue B, 22 December 2001
- RD 8 SCIAMACHY Operations Concept and Control Facilities within ESA/ESOC, ESA, PO-TN-ESA-GS-0263, Issue 1, Rev. 0, April 1995
- RD 9 Instrument Design Description, Dornier, MM-SCIA-0028DO/93, 10 December 1993
- RD 10 Description of the Operational Concept of SCIAMACHY, Dornier, TN-SCIA-0000DO/01, 15 December 1993
- RD 11 SCIAMACHY Scientific Requirements for Calibration and Characterisation, SRON, Issue Draft 3, 3 April 1995
- RD 12 SCIAMACHY Calibration Plan, FSS-TPD-SRON, PL-SCIA-10000TP/022, Issue 1, 24 July 1995
- RD 13 Optical Assembly Requirements and Constraints for In-Flight Operation and Calibration, TN-SCIA-1000FO/117
- RD 14 [R 12] State Definition Dokument, Dornier, Handout, 19 September 1995
- RD 15 SCIAMACHY In-Flight Calibration and Monitoring Operation, States, and Timelines, SRON-SCIA-MD-IFCM, Issue 2, 12 February 1996
- RD 16 SCIAMACHY In-Flight Calibration and Monitoring Operation, States, and Timelines, SRON-SCIA-MD-IFCM, Issue 3, change pages, 5 March 1996
- RD 17 SCIAMACHY In-Flight Calibration and Monitoring Concept, SRON-SCIA-MD-CALCONC, Issue 1, 2 May 1996
- RD 18 SCIAMACHY PETs, INTs and DURs for calibration states, SRON Fax, SRON-EOS-MD-FAX-96/011, 17 April 1996
- RD 19 SCIAMACHY State & Cluster Definition for Nadir & Limb states, IfE Fax, IFE-FAX-240496A-HB, 24 April 1996



- RD 20 SCIAMACHY State & Cluster Definition for Nadir & Limb states, IfE Fax, IFE-FAX-030596A-HB, 3 May 1996
- RD 21 SCIAMACHY Cluster Definition & Data Rate Optimization, IfE fax, IFE-FAX-100596A-HB, 10 May 1996
- RD 22 SCIAMACHY State list & Coadding Tables/PET, IfE fax, IFE-FAX-130696A-JF, 30 May 1996
- RD 23 SCIAMACHY State list & Coadding Tables/PET, IfE fax, IFE-FAX-130696A-JF, 13 June 1996
- RD 24 Minutes of Parameter Freezing for Final Flight States no. II, PO-MN-DAR-SH-0189, 25 July 2001
- RD 25 SCIAMACHY Operations Concept Update, PO-TN-DLR-SH-0011, Issue 1, 30 June 2001



3 Timeline Execution and Instrument States

Instrument states are the smallest building block in the frame of operations timelining. The basic rules how to use these building blocks when generating sequences of instrument activities are listed in the TN about timeline generation rules (SCIAMACHY Operations Concept: II. Timeline Generation Rules and Reference Timelines, PO-TN-DLR-SH-0001/2). In summary, the state definitions have to obey the following boundary conditions

- maximum number of states is 70
- states are defined by sets of parameters
- states are controlled by Relative Time Command Sequences (RTCSs)
- states can be modified by macrocommands (MCMDs)

This TN will provide the information on the currently defined states, i.e. the assignment of state identifiers to specific measurement categories and specific parameters. The corresponding parameter tables are maintained under configuration control by SOST. Any modifications present and in future to the parameters or even state definitions follow defined procedures. Fig. 1 and 2 depict the logic flow between various types of tables when executing a timeline. Shaded boxes in fig. 1 indicate the corresponding tables presented in this TN. For the hatched boxes, the general layout of the tables is given. In fig. 2 the relation between the tables is shown for a specific case in more detail. Each table serves a specific function (see also chapter 5). The table functions are as follows.

A timeline is started by a *START_TIMELINE* MCMD. This MCMD enters the RTCS Table where, after the corresponding RTCS for the start of the timeline has run to completion, the identifier of the instrument_timeline is transferred to the

⇒ TIMELINE INDEX Table:

The identifier of the instrument_timeline is correlated with the start index for the instrument_timeline in the TIMELINE table. The TIMELINE INDEX table has 63 entries (identifiers from 1 to 63) corresponding to the maximum number of instrument_timelines to be stored onboard.

⇒ TIMELINE Table:

The start index of the instrument_timeline defines the location of the instrument_timeline in the TIMELINE table. The TIMELINE table has 4096 entries, i.e. the sum of all entries for all 63 instrument_timelines must not exceed this number. Each instrument_timeline ends with an END OF TIMELINE entry. Note that the END OF TIMELINE entry counts like a separate state entry in an instrument_timeline. The identifiers of the states in the sequence of an instrument_timeline are listed sequentially in the TIMELINE table with the first state being found at the start index.

⇒ STATE RTCS INDEX Table:

For each state identifier from the TIMELINE table, the STATE RTCS INDEX table provides the start index of the RTCS associated with that state. The RTCS INDEX table has 70 entries, corresponding to the maximum number of states. The RTCS start index is transferred to the RTCS table and the state is executed.

⇒ RTCS Table:

Each RTCS is listed in the RTCS table with its sequence of primitive commands. A total of 1000 primitive commands can be stored. The RTCS start index defines the location where the first primitive command to execute the RTCS (i.e. the state) can be found.

<u>Note</u>: There are two types of RTCS: NORMAL RTCS (e.g. *STR_TML*) and STATE RTCS (STT_01-STT_15). All NORMAL RTCS are designed such that only one Primitive Command is executed at any given point in time. STATE RTCS are designed such that only one Primitive Command is executed in each of the three processors ICU, PMTC and SDPU at any given point in time. Hence



not more than three Primitive Commands can be executed simultaneously. This concept allows to shorten the execution time of STATE RTCS when preparing a measurement or when cleaning up after measurement. The execution of a state is controlled only by one particular STATE RTCS (see table 2) and by parameters, defined in various STATE Parameter and COMMON Parameter tables.

⇒ STATE Parameter and COMMON Parameter Tables:

These tables contain the information relevant for the execution of the state. The parameters can be grouped into different classes according to their functional purpose (see also fig. 4 in chapter 5). Note that only a fraction of the COMMON Parameters will be described in the TN in detail, i.e. those that have a direct impact on STATE Parameter tables.

After the execution of the state (end of the corresponding RTCS), the ID of the next state in the instrument_timeline is read from the TIMELINE table and the sequence TIMELINE table - RTCS INDEX table - RTCS table (with state execution) occurs again. This loop is executed until the END OF TIMELINE entry at the end of the instrument_timeline is reached. Control is then returned to outside the instrument_timeline execution chain and a new instrument_timeline, if required within an orbit_timeline, can be started.

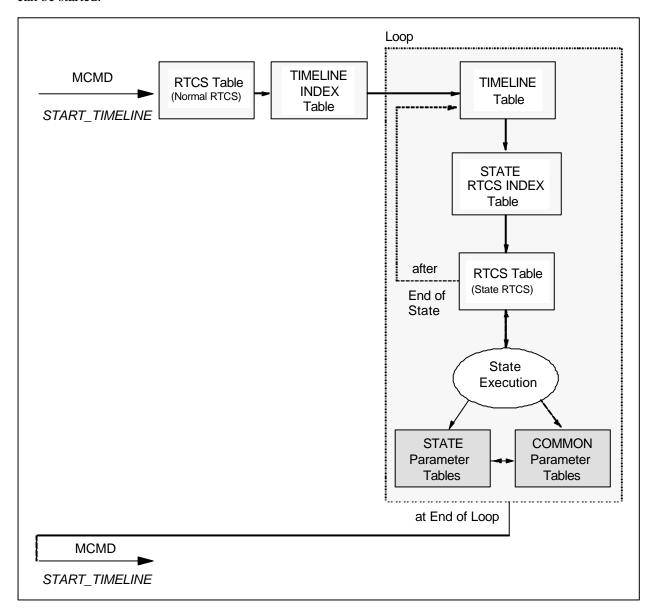


Figure 1: Timeline Execution - General Flow



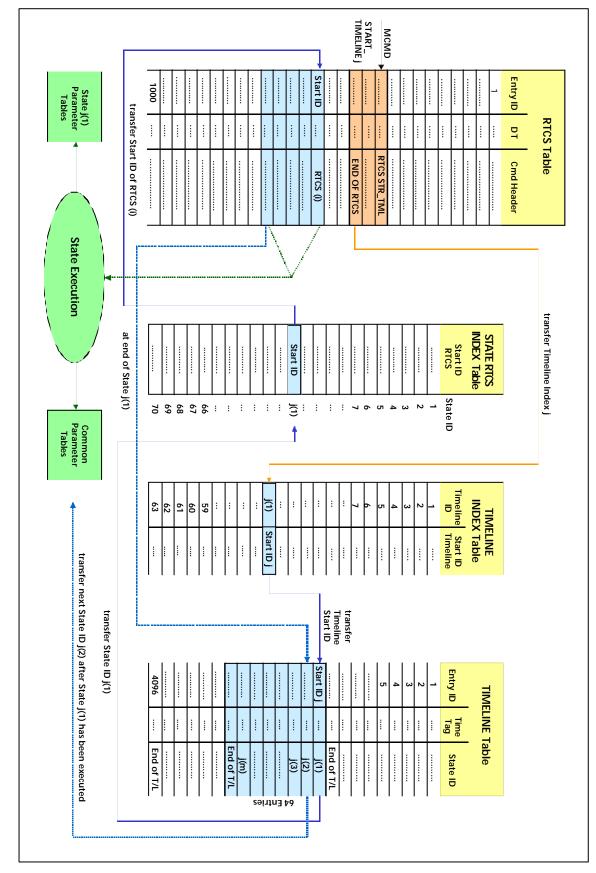


Figure 2: Timeline Execution - Detailed Flow



4 State Summary and Orbit Dependence

The current definition of the 70 states, i.e. the assignment of specific measurement categories with specific parameter sets to a state identifier i $(1 \le i \le 70)$ is outlined in table 1. The table presented reflects the status of the Final Flight configuration as loaded into RAM October 15th 2003.

Table 1 is a top level table which does not play a role in the actual timeline execution as depicted in fig. 3. Tables that will provide insight into the parameter space are depicted in chapter 5. The columns in table 1 have the following meaning:

State ID State identifier

State Acronym Acronym used in the definition of reference timelines

Function Purpose of state Cat. (Type) Title of state

Cat. (ID) Measurement category

Orbital Position Position in orbit (in degrees) where state should be executed. The

definition is in a sun fixed reference frame. Origin (0 degrees) is the orbital position close to the SO&C window perpendicular to the

centroid of the sub-solar window.

RTCS RTCS controlling state execution

Description Short description of major state properties

Timing State timing properties related to measurement (no. setup and

cleanup)

ESM Status of Elevation Scan Mechanism
ASM Status of Azimuth Scan Mechanism
NCWM Nadir Calibration Window Mechanism

APSM Aperture Stop mechanism

NDFM Neutral Density Filter Mechanism

WLS White Light Source SLS Spectral Lamp Source

Scan Speed Scan speed (ILOS) for measurement states (1st line: ESM,

2nd line: ASM)

Cluster Definition Index assigned Cluster Definition

NOTE:

because of pending OCRs some states described here in table 1 may become subject to further modifications.

Table 2 summarises the properties of the RTCS used in the definition of the states.

It is obvious in table 1 that most of the states are reserved for scientific measurement categories (limb, nadir, SO&C, MO&C). This fact is partially due to the requirement to implement a flexible exposure time scheme. With the sunlight incidence angle (w.r.t. the atmosphere) being a function of latitude, the intensity of the reflected and scattered light measured in orbit varies with orbital position. Therefore, in order to achieve signal-to-noise ratios in the observed radiances which allow accurate retrieval of atmospheric trace gases and to avoid saturation, exposure times and co-adding factors for limb and nadir categories must also be latitude dependant, i.e. they vary across the orbit.

Fig. 3 displays this relation. The shaded inner disk represents the Earth with arrows pointing at three sun fixed positions. The sun is located to the right. A sun fixed reference system can be defined with its origin close to the North Pole (the 90°-axis points towards the sun in the ecliptic plane). Three rings above the Earth disk indicate the orbital positions of nadir, sun/moon fixed and limb states (each number in a cell within the ring refers to the state IDs of table 1). Note that over the North polar region limb states start



significantly prior to the SO&C window because they sense atmospheric volumes which lie sufficiently ahead of the instrument, i.e. they are already illuminated by the rising sun. Measurements in nadir mode have to wait until the spacecraft has reached a position in orbit where the atmosphere below the instrument is hit by the first sunlight. In the South polar region this relation reverses. The orbital location of the MO&C window is only sketched. Analysis of Sun and Moon visibility in SCIAMACHY's FOV indicates that the rising Moon can be seen over a wide latitude range in the southern hemisphere depending on the time of observation and whether it is measured at the beginning or end of a monthly period.

The non-illuminated part of the orbit (eclipse period) will mainly be used for calibration and nadir-eclipse measurements and also for any scheduled maintenance purposes.



State Acro- nym	Function	Cat. (Type)	Cat. (ID)	Orbital Position	RTCS	Description	Timing (measurement duration only) (INT: max. integration time)	ESM	ASM	NCWM	APSM	NDFM	WLS	STS	Scan speed (deg/s)	CI De
nad01	Scientific Measurement	Nadir	1	<-3 & >183	STT_01	ESM: scanning swath width: 940 km	PET: N1 INT: N1 Dur: 80s	u.	n.u.	closed	large	out	off	off	16	
nad02	Scientific Measurement	Nadir		(-3 to5) & (175 to 183)	STT_01	ESM: scanning swath width: 940 km	PET: N2 INT: N2 Dur: 80s	u.	n.u.	closed	large	out	off	off	16	
nad03	Scientific Measurement	Nadir		(5 to 16) & (164 to 175)	STT_01	ESM: scanning swath width: 940 km	PET: N3 INT: N3 Dur: 80s	u.	n.u.	closed	large	out	off	off	16	-
nad04	Scientific Measurement	Nadir	1	(16 to 26) & (154 to 164)	STT_01	ESM: scanning swath width: 940 km	PET: N4 INT: N4 Dur: 65s	u.	n.u.	closed	large	out	off	off	16	
nad05	Scientific Measurement	Nadir		(26 to 36) & (144 to 154)	STT_01	ESM: scanning swath width: 940 km	PET: N5 INT: N5	u.	n.u.	closed	large	out	off	off	16	
nad06	Scientific Measurement	Nadir		(36 to 70) & (110 to 144)	STT_01	ESM: scanning swath width: 940 km	Dur: 65s PET: N6 INT: N6	u.	n.u.	closed	large	out	off	off	16	
nad07	Scientific Measurement	Nadir	1	(70 to 110)	STT_01	ESM: scanning swath width: 940 km	Dur: 65s PET: N7 INT: N7	u.	n.u.	closed	large	out	off	off	16	-
dcc05	Calibration	Dark_Current_ Calibration	1	0 to 360	STT_01	ESM: pointing to deep space (250km above horizon) ASM: pointing to deep space	Dur: 65s PET: Dark_Current 5 INT: 5s		fix.	closed	large	out	off	off	0	-
nad09	Scientific Measurement	Nadir	12	<-3 & > 183	STT_01	ESM: scanning swath width: 117 km	Dur: 40s PET: N1 INT: N1	u.	n.u.	closed	large	out	off	off	2	4
nad10	Scientific	Nadir	1	(-3 to5) &	STT_01	ESM: scanning swath width: 117 km	Dur: 80s PET: N2 INT: N2	u.	n.u.	closed	large	out	off	off	2	-
nad11	Measurement Scientific	Nadir	1	(175 to 183) (5 to 16) &	STT_01	ESM: scanning swath width: 117 km	Dur: 80s PET: N3 INT: N3	u.	n.u.	closed	large	out	off	off	2	-
nad12	Measurement Scientific	Nadir	1	(164 to 175) (16 to 26) &	STT_01	ESM: scanning swath width: 117 km	Dur: 80s PET: N4 INT: N4	<u> </u>	n.u.	closed	large	out	off	off	2	-
nad13	Measurement Scientific	Nadir	1	(154 to 164) (26 to 36) &	STT_01	ESM: scenning swath width: 117 km	Dur: 65s PET: N5 INT: N5	, .	n.u.	closed		out	off	off	2	-
	Measurement Scientific		1	(144 to 154) (36 to 70) &		ESM: scanning	Dur: 65s PET: N6	u.			large				2	
nad14	Measurement Scientific	Nadir	1	(110 to 144)	STT_01	swath width: 117 km ESM: scanning	INT: N6 Dur: 65s PET: N7	u.	n.u.	closed	large	out	off	off	2	-
nad15	Measurement	Nadir NDF_Monitoring	1	(70 to 110)	STT_01	swath width: 117 km ESM: fix non-optimal WLS pos.: 10.673deg	INT: N7 Dur: 65s PET: NDF Monitoring	u.	n.u.	closed	large	out	off	off	0	
wnd02	Monitoring	ND Filter OUT	21	0 to 360	STT_05	ESM: pointing to altitude 250 km	INT: 4s Dur: 12s PET: Sun_ASM_Diffuser	u.	n.u.	closed	large	out	on	off	0	-
ascd01	Calibration	Sun_ASM_Diffuser _Calibration	23	SO&C window; Sun above atm.	STT_09	ASM: diffuser normal to 264deg ESM: pointing to altitude 250 km	INT: 1s Dur: 30s PET: Sun_ASM_Diffuser	u.	n.u.	closed	large	out	off	off	0,27	
ascd02	Calibration	Sun_ASM_Diffuser _Calibration	23	SO&C window; Sun above atm.	STT_09	ASM: diffuser normal to 266deg ESM: pointing to attitude 250 km	INT: 1s Dur: 30s PET: Sun_ASM_Diffuser	u.	n.u.	closed	large	out	off	off	0,27	
ascd03	Calibration	Sun_ASM_Diffuser _Calibration	23	SO&C window; Sun above atm.	STT_09	ASM: diffuser normal to 268deg	INT: 1s Dur: 30s	u.	n.u.	closed	large	out	off	off	0,27	
ascd04	Calibration	Sun_ASM_Diffuser _Calibration	23	SO&C window; Sun above atm.	STT_09	ESM: pointing to attitude 250 km ASM: diffuser normal to 270deg	PET: Sun_ASM_Diffuser INT: 1s Dur: 30s	u.	n.u.	closed	large	out	off	off	0 0,27	
ascd05	Calibration	Sun_ASM_Diffuser _Calibration	23	SO&C window; Sun above atm.	STT_09	ESM: pointing to attitude 250 km ASM: diffuser normal to 272deg	PET: Sun_ASM_Diffuser INT: 1s Dur: 30s	u.	n.u.	closed	large	out	off	off	0 0,27	
asad01	Monitoring	Sun_ASM_Diffuser _Atmosphere	25	SO&C window; Sun through atm.	STT_09	ESM: pointing to attitude 17,2 km ASM: diffuser normal to 266deg	PET: Sun_ASM_Diffuser INT: 1s Dur: 32s	u.	n.u.	closed	large	out	off	off	0 0,27	
nad23	Scientific Measurement	Nadir_pointing	3	<-3 & > 183	STT_01	ESM: Nadir pointing	PET: N1 INT: N1 Dur: 80s	u.	n.u.	closed	large	out	off	off	0	-
nad24	Scientific Measurement	Nadir_pointing	3	(-3 to5) & (175 to 183)	STT_01	ESM: Nadir pointing	PET: N2 INT: N2 Dur: 80s	u.	n.u.	closed	large	out	off	off	0	1
nad25	Scientific Measurement	Nadir_pointing	3	(5 to 16) & (164 to 175)	STT_01	ESM: Nadir pointing	PET: N3 INT: N3 Dur: 80s	u.	n.u.	closed	large	out	off	off	0	γ
dcc04	Calibration	Dark_Current_ Calibration	12	0 to 360	STT_01	ESM: pointing to deep space (250km above horizon) ASM: pointing to deep space	PET: Dark_Current 4 INT: 0,5s Dur: 30s	fix.	fix.	closed	large	out	off	off	0	4
elimb01	Scientific Measurement	Limb_Mesopshere		eclipse	STT_01	ESM: scanning ASM: scanning swath width: 120 km	PET: L6 INT: L6	u.	n.u.	closed	large	out	off	off	steps 0	Υ
limb01	Scientific Measurement	Limb	26	< -20	STT_01	ESM: scanning ASM: scanning	Dur:40,5s PET: L1 INT: L1	u.	u.	closed	large	out	off	off	steps 11	-
limb02	Scientific Measurement	Limb	2	-20 to -12	STT_01	swath width: 960 km ESM: scanning ASM: scanning	Dur: 52,31s PET: L2 INT: L2	u.	u.	closed	large	out	off	off	steps 11	-
limb03	Scientific Measurement	Limb	2	(-12 to 9) & (146 to 157)	STT_01	swath width: 960 km ESM: scanning ASM: scanning	Dur: 52,31s PET: L3 INT: L3	u.	u.	closed	large	out	off	off	steps 11	
limb04	Scientific	Limb	2	(9 to 20) &	STT_01	swath width: 960 km ESM: scanning ASM: scanning	Dur: 52,31s PET: L4 INT: L4	u.	u.	closed	large	out	off	off	steps 11	
limb05	Measurement Scientific	Limb	2	(125 to 146) (20 to 125)	STT_01	swath width: 960 km ESM: scanning ASM: scanning	Dur: 52,31s PET: L5 INT: L5	u.	u.	closed	large	out	off	off	steps 11	-
limb06	Measurement Scientific	Limb	2	» 157	STT_01	swath width: 960 km ESM: scanning ASM: scanning	Dur: 52,31s PET: L6 INT: L6	u.	u.	closed	large	out	off	off	steps	-
	Measurement Scientific		2	(9 to 20) &		swath width: 960 km ESM: scanning	Dur: 52,31s PET: L4 INT: L4	ļ							steps	-
limb11	Measurement Scientific	Limb	2	(125 to 146)	STT_01	ASM: scanning swath width: 120 km ESM: scanning	Dur: 52,31s PET: L1	u.	u.	closed	large	out	off	off	11 steps	
limb08	Measurement	Limb	2	< -20	STT_01	ASM: pointing swath width: 120 km	INT: L1 Dur: 52,31s	u.	u.	closed	large	out	off	off	0	



State Acro- nym	Function	Cat. (Type)	Cat. (ID)	Orbital Position	RTCS	Description	Timing (measurement duration only) (INT: max. integration time)	ESM	ASM	NCWM	APSM	NDFM	WLS	STS	Scan speed (deg/s)	Cluster Definitio n Index
limb09	Scientific Measurement	Limb	2	-20 to -12	STT_01	ESM: scanning ASM: pointing swath width: 120 km	PET: L2 INT: L2 Dur: 52,31s	u.	u.	closed	large	out	off	off	steps 0	1
limb10	Scientific Measurement	Limb	2	(-12 to 9) & (146 to 157)	STT_01	ESM: scenning ASM: pointing swath width: 120 km	PET: L3 INT: L3 Dur: 52,31s	u.	u.	closed	large	out	off	off	steps 0	1
Inad01	Monitoring	Nadir_pointing _left	24	0 to 360	STT_01	ESM: fix position 32.5deg left	PET: N7 INT: N7 Dur: 65s	u.	n.u.	closed	large	out	off	off	0	
dechm	Calibration	Dark_Current_ Calibration_HM	20	0 to 360	STT_09	ESM: fix VVLS pos.: 10.52deg	PET: wis_table INT: 2/1s Dur: 12s	u.	u.	closed	large	out	off	off	0	1
limb13	Scientific Measurement	Limb	2	» 157	STT_01	ESM: scanning ASM: pointing swath width: 120 km	PET: L6 INT: L6 Dur: 52,31s	u.	u.	closed	large	out	off	off	steps 0] 1
limb12	Scientific Measurement	Limb	2	(20 to 125)	STT_01	ESM: scanning ASM: pointing swath width: 120 km	PET: L5 INT: L5 Dur: 52,31s	u.	u.	closed	large	out	off	off	steps 0	1
nad26	Scientific Measurement	Nadir_pointing	3	(16 to 26) & (154 to 164)	STT_01	ESM: Nadir pointing	PET: N4 INT: N4 Dur: 65s	u.	n.u.	closed	large	out	off	off	0] 3
nad27	Scientific Measurement	Nadir_pointing	3	(26 to 36) & (144 to 154)	STT_01	ESM: Nadir pointing	PET: N5 INT: N5 Dur: 65s	u.	n.u.	closed	large	out	off	off	0	
nad28	Scientific Measurement	Nadir_pointing	3	(36 to 70) & (110 to 144)	STT_01	ESM: Nadir pointing	PET: N6 INT: N6 Dur: 65s	u.	n.u.	closed	large	out	off	off	0	3
nad29	Scientific Measurement	Nadir_pointing	3	(70 to 110)	STT_01	ESM: Nadir pointing	PET: N7 INT: N7 Dur: 65s	u.	n.u.	closed	large	out	off	off	0	3
dec 01	Calibration	Dark_Current_ Calibration	12	0 to 360	STT_01	ESM: pointing to deep space (250km above horizon) ASM: pointing to deep space	PET: Dark_Current 1 INT: 125ms_HR/500ms_LR Dur: 10s	fix. pos	fix. pos.	closed	large	out	off	off	0	1
sos 02	Scientific Measurement, Calibration	SO&C_Scanning/ Pointing	4	SO&C window start at sunrise to sun above atm.	STT_02	ESM: nominal scan ASM: ICU/SFS control SFS: pointing at end of scan sequence	PET: suntable INT: 62,5ms_HR/500ms_LR Dur: 64s+2s_point	u.	u.	closed	small	in	off	off	0,33 0	1
lwnd01	Monitoring	NDF_Monitoring ND Filter IN	22	0 to 360	STT_10	ESM: fix non-optimal VVLS pos. 10.673deg	PET: NDF Monitoring INT: 4s Dur: 12s	u.	n.u.	closed	large	in	on	off	0	1
sos01	Scientific Measurement, Calibration	SO&C_scanning_ long_Duration	4	SO&C window sunrise to upper limb wind, edge	STT_02	ESM: nominal scan ASM: ICU/SFS control SFS: operating	PET: suntable INT: 62,5ms_HR/500ms_LR Dur: 130s	u.	u.	closed	small	in	off	off	0,33 0	1
scs 01	Calibration	SO&C_Scanning	4	SO&C window sun above atm.	STT_02	ESM: fast sweep of 125ms, 12 scans ESM: ICU control for sun tracking SFS: inactive	PET:sun_fast_sweep_table INT: 125ms_HR/500ms_LR Dur: 3s	u.	u.	closed	small	in	off	off	22,4 0	1
sop01	Scientific Measurement, Calibration	SO&C_Pointing	5	SO&C window start at sunrise to sun above atm.	STT_02	ESM: SFS control ASM: ICU/SFS control SFS: centre pointing to sun	PET: suntable INT: 62,5ms_HR/500ms_LR Dur: 64s	u.	u.	closed	small	in	off	off	0	1
escd01	Calibration	Sun_ESM_Diffuser_ Calibration, ND-Filter OUT	8	SO&C window sun above atm.	STT_09	ESM: diffuser pos.: 22.5deg ASM: ICU control SFS: inactive	PET: sun_diffuser_table INT: 125ms_HR/500ms_LR Dur: 30s	diff. pos	u.	closed	large	out	off	off	0	1
sscp02	Calibration	Sub_Solar_ Calibration_ Pointing	9	Sub-solar window	STT_03	ESM: sfs control SFS: pointing in elevation	PET: suntable INT: 62,5ms_HR/500ms_LR Dur: 22s	u.	n.u.	open	small	in	off	off	0	1
mos01	Calibration	Moon_Scanning	7	MO&C moon above atm.	STT_01	ESM: nominal scan, 5 scans ASM: SFS control SFS: operating	PET: moontable INT: 2s Dur: 12s	u.	u.	closed	large	out	off	off	0,33 0	1
mop03	Scientific Measurement	MO&C_Pointing_ Troposphere	6	MO&C window at moonrise to moon above atm	STT_01	ESM: ICU/SFS control ASM; ICU/SFS control SFS: centre pointing to moon	PET: moontable INT: 2s Dur: 142s	u.	u.	closed	large	out	off	off	0 0	1
mop01	Scientific Measurement, Calibration	MO&C_Pointing	6	MO&C window at moonrise to moon above atm	STT_01	ESM: ICU/SFS control ASM; ICU/SFS control SFS: centre pointing to moon	PET: moontable INT: 2s Dur: 40s	u.	u.	closed	large	out	off	off	0	1
mop02	Scientific Measurement, Calibration	Moon_pointing_ long_duration	6	MO&C window moonrise to upper limb wind, edge	STT_01	ESM: ICU/SFS control ASM: ICU/SFS control SFS: centre pointing to moon	PET: moontable INT: 2s Dur: 128s	u.	u.	closed	large	out	off	off	0	1
sscp01	Calibration	Sub_Solar_ Calibration_ Pointing/Scanning	9	Sub-solar window	STT_03	ESM: nominal scan SFS: pointing before scan	PET: suntable INT: 62,5ms_HR/500ms_LR Dur: 22s	u.	n.u.	open	small	in	off	off	0,33	1
Isc01	Calibration	Spectral_Lamp_ Calibration	10	0 to 360	STT_04	ESM: fix SLS pos. 9.77deg	PET: sls_table INT: 4s Dur: 12s	sis pos	n.u.	closed	large	out	off	on	0	1
sscs01	Calibration	Sub_Solar_ Calibration_ Scanning	9	Sub-solar window	STT_03	ESM: fast sweep of 125ms, 88 scans ESM: ICU control for sun tracking SFS: inactive	PET:sun_fast_sweep_table INT: 125ms_HR/500ms_LR Dur: 22s	u.	n.u.	open	small	in	off	off	22,4	1
lwc01	Calibration	White_Lamp_ Calibration	11	0 to 360	STT_10	ESM: fix VVLS pos. 10.52deg	PET: wis_table INT: 2/1s Dur: 12s	wis pos	n.u.	closed	large	in	on	off	0	1
escd02	Calibration	Sun_ESM_Diffuser_ Calibration, ND-Filter IN	16	SO&C window sun above atm.	STT_06	ESM: diffuser pos. 22,5 deg ASM: ICU control SFS: inactive	PET: sun_diffuser_table INT: 125ms_HR/500ms_LR Dur: 30s	diff. pos	u.	closed	large	in	off	off	0 0	1
dcc02	Calibration	Dark_Current_ Calibration	12	0 to 360	STT_01	ESM: pointing to deep space (250km above horizon) ASM: pointing to deep space	PET: Dark_Current 2 INT: 1s Dur: 30s	fix. pos	fix. pos.	closed	large	out	off	off	0 0	1
nmep01	Calibration	Nadir / Elevation_ Mirror_Calibration_ Pointing	13	SO&C window sun above atm.	STT_02	ESM: ext_mir_pos; SFS control ASM; SFS control SFS: centre pointing to sun	PET: suntable INT: 62,5ms_HR/500ms_LR Dur: 4s	e_m pos	u	closed	small	in	off	off	0	1
adc01	Calibration/ Maintenance	ADC_Calibration7 Scanner maintenance	15	0 to 360	STT_07	ESM: performing 360deg revolution ASM: performing 360deg revolution	PET: Dark_Current 1 INT: 125ms_HR/500ms_LR Dur: 20s		360 sca n	closed	large	out	off	off	? ?	1
nmes02	Calibration	Nadir / Elevation_ Mirror_Calibration_ Scanning	13	SO&C window sun above atm.	STT_02	ESM: nom. scan at ext_mir_pos., 5 scans ASM: SFS control SFS: operating	PET: suntable INT: 62,5ms_HR/500ms_LR Dur: 11s	e_m sca n		closed	small	in	off	off	0,33 0] 1
dcc03	Calibration	Dark_Current_ Calibration	12	0 to 360	STT_01	ESM: pointing to deep space (250km above horizon) ASM: pointing to deep space (PET in all channels set to max, at no saturation	PET: Dark_Current 3 INT: 40s Dur: 80s		fix. pos.	closed	large	out	off	off	0 0	1
nmes01	Calibration	Nadir / Elevation_ Mirror_Calibration_ Scanning	13	SO&C window sun above atm.	STT_02	ESM: fast sweep at extra_mir_pos., 12 scans ASM&ESM: ICU control for sun tracking SFS: inactive	PET:sun_fast_sweep_table INT: 125ms_HR/500ms_LR Dur: 3s	e_m sca n		closed	small	in	off	off	22,4 0	1
Isd01	Monitoring	Spectral_Lamp_ Diffuser_Monitoring	10	0 to 360	STT_04	ESM: diffuser pos_LS 190,2deg	PET: SLS_diff_table INT: 40s DUR: 80s	diff. pos	n.u.	closed	large	out	off	on	0	1
lwd01	Monitoring	White_Lamp_ Diffuser_Monitoring	19	0 to 360	STT_05	ESM: diffuser pos_LS 190,2deg	PET: WLS_diff_table INT: 40s DUR: 80s	diff. pos	n.u.	closed	large	out	on	off	0	1

notes referring to SFS: SFS modes

The sun follower system is used for acquisition/tracking of sun and moon. inactive:

SFS is not part of the control loop operating:

SFS is in operation e.g. to correct the centre of a scan but not part of the complete scanner control loop centre pointing:

SFS is part of the scanner control loop following the centroid of sun/moon on their trajectory In column Scan speed* the listed angular velocity is referring to the line of sight

note referring to scan speed

Table 1: **SCIAMACHY State Definition Summary**



E:\SCIA_FLIGHT\Flight_parameters\States\Final_flight_states\parameter_tables\(support_tables_030930.xls)\)Measurement Categories

	Measurement Categories ID	RTCS	State ID	NCWM Nadir Cal. Window	APSM Aperture Stop	NDFM ND Filter	WLS White Light Source Lamp	SLS Spectral Line Source Lamp
Nadir	1	STT_01	1 to 7; 9 to 15	closed	Large	Out	Off	Off
Limb	2	STT_01	28 to 37; 40 to 41	closed	Large	Out	Off	Off
Nadir_pointing	3	STT_01	23 to 25; 42 to 45	closed	Large	Out	Off	Off
SO&C_Scanning	4	STT_02	47;49;50	closed	Small	In	Off	Off
SO&C Pointing	5		51	closed	Small	In	Off	Off
MO&C_Pointing (incl. Troposphere)	6	STT_01	55 to 57	closed	Large	Out	Off	Off
Moon_Scanning	7		54	closed	Large	Out	Off	Off
Sun_ESM_Diffusor_Calibration (ND OUT)	8		52	closed	Large	Out	Off	Off
Sub-solar_Calibration	9	STT_03	53;58;60	open	Small	In	Off	Off
Spectral_Lamp_Calibration	10		59;69	closed	Large	Out	Off	On
White_Lamp_Calibration (ND IN)	11		61	closed	Large	In	On	Off
Dark_Current_Calibration	12		8;26;46;63;67	closed	Large	Out	Off	Off
Sun Nadir/Elevation_Mirror_Calibration	13	STT_02	64;66;68	closed	Small	In	Off	Off
Moon Nadir/Elevation_Mirror_Calibration	14		not used	closed	Large	Out	Off	Off
ADC_Calibration	15		65	closed	Large	Out	Off	Off
Sun_ESM_Diffusor_Calibration (ND IN)	16		62	closed	Large	In	Off	Off
Nadir_Eclipse_Pointing	17	STT_01	not used	closed	Large	Out	Off	Off
Nadir_Eclipse_Scanning	18	STT_01	not used	closed	Large	Out	Off	Off
White_Lamp_Calibration (ND OUT)	19	STT_05	70	closed	Large	Out	On	Off
Dark_Current_Calibration_HM	20	STT_01	39	closed	Large	Out	Off	Off
NDF Monitoring (ND OUT)	21	STT_05	16	closed	Large	Out	On	Off
NDF Monitoring (ND IN)	22	STT_10	48	closed	Large	In	On	Off
Sun_ASM_Diffuser	23	STT_09	17 to 21	closed	Large	Out	Off	Off
Nadir_Pointing_Left	24	STT_01	38	closed	Large	Out	Off	Off
Sun_ASM_Diffuser_Atmosphere	25	STT_09	22	closed	Large	Out	Off	Off
Limb_Mesosphere	26	STT_01	27	closed	Large	Out	Off	Off

Table 2: SCIAMACHY Measurement Cate gory & State RTCS Definition Summary



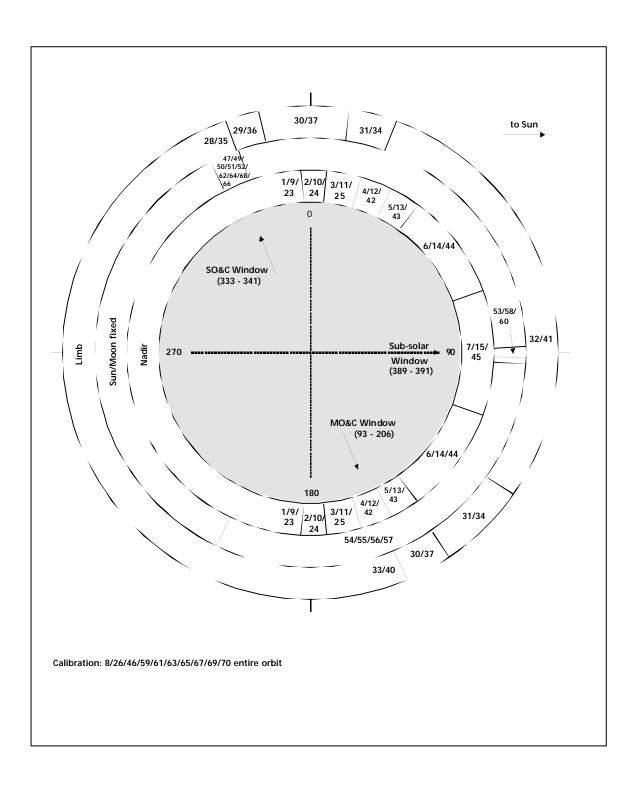


Figure 3: Orbital Position of Limb, Nadir and Sun Fixed States



5 State Parameter Description

This chapter describes each instrument state down to the level of individual STATE and COMMON parameters. These parameters can be grouped in different classes as depicted in fig. 4. Shaded boxes indicate those parameters whose tables are presented here in the 3rd volume of the SCIAMACHY Operations Concept TN's. From the COMMON parameter tables only those, which are "referenced" by STATE parameter tables (e.g. the Scanner State Parameter Table refers to entries in the Scan Profiles Table) are described in this chapter.

The layout of the succeeding sub-chapters is table dependant. Nevertheless it has been tried to maintain a common structure with a table template preceding each parameter table. The template has the purpose to

- identify the MCMD which is required to update the parameters stored in the ICU
- provide a reference to the list of MCMDs according to the latest issue of the Instrument Operations Manual (RD 1)
- specify the range and unit of each parameter together with an indication of the parameter function
- present information about
 - 1. the table parameter values as defined at time of *Issue 5 Rev.*0 of this TN reflecting the status of definition of the 'Final-Flight'-states including the implementation of all accepted DCR's prelaunch, the complete of chages introduced by the definition of the final flight parameter set and all subsequent approved and implemented OCR's
 - 2. the table parameter values as defined at time of the last burning of the onboard ICU-EEPROM (necessary corrections to contents in tables for the EEPROM parameters are included)

The second bullet is included since a more detailed description of the properties of each parameter can be found in the MCMD sheets of RD1 Annex 6.

The last bullet covering the table parameter values serves the purpose to identify necessary updates of parameter tables via MCMD (either as part of Error Correction during NT3 Part 4 -see RD 1 or via CTI-I/F for instrument tuning and optimisation) in order to write into the working area of the ICU-RAM the latest valid version of parameter tables.

Note that the tables presented here in the TN cannot serve the purpose to explain the instrument actions and activities triggered by the parameters.



OCR Status

The table below lists the status of issued OCRs. Pending OCRs either wait for approval of the implementation option by the originator, approval by project management or implementation by SOST. In case implementation is finished, the associated column lists the date and the orbit number when the modification becomes effective.

OCR	Originator	Issue Date	Subject	Approval	Implementation
1	S. Noël, IFE	11/02/03	Reduce Moon Occ PETs to 1 s	27/02/03	10/03/03, orbit 5358
2	S. Noël, IFE	20/02/03	Change nadir scan w.r.t. TCFoV anomaly (PR-ID 36)	17/03/03	08/04/03, orbit 5771
3*	Q.L. Kleipool, SRON	27/02/03	In-flight measurement of channel 8 non-linearity	18/03/03	30/04/03, orbit 6090
4*	Q.L. Kleipool, SRON	27/02/03	In-flight measurement of channel 7 non-linearity	pending	pending
5*	Q.L. Kleipool, SRON	26/02/03	Harmonisation of the monthly dark signal calibrations	12/03/03	04/04/03, orbit 5711/5712
6*	Q.L. Kleipool, SRON	26/02/03	Increase of dark current blocks in the eclipse timeline	12/03/03	04/04/03, orbit 5711/5712
7	SRON	07/07/03	Revision of calibration states 67, 8, 16 and 48	10/07/03	21/07/03, orbit 7267
8	G. Lichtenberg, SRON	09/05/03	Change of final limb tangent height step ('Limb dark') from 150km to 250km	13/05/03 & 07/07/03	26/05/03, orbit 6456 & 21/07/03, orbit 7265 (limb_mesosphere)
9*	G. Lichtenberg, SRON	07/05/03	Repetition of memory effect from SODAP	23/06/03	16/07/03, orbit 7193/7194
10*	J. Skupin, IFE	08/05/03	Perform WLS over diffuser measurements (state 70, meas.cat. 19) in eclipse only	20/05/03	13/07/03, orbit 7151
11	M. Gottwald, DLR	21/07/03	Improvement of limb/nadir matching	22/09/03	15/10/03, orbit 8489

^{*:} OCR's marked with '*' are not related to parameter tables or are for temporary test puposes only

Table 3: OCR - Implementation status



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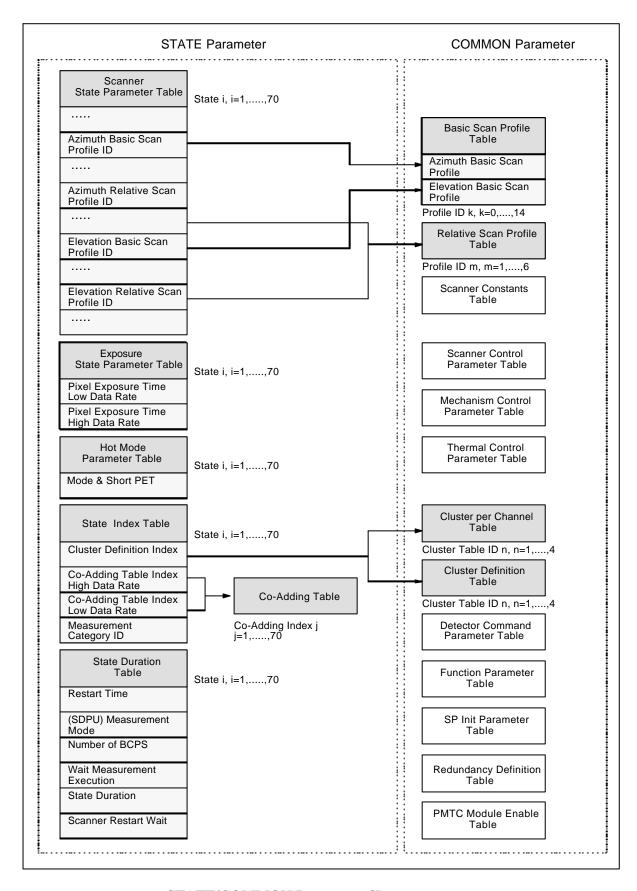


Figure 4: STATE/COMMON Parameter Classes



5.1 STATE Parameter Tables

5.1.1 Scanner State Parameter Table

This table defines various scanner parameters. A Scanner State Parameter table exists for each state, i.e. the total number of tables in this class is 70.

Table Template:

MCMD: SET SCANNER STATE PARAMETER (IOM Reference A6.49)

Columns:

Common parameter: parameters, applicable to all phases (columns 3 - 10)

note that the term "common" is only used locally; it does not refer to the

COMMON parameters (chapter 5.2)

Phase 1 - Phase 8: particular phases of the scan activities (phase 1 = transition from scanner idle

to scanner start position, last phase = transition from scan to idle);

the maximum number of phases is given by the row parameter *Number of Scan*

Phases

Trailer: only for internal use

Rows:

State ID: identifier of measurement state; range = 1-70

spare: presently unused

Relative Scan Profile Factor n: multiplication factor to be applied to the Relative Scan Profile

(n=1-6) parameters Angular Variation, Start Acceleration, End Acceleration;

if no Relative Scan profile shall be used in a state, all factors shall

be "0"; range = $-128 \dots +127$

spare: presently unused

Number of Scan Phases: number of phases for each scanner mode; range = 1-8 (according

to used phases of columns 3-10)

Duration of Phase: duration of the scan phase in milliseconds; this parameter has

precedence for the timing of a phase; range = 250msec-6500 sec note that the duration of phase 1 and the last phase are smaller than the setup and cleanup times because the latter include the execution

times of the corresponding primitive commands

Phase Type: selection of type of scanner movement; range = 0/1

0 = transition to position defined by nominal profile - see IOM

1 = scan execution according to phase parameters

Azimuth Centering of Relative Scan Profile: selection of centering; range = 0/1

0 =no centering applied

1 = apply centering algorithm to Relative Profile

Azimuth Filtering: selection of filtering, range = 0/1

0 = no filtering applied

1 = apply filter for smoothing the transition from

encoder to sun-follower feedback

Azimuth Inverse Rel. Scan Profile for Even Scan: selection of inversion scheme, range = 0/1

0 = no inversion, all repetitions are identical 1 = inversion, each 2^{nd} scan profile in a series is

inverted

Azimuth Correction of nominal Scan Profile: selection of correction type for Basic Scan Profile

for time dependent effects to achieve nominal



ILOS scan trajectory; range = 0-9

0 = no correction

1-9 = different types of corrections - see IOM

Azimuth Relative Scan Profile Identifier: selection of Relative Scan Profile stored in the

PMTC: the Relative Scan Profile is added to the

Basic Scan Profile; range = 0-60 = no Relative Scan Profile

j (j=1,...,6) = Relative Scan Profile j

H/W Constellation: selection of ILOS conversion algorithms for the

> optical H/W constellation in use; range = 1-5 (according to 5 different algorithms - see

[R 6], p. 79)

Azimuth Basic Scan Profile Identifier: selection of Basic Scan Profile stored in the

PMTC; range = 0-14 (according to number of

Basic Scan sets)

Azimuth Number of Repetition of Relative Scan: number of repetitions of Relative Scan Profile in

one scan phase, range = 0-4095

0 = no repetition, executes selected Relative

Scan Profile only once

n>0 = execution of n repetitions

spare: presently unused

selection of centering, range = 0/1Elevation Centering of Relative Scan Profile:

0 =no centering applied

1 = apply centering algorithm to Relative Profile

selection of filtering, range = 0/1

0 = no filtering applied

1 = apply filter for smoothing the transition from

encoder to sun-follower feedback

Elevation Inverse Rel. Scan Profile for Even Scan: selection of inversion scheme, range = 0/1

> 0 = no inversion, all repetitions are identical 1 = inversion, each 2^{nd} scan profile in a series is

inverted

Elevation Correction of nominal Scan Profile: selection of correction type for Basic Scan

> Profile for time dependent effects to achieve nominal ILOS scan trajectory; range = 0-9

0 =no correction

1-9 = different types of corrections - see IOM Elevation Relative Scan Profile Identifier:

selection of Relative Scan Profile stored in the PMTC; the Relative Scan Profile is added to the

Basic Scan Profile; range = 0-60 = no Relative Scan Profile

i(j=1,....6) = Relative Scan profile i

presently unused

selection of Basic Scan Profile stored in the Elevation Basic Scan Profile Identifier:

PMTC; range = 0-14 (according to number of

Basic Scan sets)

Elevation Number of Repetition of Relative Scan: number of repetitions of Relative Scan Profile in

one scan phase; range = 0-4095

0 = no repetition, executes selected Relative

Scan Profile only once

n>0 = execution of n repetitions

spare:

Elevation Filtering:



At time of issue the following OCR's are affecting the table content of the FINAL-FLIGHT definitions such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	State affected
OCR_008	09/05/03	SRON; G.Lichtenberg	Change of final limb tangent height step ('Limb dark') from 150km to 250km	27; 54 - 57
OCR_011	21/07/03	SOST-DLR; M.Gottwald	Improvement of limb/nadir matching	28 - 37; 40; 41



$\mathbf{EEPROM} - \mathbf{ICU_SW~V.~2.03}$

Scanner State Parameter #1		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	01								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000	000000000000000000000000000000000000000							
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0

Scanner State Parameter #2		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	02								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000	000000000000000000000000000000000000000							
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	03								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000	000000000000000000000000000000000000000							
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	n	0	0	0	0	0



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Scanner State Parameter #4		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	04								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare					1				1
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0

Scanner State Parameter #5		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	05								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0

Scanner State Parameter #6	Nadir Common								$\overline{}$
		Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	06								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0



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Scanner State Parameter #7		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	07								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	08								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0

Scanner State Parameter #9		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	09								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0



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	Common	rk_Current_C T	<u> </u>						
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	08								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00040000	00000840	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	19	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	19	0	0	0	0	0	0



Scanner State Parameter #10		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	10								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0

Scanner State Parameter #11		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	11								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0

Scanner State Parameter #12		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	12		1 11000 2	1 11000 0	1 11000 1	i nace c	1 11000 0	1 110001	
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0



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Scanner State Parameter #13		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	13								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	14	000000000000000000000000000000000000000							
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		. 0	12	Π	n	Π	0	n	Π

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	15								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0



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Scanner State Parameter #16		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	16								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	17								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000	000000000000000000000000000000000000000							
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0020,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	3	0	0	0	0	0	0

Scanner State Parameter #18		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	18								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0020,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	3	0	0	0	0	0	0



Scanner State Parameter #16	Common	NDF-mon_NE	I IVI-Out		1	1		1	1
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	16	riidse i	riidse z	Filase J	riidse 4	riidse 5	Filase 0	Filase /	Filase 0
	16								
spare Relative Scan Profile 1 Factor	000								
Belative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00012000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		13	13	0	0	0	0	0	0
Elevation Number of Repetition of Rel.	1	0	n	ň	ň	ň	ň	ň	ŏ

Scanner State Parameter #17	Common	1_Diffuser_Ca T	I					Т	
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	17								
spare								1	
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00030000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		4	4	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0

Scanner State Parameter #18	Sun_ASM	_Diffuser_Ca	alibration_2						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	18								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00030000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		10	10	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



Scanner State Parameter #19		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	19								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	008								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0020,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	3	0	0	0	0	0	0

Scanner State Parameter #20		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	20								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0020,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.	***************************************	0	3	0	0	0	0	0	0

Scanner State Parameter #21		Nadir							
	Common						-		
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	21								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0020,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier	I	1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	3	Ö	Ö	0	0	0	Ö



	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	19								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00030000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		11	11	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									1
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0

Scanner State Parameter #20	Sun_ASN	/_Diffuser_Ca	dibration_4						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	20								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00030000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		12	12	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0

	Common	1_Diffuser_Ca T							
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	21								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00030000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		13	13	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



Scanner State Parameter #22		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	22								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	001								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0020,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	3	0	0	0	0	0	0

Scanner State Parameter #23		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	23								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,00
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Benetition of Bel		n .	15	n	Π	Π	n	Π	n

Scanner State Parameter #24		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	24								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0



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Scanner State Parameter #22	ASM DIR	ser_Atmosph	man for at Off &	Bar A					
ocamer size r didirect was	Common								
	Perem.	Phase1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 5	Phase 7	Phese 8
STATE ID	22		8		8 8		9	8	
spore Relative Scon Profile 1 Factor	000								
Relative Scen Profile 2 Factor	000		-						
Relative Scan Profile 3 Factor	000		- 11					-	
Relative Scan Profile 4 Factor	000	8 1	1 12		3 8		7 1		
Relative Scan Profile 5 Factor	000		9						
Relative Scan Profile 6 Factor	000	8							
Number of Scan Phases	1								
Duration of Phase [msec] Phase Type		00004000	00032000	00004000	00000000	00000000		00000000	00000000
Azimuth Centering of Relative Scan Profile	-	0	0	0	0	0	0	0	0
Azimuth Filtening		0	0	Ü	Ū	Ö	D	0	0
Az, Inverse Rel, Scan Profile for Even Scan		0	0	Ď	0	Ŏ.	0	ū	- O
Azimuth Correction of nominal Scan Profile		. 0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	D	0	0	0	D	0	0
H/W constellation	-	0.01	1	1	0	0	D	0	0
Azimuth Besic Scen Profile Identifier Azimuth Number of Repetition of Rel. Scen	1	10	10	0	0	0	0	0	0
spare	 	0	-	- 0	- 4	_ ~	- 0	- 0	- "
Elevation Centering of Relative Scen	1	0	0	0	0	0	D	0	.0
Elevation Filtering		.0	0	ū	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	ū	0	0	D	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier	-	0	0	0	0	0	D	Δ.	0
spere Elevation Basic Scan Profile Identifier	1	14	14	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	ä	0	0	0	Ü	ű
0									
	_								
	_		15						
	_								
			-						



Scanner State Parameter #25 Nadir										
	Common									
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
STATE ID	25									
spare										
Relative Scan Profile 1 Factor	000									
Relative Scan Profile 2 Factor	000									
Relative Scan Profile 3 Factor	000									
Relative Scan Profile 4 Factor	000									
Relative Scan Profile 5 Factor	000									
Relative Scan Profile 6 Factor	000									
Number of Scan Phases	3									
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000	
Phase Type		0	1	0	0	0	0	0	0	
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Filtering		0	0	0	0	0	0	0	0	
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0	
H/W constellation		1	1	1	0	0	0	0	0	
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0	
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0	
spare										
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0	
Elevation Filtering		0	0	0	0	0	0	0	0	
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0	
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0	
spare										
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0	
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0	

Scanner State Parameter #26	1	Nadir Eclips	∍						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	26								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0080,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0

Scanner State Parameter #27										
	Common									
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
STATE ID	27									
spare										
Relative Scan Profile 1 Factor	000									
Relative Scan Profile 2 Factor	001									
Relative Scan Profile 3 Factor	000									
Relative Scan Profile 4 Factor	000									
Relative Scan Profile 5 Factor	000									
Relative Scan Profile 6 Factor	000									
Number of Scan Phases	3									
Duration of Phase		0001,300	0080,000	0000,720	0000,000	000,000	0000,000	000,000	0000,000	
Phase Type		0	1	0	0	0	0	0	0	
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Filtering		0	0	0	0	0	0	0	0	
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0	
H/W constellation		1	1	1	0	0	0	0	0	
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0	
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0	
spare										
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0	
Elevation Filtering		0	0	0	0	0	0	0	0	
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0	
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0	
spare										
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0	
Elevation Number of Repetition of Rel.		0	15	0	0	0	0	0	0	



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	Common	T	T						
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	26								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00030000	00000840	00000000	00000000	00000000	000000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	14	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	14	0	0	0	0	0	0

Scanner State Parameter #27 Limb_Mesosphere (Aurora) Phase 2 Phase 3 Phase 5 Phase 8 Phase 1 Phase 4 Phase 6 Phase 7 Param. STATE ID spare Relative Scan Profile 1 Factor -006 Relative Scan Profile 2 Factor Relative Scan Profile 3 Factor 000 Relative Scan Profile 4 Factor Relative Scan Profile 5 Factor 000 Relative Scan Profile 6 Factor Number of Scan Phases 000 Number of Scan Phases
Duration of Phase [msec]
Phase Type
Azimuth Centering of Relative Scan Profile
Azimuth Filtering
Az. Inverse Rel. Scan Profile for Even Scan
Azimuth Correction of nominal Scan Profile
Azimuth Relative Scan Profile Identifier
H/W constellation
Azimuth Basic Scan Profile Identifier
Azimuth Basic Scan Profile Identifier
Azimuth Number of Repetition of Rel. Scan Azimuth Number of Repetition of Rel. Scan 0 spare
Elevation Centering of Relative Scan
Elevation Filtering
El. Inverse Rel. Scan Profile for Even Scan
Elevation Correction of nominal Scan
Elevation Relative Scan Profile Identifier 0 0 spare Elevation Basic Scan Profile Identifier Elevation Number of Repetition of Rel. 0



Scanner State Parameter #28 Limb										
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
STATE ID	28									
spare										
Relative Scan Profile 1 Factor	006									
Relative Scan Profile 2 Factor	000									
Relative Scan Profile 3 Factor	004									
Relative Scan Profile 4 Factor	000									
Relative Scan Profile 5 Factor	000									
Relative Scan Profile 6 Factor	000									
Number of Scan Phases	5									
Duration of Phase		0001,300	0057,375	0000.250	0001,438	0000,840	0000,000	0000,000	0000,000	
Phase Type		0	1	0	1	0	0	0	0	
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0	
Azimuth Filtering		0	0	0	0	0	0	0	0	
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0	
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0	
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0	
H/W constellation		3	3	3	3	3	0	0	0	
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0	
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0	
spare										
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0	
Elevation Filtering		0	0	0	0	0	0	0	0	
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0	
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0	
spare										
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0	
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0	

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	29								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel		n	33	0	n	n	n	Λ	n

Scanner State Parameter #30		Limb							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	30								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0



Scanner State Parameter #28		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	28								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0

Scanner State Parameter #29		Limb_short							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	29								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0

Scanner State Parameter #30		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	30								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0



	Common	Limb							
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	31								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00057375	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	32								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00057375	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0

Scanner State Parameter #33	10	Limb							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	33								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00057375	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0



Scanner State Parameter #31		Limb_short							
•	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	31								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0

Scanner State Parameter #32		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	32								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.	1	l n	29	1 0	1 0	l n	l n	1 0	1 0

Scanner State Parameter #33		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	33								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	004								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0



Scanner State Parameter #34 Limb											
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8		
STATE ID	34							200000000000000000000000000000000000000			
spare											
Relative Scan Profile 1 Factor	006										
Relative Scan Profile 2 Factor	000										
Relative Scan Profile 3 Factor	004										
Relative Scan Profile 4 Factor	000										
Relative Scan Profile 5 Factor	000										
Relative Scan Profile 6 Factor	000	000000000000000000000000000000000000000									
Number of Scan Phases	5										
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000		
Phase Type		0	1	0	1	0	0	0	0		
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0		
Azimuth Filtering		0	0	0	0	0	0	0	0		
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0		
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0		
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0		
H/W constellation		3	3	3	3	3	0	0	0		
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0		
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0		
spare											
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0		
Elevation Filtering		0	0	0	0	0	0	0	0		
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0		
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0		
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0		
spare											
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0		
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0		

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	35								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering	000000000000000000000000000000000000000	0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel		n	33	n	n	n	n	Π	n

Scanner State Parameter #36		Limb							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	36								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0



Scanner State Parameter #34		Limb_short							
•	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	34								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0

Scanner State Parameter #35		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	35								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		Π	29	0	0	Π	n	0	Π

Scanner State Parameter #36		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	36								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0



Scanner State Parameter #37		Limb							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	37								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000	000000000000000000000000000000000000000							
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0

	Common		DI 0	D. 0	D	D	D 0	D. 3	D
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	38								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel		Π	33	n	Π	n	n	Π	n

Scanner State Parameter #39		Limb							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	39								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	33	0	0	0	0	0	0



Scanner State Parameter #37		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	37								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0

Scanner State Parameter #38	Nadir	_pointing extr	em left						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	38								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	-113								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00065000	00000720	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	1	0	0	0	0	0	0

Scanner State Parameter #39	D	ark_Current_l	нм						
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	39								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00012000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		12	12	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



Scanner State Parameter #40		Limb							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID		rnase i	riiase z	riiase J	riiase 4	rnaseo	Filase o	riiase /	rnaseo
	40								
spare	000								
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	9000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	Ö	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	Ö	Ö	Ö	Ö	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		ō	33	ŏ	ŏ	ŏ	ŏ	ő	ŏ
	p.ooccoccoccoccocc	4 -							

Scanner State Parameter #41	10	Limb							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	41								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0057,375	0000,250	0001,438	0000,840	0000,000	0000,000	0000,000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	33	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel		1 0	33	n n	n n	l n	l n	n	n

Scanner State Parameter #42		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	42								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0



Scanner State Parameter #40		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	40								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0

Scanner State Parameter #41		Limb_short							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	41								
spare									
Relative Scan Profile 1 Factor	006								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00050625	00000250	00001438	00000840	00000000	00000000	00000000
Phase Type		0	1	0	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		1	1	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	3	0	0	0	0
Azimuth Relative Scan Profile Identifier		3	3	0	0	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	29	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	3	3	0	0	0	0
Elevation Relative Scan Profile Identifier		1	1	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		2	2	9	9	0	0	0	0
Elevation Number of Repetition of Rel.		0	29	0	0	0	0	0	0



Scanner State Parameter #43		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	43								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0

Scanner State Parameter #44		Nadir							
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	44								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel		i n	12	n	Π	n	n	n	n

Scanner State Parameter #45		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	45								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0



no modifications to the contents of the tables on the opposite side as burned in EEPROM – $ICU_SW~V.2.03$



Scanner State Parameter #46	D	ark_Current_I	Cal						
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	46								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0005,000	0000,840	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	2	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	2	0	0	0	0	0	0

	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	47								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	7								
Duration of Phase	***************************************	0001,300	0028,000	0004,000	0028,000	0001,000	0001,000	0000,780	0000,000
Phase Type		0	1	1	1	1	1	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		- 8	8	4	6	6	6	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	5	5	0	0
H/W constellation		3	3	3	3	3	3	3	0
Azimuth Basic Scan Profile Identifier		3	3	3	3	3	3	0	0
Azimuth Number of Repetition of Rel. Scan		0	13	1	13	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		1	1	1	1	0	0	0	0
Elevation Correction of nominal Scan		2	2	2	8	4	6	0	0
Elevation Relative Scan Profile Identifier		4	4	4	4	5	5	0	0
spare									
Elevation Basic Scan Profile Identifier		14	14	14	3	3	3	0	0
Elevation Number of Repetition of Rel.		1 0	13	1 1	13	l n	1 0	l n	n .

Scanner State Parameter #48		Nadir							
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	48								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0065,000	0000,720	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		2	2	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	12	0	0	0	0	0	0



Scanner State Parameter #46	Da	rk_Current_C	al_1						
•	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	46								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00010000	00000840	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	4	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	4	0	0	0	0	0	0

Scanner State Parameter #47	S	D&C_Scan/P	oint						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	47								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	7								
Duration of Phase [msec]		00001300	00032000	00004000	00028000	00001000	00001000	00000780	00000000
Phase Type		0	1	1	1	1	1	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	4	6	6	6	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	5	5	0	0
H/W constellation		3	3	3	3	3	3	3	0
Azimuth Basic Scan Profile Identifier		3	3	3	3	3	3	0	0
Azimuth Number of Repetition of Rel. Scan		0	15	1	13	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		1	1	1	1	0	0	0	0
Elevation Correction of nominal Scan		2	2	8	8	4	6	0	0
Elevation Relative Scan Profile Identifier		4	4	4	4	5	5	0	0
spare									
Elevation Basic Scan Profile Identifier		14	14	3	3	3	3	0	0
Elevation Number of Repetition of Rel.		Π	15	1	13	Π	Π	n	n

Scanner State Parameter #48	WLS_	NDF-mon_N	DFM-In						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	48								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00012000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		13	13	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



Scanner State Parameter #49	Common	_Scan_long_ I	a aradon						
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	49								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000	000000000000000000000000000000000000000							
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001,300	0028,000	0004,000	0098,000	0000,780	0000,000	0000,000	0000,000
Phase Type		0	1	1	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	4	6	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		3	3	3	3	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	13	1	48	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		1	1	1	1	0	0	0	0
Elevation Correction of nominal Scan		2	2	2	8	0	0	0	0
Elevation Relative Scan Profile Identifier		4	4	4	4	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	14	14	3	0	0	0	0
Elevation Number of Repetition of Rel.		0	13	1	48	0	0	0	0

Scanner State Parameter #50	S0&C_9	Scanning_fas	t_sweep						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	50								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	014								
Number of Scan Phases	3								
Duration of Phase		0001,300	0002,500	0000,780	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		3	3	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	1	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	1	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		6	6	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		3	3	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	19	0	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	51								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	6								1
Duration of Phase		0001,300	0028,000	0004,000	0000,500	0026,500	0000,780	0000,000	0000,000
Phase Type		0	1	1	1	1	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		- 8	8	4	6	6	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	5	0	0	0
H/W constellation		3	3	3	3	3	3	0	0
Azimuth Basic Scan Profile Identifier		3	3	3	3	3	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	13	1	0	13	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		1	1	1	0	0	0	0	0
Elevation Correction of nominal Scan		2	2	2	4	6	0	0	0
Elevation Relative Scan Profile Identifier		4	4	4	5	5	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	14	14	3	3	0	0	0
Elevation Number of Repetition of Rel.		0	13	1	0	13	0	0	0



	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	49								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00032000	00004000	00094000	00000780	00000000	00000000	00000000
Phase Type		0	1	1	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	4	6	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		3	3	3	3	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	15	1	46	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		1	1	1	1	0	0	0	0
Elevation Correction of nominal Scan		2	2	8	8	0	0	0	0
Elevation Relative Scan Profile Identifier		4	4	4	4	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	14	3	3	0	0	0	0
Elevation Number of Repetition of Rel.		0	15	1	46	0	0	0	0

Scanner State Parameter #50	S0&C_	Scanning_fas	st_sweep						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	50								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	016								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00003000	00000780	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		3	3	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	1	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		6	6	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		3	3	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	1	0	0	0	0	0	0

Scanner State Parameter #51	9	SO&C_Pointir	ng						
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	51								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	6								
Duration of Phase [msec]		00001300	00036000	00012000	00000500	00015500	00000780	00000000	00000000
Phase Type		0	1	1	1	1	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	4	6	6	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	5	0	0	0
H/W constellation		3	3	3	3	3	3	0	0
Azimuth Basic Scan Profile Identifier		3	3	3	3	3	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	17	5	0	7	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		1	1	0	0	0	0	0	0
Elevation Correction of nominal Scan		2	2	8	4	6	0	0	0
Elevation Relative Scan Profile Identifier		4	4	5	5	5	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	14	3	3	3	0	0	0
Elevation Number of Repetition of Rel.		0	17	5	0	7	0	0	0



Scanner State Parameter #52	Sun_Diffu	sor_Calibrati	on_ND_0						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	52								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0004,000	0030,000	0003,460	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		4	4	4	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		6	6	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	14	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		6	6	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0

	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	53			1110303	111030 1	1 11030 3	1110300	110301	1 11030 0
spare	33								
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase		0001.750	0007.000	0006.000	0009.000	0001.730	0000.000	0000.000	0000.000
Phase Type		0	1	1	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		Ö	ò	ò	ò	ŏ	Ö	Ö	Ö
Azimuth Filtering		Ō	Ö	ň	ň	ň	ň	ñ	n
Az. Inverse Rel. Scan Profile for Even Scan		0	i i	Ō	Ō	ō	i i	ō	0
Azimuth Correction of nominal Scan Profile		0	0	Ö	Ō	ō	0	Ö	Ō
Azimuth Relative Scan Profile Identifier		0	0	Ö	0	Ö	0	Ö	Ō
H/W constellation		1	1	1	1	1	0	0	0
Azimuth Basic Scan Profile Identifier		4	4	4	4	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	4	9	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		4	4	4	4	0	0	0	0
Elevation Number of Benetition of Bel		n	3	2	4	n	Π	Π	n

Scanner State Parameter #54	Common	<u>loon_Cal_Sc</u> T	I						1
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	54								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase		0001,300	0002,000	0010,000	0001,020	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		5	5	7	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		3	3	3	3	0	0	0	0
Azimuth Basic Scan Profile Identifier		5	5	5	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	4	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	1	0	0	0	0	0
Elevation Correction of nominal Scan		5	5	9	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	4	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		5	5	5	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	4	0	0	0	0	0



Scanner State Parameter #53		<u>Solar_Cal_P</u>	ointing						
	Common Param	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Dh	Phase 8
OTATE ID		Phase I	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase o
STATE ID	53							-	
spare	000								
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001750	00007000	00006000	00009000	00001730	00000000	00000000	00000000
Phase Type		0	1	1	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	1	1	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	1	1	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	4	9	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		4	4	4	4	0	0	0	0
Elevation Number of Repetition of Rel.		0	3	2	4	Ö	Ō	Ō	i i

Scanner State Parameter #54	N	toon Cal Sc	an						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	54								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase [msec]		00001300	00002000	00010000	00001020	00000000	00000000	00000000	00000000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		5	5	7	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		3	3	3	3	0	0	0	0
Azimuth Basic Scan Profile Identifier		5	5	5	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	4	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	1	0	0	0	0	0
Elevation Correction of nominal Scan		5	5	9	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	4	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		3	3	3	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	4	0	0	0	0	0



	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	55								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	001								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase [msec]		00001300	00002000	00010000	00001110	00000000	00000000	00000000	00000000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		5	5	7	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		5	5	5	5	0	0	0	0
Azimuth Basic Scan Profile Identifier		13	13	13	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	4	0	0	0	0	0
spare									
Elevation Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	1	0	0	0	0	0
Elevation Correction of nominal Scan Profile		5	5	9	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	4	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		13	13	13	0	0	0	0	0
Elevation Number of Repetition of Rel. Scan		0	0	4	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	56								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase [msec]		00001300	00002000	00030000	00001020	00000000	00000000	00000000	00000000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		5	5	7	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		3	3	3	3	0	0	0	0
Azimuth Basic Scan Profile Identifier		5	5	5	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	14	0	0	0	0	0
spare									
Elevation Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan Profile		5	5	7	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	5	5	0	0	0	0	0
Elevation Number of Repetition of Rel. Scan		0	0	14	0	0	0	0	0

Scanner State Parameter #57		C_Poin_long_c	juration	1					
	Common	1	L		l	L		l	l
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	57								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase [msec]		00001300	00002000	00126000	00001020	00000000	00000000	00000000	00000000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		5	5	7	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		3	3	3	3	0	0	0	0
Azimuth Basic Scan Profile Identifier		5	5	5	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	62	0	0	0	0	0
spare									
Elevation Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan Profile		5	5	7	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	5	5	0	0	0	0	0
Elevation Number of Repetition of Rel. Scan	1	0	0	62	0	0	0	0	0



	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	55								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00002000	00014000	00126000	00001020	00000000	00000000	00000000
Phase Type		0	1	1	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		5	5	7	7	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		5	5	5	5	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	6	14	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		5	5	7	7	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	14	14	3	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	6	62	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	56								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00016000	00002000	00022000	00001020	00000000	00000000	00000000
Phase Type		0	1	1	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	5	7	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		5	5	5	5	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	7	0	10	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	5	7	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	3	3	3	0	0	0	0
Flancation Number of Parastica, at Dal		0	7	-	10	0	0		0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	57								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	5								
Duration of Phase [msec]		00001300	00016000	00002000	00110000	00001020	00000000	00000000	00000000
Phase Type		0	1	1	1	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	5	7	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
H/W constellation		3	3	3	3	3	0	0	0
Azimuth Basic Scan Profile Identifier		5	5	5	5	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	7	0	54	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	5	7	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	5	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		14	3	3	3	0	0	0	0
Elevation Number of Repetition of Rel.		0	7	0	54	0	0	0	0



	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	58								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000	000000000000000000000000000000000000000							
Number of Scan Phases	6								
Duration of Phase		0001,750	0007,000	0002,000	0004,000	0009,000	0001,730	0000,000	0000,000
Phase Type		0	1	1	1	1	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	1	1	1	0	0
Azimuth Basic Scan Profile Identifier		4	4	4	4	4	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	1	0	0	0	0
Elevation Correction of nominal Scan		- 8	8	4	9	9	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	4	5	0	0	0
spare									
Elevation Basic Scan Profile Identifier		4	4	4	4	4	0	0	0
Elevation Number of Repetition of Rel.		0	3	0	1	4	0	0	0

Scanner State Parameter #59 Spectral_Lamp_Calibration									
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	59								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0004,000	0004,000	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		10	10	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		10	10	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0

	Common									
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
STATE ID	60									
spare										
Relative Scan Profile 1 Factor	000									
Relative Scan Profile 2 Factor	000									
Relative Scan Profile 3 Factor	000									
Relative Scan Profile 4 Factor	000									
Relative Scan Profile 5 Factor	000									
Relative Scan Profile 6 Factor	001									
Number of Scan Phases	3									
Duration of Phase		0001,750	0022,000	0001,730	0000,000	0000,000	0000,000	0000,000	0000,000	
Phase Type		0	1	0	0	0	0	0	0	
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Filtering		0	0	0	0	0	0	0	0	
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0	
H/W constellation		1	1	1	0	0	0	0	0	
Azimuth Basic Scan Profile Identifier		4	4	0	0	0	0	0	0	
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0	
spare								000000000000000000000000000000000000000		
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0	
Elevation Filtering		0	0	0	0	0	0	0	0	
El. Inverse Rel. Scan Profile for Even Scan		0	1	0	0	0	0	0	0	
Elevation Correction of nominal Scan		8	8	0	0	0	0	0	0	
Elevation Relative Scan Profile Identifier		6	6	0	0	0	0	0	0	
spare										
Elevation Basic Scan Profile Identifier		4	4	0	0	0	0	0	0	
Elevation Number of Repetition of Rel.		0	175	0	0	0	0	0	0	



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Scanner State Parameter #58	Sub_S	olar_Cal_Poi	int/Scan						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	58								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	002								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	6								
Duration of Phase [msec]		00001750	00007000	00002000	00004000	00009000	00001730	00000000	00000000
Phase Type		0	1	1	1	1	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	1	1	1	0	0
Azimuth Basic Scan Profile Identifier		1	1	1	1	1	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	1	0	0	0	0
Elevation Correction of nominal Scan		8	8	4	9	9	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	4	5	0	0	0
spare									
Elevation Basic Scan Profile Identifier		4	4	4	4	4	0	0	0
Elevation Number of Repetition of Rel.		0	3	0	1	4	0	0	0

Scanner State Parameter #59	Spectral_Lamp_Calibration									
	Common									
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
STATE ID	59									
spare										
Relative Scan Profile 1 Factor	000									
Relative Scan Profile 2 Factor	000									
Relative Scan Profile 3 Factor	000									
Relative Scan Profile 4 Factor	000									
Relative Scan Profile 5 Factor	000									
Relative Scan Profile 6 Factor	000									
Number of Scan Phases	3									
Duration of Phase [msec]		00001300	00012000	00004000	00000000	00000000	00000000	00000000	00000000	
Phase Type		0	1	0	0	0	0	0	0	
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Filtering		0	0	0	0	0	0	0	0	
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0	
H/W constellation		1	1	1	0	0	0	0	0	
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0	
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0	
spare										
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0	
Elevation Filtering		0	0	0	0	0	0	0	0	
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0	
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0	
spare										
Elevation Basic Scan Profile Identifier		10	10	0	0	0	0	0	0	
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0	

Scanner State Parameter #60	Sub	_Solar_Cal_:	Scan						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	60								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	016								
Number of Scan Phases	3								
Duration of Phase [msec]		00001750	00022000	00001730	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		6	6	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		4	4	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	10	0	0	0	0	0	0



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Scanner State Parameter #61	Whi	te_Lamp_Calib	oration						
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
0717510		riidse i	FIIdSe Z	riidse s	FIIdSe 4	riiase o	riidse 0	riidse /	riiase o
STATE ID	61								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00010000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		12	12	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		12	12	0	0	0	0	0	0
Elevation Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0

Scanner State Parameter #62	Sun_Dif	fusor_Calibrat	ion_ND_I						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	62								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00030000	00003460	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		4	4	4	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		6	6	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	14	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		6	6	0	0	0	0	0	0
Elevation Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0

Scanner State Parameter #63	Common	_Current_Cali	I						
	Param	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	63	1							
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00030000	00000840	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	14	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan Profile		3	3	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel. Scan		0	14	0	0	0	0	0	0



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	Common	_Lamp_Calil T	1						
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	61								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00012000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		12	12	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



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Scanner State Parameter #64		dir/Elev_Mir_	Cal_Point						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	64								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase		0001,300	0000,500	0003,000	0001,110	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		4	4	6	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		5	5	5	5	0	0	0	0
Azimuth Basic Scan Profile Identifier		8	8	8	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	1	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		4	4	6	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		8	8	8	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	1	0	0	0	0	0

Scanner State Parameter #65 ADC/Cal_Scan/Maintenance											
	Common										
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8		
STATE ID	65										
spare											
Relative Scan Profile 1 Factor	000										
Relative Scan Profile 2 Factor	000										
Relative Scan Profile 3 Factor	000										
Relative Scan Profile 4 Factor	000										
Relative Scan Profile 5 Factor	000										
Relative Scan Profile 6 Factor	000										
Number of Scan Phases	1										
Duration of Phase		0000,000	0000,000	0000,000	0000,000	0000,000	0000,000	0000,000	0000,000		
Phase Type		0	0	0	0	0	0	0	0		
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0		
Azimuth Filtering		0	0	0	0	0	0	0	0		
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0		
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0		
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0		
H/W constellation		1	0	0	0	0	0	0	0		
Azimuth Basic Scan Profile Identifier		0	0	0	0	0	0	0	0		
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0		
spare											
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0		
Elevation Filtering		0	0	0	0	0	0	0	0		
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0		
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0		
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0		
spare											
Elevation Basic Scan Profile Identifier		0	0	0	0	0	0	0	0		
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0		

	Common	dir/Elev_Mir_i T							
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	66								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	001								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000	000000000000000000000000000000000000000							
Number of Scan Phases	4								
Duration of Phase		0001,300	0001,000	0010,000	0001,110	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		4	4	6	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		5	5	5	5	0	0	0	0
Azimuth Basic Scan Profile Identifier		8	8	8	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	4	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	1	0	0	0	0	0
Elevation Correction of nominal Scan		4	4	9	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	4	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		- 8	8	8	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	4	0	0	0	0	0



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Scanner State Parameter #64	Sun_Na	dir/Elev_Mir_	Cal_Point						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	64								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase [msec]		00001300	00000500	00003500	00001110	00000000	00000000	00000000	00000000
Phase Type		0	1	1	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		4	4	6	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
H/W constellation		5	5	5	5	0	0	0	0
Azimuth Basic Scan Profile Identifier		8	8	8	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	1	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		4	4	6	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	5	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		8	8	8	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	1	0	0	0	0	0

Scanner State Parameter #65		al_Scan/Mair	ntenance						
	Common Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	65								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	4								
Duration of Phase [msec]		00001300	00010000	00010000	00000780	00000000	00000000	00000000	00000000
Phase Type		0	0	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		3	3	3	3	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	7	1	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		12	7	12	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



Scanner State Parameter #67	Common	Current_Cali	DIGNOII					1	
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	67								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000	000000000000000000000000000000000000000							
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0001,300	0200,000	0000,840	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		3	3	3	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		3	3	3	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	99	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		3	3	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	99	0	0	0	0	0	0

Scanner State Parameter #68	Sun_Nadir/f	Elev_Mir_Cal	_fast_sweep	ı					
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	68								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	007								
Number of Scan Phases	3								
Duration of Phase		0001,300	0002,500	0001,110	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		5	5	5	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		8	8	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	1	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	1	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		6	6	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		8	8	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	19	0	0	0	0	0	0

	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	69								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0004,000	0080,000	0004,000	0000,000	0000,000	0000,000	000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		11	11	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		11	11	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



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Scanner State Parameter #67 Dark_Current_Cal_3										
	Common									
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
STATE ID	67									
spare										
Relative Scan Profile 1 Factor	000									
Relative Scan Profile 2 Factor	000									
Relative Scan Profile 3 Factor	000									
Relative Scan Profile 4 Factor	000									
Relative Scan Profile 5 Factor	000									
Relative Scan Profile 6 Factor	000									
Number of Scan Phases	3									
Duration of Phase [msec]		00001300	00080000	00000840	00000000	00000000	00000000	00000000	00000000	
Phase Type		0	1	0	0	0	0	0	0	
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0	
Azimuth Filtering		0	0	0	0	0	0	0	0	
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Azimuth Correction of nominal Scan Profile		3	3	3	0	0	0	0	0	
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0	
H/W constellation		3	3	3	0	0	0	0	0	
Azimuth Basic Scan Profile Identifier		9	9	0	0	0	0	0	0	
Azimuth Number of Repetition of Rel. Scan		0	39	0	0	0	0	0	0	
spare										
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0	
Elevation Filtering		0	0	0	0	0	0	0	0	
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0	
Elevation Correction of nominal Scan		3	3	0	0	0	0	0	0	
Elevation Relative Scan Profile Identifier		5	5	0	0	0	0	0	0	
spare										
Elevation Basic Scan Profile Identifier		9	9	0	0	0	0	0	0	
Elevation Number of Repetition of Rel.		0	39	0	0	0	0	0	0	

Scanner State Parameter #68	Sun_Nadir/	Elev_Mir_Ca	l_fast_sweep)					
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	68								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	008								
Number of Scan Phases	3								
Duration of Phase [msec]		00001300	00003000	00001110	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		8	8	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		5	5	0	0	0	0	0	0
H/W constellation		5	5	5	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		8	8	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	1	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		1	1	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		8	8	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		6	6	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		8	8	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	1	0	0	0	0	0	0

Scanner State Parameter #69	Spectra	al_Lamp_Cal	_Diffusor						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	69								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00080000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		11	11	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	70								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase		0004,000	0080,000	0004,000	0000,000	0000,000	0000,000	0000,000	0000,000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		12	12	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		11	11	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



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Scanner State Parameter #70	White,	_Lamp_Cal_l	Diffusor						
	Common								
	Param.	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
STATE ID	70								
spare									
Relative Scan Profile 1 Factor	000								
Relative Scan Profile 2 Factor	000								
Relative Scan Profile 3 Factor	000								
Relative Scan Profile 4 Factor	000								
Relative Scan Profile 5 Factor	000								
Relative Scan Profile 6 Factor	000								
Number of Scan Phases	3								
Duration of Phase [msec]		00004000	00080000	00004000	00000000	00000000	00000000	00000000	00000000
Phase Type		0	1	0	0	0	0	0	0
Azimuth Centering of Relative Scan Profile		0	0	0	0	0	0	0	0
Azimuth Filtering		0	0	0	0	0	0	0	0
Az. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Azimuth Correction of nominal Scan Profile		0	0	0	0	0	0	0	0
Azimuth Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
H/W constellation		1	1	1	0	0	0	0	0
Azimuth Basic Scan Profile Identifier		1	1	0	0	0	0	0	0
Azimuth Number of Repetition of Rel. Scan		0	0	0	0	0	0	0	0
spare									
Elevation Centering of Relative Scan		0	0	0	0	0	0	0	0
Elevation Filtering		0	0	0	0	0	0	0	0
El. Inverse Rel. Scan Profile for Even Scan		0	0	0	0	0	0	0	0
Elevation Correction of nominal Scan		0	0	0	0	0	0	0	0
Elevation Relative Scan Profile Identifier		0	0	0	0	0	0	0	0
spare									
Elevation Basic Scan Profile Identifier		11	11	0	0	0	0	0	0
Elevation Number of Repetition of Rel.		0	0	0	0	0	0	0	0



5.1.2 Pixel Exposure Time Parameter Table

This table defines the pixel exposure times for all states, both for the low and the high data rate. Only one table of this class exists.

Table Template:

MCMD: SET EXPOSURE STATE PARAMETER (IOM Reference A6.35)

Columns:

State ID: identifier of state; range = 1-70

Data Rate: data rate for which the exposure times apply; the Pixel Exposure Time

(PET) is specified separately for high and low data rate

Channel 1a - Channel 8: PET in SCIAMACHY measurement channels (including the separation

of the first two channels into virtual channels) in BCPS

(1 BCPS=62.5 msec); range = 1-16383 (62.5 msec - 1023.9375 sec); note that the value "0" corresponds to 31.25 msec i.e. only pixel data from

every second exposure will be read

Note that the values for the PET are furtheron under investigation. They depend on instrument performance subject to the SCIAMACHY monitoring task. In addition the optimasation of the PET is ongoing in order to obtain the best results (signal-to-noise ratio) over the complete orbit

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	State affected
OCR_001	11.Feb.03	IFE, S.Noel	Reduce Moon Occ PETs to 1 s	54 - 57
OCR_007	07.Jul.03	SRON	Revision of calibration states 67, 8, 16 and 48	8; 67



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_	ţe.	Channel 1a	4	S	2a	n	4	ro	9	7	∞
_	Rate	inel	ije j	ije ij	la la	in el	mel	la la	ınel	mel	la la
State ID	Data	har	Channel	Channel	Channel	Channel	Channel	Channel	Channel	Channel	Channel
<u></u>	Low	160	160	160	160	160	160	160	160	16	16
'	High	160	160	160	160	160	160	160	160	16	16
2	Low	160	160	16	16	16	16	16	16	16	16
	High	160	160	16	16	16	16	16	16	16	16
3	Low	80	80	16	16	8	4	8	8	16	16
	High	80	80	16	16	8	4	8	8	16	16
4	Low	16	16	8	16	4	4	4	4	16	16
	High	16	16	8	16	4	4	4	4	16	16
5	Low	16 16	16	8	16	2	2	4	4	8	16
-6	High Low	16 16	16 16	8	16 16	2	2	4 2	4 2	8	16 16
U	High	16	16	4	16	2	2	2	2	8	16
7	Low	16	16	4	16	2	2	2	2	8	8
	High	16	16	4	16	2	2	2	2	8	8
- 8	Low	16	16	2	8	1	1	1	1	4	4
	High	16	16	2	8	1	1	1	1	4	4
9	Low	160	160	160	160	160	160	160	160	16	16
	High	160	160	160	160	160	160	160	160	16	16
10	Low	160	160	16	16	16	16	16	16	16	16
	High	160	160	16	16	16	16	16	16	16	16
11	Low	80	80	16	16	8	4	8	8	16	16
-10	High	80	80	16	16	8	4	8	8	16	16
12	Low High	16 16	16 16	8	16 16	4	4	4	4	16 16	16 16
13	Low	16	16	8	16	2	2	4	4	8	16
13	High	16	16	8	16	2	2	4	4	8	16
14	Low	16	16	4	16	2	2	2	2	8	16
	High	16	16	4	16	2	2	2	2	8	16
15	Low	16	16	4	16	2	2	2	2	8	8
	High	16	16	4	16	2	2	2	2	8	8
16	Low	16	16	2	8	1	1	1	1	4	4
	High	16	16	2	8	1	1	1	1	4	4
17	Low	16	16	8	16	4	4	4	4	16	16
	High	16	16	8	16	4	4	4	4	16	16
18	Low	16	16	8	16	2	2	4	4	8	16
-10	High	16	16	8	16	2	2	4	4	8	16
19	Low High	16 16	16 16	4	16 16	2	2	2	2	8	8
20	Low	16	16	8	16	4	4	4	4	16	16
20	High	16	16	8	16	4	4	4	4	16	16
21	Low	16	16	8	16	2	2	4	4	8	16
	High	16	16	8	16	2	2	4	4	8	16
22	Low	16	16	4	16	2	2	2	2	8	8
	High	16	16	4	16	2	2	2	2	8	8
23	Low	160	160	160	160	160	160	160	160	16	16
	High	160	160	160	160	160	160	160	160	16	16
24	Low	160	160	16	16	16	16	16	16	16	16
	High	160	160	16	16	16	16	16	16	16	16
25	Low High	80 80	80 80	16 16	16 16	8	4	8	8	16 16	16 16
26	Low	1280	1280	1280	1280	1280	1280	1280	160	16	16
20	High	1280	1280	1280	1280	1280	1280	1280	160	16	16
27	Low	1280	1280	1280	1280	1280	1280	1280	160	16	16
	High	1280	1280	1280	1280	1280	1280	1280	160	16	16
28	Low	24	24	12	24	4	4	6	8	24	24
	High	24	24	12	24	4	4	6	8	24	24
29	Low	24	24	8	24	4	4	6	8	24	24
	High	24	24	8	24	4	4	6	8	24	24
30	Low	24	6	6	6	3	3	6	6	6	6
	High	24	6	6	6	3	3	6	6	6	6
31	Low	24	6	6	6	3	3	6	6	6	6
20	High	24	6	6	6	3	3	6	6	6	6
32	Low High	24 24	6	6	6	3	6	6	6	6	6
33	Low	24	24	12	24	12	12	24	24	24	24
55	High	24	24	12	24	12	12	24	24	24	24
34	Low	24	6	6	6	2	2	2	2	6	6
٠,	High	24	6	6	6	2	2	2	2	6	6
35	Low	24	24	12	24	4	4	6	8	24	24
	High	24	24	12	24	4	4	6	8	24	24

corresponding PET/Coadd-table

N1 N1 N2 N2 N3 N3 N4 N4 N5 N5 N6 N6 N7 N7 Ν8 Ν8 N1 N1 N2 N2 N3 N3 N4 N4 N5 N5 N6 N6 N7 N7 Ν8 N8 N4 N4 N5 N5 N7 N7 N4 N4 N5 N5 N7 N7 N1 N1 N2 N2 N3 N3 N9 N9 N9 N9 L1 L1 L2 L2 L3 L3 L4 L4 L5 L5 L6 L6 L7 L7 L1 L1



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0	Rate	Channel 1a	Channel 1b	Channel 2b	Channel 2a	0	Channel 4	<u>~</u>	9	Channel 7	<u></u>	corresponding
=	œ	Ĕ	l ĕ	l ĕ	l ë l	Ĕ	l ĕ	l ĕ	l ĕ	lë	le	PET/Coadd-table
State ID	Data	þar	ļ ja	ļ jā	har	Channel	튵	Channel	Channel	튵	Channel	T E I/O CONTO TABLE
	$\overline{}$											
1	Low	160	160	160	160	16	16	160	80	16	16	N1
	High	160	160	160	160	16	16	160	80	16	16	N1
2	Low	160	16	16	16	16	16	16	8	16	16	N2
	High	160	16	16	16	16	16	16	8	16	16	N2
3	Low	80	16	16	16	4	4	8	4	16	16	N3
	High	80	16	16	16	4	4	8	4	16	16	N3
4	Low	16	16	- 8	16	4	2	8	4	16	16	N4
	High	16	16	8	16	4	2	8	4	16	16	N4
5	Low	16	8	8	8	2	2	4	2	16	16	N5
_	High	16	8	8	8	2	2	4	2	16	16	N5
6	Low	16	4	4	4	1	1	4	2	8	8	N6
0	High	16	4	4	4	1	1	4	2	8	8	N6
	. ~ 1	16				-						4
7	Low	16	4	4	4	1	1	2	2	8	8	N7
	High		4	4	4	1	1	2	2	8	8	N7
8	Low	80	80	16	16	16	16	16	80	16	16	Dark Current 5
	High	80	80	16	16	16	16	16	80	16	16	Dark Current 5
9	Low	160	160	160	160	16	16	160	80	16	16	N1
	High	160	160	160	160	16	16	160	80	16	16	N1
10	Low	160	16	16	16	16	16	16	8	16	16	N2
	High	160	16	16	16	16	16	16	8	16	16	N2
11	Low	80	16	16	16	4	4	- 8	4	16	16	N3
	High	80	16	16	16	4	4	8	4	16	16	N3
12	Low	16	16	8	16	4	2	8	4	16	16	N4
	High	16	16	8	16	4	2	8	4	16	16	N4
13	Low	16	8	8	8	2	2	4	2	16	16	N5
13	High	16	8	8	8	2	2	4	2	16	16	N5
14		16	4	4	4	1	1	4	2	8	8	4
14	Low							4				N6
	High	16	4	4	4	1	1		2	8	8	N6
15	Low	16	4	4	4	11	1	2	2	8	8	N7
	High	16	4	4	4	1	1	2	2	8	8	N7
16	Low	64	64	64	64	2	0	0	0	0	1	NDF Monitoring
	High	64	64	64	64	2	0	0	0	0	1	NDF Monitoring
17	Low	4	4	4	4	1	1	2	1	4	8	Sun_ASM_diffuser
	High	4	4	4	4	1	1	2	1	4	8	Sun_ASM_diffuser
18	Low	4	4	4	4	1	1	2	1	4	8	Sun ASM diffuser
	High	4	4	4	4	1	1	2	1	4	8	Sun_ASM_diffuser
19	Low	4	4	4	4	1	1	2	1	4	8	Sun ASM diffuser
	High	4	4	4	4	1	1	2	1	4	8	Sun_ASM_diffuser
20	Low	4	4	4	4	1	1	2	1	4	8	Sun ASM diffuser
20	High	4	4	4	4	1	1	2	1	4	8	Sun ASM diffuser
21	Low	4	4	4	4	1	1	2	1	4	8	Sun ASM diffuser
21	High	4	4	4	4	1	1	2	1	4	8	Sun ASM diffuser
22			4	4	4	1		2		4	8	. – –
22	Low Hiah	4	4	4	4	1	1	2	1	4		Sun_ASM_diffuser
	1 1	<u> </u>	· ·	· ·		<u> </u>	<u> </u>			· ·		Sun_ASM_diffuser
23	Low	160	160	160	160	16	16	160	80	16	16	N1
	High	160	160	160	160	16	16	160	80	16	16	N1
24	Low	160	16	16	16	16	16	16	8	16	16	N2
	High	160	16	16	16	16	16	16	8	16	16	N2
25	Low	80	16	16	16	4	4	8	4	16	16	N3
	High	80	16	16	16	4	4	8	4	16	16	N3
26	Low	4	4	4	4	0	0	4	0	0	2	Dark Current 4
	High	4	4	4	4	0	0	4	0	0	2	Dark Current 4
27	Low	24	24	24	24	12	12	24	24	24	24	L6
	High	24	24	24	24	12	12	24	24	24	24	L6
28	Low	24	24	12	24	6	6	6	6	24	24	L1
	High	24	24	12	24	6	6	6	6	24	24	L1
29	Low	24	24	12	24	1	1	3	1	24	24	L2
	High	24	24	12	24	1	1	3	1	24	24	12
30	Low	24	6	6	6	1	1	6	1	6	6	L3
30	High	24	6	6	6	1	1	6	1	6	6	i ü
31		24	6	6	6	3	3	6	3	6	6	L4
JI	Low											
	High	24	6	6	6	3	3	6	3	6	6	L4
32	Low	24	6	6	6	3	3	6	3	6	6	L5
	High	24	6	6	6	3	3	6	3	6	6	L5
33	Low	24	24	24	24	12	12	24	24	24	24	L6
	High	24	24	24	24	12	12	24	24	24	24	L6
34	Low	24	6	6	6	3	3	6	3	6	6	L4
	High	24	6	6	6	3	3	6	3	6	6	L4
35	Low	24	24	12	24	6	6	6	6	24	24] L1
_	High	24	24	12	24	6	6	6	6	24	24	L1
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		<u>~</u>	2	3b	2a	m	4	Ω	9	~	∞	
	Rate	.			<u></u>		- 0				<u> </u>	corresponding
State ID	<u> </u>	Channel	Channel	Channel	Channel	Channel	Channel	Channel	Channel	Channel	Channel	PET/Coadd-table
₽	Data	<u> </u>	<u>a</u>	<u> </u>	Ē	<u> </u>	Ē	hа	<u> </u>	Ē	喜	T E17Coddd tablo
						_	_		_			
36	Low	24	24	8	24	4	4	6	8	24	24	L2
	High	24	24	8	24	4	4	6	8	24	24	L2
37	Low	24	6	6	6	3	3	6	6	6	6	L3
	High	24	6	6	6	3	3	6	6	6	6	L3
38	Low	24	6	6	6	3	3	6	6	6	6	L4
30												
	High	24	6	6	6	3	3	6	6	6	6	L4
39	Low	24	6	6	6	3	6	6	6	6	6	L5
	High	24	6	6	6	3	6	6	6	6	6	L5
40	Low	24	24	12	24	12	12	24	24	24	24	L6
	High	24	24	12	24	12	12	24	24	24	24	L6
41	Low	24	6	6	6	2	2	2	2	6	6	L7
71	High	24	6	6	6	2	2	2	2	6	6	L7
42	Low	16	16	8	16	4	4	4	4	16	16	N4
	High	16	16	8	16	4	4	4	4	16	16	N4
43	Low	16	16	8	16	2	2	4	4	8	16	N5
	High	16	16	8	16	2	2	4	4	8	16	N5
44	Low	16	16	4	16	2	2	2	2	8	16	N6
	High	16	16	4	16	2	2	2	2	8	16	N6
45	Low	16	16	4	16	2	2	2	2	8	8	N7
40												
	High	16	16	4	16	2	2	2	2	8	8	N7
46	Low	11	1	1	1	1	1	1	1	1	1	Dark Current 1
	High	1	1	1	1	1	1	1	1	1	1	Dark Current 1
47	Low	1	1	0	0	1	1	1	0	0	1	Sun
	High	1	1	0	0	1	1	1	0	0	1	Sun
48	Low	16	16	2	8	1	1	1	1	4	4	N8
-10	High	16	16	2	8	1	1	1	1	4	4	N8
40	- T		1									
49	Low	11	1	0	0	1	1	1	0	0	1	Sun
	High	1	1	0	0	1	1	1	0	0	1	Sun
50	Low	2	2	2	2	2	2	2	2	2	2	Sun_Fast_Sweep
	High	2	2	2	2	2	2	2	2	2	2	Sun_Fast_Sweep
51	Low	1	1	0	0	1	1	1	0	0	1	Sun
	High	1	1	0	0	1	1	1	0	0	1	Sun
52	Low	1	1	1	1	0	0	0	0	2	2	Sun_diffuser
02	High	1	1	1	1	0	0	0	0	2	2	Sun diffuser
									-			-
53	Low	1	1	0	0	1	1	1	0	0	1	Sun
	High	1	1	0	0	1	1	1	0	0	1	Sun
54	Low	32	32	32	32	32	32	32	32	32	32	Moon
	High	32	32	32	32	32	32	32	32	32	32	Moon
55	Low	32	32	32	32	32	32	32	32	32	32	Moon
	High	32	32	32	32	32	32	32	32	32	32	Moon
56	Low	32	32	32	32	32	32	32	32	32	32	Moon
50	High	32	32	32	32	32	32	32	32	32	32	1
												Moon
57	Low	32	32	32	32	32	32	32	32	32	32	Moon
	High	32	32	32	32	32	32	32	32	32	32	Moon
58	Low	1	1	0	0	1	1	1	0	0	1	Sun
	High	1	1	0	0	1	1	1	0	0	1	Sun
59	Low	64	64	32	32	2	0	4	4	8	2	SLS
	High	64	64	32	32	2	0	4	4	8	2	SLS
60	Low	2	2	2	2	2	2	2	2	2	2	Sun_Fast_Sweep
	High	2	2	2	2	2	2	2	2	2	2	Sun_Fast_Sweep
64				32	32							
61	Low	160	160			4	2	1	0	0	0	WLS
	High	160	160	32	32	4	2	1	0	0	0	WLS
62	Low	1	1	1	1	0	0	0	0	2	2	Sun_diffuser
_	High	1	1	1	1	0	0	0	0	2	2	Sun_diffuser
63	Low	16	16	16	16	16	16	16	16	16	8	Dark Current 2
	High	16	16	16	16	16	16	16	16	16	8	Dark Current 2
64	Low	1	1	0	0	1	1	1	0	0	1	Sun
04	High	1	1	0	0	1	1	1	0	0	1	Sun
-05												4
65	Low	0	0	0	0	0	0	0	0	0	0	ADC Cal
	High	0	0	0	0	0	0	0	0	0	0	ADC Cal
66	Low	1	1	0	0	1	1	1	0	0	1	Sun
_	High	1	1	0	0	1	1	1	0	0	1	Sun
67	Low	640	640	640	640	640	640	640	320	80	16	Dark Current 3
٠,	High	640	640	640	640	640	640	640	320	80	16	Dark Current 3
68		2	2	2	2	2	2	2	2	2	2	-
08	Low											Sun_Fast_Sweep
	High	2	2	2	2	2	2	2	2	2	2	Sun_Fast_Sweep
69	Low	640	640	640	640	640	640	640	640	80	32	SLS_diffuser
	High	640	640	640	640	640	640	640	640	80	32	SLS_diffuser
70	Low	640	640	640	640	640	320	320	160	80	32	WLS_diffuser
	High	640	640	640	640	640	320	320	160	80	32	WLS_diffuser
							i					. –



Corresponding Correspondin			1		ı		ı	ı	ı]	Final-F	light_Vers.FF10
10	٥	ate	13 a	1 p	9 S b	al 2a	<u>~</u>	4	35	9	7 6	<u></u>	corresponding
10	tate l	ata R	hann	hanni	Chann	hanni	hanni	hanni	hanni	Chann	hanni	hann	
	36	Low	24	24	12	24	1	1	3	1	24	24	
High 24 6 6 6 1 1 1 6 1 6 6	37	Ť								<u> </u>			
High 16		Ť	24	6		6	1		6		6		L3
High 32 32	38												4
High 24	39	_											4
High 24	40	Ť											4
High 24 6 6 6 6 3 3 6 3 6 6		Ť		24	24		12	12	24	24	24	24	1
High 16 16 8 8 16 4 2 8 4 16 16 16 16 16 16 16	41												
Hugh 16	42	-											N4
High 16	43	_											4
High 16		_	16								16		4
High 1	44												4
High 1	45									2			4
High	46	_											
High 1		High	1			1	1	1	2	4			Dark Current 1
High Fig. Fig. Fig. High	47												
AS Low	48	Low	64				2	0		0	0	1	NDF Monitoring
High	49	Ť											4 *
High 2		High	1	1	1	1	1	1	1	0	0	1	Sun
Fig.	50												
Fig.	51	Low	1	1	1	1	1	1	1	0	0	1	Sun
High	52	Ť											4
High 1		High	1	1	1	1	0	0	0	0	1	2	Sun_ESM_diffuser
Fig.	53												4
Moon High 16 16 16 16 16 16 16 1	54	Low	16	16	16	16	16	16	16	16	16	16	Moon
High 16	55	_											•
High 16			16	16	16	16	16	16	16	16	16	16	Moon
Noon 16	56	_											1
Sun Flight Flig	57	Low	16	16	16	16	16	16	16	16	16	16	Moon
High 1	58	_											4
High 64 64 32 32 32 2 0 4 4 16 16 16 SLS		High	1	1	1	1	1	1	1	0	0	1	Sun
Fig.	59												
61 Low 32 32 4 4 2 0 0 0 0 0 WLS High 32 32 4 4 2 0 0 0 0 0 0 WLS 62 Low 1 1 1 1 0 0 1 0 1 2 Sun_ESM_diffuser High 1 1 1 1 0 0 1 0 1 2 Sun_ESM_diffuser 63 Low 16 16 8 8 4 4 8 8 8 8 Dark Current 2 64 Low 16 16 8 8 4 4 8 8 8 8 Bark Current 2 64 Low 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	60	Low	2	2	2	2	2	2	2	2	2	2	Sun_Fast_Sweep
High 32 32 4 4 2 0 0 0 0 0 0 0 0	61	Ť											
High 1		High	32	32	4	4	2	0	0	0	0	0	WLS
63 Low 16 16 8 8 4 4 8 8 8 8 B <td>62</td> <td>_</td> <td></td>	62	_											
64 Low 1	63	Low	16	16	8	8	4	4	8	8	8	8	Dark Current 2
High 1	64	Ť											
High 1 2 2 3 2		High	1	1	1	1	1	1	1	0	1	1	Sun
66 Low 1 2 B Low <td>65</td> <td></td> <td>4</td>	65												4
67 Low 160 160 160 160 2 2 160 2 32 32 Dark Current 3 High 160 160 160 2 2 160 2 32 32 Dark Current 3 68 Low 2 3 3	66	Low	1	1	1	1	1	1	1	0	1	1	Sun
High 160 160 160 160 2 2 160 2 32 32 Dark Current 3 68 Low 2 3 3 SLS_diffuser 69 Low 640 640 640 320 160 640 160 32 32 SLS_diffuser 70	67	_											4
High 2		High	160	160	160	160	2	2	160	2	32	32	Dark Current 3
69 Low 640 640 640 320 160 640 160 32 32 SLS_diffuser High 640 640 640 320 160 640 160 32 32 SLS_diffuser 70 Low 640 640 640 160 64 64 16 16 32 WLS_diffuser	68												
70 Low 640 640 640 640 160 64 64 16 16 32 WLS_diffuser	69	Low	640	640	640	640	320	160	640	160	32	32	SLS diffuser
	70	_											



Hot Mode Parameter Table

This table defines whether to invoke the Hot Mode for channels 6-8 or to use the PET-values as defined in the Pixel Exposure Time parameter table. Only one table of this class exists.

Table Template:

MCMD: SET HOT MODE (IOM Reference A6.37)

Columns:

State ID: identifier of state; range = 1-70

Channel 6 - Mode: definition of the exposure time in channel 6; range = 00/01

00 = normal mode, i.e. the exposure time is defined by the PET

01 = Hot Mode, i.e. the exposure time is <u>not</u> defined by the PET

Channel 6 - Short PET: scaling factor for determination of exposure time in channel 6 when

mode is set to "01" (exposure time=28.125 usec*2Short PET):

range = 0-10

Channel 7 - Mode: definition of the exposure time in channel 7; range = 00/01

> 00 = normal mode, i.e. the exposure time is defined by the PET 01 = Hot Mode, i.e. the exposure time is not defined by the PET

Channel 7 - Short PET: scaling factor for determination of exposure time in channel 7 when

mode is set to "01" (exposure time=28.125 usec*2Short PET):

range = 0-10

Channel 8 - Mode: definition of the exposure time in channel 8; range = 00/01

00 = normal mode, i.e. the exposure time is defined by the PET

01 = Hot Mode, i.e. the exposure time is not defined by the PET

Channel 8 - Short PET: scaling factor for determination of exposure time in channel 8 when

mode is set to "01" (exposure time=28.125 usec *2Short PET);

range = 0-10

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	State affected
OCR_007	07.Jul.03	SRON	Revision of calibration states 67, 8, 16 and 48	16;48 (channel 6)



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$\mathbf{EEPROM} - \mathbf{ICU_SW~V.~2.03}$

State ID	Mode	nnel 6 Short PET	Mode	annel 7 Short PET	Mode	nnel 8 Short PET
DEC	BIN	BIN	BIN	BIN	BIN	BIN
1	00	0000	00	0000	00	0000
2	00	0000	00	0000	00	0000
3	00	0000	00	0000	00	0000
4	00	0000	00	0000	00	0000
5	00	0000	00	0000	00	0000
6	00	0000	00	0000	00	0000
7	00	0000	00	0000	00	0000
8	00	0000	00	0000	00	0000
9	00	0000	00	0000	00	0000
10	00	0000	00	0000	00	0000
11	00	0000	00	0000	00	0000
12	00	0000	00	0000	00	0000
13	00	0000	00	0000	00	0000
14	00	0000	00	0000	00	0000
15	00	0000	00	0000	00	0000
16	00	0000	00	0000	00	0000
17	00	0000	00	0000	00	0000
18	00	0000	00	0000	00	0000
19	00	0000	00	0000	00	0000
20	00	0000	00	0000	00	0000
21	00	0000	00	0000	00	0000
22	00	0000	00	0000	00	0000
23	00	0000	00	0000	00	0000
24	00	0000	00	0000	00 00	0000
25 26	00	0000	00	0000	00	0000
27	00	0000	00	0000	00	0000
28	00	0000	00	0000	00	0000
29	00	0000	00	0000	00	0000
30	00	0000	00	0000	00	0000
31	00	0000	00	0000	00	0000
32	00	0000	00	0000	00	0000
33	00	0000	00	0000	00	0000
34	00	0000	00	0000	00	0000
35	00	0000	00	0000	00	0000
36	00	0000	00	0000	00	0000
37	00	0000	00	0000	00	0000
38	00	0000	00	0000	00	0000
39	00	0000	00	0000	00	0000
40	00	0000	00	0000	00	0000
41	00	0000	00	0000	00	0000
42	00	0000	00	0000	00	0000
43	00	0000	00	0000	00	0000
44	00	0000	00	0000	00	0000
45	00	0000	00	0000	00	0000
46	00	0000	00	0000	00	0000
47	00	0000	00	0000	00	0000
48	00	0000	00	0000	00	0000
49	00	0000	00	0000	00	0000
50	00	0000	00	0000	00	0000
51	00	0000	00	0000	00	0000
52	00	0000	00	0000	00	0000
53	00	0000	00	0000	00	0000
54	00	0000	00	0000	00	0000
55	00	0000	00	0000	00	0000
56	00	0000	00	0000	00	0000
57	00	0000	00	0000	00	0000
58	00	0000	00	0000	00	0000
59	00	0000	00	0000	00	0000
60	00	0000	00	0000	00	0000
61	01	1000	01	1000	01	1000
62	00	0000	00	0000	00	0000
63	00	0000	00	0000	00	0000
64	00	0000	00	0000	00	0000
65	00	0000	00	0000	00	0000
66	00	0000	00	0000	00	0000
67	00	0000	00	0000	00	0000
68	00	0000	00	0000	00	0000
69	00	0000	00	0000	00	0000



FFinal-Flight Vers.FF10

1	Ī		i				FFinal-Flight_Vers.FF1
	l	mel 6		nnel 7	Char		
State ID	Mode	Short PET	Mode	Short PET	Mode	Short PET	
DEC	BIN	BIN	BIN	BIN	BIN	BIN	
1	0	0	0	0	0	0	Nadir 01
2 3	0	0	0	0	0	0	Nadir 02
4	0	0	0	0	0	0	Nadir 03 Nadir 04
5	0	0	0	0	0	0	Nadir 05
6	0	0	0	0	0	0	Nadir 06
7	0	0	0	0	Ö	0	Nadir 07
8	0	0	0	0	0	0	Dark_Current_Cal_5
9	0	0	0	0	0	0	Nadir 09
10	0	0	0	0	0	0	Nadir 10
11	0	0	0	0	0	0	Nadir 11
12	0	0	0	0	0	0	Nadir 12
13	0	0	0	0	0	0	Nadir 13
14 15	0	0	0	0	0	0	Nadir 14 Nadir 15
16	1	1000	0	0	0	0	NDF Monitoring, ND Filter OUT
17	0	0	0	0	ů	0	Sun_ASM_Diffuser
18	Ö	0	0	0	Ö	0	Sun ASM Diffuser
19	0	0	0	0	0	0	Sun ASM Diffuser
20	0	0	0	0	0	0	Sun_ASM_Diffuser
21	0	0	0	0	0	0	Sun_ASM_Diffuser
22	0	0	0	0	0	0	Sun_ASM_Diffuser_Atmosphere
23	0	0	0	0	0	0	Nadir 23
24	0	0	0	0	0	0	Nadir 24
25	0	0	0	0	0	0	Nadir 25 Dark Current Cal 4
26 27	0	0	0	0	0	0	Limb_Mesosphere
28	ů ů	0	0	0	ů	0	Limb 01
29	Ö	0	0	0	Ö	0	Limb 02
30	0	0	0	0	0	0	Limb 03
31	0	0	0	0	0	0	Limb 04
32	0	0	0	0	0	0	Limb 05
33	0	0	0	0	0	0	Limb 06
34	0	0	0	0	0	0	Limb 11
35	0	0	0	0	0	0	Limb 08
36 37	0	0	0	0	0	0	Limb 09
38	0	0	0	0	0	0	Limb 10 Nadir_Pointing_Left
39	1	1000	1	111	1	1000	Dark Current Cal HM
40	0	0	0	0	0	0	Limb 13
41	0	0	0	0	0	0	Limb 12
42	0	0	0	0	0	0	Nadir 26
43	0	0	0	0	0	0	Nadir 27
44	0	0	0	0	0	0	Nadir 28
45	0	0	0	0	0	0	Nadir 29
46	0	0	0	0	0	0	Dark_Current_Cal_1
47	0	0 1000	0	0	0	0	SO&C_Scan/Point
<u>48</u> 49	0	0	0	0	0	0	NDF Monitoring, ND Filter IN SO&C_Scan_long_duration
50	0	0	0	0	0	0	SO&C_Scan_fast_sweep
51	0	0	0	0	Ů.	0	SO&C_Point
52	0	0	0	0	0	0	Sun_Diffusor_Cal_ND_O
53	0	0	0	0	0	0	Sub_Solar_Cal_Point
54	0	0	0	0	0	0	Moon_Cal_Scan
55	0	0	0	0	0	0	MO&C_Point_Troposphere
56	0	0	0	0	0	0	MO&C_Point
57	0	0	0	0	0	0	MO&C_Point_long_duration
58	0	0	0	0	0	0	Sub_Solar_Cal_Point/Scan
59	0	0	0	0	0	0	Spectral_Lamp_Cal_Mirror
60 61	0	0 1000	0 1	0 111	0	0 1000	Sub_Solar_Cal_Scan White_Lamp (ND_IN)
62	0	0	0	0	0	0	Wnite_Lamp(ND_IN)Sun_Diffusor_Cal_ND_I
63	0	0	0	0	0	0	Sun_Diffusor_Cal_ND_1 Dark_Current_Cal_2
64	0	0	0	0	0	0	Sun_Nadir/Elev_Mir_Cal_Point
65	0	0	0	0	0	0	ADC/Cal_Scan/Maintenance
66	0	0	0	0	0	0	Sun_Nadir/Elev_Mir_Cal_Scan
67	0	0	0	0	0	0	Dark_Current_Cal_3
68	0	0	0	0	0	0	Sun_Nadir/Elev_Mir_Cal_fast_swe
69	0	0	0	0	0	0	Spectral_Lamp_Cal_Diffusor
70	0	0	0	0	0	0	White_Lamp_Cal(ND_OUT)



5.1.3 State Index Table

Measurement Category ID:

This table defines the relation between states, cluster definition and co-adding index, both for the low and the high data rate. Only one table of this class exists.

Table Template:

MCMD: SET STATE INDEX TABLE (IOM Reference A6.54)

Columns:

State ID: identifier of state, range = 1-70

Cluster Table Index: selection of the clustering scheme (cluster: pixel area of a sensor/

channel with identical PET and co-adding factor); range = 1-4;

the Cluster Definition Table is given in chapter 5.2.4

Coadding Index High Data Rate: selection of the co-adding table for the high data rate;

range = 1-70 (note that the equality of the maximum number of co-adding schemes and the maximum number of states is only

accidental)

the Co-Adding Tables are given in chapter 5.1.6

Note: for the ADC calibration, the co-adding index is set to "0"

Coadding Index Low Data Rate: selection of the co-adding table for the low data rate;

range = 1-70 (note that the equality of the maximum number of co-adding schemes and the maximum number of states is only

accidental)

the Co-Adding Tables are given in chapter 5.1.6

Note: for the ADC calibration, the co-adding index is set to "0" identification of the measurement category, range = 1-22 (note that this parameter is not used onboard, it is added to the measurement data packets for ground processing purposes)

the assignment of IDs is as follows:

1 = Nadir

2 = Limb

3 = Nadir Pointing

4 = SO&C_Scanning

 $5 = SO\&C_Pointing$

 $6 = MO\&C_Pointing$

7 = Moon scanning

8 = Sun Diffuser Calibration (ND filter out)

9 = Sub-solar Calibration

10 = Spectral_Lamp_Calibration

11 = White Lamp Calibration

12 = Dark_Current_Calibration

13 = Sun Nadir/Elevation_Mirror_Calibration

14 = Moon Nadir/Elevation Mirror Calibration

15 = ADC Calibration

16 = Sun_Diffuser_Calibration (ND filter in)

17 = Nadir eclipse (pointing)

18 = Nadir_eclipse (scanning)

19 = White_Lamp_Diffuser_Monitoring

20 = Dark_Current_Calibration Hot_Mode

21 = NDF_Monitoring_Filter-OUT

22 = NDF_Monitoring_Filter-IN

23 = Sun ASM-Diffuser Calibration

24 = Nadir_Pointing _LEFT



25 = Sun_ASM-Diffuser_Atmosphere 26 = Limb-Mesosphere

In fig. 5, the relation between the State Index table, the Co-Adding table and the Cluster Definition table is shown. It can be read as follows: For low data rates when executing state i, the cluster definition as listed in Cluster Definition table k is selected. This definition is associated with the co-adding scheme of Co-Adding table j. Each table consists of 64 identical Cluster Indices. All co-adding factors of table j are applied to the corresponding clusters of table k. Fig. 5 depicts an example where a co-adding factor f is applied to the cluster with index m and identifier n (the cluster is part of channel l; it starts at pixel 11 and has a length of Dl).

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	State affected
none				



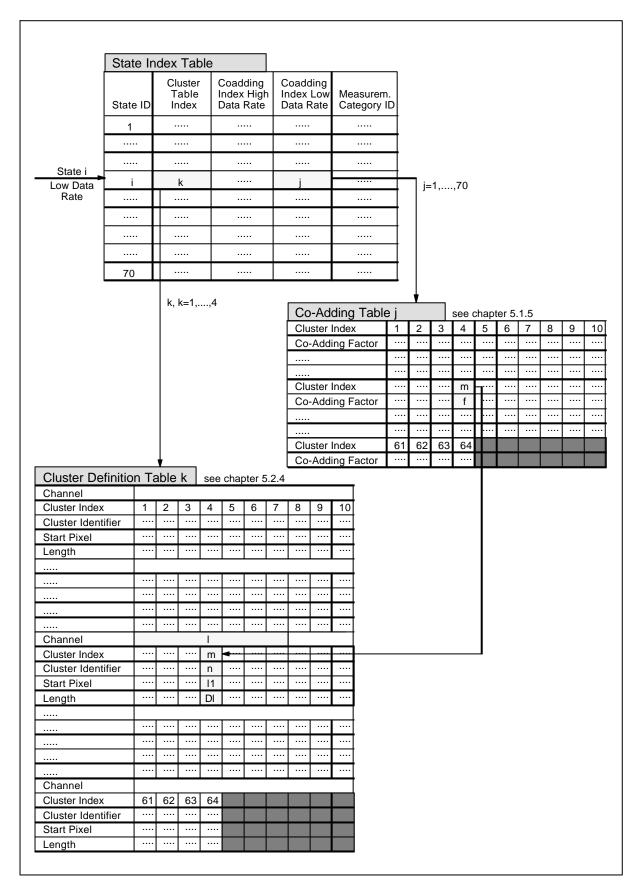


Figure 5: Relation between State Index Table, Co-Adding Table and Cluster Definition Table



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	Cluster	Coadding	Coadding	
	Table		Index Low	N
a		Index High		Measurement
State ID	Index	Data Rate	Data Rate	Category ID
1	3	30	21	1
2	3	30	22	1
3	3	30	23	1
4	3	30	24	1
5	3	30	25	1
6	3	30	26	1
7	3	30	27	1
8	1	20	11	1
9	3	30	21	1
10	3	30	22	1
11	3	30	23	1
12	3	30	24	1
13	3	30	25	1
14	3	30	26	1
15	3	30	27	1
16	1	20	11	1
17	3	30	24	1
18	3	30	25	1
19	3	30	27	1
20	3	30	24	1
21	3	30	25	1
22	3	30	27	1
23	3	30	21	3
24	3	30	22	3
25	3	30	23	3
26	1	20	12	17
27	1	20	12	18
28	1	10	1	2
29	1	10	2	2
30	1	10	3	2
31	1	10	4	2
32	1	10	5	2
33	1	10	6	2
34	1	10	7	2
35	1	10	1	2
30	1	10		

	Cluster	Coadding	Coadding	
	Table	Index High	Index Low	Measurement
State ID	Index	Data Rate	Data Rate	Category ID
36	1	10	2	2
37	1	10	3	2
38	1	10	4	2
39	1	10	5	2
40	1	10	6	2
41	1	10	7	2
42	3	30	24	3
43	3	30	25	3
44	3	30	26	3
45	3	30	27	3
46	1	44	43	12
47	1	32	31	4
48	1	20	11	3
49	1	32	31	4
50	1	36	35	4
51	1	32	31	5
52	1	40	39	8
53	1	32	31	9
54	1	47	47	7
55	1	47	47	14
56	1	47	47	6
57	1	47	47	6
58	1	32	31	9
59	1	53	53	10
60	1	36	35	9
61	1	55	55	11
62	1	40	39	16
63	1	49	49	12
64	1	32	31	13
65	1	0	0	15
66	1	32	31	13
67	1	50	50	12
68	1	36	35	13
69	1	57	57	10
70	1	59	59	19



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	Cluster	Coadding	Coadding	
	Definition	Index High	Index Low	Measurement
State ID	Index	Data Rate	Data Rate	Category ID
1	3	30	21	1
2	3	30	22	1
3	3	30	23	1
4	3	30	24	1
5	3	30	25	1
6	3	30	26	1
7	3	30	27	1
8	1	52	52	12
9	3	30	21	1
10	3	30	22	1
11	3	30	23	1
12	3	30	24	1
13	3	30	25	1
14	3	30	26	1
15	3	30	27	1
16	1	48	48	21
17	1	17	17	23
18	1	17	17	23
19	1	17	17	23
20	1	17	17	23
21	1	17	17	23
22	1	17	17	25
23	3	30	21	3
24	3	30	22	3
25	3	30	23	3
26	1	51	51	12
27	1	10	6	26
28	1	10	1	2
29	1	10	2	2
30	1	10	3	2
31	1	10	4	2
32	1	10	5	2
33	1	10	6	2
34	1	10	4	2
35	1	10	1	2

	Cluster	Coadding	Coadding	
	Definition	Index High	Index Low	Measurement
State ID	Index	Data Rate	Data Rate	Category ID
36	1	10	2	2
37	1	10	3	2
38	3	30	27	24
39	1	55	55	20
40	1	10	6	2
41	1	10	5	2
42	3	30	24	3
43	3	30	25	3
44	3	30	26	3
45	3	30	27	3
46	1	45	45	12
47	1	32	31	4
48	1	48	48	22
49	1	32	31	4
50	1	36	35	4
51	1	32	31	5
52	1	40	39	8
53	1	32	31	9
54	1	47	47	7
55	1	47	47	6
56	1	47	47	6
57	1	47	47	6
58	1	32	31	9
59	1	53	53	10
60	1	36	35	9
61	1	55	55	11
62	1	40	39	16
63	1	49	49	12
64	1	32	31	13
65	1	44	43	15
66	1	32	31	13
67	1	50	50	12
68	1	36	35	13
69	1	57	57	10
70	1	59	59	19



5.1.4 State Duration Table

This table defines the duration of state internal time intervals. Only one table of this class exists.

Table Template:

MCMD: SET STATE DURATION TABLE (IOM Reference A6.53)

Columns:

State ID: identifier of state, range = 1-70

Restart Time: definition of the elapse time between consecutive *RESTART*

commands in limb mode in number of BCPS pulses;

range = 1-255

(1 BCPS = 62.5 msec)

(SDPU) Mode: selection of measurement mode for SDPU; range = 0/1

0 = standard, continuous measurement

1 = limb mode, no data processing from elevation steps

SDPU Duration (Number of BCPS): definition of SDPU measurement mode in number of

BCPS,

range = 0 to 2^{16} -1

Wait Measurement Execution - WM: definition of the RTCS Wait parameter WM (the time to

wait for the termination of the nominal scan, i.e. excluding the last phase of a state, in CT (1 CT = 3.90625 msec);

range = 0 to 2^{32} -1

State Duration: definition of the total duration of the state, including all

phases of the state (equivalent to the RTCS execution time)

in CT; range = 0 to 2^{32} -1

Scanner Reset Wait - WSR: definition of the RTCS Wait parameter WSR (the time to

wait for the termination of the last phase of a state) in CT;

range = 0 to 2^{16} -1

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	State affected
OCR_011	21/07/03	SOST-DLR; M.Gottwald	Improvement of limb/nadir matching	28 - 37; 40; 41



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State ID	Restart Time	(SDPU) Mode	SDPU Duration (Number of BCPS)	Execution	State Duration	Scanner Reset Wa
1	255	STANDARD	1280	20456	21392	174
2	255	STANDARD	1280	20456	21392	174
3	255	STANDARD	1280	20456	21392	174
4	255	STANDARD	1040	16617	17551	172
5	255	STANDARD	1040	16617	17551	172
6	255	STANDARD	1040	16617	17551	172
7	255	STANDARD	1040	16617	17551	172
8	255	STANDARD	1040	16617	17551	172
9	255	STANDARD	1280	20456	21392	174
10	255	STANDARD	1280	20456	21392	174
11	255	STANDARD	1280	20456	21392	174
12	255	STANDARD	1040	16617	17551	172
13	255	STANDARD	1040	16617	17551	172
14	255	STANDARD	1040	16617	17551	172
15	255	STANDARD	1040	16617	17551	172
16	255	STANDARD	1040	16617	17551	172
17	255	STANDARD	320	5097	6031	172
18	255	STANDARD	320	5097	6031	172
19	255	STANDARD	320	5097	6031	172
20	255	STANDARD	320	5097	6031	172
21	255	STANDARD	320	5097	6031	172
22	255	STANDARD	320	5097	6031	172
23	255	STANDARD	1280	20456	21392	174
24	255	STANDARD	1280	20456	21392	174
25	255	STANDARD	1280	20456	21392	174
26	255	STANDARD	1280	20456	21392	174
27	255	STANDARD	1280	20456	21392	174
28	27	LIMB	945	15097	16031	172
29	27	LIMB	945	15097	16031	172
30	27	LIMB	945	15097	16031	172
31	27	LIMB	945	15097	16031	172
32	27	LIMB	945	15097	16031	172
33	27	LIMB	945	15097	16031	172
34	27	LIMB	945	15097	16031	172
35	27	LIMB	945	15097	16031	172
36	27	LIMB	945	15097	16031	172
37	27	LIMB	945	15097	16031	172
38	27	LIMB	945	15097	16031	172
39	27	LIMB	945	15097	16031	172
40	27	LIMB	945	15097	16031	172
41	27	LIMB	945	15097	16031	172
42	255	STANDARD	1040	16617	17551	172
43	255	STANDARD	1040	16617	17551	172
44	255	STANDARD	1040	16617	17551	172
45	255	STANDARD	1040	16617	17551	172
46	255	STANDARD	80	1257	2555	8
47	255	STANDARD	992	15849	17147	8
48	255	STANDARD	1040	16617	17551	172
49	255	STANDARD	2080	33256	34554	8
50	255	STANDARD	40	617	1915	8
51	255	STANDARD	944	15081	16379	8
52	255	STANDARD	480	7657	9911	801
53	255	STANDARD	352	5609	7286	8
54	255	STANDARD	192	3049	3988	177
55	255	STANDARD	192	3049	4011	200
56	255	STANDARD	512	8169	9108	177
57	255	STANDARD	2048	32744	33685	179
58	255	STANDARD	352	5609	7286	8
59	255	STANDARD	64	1001	3475	875
60	255	STANDARD	352	5609	7286	8
61	255	STANDARD	160	2537	5465	873
62	255	STANDARD	480	7657	10175	801
63	255	STANDARD	480	7657	8955	8
64	255	STANDARD	56	873	2171	8
65	255	STANDARD	16	506	4807	0
66	255	STANDARD	176	2793	4091	8
67	255	STANDARD	3200	51175	52473	8
68	255	STANDARD	40	617	1915	8
69	255	STANDARD	1280	20456	22932	877
70	255	STANDARD	1280	20456	23122	875



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	1 1		Duration	Wait Measurement	Stata Duration	Scanner Reset	!
State ID	Restart Time	(SDPU) Mode	Duration (BCPS)	Execution (counts)	(counts)	Wait (counts)	
1	255	STANDARD	1280	20456	21392	174	Nadir 01
2	255	STANDARD	1280	20456	21392	174	Nadir 02
3	255	STANDARD	1280	20456	21392	174	Nadir 03
4	255	STANDARD	1040	16617	17551	172	Nadir 04
5	255	STANDARD	1040	16617	17551	172	Nadir 05
<u>6</u> 7	255 255	STANDARD STANDARD	1040 1040	16617 16617	17551 17551	172 172	Nadir 06 Nadir 07
8	255	STANDARD	640	10217	11151	172	Dark_Current_Cal_5
9	255	STANDARD	1280	20456	21392	174	Nadir 09
10	255	STANDARD	1280	20456	21392	174	Nadir 10
11	255	STANDARD	1280	20456	21392	174	Nadir 11
12	255	STANDARD	1040	16617	17551	172	Nadir 12
13	255	STANDARD	1040	16617	17551	172	Nadir 13
14	255	STANDARD	1040	16617	17551	172	Nadir 14
15 16	255 255	STANDARD STANDARD	1040 192	16617 3049	17551 5713	172 873	Nadir 15 NDF Monitoring, ND Filter OUT
17	255	STANDARD	480	7657	10050	940	Sun_ASM_Diffuser
18	255	STANDARD	480	7657	10050	940	Sun_ASM_Diffuser
19	255	STANDARD	480	7657	10050	940	Sun_ASM_Diffuser
20	255	STANDARD	480	7657	10050	940	Sun_ASM_Diffuser
21	255	STANDARD	480	7657	10050	940	Sun_ASM_Diffuser
22	255	STANDARD	512	8169	10562	940	Sun_ASM_Diffuser_Atmosphere
23	255	STANDARD	1280	20456	21392	174	Nadir 23
24	255	STANDARD	1280	20456	21392	174	Nadir 24
25 26	255 255	STANDARD STANDARD	1280 480	20456 7657	21392 8591	174 172	Nadir 25 Dark_Current_Cal_4
27	27	LIMB	648	10345	11279	172	Limb_Mesosphere
28	27	LIMB	837	13369	14303	172	Limb 01_short
29	27	LIMB	837	13369	14303	172	Limb 02_short
30	27	LIMB	837	13369	14303	172	Limb 03_short
31	27	LIMB	837	13369	14303	172	Limb 04_short
32	27	LIMB	837	13369	14303	172	Limb 05_short
33	27	LIMB	837	13369	14303	172	Limb 06_short
34 35	27 27	LIMB LIMB	837 837	13369 13369	14303 14303	172 172	Limb 11_short Limb 08_short
36	27	LIMB	837	13369	14303	172	Limb 00_short
37	27	LIMB	837	13369	14303	172	Limb 10_short
38	255	STANDARD	1040	16617	17551	172	Nadir_Pointing_Left
39	255	STANDARD	192	3049	5442	940	Dark_Current_Cal_HM
40	27	LIMB	837	13369	14303	172	Limb 13 _short
41	27	LIMB	837	13369	14303	172	Limb 12_short
42	255	STANDARD	1040	16617	17551	172	Nadir 26
43 44	255 255	STANDARD STANDARD	1040 1040	16617 16617	17551 17551	172 172	Nadir 27 Nadir 28
45	255	STANDARD	1040	16617	17551	172	Nadir 29
46	255	STANDARD	160	2537	3471	172	Dark_Current_Cal_1
47	255	STANDARD	1056	16873	18171	8	SO&C_Scan/Point
48	255	STANDARD	192	3049	5977	873	NDF Monitoring, ND Filter IN
49	255	STANDARD	2080	33256	34554	8	SO&C_Scan_long_duration
50	255	STANDARD	48	745	2043	8	SO&C_Scan_fast_sweep
51 52	255 255	STANDARD STANDARD	1024 480	16361 7657	17659 9911	8 801	SO&C_Point Sun_Diffusor_Cal_ND_O
53	255	STANDARD	352	5609	7286	8	Sun_Diffusor_Cal_ND_0 Sub_Solar_Cal_Point
54	255	STANDARD	192	3049	3988	177	Moon_Cal_Scan
55	255	STANDARD	2272	36328	37269	179	MO&C_Point_Troposphere
56	255	STANDARD	640	10217	11156	177	MO&C_Point
57	255	STANDARD	2048	32744	33685	179	MO&C_Point_long_duration
58	255	STANDARD	352	5609	7286	8	Sub_Solar_Cal_Point/Scan
59	255	STANDARD	192	3049	5523	875	Spectral_Lamp_Cal_Mirror
60 61	255 255	STANDARD STANDARD	352 192	5609 3049	7286 5977	8 873	Sub_Solar_Cal_Scan White Lamp (ND IN)
62	255	STANDARD	480	7657	10175	801	Sun_Diffusor_Cal_ND_I
63	255	STANDARD	480	7657	8591	172	Dark_Current_Cal_2
64	255	STANDARD	64	1001	2299	8	Sun_Nadir/Elev_Mir_Cal_Point
65	255	STANDARD	320	5097	10803	172	ADC/Cal_Scan/Maintenance
66	255	STANDARD	176	2793	4091	8	Sun_Nadir/Elev_Mir_Cal_Scan
67	255	STANDARD	1280	20456	21392	174	Dark_Current_Cal_3
68	255	STANDARD	48	745	2043	8	Sun_Nadir/Elev_Mir_Cal_fast_sweek
69 70	255 255	STANDARD	1280 1280	20456	22932	877	Spectral_Lamp_Cal_Diffusor
70	255	STANDARD	1200	20456	23122	875	White_Lamp_Cal (ND_OUT)



5.1.5 Co-Adding Table

A Co-Adding table exists for each co-adding index, i.e. the total number of tables in this class is 70 (the equality of the number of co-adding tables and the number of states is only accidental). Each Co-Adding table stores consecutively 64 co-adding factors.

Table Template:

MCMD: SET CO-ADDING TABLE (IOM Reference A6.33)

Rows:

Cluster Index: identifier of the cluster (it refers to the Cluster Index in the Cluster

Definition

Table - see chapter 5.2.4); range = 1-64 (maximum)

Co-Adding Factor: number of co-addings to be applied to the pixel data in a cluster;

range = 1-64 (maximum) 1 = no co-adding applied

n, $1 < n \le 64$ (n data words will be co-added)

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	Co-Adding Table affected
OCR_007	07.Jul.03	SRON	Revision of calibration states 67, 8, 16 and 48	50



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CO_ADDING	1							_
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	- 1	- 1	- 1	- 1	- 1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	4							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	- 1	-1	- 1	1	-1	-1	1	- 1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	-1	-1	- 1	1	-1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	7							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	-1	1	-1	-1	1	- 1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	1	3	3	3	3	3
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	3	6	6	6	3	3	3	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	- 1	- 1	- 1	- 1	- 1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING Cluster Index	T	2	3	4	5	6	7	8
	-	- 4	0	4	0		- /	
Co_Adding Factor								
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	-1	1	1	1	-1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	- 1	- 1	1	1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	5				-		-	
Cluster Index	1	2	3	4	5	6	- /	8
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	9	10	11	12	13	14	15	-1
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	- 1
Cluster Index	17	18	19	20	21	22	23	2
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	1	1
Cluster Index	25	26	27	28	29	30	31	3
Co_Adding Factor	1	1	1	1	1	0	0	(
Cluster Index	33	34	35	36	37	38	39	4
Co_Adding Factor	0	0	0	0	0	0	0	-
Cluster Index	41	42	43	44	45	46	47	4
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	49	50	51	52	53	54	55	5
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	57	58	59	60	61	62	63	6
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	8							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	3							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	-1	-1	1	1	-1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	-1	-1	1	-1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	- 6							_
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	1	- 1
Cluster Index	9	10	11	12	13	14	15	1
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	2
Co_Adding Factor	1	- 1	1	1	1	- 1	1	1
Cluster Index	25	26	27	28	29	30	31	3
Co_Adding Factor	- 1	- 1	- 1	- 1	- 1	0	0	-
Cluster Index	33	34	35	36	37	38	39	4
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	41	42	43	44	45	46	47	4
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	49	50	51	52	53	54	55	5
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	57	58	59	60	61	62	63	6
Co_Adding Factor	0	0	0	0	0	0	0	(

Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	10							
Cluster Index	-1	2	3	4	5	6	7	8
Co_Adding Factor	-1	1	- 1	1	1	- 1	1	1
Cluster Index	9	10	-11	12	13	14	15	16
Co_Adding Factor	- 1	- 1	- 1	1	1	- 1	- 1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	-1	1	1	-1	-1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	1	1	1	1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	13							_
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	16							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	9	10	11	12	13	14	15	1
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	17	18	19	20	21	22	23	2
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	25	26	27	28	29	30	31	3
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	33	34	35	36	37	38	39	4
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	41	42	43	44	45	46	47	4
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	49	50	51	52	53	54	55	- 5
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	57	58	59	60	61	62	63	6
Co_Adding Factor	0	0	0	0	0	0	0	

CO_ADDING	11							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	-1	1	1	- 1	8	8
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	2	2	2	16	16	16	16	16
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	16	16	16	16	16	16	16	4
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	4	4	4	4	4	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	14							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	17							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	12							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	-1	- 1	1	1	- 1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	- 1	-1	1	1	-1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	- 1	-1	1	1	8	8	8	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	- 1	- 1	- 1	1	- 1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	15							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

Cluster Index	1	2	3	4	- 5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

 $FFinal\text{-}Flight_Vers.FF10$



CO ADDING 1	CO ADDING 4	CO ADDING 7
CO_ADDING 1 Cluster Index 1 2 3 4 5 6 7 8	CO_ADDING	CO_ADDING 7 Cluster Index 1 2 3 4 5 6 7 8
Cluster Index	Cluster Index	Cluster Index
Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16
Co Adding Factor 1 1 1 1 1 1 1 1 1	Co Adding Factor 1 1 4 4 8 8 2 8	Co_Adding Factor 2 1 4 4 24 24 6 24
Cluster Index 17 18 19 20 21 22 23 24	Cluster Index 17 18 19 20 21 22 23 24	Cluster Index 17 18 19 20 21 22 23 24
Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 8 8 8 2 8 8 4 4	Co_Adding Factor 24 24 24 6 24 24 4 4
Cluster Index 25 26 27 28 29 30 31 32	Cluster Index 25 26 27 28 29 30 31 32	Cluster Index 25 26 27 28 29 30 31 32
Co_Adding Factor 1 1 1 1 1 1 1 1 1	Co_Adding Factor 1 4 4 8 8 2 8 8	Co_Adding Factor 1 4 4 4 4 1 4 4
Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40
Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 4 4 1 4 4 1 4	Co_Adding Factor 4 4 1 4 4 1 4
Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0
Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 0 0 0 0 0 0 0 0	Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 0 0 0 0 0 0 0 0	Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 0 0 0 0 0 0 0 0
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 57 58 59 60 61 62 63 64
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0
CO_ADDING 2	CO_ADDING 5	CO_ADDING 8
Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8	
Co_Adding Factor 1 1 1 1 1 1 2 1	Co_Adding Factor 1 1 1 2 4 4 4 4	
Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16	
Co_Adding Factor 1 1 1 1 24 24 6 24	Co_Adding Factor 1 1 4 4 8 8 2 8	
Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 24 24 24 6 24 24 8 8	Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 8 8 8 8 2 8 8 4 4	
Co_Adding Factor 24 24 24 6 24 24 8 8 8 8 8 9 9 9 9 9	Co_Adding Factor 8 8 8 8 2 8 8 4 4 Cluster Index 25 26 27 28 29 30 31 32	
Co_Adding Factor 2 8 8 24 24 6 24 24	Co_Adding Factor 1 4 4 8 8 2 8 8	
Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40	
Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 4 4 1 4 4 1 4	
Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48	
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0	
Cluster Index 49 50 51 52 53 54 55 56	Cluster Index 49 50 51 52 53 54 55 56	
Co_Adding Factor 0 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0 0	<u> </u>
Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0	
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_waging Factor 0 0 0 0 0 0 0 0	
CO_ADDING 3	CO_ADDING 6	CO_ADDING 9
Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8	
Co_Adding Factor 1 1 1 2 4 4 4 4	Co_Adding Factor 1 1 1 1 1 1 1 1	
Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16	
Co_Adding Factor 1 1 4 4 24 24 6 24	Co_Adding Factor 1 1 1 1 1 1 1 1	
Cluster Index 17 18 19 20 21 22 23 24	Cluster Index 17 18 19 20 21 22 23 24	
Co_Adding Factor 24 24 24 6 24 24 4 4 4 Cluster Index 25 26 27 28 29 30 31 32	Co_Adding Factor 1 1 1 1 1 1 1 1 1	
Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 1 4 4 24 24 6 24 24	Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 1 1 1 1 1 1 1 1	
Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40	
Co_Adding Factor 4 4 1 4 4 1 4	Co Adding Factor 1 1 1 1 1 1 1 1	
Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48	
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0	
Cluster Index 49 50 51 52 53 54 55 56	Cluster Index 49 50 51 52 53 54 55 56	
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0	
Cluster Index 57 58 59 60 61 62 63 64 Co Adding Factor 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co Adding Factor 0 0 0 0 0 0 0 0	
Co_Adding Factor 0 0 0 0 0 0 0	Co_Adding ractor of of of of of of of o	
CO ADDING 10	CO ADDING 13	CO ADDING 16
	CO_ADDING 13	CO_ADDING 16
	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 1 1 1 1 1 1 1 1 Cluster Index 9 10 11 12 13 14 15 16	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 1 1 1 1 1 1 1 1 1 1 1 Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 1 1 1 1 1 1 1 1	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1 </td <td>CO_ADDING 13</td> <td>CO_ADDING 16</td>	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 1	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1 1 1 1 1 1 1 1 Custer Index 9 10 11 12 13 14 15 16 Co Adding Factor 1 1 1 1 1 1 1 1 1 1 Custer Index 17 18 19 20 21 22 23 24 Co Adding Factor 1 1 1 1 1 1 1 Cluster Index 25 26 27 28 29 30 31 32	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1 </td <td>CO_ADDING 13</td> <td>CO_ADDING 16</td>	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1 1 1 1 1 1 1 1 Custer Index 9 10 11 12 13 14 15 16 Co Adding Factor 1 1 1 1 1 1 1 1 1 1 Custer Index 17 18 19 20 21 22 23 24 Co Adding Factor 1 1 1 1 1 1 1 Cluster Index 25 26 27 28 29 30 31 32	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 1	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1 </td <td>CO_ADDING 13</td> <td>CO_ADDING 16</td>	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1 </td <td>CO_ADDING 13</td> <td>CO_ADDING 16</td>	CO_ADDING 13	CO_ADDING 16
Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 1	CO_ADDING 13	CO_ADDING 16
Cluster Index		
Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 1 1 1 1 1 1 1 1 Co_Adding Factor 1 1 1 1 1 1 1 1 Co_Adding Factor 1	CO_ADDING 13	CO_ADDING 17
Cluster Index		CO_ADDING 17 Cluster Index 1 2 3 4 5 6 7 8
Cluster Index		CO_ADDING 17 Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 4 4 4 4 4 4 4 4 4 4 4
Cluster Index		CO ADDING 17 Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 4 4 4 4 4 4 4 4 Cluster Index 9 10 11 12 13 14 15 16
Cluster Index		CO_ADDING 17 Cluster Index 1 2 3 4 5 6 7 8 Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 4 4 4 16 16 16 16 Co_Adding Factor 4 4 4 16 16 16 16 16
Cluster Index		CO ADDING 17 Cluster Index 1 2 3 4 5 6 7 8 Co Adding Factor 4 4 4 4 4 4 4 4 Cluster Index 9 10 11 12 13 14 15 16
Cluster Index		CO_ADDING 17 Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Cluster Index		CO_ADDING
Cluster Index		CO_ADDING
Cluster Index		CO_ADDING 17 Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 4 4 4 4 4 4 4 4 4 4 4 4 4 6 16 16 16 16 16 16 16 16 16 16 16 16 1
Cluster Index		CO_ADDING 17 Cluster Index 1 1 2 3 4 5 6 7 8 Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 4 4 4 4 4 16 16 16 16 Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 16 16 16 16 16 16 16 18 Co_Adding Factor 16 16 16 16 16 16 16 18 Cluster Index 2 5 26 27 28 29 30 31 32 Co_Adding Factor 18 8 8 16 16 16 16 16 16 Cluster Index 3 33 34 35 36 37 38 39 40 Co_Adding Factor 4 4 4 4 4 2 2 2 Cluster Index 3 33 34 35 36 37 38 39 40 Co_Adding Factor 4 4 4 4 4 2 2 2 Cluster Index 4 4 4 4 4 2 2 2 Cluster Index 4 4 4 4 4 2 2 2 Cluster Index 4 4 4 4 4 2 2 2 Cluster Index 4 4 4 4 4 2 2 2 Cluster Index 4 4 4 4 4 6 6 6 74 86
Cluster Index		CO_ADDING 17 Cluster Index 1 2 3 4 5 6 7 8 Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 4 4 4 4 4 6 16 16 16 Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 16 16 16 16 16 16 16 16 Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 16 16 16 16 16 16 16 16 Cluster Index 2 7 28 29 30 31 32 Co_Adding Factor 8 8 8 16 16 16 16 16 Cluster Index 3 3 34 35 36 37 38 39 40 Co_Adding Factor 4 4 4 4 4 2 2 2 Cluster Index 3 3 34 35 36 37 38 39 40 Co_Adding Factor 4 4 4 4 4 4 2 2 2 Cluster Index 4 14 2 43 44 45 46 47 48 Co_Adding Factor 4 4 4 4 4 4 4 6 6 47 48 Co_Adding Factor 6 0 0 0 0 0 0 0 0 0 0 0
Cluster Index		CO_ADDING 17 Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 4 4 4 4 4 16 16 16 16 16 16 16 16 16 16 16 16 16
Cluster Index		CO_ADDING
Cluster Index		CO_ADDING 17 Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 16 16 16 16 16 16 16 16 16 16 16 16 16
Cluster Index		CO_ADDING
Cluster Index	CO_ADDING 14	CO_ADDING
Couster Index	CO_ADDING 14	CO_ADDING
Couster Index	CO_ADDING 14	CO_ADDING
Couster Index	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Couster Index	CO_ADDING 14	CO_ADDING
Couster Index	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING
Co_Adding Factor 1	CO_ADDING 14	CO_ADDING



CO_ADDING	19							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	22							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	9	10	1.1	12	13	14	15	16
Co_Adding Factor	1	1	1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	1	1	1	1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	- 1	1	1	1	1	1	1
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	1	- 1	1	1	1	1	1	1
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	1	- 1	1	1	1	- 1	1	1
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	25							
Cluster Index	- 1	2	3	4	5	6	7	8
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	9	10	1.1	12	13	14	15	16
Co_Adding Factor	1	1	1	1	1	1	1	8
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	8	8	1	8	1	8	1	8
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	8	- 1	1	8	1	8	1	8
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	4	- 1	1	4	1	4	1	4
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	4	- 1	4	1	4	- 1	4	1
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	1	4	1	1	1	1	1	1
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	20							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	-1	1	1	1	- 1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	-1	1	1	1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	23							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	1	1	1	- 1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	- 1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	- 1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	1	- 1	1	1	1	- 1	1	1
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	1	- 1	1	1	- 1	- 1	1	1
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	26							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	1	4
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	4	4	2	1	- 1	- 1	1	8
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	8	8	1	8	2	8	2	8
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	8	2	2	8	2	8	2	8
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	8	2	2	8	2	8	2	8
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	8	2	8	2	8	2	8	2
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	2	8	2	2	2	1	1	1
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	21							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	- 1	1	1	1	- 1	1	1
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	24							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	1	1	- 1	- 1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	-1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	- 1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	- 1
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	- 1
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	-1	- 1
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	- 1	- 1	- 1	1	1	- 1	1	-1
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	27							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	1	1	1	1	1	1	4
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	4	- 4	1	1	1	- 1	1	8
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	8	8	2	8	2	8	2	8
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	8	2	2	8	2	8	2	8
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	8	2	2	8	2	8	2	8
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	8	2	8	2	8	2	8	2
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	2	8	2	2	2	2	2	2
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	28							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index Co Adding Factor	9	10	11	12	13	14	15	16
Cluster Index Co_Adding Factor	17	18	19	20	21	22	23	24
Cluster Index Co_Adding Factor	25 0	26 0	27 0	28 0	29	30	31 0	32 0
Cluster Index Co_Adding Factor	33	34	35 0	36 0	37	38	39	40 0
Cluster Index Co_Adding Factor	41	42	43	44	45	46 0	47	48
Cluster Index Co_Adding Factor	49	50 0	51 0	52 0	53	54 0	55 0	56 0
Cluster Index Co_Adding Factor	57 0	58 0	59 0	60	61	62	63	64

CO_ADDING	31							_
Cluster Index	1	2	3	4	5	6	7	
Co_Adding Factor	8	8	8	8	8	8	8	П
Cluster Index	9	10	11	12	13	14	15	П
Co_Adding Factor	8	8	8	8	8	8	8	Г
Cluster Index	17	18	19	20	21	22	23	
Co_Adding Factor	8	8	8	8	8	8	8	Г
Cluster Index	25	26	27	28	29	30	31	
Co_Adding Factor	8	8	8	8	8	0	0	Г
Cluster Index	33	34	35	36	37	38	39	
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	41	42	43	44	45	46	47	Ι.
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	49	50	51	52	53	54	55	
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	57	58	59	60	61	62	63	
Co Adding Factor	0	0	0	0	0	0	0	

CO_ADDING	34							
Cluster Index	1	2	3	4	- 5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	29							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	32							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	- 1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	- 1	- 1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	1	- 1	1	1	- 1	1	2
Cluster Index	25	26	27	28	29	30	31	3:
Co_Adding Factor	2	2	- 1	1	1	0	0	0
Cluster Index	33	34	35	36	37	38	39	41
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	4
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	5
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	6
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	35							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	4	4	4	4	4	4	4	4
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	4	4	4	4	4	4	4	4
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	4	4	4	4	4	4	4	4
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	4	4	4	4	4	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	30							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	- 1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	-1	-1	1	1	-1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	1
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	1	-1	-1	1	-1	-1	1	1
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	33							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	36							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	1	1	-1	-1	1	-1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	1	1	-1	- 1	1	-1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	- 1	1	1	1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

 $FF in al\text{-}Flight_Vers.FF 10$



		FFinal-Flight_Vers.FF1
CO_ADDING 19	CO_ADDING	CO_ADDING
	Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 1 1 1 1 1 2 2 2
	Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 1 1 1 1 1 1 1 1	Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 1 1 2 8 8 1 1 8
	Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 1 1 1 1 1 1 1 1	Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 1 8 8 8 8 8 8 8 1
	Cluster Index 25 26 27 28 29 30 31 32	Cluster Index 25 26 27 28 29 30 31 32
	Co_Adding Factor	Co_Adding Factor 8 1 8 8 4 4 4 1 Cluster Index 33 34 35 36 37 38 39 40
	Co_Adding Factor 1 1 1 2 2 1 1 1	Co_Adding Factor 4 1 4 8 2 8 1 8
	Cluster Index 41 42 43 44 45 46 47 48 Co_Adding Factor 1 1 1 1 1 1 2 1	Cluster Index 41 42 43 44 45 46 47 48 Co_Adding Factor 1 8 1 8 1 8 8 1
	Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 1 1 1 1 1 1 1 1 1	Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 1 1 1 1 1 1 1 1 1
	Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 57 58 59 60 61 62 63 64
	Co_Adding Factor 0 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0 0
CO ADDING 20	CO_ADDING 23	CO ADDING 26
Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Co_Adding Factor 1 2 1 2	Co_Adding Factor 1 1 1 1 1 4 4 4 Cluster Index 9 10 11 12 13 14 15 16
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 1 1 1 4 4 1 1 1	Co_Adding Factor 1 1 4 16 16 16 4 16
Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0	Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 1 1 1 1 4 2 1 1 1	Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 4 16 16 16 16 16 16 16 4
Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0	Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 1 1 2 2 1 1 1 1 1	Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 16 4 16 16 4 4 4 1
Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Cluster Index 41 42 43 44 45 46 47 48	Co_Adding Factor	Co_Adding Factor 4 2 4 8 4 8 2 8 8 Cluster Index 41 42 43 44 45 46 47 48
Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 1 1 1 1 1 1 2 1	Co_Adding Factor 2 8 2 8 2 8 8 2
Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 1 1 1 1 1 1 1 1 1	Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 2 1 2 1 2 2 1 2
Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0
so_r damig r deter to to to to to to to		
CO_ADDING 21	CO_ADDING 24	CO_ADDING 27
Cluster Index 1 2 3 4 5 6 7 8 Co_Adding Factor 1	Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8
Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16
Co_Adding Factor	Co_Adding Factor 2 1 1 4 4 1 1 1 1 Cluster Index 17 18 19 20 21 22 23 24	Co_Adding Factor 1 1 4 16 16 16 4 16 16
Co_Adding Factor 1 1 1 1 1 1 1 1 1	Co_Adding Factor 1 1 1 4 4 2 1 1	Co_Adding Factor 4 16 16 16 16 16 4
Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 1 1 1 1 1 1 1 1 1 1 1	Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 1 1 4 4 1 1 1 1	Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 16 4 16 16 8 8 8 2
Cluster Index 33 34 35 36 37 38 39 40 Co_Adding Factor 1 1 1 2 2 1 1 1 1	Cluster Index 33 34 35 36 37 38 39 40 Co_Adding Factor 1 1 1 2 2 1 1 1	Cluster Index 33 34 35 36 37 38 39 40 Co_Adding Factor 8 8 8 8 8 8 8 2 8
Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48
Co_Adding Factor	Co_Adding Factor	Co_Adding Factor 2 8 2 8 2 8 8 2 Cluster Index 49 50 51 52 53 54 55 56
Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 2 1 2 1 2 2 1 2
Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0
CO_ADDING 28	CO_ADDING 31 Cluster Index 1 2 3 4 5 6 7 8	CO_ADDING 34
	Co_Adding Factor 8 8 8 8 8 8 8 8	
	Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 8 8 8 8 16 16 16 16	
	Cluster Index 17 18 19 20 21 22 23 24	
	Co_Adding Factor 16 8 8 8 8 8 8 8 8 8	
	Co_Adding Factor 8 8 8 16 16 16 16 16	
	Co_Adding Factor 8 8 8 8 8 8 8 8	
	Cluster Index 41 42 43 44 45 46 47 48 Co_Adding Factor 0 0 0 0 0 0 0 0	
	Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 0 0 0 0 0 0 0 0	
	Cluster Index 57 58 59 60 61 62 63 64	
	Co_Adding Factor 0 0 0 0 0 0 0 0	
CO ADDING 29	CO_ADDING 32	CO_ADDING 35
CO_ADDING 23	Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8
	Co_Adding Factor	Co_Adding Factor 4 4 4 4 4 4 4 4 4
	Co_Adding Factor	Co_Adding Factor 4 4 4 4 8 8 8 8
	Co_Adding Factor 2 2 2 2 2 2 2 2	Co_Adding Factor 8 4 4 4 4 4 4 4
	Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 2 2 2 2 2 2 2 2 2	Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 4 4 4 8 8 8 8 8
	Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40
	Co_Adding Factor 1 1 1 1 1 1 2 2 2 2 Cluster Index 41 42 43 44 45 46 47 48	Co_Adding Factor 4
	Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 Cluster Index 49 50 51 52 53 54 55 56	Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Cluster Index 49 50 51 52 53 54 55 56
		Co_Adding Factor 0 0 0 0 0 0 0 0 0
	Co_Adding Factor 0 0 0 0 0 0 0 0	
	Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 57 58 59 60 61 62 63 64
	Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 57 58 59 60 61 62 63 64
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 57 58 59 60 61 62 63 64 60 Adding Factor 0 0 0 0 0 0 0 0 0
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 CO_ADDING 36 Cluster Index 1 2 3 4 5 6 7 8
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CO ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co. Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co. Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index
CO_ADDING 30	Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 57 58 59 60 61 62 63 64 Co. Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0



CO_ADDING	37							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	40							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	2	2	2	2	2	2	2	2
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	2	2	2	2	2	2	2	2
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	2	2	2	2	2	2	2	- 1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	-1	- 1	-1	-1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	43							
Cluster Index	- 1	2	3	4	5	6	7	8
Co_Adding Factor	8	8	8	8	8	8	8	8
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	8	8	8	8	8	8	8	8
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	8	8	8	8	8	8	8	8
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	8	8	8	8	8	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	38							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	41							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	44							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	2	2	2	2	2	2	2	2
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	2	2	2	2	2	2	2	2
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	2	2	2	2	2	2	2	2
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	2	2	2	2	2	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	39							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	8	8	8	8	8	8	8	8
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	8	8	8	8	8	8	8	8
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	8	8	8	8	8	8	8	4
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	4	4	4	4	4	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	42							_
Cluster Index	1	2	3	4	5	6	7	
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	9	10	11	12	13	14	15	1
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	17	18	19	20	21	22	23	2
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	25	26	27	28	29	30	31	8
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	33	34	35	36	37	38	39	- 4
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	41	42	43	44	45	46	47	-
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	49	50	51	52	53	54	55	8
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	57	58	59	60	61	62	63	6
Co Adding Factor	0	0	0	0	0	0	0	

CO_ADDING	45							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	46							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

Cluster Index	1	2	3	4	- 5	6	7	- 1
Co_Adding Factor	1	1	1	1	1	1	1	
Cluster Index	9	10	11	12	13	14	15	1
Co_Adding Factor	- 1	- 1	- 1	- 1	- 1	- 1	- 1	
Cluster Index	17	18	19	20	21	22	23	2
Co_Adding Factor	1	- 1	1	1	1	1	1	
Cluster Index	25	26	27	28	29	30	31	3
Co_Adding Factor	1	-1	2	2	2	0	0	
Cluster Index	33	34	35	36	37	38	39	4
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	41	42	43	44	45	46	47	4
Co_Adding Factor	0	0	0	0	0	0	0	-
Cluster Index	49	50	51	52	53	54	55	5
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	57	58	59	60	61	62	63	6
Co Adding Factor	0	0	0	0	0	0	0	

CO_ADDING	52							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	47							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	- 1	- 1	- 1	- 1	-1	- 1	- 1	- 1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	1	- 1	-1	1	1	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	50			_				_
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	-1	- 1	1	- 1	- 1	- 1	- 1
Cluster Index	9	10	11	12	13	14	15	11
Co_Adding Factor	1	1	1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	2
Co_Adding Factor	1	- 1	- 1	1	2	2	2	8
Cluster Index	25	26	27	28	29	30	31	3
Co_Adding Factor	8	8	40	40	40	0	0	(
Cluster Index	33	34	35	36	37	38	39	4
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	41	42	43	44	45	46	47	4
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	49	50	51	52	53	54	55	5
Co_Adding Factor	0	0	0	0	0	0	0	(
Cluster Index	57	58	59	60	61	62	63	6
Co_Adding Factor	0	0	0	0	0	0	0	(

Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	- 1	- 1	- 1	- 1	- 1	- 1	2	2
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	2	2	2	32	32	32	64	64
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	64	16	16	16	16	16	16	8
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	8	8	32	32	32	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	48							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	54							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0



CO. ADDRESS: 40 Co. ADDRESS: 40 Co. ADDRESS			FFinal-Flight_Vers.FF10
Company	CO ADDING 37	CO ADDING 40	
CO. ACCIDIC. CO		Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8
CO_ADDISS		Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16
C. AADURC 98 C. AADURC 120 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2			
CO. ACCINIO. Co. Actions Process 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		Co_Adding Factor 2 2 2 2 2 2 2 2	Co_Adding Factor 8 8 8 8 8 8 8 8
CO_ACCINC Co_ACTION_COLUMN_			
Co. According Co. Accordin			
CO. ACCIONO SOCIAL PROPERTY AND ACCIONO SOC		Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48
CO. ACCINIC. SOLUTION CO. ACCINIC. CO.			
CO_ADDING O_ADDING O_ADD		Co_Adding Factor 0 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0
CO ACOING			
CO ACOING			
Co_Actions 1	CO_ADDING 38	CO_ADDING 41	
CO_ADDING Selections: ORDING Factor 0, 10, 11, 12, 13, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10			
CO. ADDING SECURITY FROM THE SECURITY OF THE			Co_Adding Factor 8 16 16 16 8 8 8 8
CO ADDING Control relates			
CO. ADDING Co. AD			Cluster Index 25 26 27 28 29 30 31 32
CO ADDING 30 Chair nate nate 1 1 1 1 1 1 1 1 1 1			Cluster Index 33 34 35 36 37 38 39 40
CO_ADDING O_ADDING O_ADD			
CO ADDING Co ADDING Co Adding Factor Co Co Co Co Co Co Co			Co_Adding Factor 0 0 0 0 0 0 0 0
CO ADDING SO CO ADDING CO ADDIN			
CO_ADDING			
Co. Adding Factor 0 0 0 0 0 0 0 0 0			Co_Adding Factor 0 0 0 0 0 0 0 0
Co_Adding Factor 8 8 8 8 8 8 8 8 8		CO_ADDING 42	
Co. Adding Factor 0 0 0 0 0 0 0 0 0			
Consider Index 17 18 19 20 21 22 31 4 5 6 7 6 7 7 18 19 20 21 22 31 4 5 6 7 7 7 18 19 20 21 22 31 4 5 6 7 7 7 7 7 7 7 7 7	Cluster Index 9 10 11 12 13 14 15 16		Cluster Index 9 10 11 12 13 14 15 16
Co. Adding Factor 0 0 0 0 0 0 0 0 0			Cluster Index 17 18 19 20 21 22 23 24
Co. Adding Factor 0 0 0 0 0 0 0 0 0			
CO_Adding Factor 0 0 0 0 0 0 0 0 0	Co_Adding Factor 8 8 8 16 16 16 16 16		Co_Adding Factor 0 0 0 0 0 0 0 0
Co. Adding Factor 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,			
Co. Adding Factor 0 0 0 0 0 0 0 0 0	Cluster Index 41 42 43 44 45 46 47 48		Cluster Index 41 42 43 44 45 46 47 48
Co. AdDING			
Co. Addimg Factor 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
Co. Adding Factor 1			
Co. Adding Factor 1	CO ADDING 46	CO ADDING 49	CO ADDING 53
Counter Index	CO_ADDING 48	Cluster Index 1 2 3 4 5 6 7 8	Cluster Index 1 2 3 4 5 6 7 8
Co. Adding Factor 1 1 1 1 1 1 1 1 1			
Co. Adding Factor 1 1 1 1 1 1 1 1 1		Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 0 0 0 0 0 0 0 0
Co. Adding Factor 1 1 1 1 1 1 1 1 1		Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 0 0 0 0 0 0 0 0
CO_ADDING 47 Cluster Index 1 2 3 4 5 6 7 8 Cluster Index 2 5 2 6 2 7 8 9 9 10 11 12 13 14 15 15 Cluster Index 3 3 34 35 36 37 38 39 40 CO_Adding Factor 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Counter Index		Cluster Index 33 34 35 36 37 38 39 40	Cluster Index 33 34 35 36 37 38 39 40
Co Adding Factor 0 0 0 0 0 0 0 0 0		Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48
Co_Adding Factor Co_Adding F			
Co_Adding Factor 0 0 0 0 0 0 0 0 0		Co_Adding Factor 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0
CO_ADDING			
Cluster Index			
Co_Adding Factor 1			
Co_Adding Factor 1	Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 1 1 1 1 1 1 2 2
Cluster Index			
Cluster Index 25 26 27 28 29 30 31 32 Co. Adding Factor 1 1 1 1 1 1 1 1 1 1	Cluster Index 17 18 19 20 21 22 23 24	Cluster Index 17 18 19 20 21 22 23 24	Cluster Index 17 18 19 20 21 22 23 24
Cluster Index	Cluster Index 25 26 27 28 29 30 31 32	Cluster Index 25 26 27 28 29 30 31 32	Cluster Index 25 26 27 28 29 30 31 32
Co_Adding Factor 1			
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 1 1 1 1 1 1 1 1	Co_Adding Factor 4 4 4 4 4 4 4 4
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Co_Adding Factor 0 0 0 0 0 0 0 0 0	Co_Adding Factor 0 0 0 0 0 0 0 0
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Cluster Index 49 50 51 52 53 54 55 56
CO_ADDING	Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 57 58 59 60 61 62 63 64
Cluster Index 1 2 3 4 5 6 7 8 Cluster Index 1 2 3 4 5 6 7 8 Cluster Index 1 1 1 1 1 1 1 1 1	Co_Adding Factor U U U U U U U U	Co_Adding Factor U U U U U U U U	Co_Adding Factor U U U U U U U U
Co Adding Factor 1 1 1 1 1 1 1 1 1 1 1 1 1 Co Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			CO_ADDING 54
Cluster Index 9 10 11 12 13 14 15 16 Cluster Index 9 10 11 12 13 14 15 16 Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 17 18 19 20 21 22 23 24 Cluster Index 17 18 19 20 21 22 23 24 Cluster Index 17 18 19 20 21 22 23 24 Cluster Index 25 26 27 28 29 30 31 32 Co_Adding Factor 26 26 27 28 29 30 31 32 Cluster Index 25 26 27 28 29 30 31 32 Cluster Index 25 26 27 28 29 30 31 32 Cluster Index 33 34 35 36 37 38 39 40 Cluster Index 33 34 35 36 37 38 39 40 Cluster Index 33 34 35 36 37 38 39 40 Cluster Index 31 34 35 36 37 38 39 40 Cluster Index 41 42 43 44 45 46 47 48 Cluster Index 41 42 43 44 45 46 47 48 Cluster Index 41 42 43 44 45 46 47 48 Cluster Index 41 42 43 44 45 46 47 48 Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
Cluster Index 17 18 19 20 21 22 23 24 Co. Adding Factor 32 64 64 64 64 64 64 64 64 64 64 64 64 64	Cluster Index 9 10 11 12 13 14 15 16	Cluster Index 9 10 11 12 13 14 15 16	
Co_Adding Factor 32	Cluster Index 17 18 19 20 21 22 23 24	Cluster Index 17 18 19 20 21 22 23 24	
Co_Adding Factor 64 64 64 64 64 64 64 64 64 64 64 64 64	Co_Adding Factor 32 64 64 64 64 64 64 64	Co_Adding Factor 0 0 0 0 0 0 0 0	
Co_Adding Factor 64 64 64 64 64 64 64 64 64 64 64 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Co_Adding Factor 64 64 64 64 64 64 64 64	Co_Adding Factor 0 0 0 0 0 0 0 0	
Cluster Index 41 42 43 44 45 46 47 48 Co_Adding Factor 0			
Cluster Index 49 50 51 52 53 54 55 56 Cluster Index 49 50 51 52 53 54 55 56 Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cluster Index 41 42 43 44 45 46 47 48	Cluster Index 41 42 43 44 45 46 47 48	
Cluster Index 57 58 59 60 61 62 63 64 Cluster Index 57 58 59 60 61 62 63 64	Cluster Index 49 50 51 52 53 54 55 56	Cluster Index 49 50 51 52 53 54 55 56	



CO_ADDING	55							
Cluster Index	- 1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	1	-1	5	5
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	5	5	5	40	40	40	20	20
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	20	40	40	40	40	40	40	40
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	40	40	40	40	40	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	58							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	61							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	56							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	59							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	- 1	- 1	1	- 1	- 1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	1	1	1	1	1	- 1	2	2
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	2	2	2	2	4	4	4	8
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	8	8	20	20	20	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	62							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	57							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	1	1	1	1	1	1	1	1
Cluster Index	9	10	-11	12	13	14	15	16
Co_Adding Factor	1	- 1	1	1	1	- 1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	1	- 1	- 1	1	1	- 1	1	8
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	8	8	20	20	20	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	60							
Cluster Index	1	2	3	4	5	6	7	- 8
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	9	10	11	12	13	14	15	1
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	17	18	19	20	21	22	23	2
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	25	26	27	28	29	30	31	- 8
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	33	34	35	36	37	38	39	- 4
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	41	42	43	44	45	46	47	- 4
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	49	50	51	52	53	54	55	
Co_Adding Factor	0	0	0	0	0	0	0	
Cluster Index	57	58	59	60	61	62	63	6
Co Adding Factor	0	0	0	0	0	0	0	

CO_ADDING	63							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO ADDING	64							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	70							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	65							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	68							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	66							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co. Adding Factor	0	0	0	0	0	0	0	0

CO_ADDING	69							
Cluster Index	1	2	3	4	5	6	7	8
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Co_Adding Factor	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0



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OO ABBINO FF	00 400000 50	00 400000 64
CO_ADDING 55 Cluster Index 1 2 3 4 5 6 7 8	CO_ADDING 58	CO_ADDING 61
Co_Adding Factor 1 1 1 1 1 8 8		
Cluster Index 9 10 11 12 13 14 15 16 Co_Adding Factor 8 8 8 8 16 16 16 16		
Cluster Index 17 18 19 20 21 22 23 24		
Co_Adding Factor 16 32 32 32 32 32 32 32 Cluster Index 25 26 27 28 29 30 31 32		
Co_Adding Factor 32 32 32 32 32 32 32 32		
Cluster Index 33 34 35 36 37 38 39 40 Co_Adding Factor 32 32 32 32 32 32 32 32		
Cluster Index 41 42 43 44 45 46 47 48		
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 Cluster Index 49 50 51 52 53 54 55 56		
Co_Adding Factor 0 0 0 0 0 0 0 0		
Cluster Index 57 58 59 60 61 62 63 64 Co_Adding Factor 0 0 0 0 0 0 0 0		
CO_ADDING 56	CO_ADDING 59	CO_ADDING 62
	Cluster Index 1 2 3 4 5 6 7 8	
	Co_Adding Factor 1	
	Co_Adding Factor 1 1 1 1 4 4 4 4	
	Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 4 10 10 10 10 10 10 10	
	Cluster Index 25 26 27 28 29 30 31 32	
 	Co_Adding Factor 10 10 10 40 40 40 40 40	
	Co_Adding Factor 40 40 40 40 40 20 20 20	
	Cluster Index 41 42 43 44 45 46 47 48 Co_Adding Factor 0 0 0 0 0 0 0 0 0	
	Cluster Index 49 50 51 52 53 54 55 56	
	Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Cluster Index 57 58 59 60 61 62 63 64	
	Co_Adding Factor 0 0 0 0 0 0 0 0 0	
CO_ADDING 57	CO_ADDING 60	CO_ADDING 63
Cluster Index		
Cluster Index 9 10 11 12 13 14 15 16		
Co_Adding Factor 1 1 1 1 2 2 2 2		
Cluster Index 17 18 19 20 21 22 23 24 Co_Adding Factor 2 4 4 4 4 4 1 1		
Cluster Index 25 26 27 28 29 30 31 32		
Co_Adding Factor		
Co_Adding Factor 20 20 20 20 20 20 20 2		
Cluster Index 41 42 43 44 45 46 47 48 Co_Adding Factor 0 0 0 0 0 0 0 0		
Cluster Index 49 50 51 52 53 54 55 56		
Co_Adding Factor 0 0 0 0 0 0 0 0 0 0 0 0 Cluster Index 57 58 59 60 61 62 63 64		
Co_Adding Factor 0 0 0 0 0 0 0 0		
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
		CO_ADDING 70
CO_ADDING 64	CO_ADDING 67	CO_ADDING 70
		CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65		CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70
CO_ADDING 65	CO ADDING 68	CO_ADDING 70



5.1.6 Detector Cmd Words

The table Detector Cmd Words defines the parameters for the non state dependent settings of the 8 detector channels. The table is set by the identical MCMD as the DME ENABLE list. Only one table of this class exists.

Table Template:

MCMD: SET DETECTOR COMMAND WORDS (IOM Reference A6.34)

<u>Header Line</u>: spans the area of information for the Detector Cmd Word

Columns

DME DEC: ID of the detector module electronics

Exp. Time Factor: parameter not delivered from this table to the SDPU defines the operational mode. Set to default value '00'.

Range: 00 - 01

channel 1-5 normal mode

channel 6 – 8 state dependent defined by MCMD - SET HOT MODE

Section Address DEC: defines the intersection of the 2 virtual channels of a detector

applies to channel 1-5 only

Range: 1 - 511; '0' used if no virtual channels are defined

Ratio BIN: parameter not delivered from this table to the SDPU. Set to default value

'00001'.

applies to channel 1 - 5 only

Control BIN: parameter not delivered from this table to the SDPU. Set to default value '01'.

Comp Mode BIN: defines the setting of the 'Offset' compensation.

applies to channel 6 – 8 only

Range: 00 – 11

Fine Bias Setting BIN: adjusts the setting of the 'Bias' voltage.

applies to channel 6 – 8 only

Range: 000 – 111

Short PET BIN: defines PET in HOT MODR (not delivered from this table to the SDPU)

applies to channel 6 - 8 only

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title
none			



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				Detector Con	nmand Word			
DME	Exp. Time	Mode	Section Address	Ratio	Control	Comp Mode	Fine Bias Setting	Short PET
DEC	Factor	BIN	DEC	BIN	BIN	BIN	BIN	BIN
1		00	372	00001	01			
2		00	417	00001	01			
3		00	0	00001	01			
4		00	0	00001	01			
5		00	0	00001	01			
6		00			01	00	110	0000
7		00			01	00	110	0000
8		00			01	00	110	0000

not applicable indirect selection by other parameter



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				Detector Com	ımand Word			
DME DEC	Exp. Time Factor	Mode BIN	Section Adress DEC	Ratio BIN	Control BIN	Comp Mode BIN	Fine Bias Setting BIN	Short PET BIN
1		00	276	00001	01			
2		00	427	00001	01			
3		00	0	00001	01			
4		00	0	00001	01			
5		00	0	00001	01			
6		00			01	00	110	0000
7		00			01	00	110	0000
8		00			01	00	110	0000

not applicable ______indirec selection by other parameter



5.1.7 DME ENABLE List

The table DME ENABLE list defines if one of the 8 detector channels is enabled/disabled. The table is set by the identical MCMD as the Detector Cmd Words table. Only one table of this class exists.

Table Template:

MCMD: SET DETECTOR COMMAND WORDS (IOM Reference A6.34)

Columns

DME DEC: ID of the detector module electronics Enabled/Disabled BIN: defines if the DME is activated.

Range: 0 - 1

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title
None			



DME DEC	Enabled/ Disabled BIN
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1

No corrections to above table were introduced.



5.2 COMMON Parameter Tables

5.2.1 Basic Scan Profile Table

This table defines the parameters for the Basic Scan Profile. Only one table of this class exists.

Table Template:

MCMD: SET SCANNER BASIC PROFILES (IOM Reference A6.45)

Columns:

Basic Scan Profile Identifier: identifier of Basic Scan profile; range = 0-14

Basic Scan Position Azimuth: definition of the scanner azimuth start position of a basic scan

profile in μ rad; range = -6283185 to 6283185 (-2 π to 2 π)

Basic Scan Rate Azimuth: definition of the scanner azimuth scan rate in µrad/sec;

range = -32768 to 32767 (-0.032768 to +0.032767 rad/sec)

Basic Scan Position Elevation: definition of the scanner elevation start position of a basic scan

profile in μ rad; range = -6283185 to 6283185 (-2 π to 2 π)

Basic Scan Rate Elevation: definition of the scanner elevation scan rate in µrad/sec;

range = -32768 to 32767 (-0.032768 to +0.032767 rad/sec)

Note that the Basic Scan Profile parameters are preliminary. They are subject to change based on present testing activities and the results of a detailed orbit analysis, in particular the visibility of celestial objects within the IFOV.

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	Basic Profile affected
OCR_002	20.Feb.03	IFE, S.Noel	Change nadir scan w.r.t. TCFoV anomaly	ESM 1
OCR_008	09/05/03	SRON; G.Lichtenberg	Change of final limb tangent height step ('Limb dark') from 150km to 250km	ESM 5; ESM 9



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	Azim	uth	Eleva	tion	
Basic Scan Profile Identifier	Basic Scan Position	Basic Scan Rate	Basic Scan Position	Basic Scan Rate	
ruenimiei		value [10-6 rad/sec]			
	value [10-6 rad]	value [10-6 fad/sec]	value [10-6 rad]	value [10-6 rad/sec]	
					0
0	0000436332	000000	-0000261799	000000	no scan
					1
1	0000785398	000000	-0000785398	000000	nadir
					2
2	-0000785398	000000	-0000237101	000000	limh scan /noint
	-0000705570	000000	-0000257101	000000	limb scan./point. 3
	0000 474 000	000101	000000 4000	000.445	sun scan./point. with mirror;
3	-0000471239	000131	-0000234032	000445	start 17,2km above horizon
					4
4	0000785398	000000	0000986111	000000	sub solar cal. S
					ם moon scan./point. with mirror
5	0002574361	-000174	-0000234032	000384	start 17,2km above horizon
6	-0000468621	000131	0002748894	000000	δ
	-0000408021	000131	0002740094	000000	sun point, with diff.
					7
7	0000000000	000000	0000000000	000000	Spare 8
					o mirror °radation
8	-0000468621	000131	0000570714	000222	sun scan./point.
					9
9	-0000785398	000000	-0000213849	000000	dark current (150km above horizon, downrange)
	-0000705570	000000	-00002130-15	000000	10
					internal wavelenght cal. with
10	0000785398	000000	0000171042	000000	mirror I I
					int. wavelenght/rel.rad. cal.
11	0000785398	000000	0003319617	000000	with diffusor
					12 internal relative radiometric
12	0000785398	000000	0000185005	000000	cal. with mirror
					13
12	0002574261	000174	0000570714	000102	mirror ^o radation
13	0002574361	-000174	0000570714	000192	moon scan./point. l 4
					sun direction (17,2km above
14	-0000471239	000227	-0000234032	000000	horizon, fix elevation)



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	Azim	uth !	Eleva	tion !	
Basic Scan Profile Identifier	Basic Scan Position	Basic Scan Rate	Basic Scan Position	Basic Scan Rate	
	value [10-6 rad]	value [10-6 rad/sec]	value [10-6 rad]	value [10-6 rad/sec]	
0	000000000	000000	-0000261799	000000	
,	000000000	000000	0000704125	000000	
1	000000000	000000	-0000794125	000000	
2	-0000785398	000000	-0000237101	000000	
3	-0000471239	000131	-0000234032	000445	
4	0003298672	-008145	0000986111	000000	
5	-0001003564	-000174	-0000213849	000000	
6	-0000468621	000131	0002879793	000000	
7	-0006283185	000000	-0006283185	000000	
8	-0000468621	000131	0000570714	000222	
9	-0000785398	000000	-0000196437	000000	
10	0003263766	-008145	0000170480	000000	
11	0003228859	-008145	0003319617	000000	
12	0003193953	-008145	0000183658	000000	
13	0003159046	-008145	0000186279	000000	
13	0003179040	-000142	0000180279	000000	
14	-0000471239	000227	-0000234032	000000	



5.2.2 Relative Scan Profile Table

The relative scan profile is superimposed onto the basic scan profile. Each table describes the parameters for one Relative Scan Profile. Six tables of this class exists.

Table Template:

MCMD: SET SCANNER RELATIVE PROFILE (IOM Reference A6.48)

Columns:

Common parameter: parameters, applicable to the entire profile (columns 3 -8)

note that the term "common" is only used locally; it does not refer to

the COMMON parameters (chapter 5.2)

Segment 1 - Segment 8/16: identifier of the segment of the Relative Scan Profile; the maximum

number of segments is given by the row parameter Number of used

Segments (segments are sub-divisions of a profile)

Rows:

Number of used Segments: number of segments used for the construction of the

profile; range = 1-16 (identical to columns 3-10)

Duration of Segment (msec): duration of a segment in msec; range = 0-65535

Angular variation (µrad): definition of the difference between the angle at the

end of the segment and the angle at the start of the

profile in urad;

range = -6283185 to 6283185 (-2π to 2π)

Acceleration at Start of Segment (mrad/sec²): definition of the acceleration at the start of a

segment in $mrad/sec^2$; range = -32768 to +32767

Acceleration at End of Segment (mrad/sec²): definition of the acceleration at the end of a segment

in mrad/sec²; range = -32768 to +32767

Number of Support Points: selection of number of support points for the

calculation of the acceleration function (the position

between support points is derived by linear

interpolation; range = 0-255

BCPS Synchronisation: selection of synchronisation mode at start of a

segment; range = 0/10 = no synchronisation

1 = synchronisation (start when a BCPS is received)

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	Relative Profile affected
OCR_002	20.Feb.03	IFE, S.Noel	Change nadir scan w.r.t. TCFoV anomaly	2



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Scanner Relative Profile 1

	a						a	a	
	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	4								
Profile ID	1								
Duration of Segment [msec]		50	51	50	1536				
Angular Variation [µrad]		83	83	83	83				
Acceleration at Start of Segment [mrad/sec2]		0	0	0	0				
Acceleration at End of Segment [mrad/sec2]		0	0	0	0				
Number of Support Points		1	1	1	12				
BCPS Synchronisation		1	0	0	0				
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]									
Angular Variation [#rad]									
Acceleration at Start of Segment [mrad/sec2]									
Acceleration at End of Segment [mrad/sec2]									
Number of Support Points									
BCPS Synchronisation									

Scanner Relative Profile 2

Deditier residuye i forme z									
	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	6								
Profile ID	2								
Duration of Segment [msec]		12	3976	12	8	984	8		
Angular Variation [µrad]		0	69395	69395	69046	350	0		
Acceleration at Start of Segment [mrad/sec2]		2792	0	-2792	-6283	0	6283		
Acceleration at End of Segment [mrad/sec2]		2792	0	-2792	-6283	0	6283		
Number of Support Points		6	1	6	4	1	4		
BCPS Synchronisation		1	0	0	0	0	0		
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]									
Angular Variation [µrad]									
Acceleration at Start of Segment [mrad/sec2]									
Acceleration at End of Segment [mrad/sec2]									
Number of Support Points									
BCPS Synchronisation									

	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	4								
Profile ID	3								
Duration of Segment [msec]		50	51	50	1536				
Angular Variation [µrad]		-589	-589	0	36861				
Acceleration at Start of Segment [mrad/sec2]		471	0	471	0				
Acceleration at End of Segment [mrad/sec2]		471	0	471	0				
Number of Support Points		5	1	5	1				
BCPS Synchronisation		1	0	0	0				
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]									
Angular Variation [µrad]									
Acceleration at Start of Segment [mrad/sec2]									
Acceleration at End of Segment [mrad/sec2]									
Number of Support Points									
BCPS Synchronisation									



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	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	6								
Profile ID	2								
Duration of Segment [msec]		12	3976	12	8	984	8	0	0
Angular Variation [mrad]		0	67226	67226	66888	339	0	0	0
Acceleration at Start of Segment [mrad/sec2]		2705	0	-2705	-6087	0	6087	0	0
Acceleration at End of Segment [mrad/sec2]		2705	0	-2705	-6087	0	6087	0	0
Number of Support Points		6	1	6	4	1	4	0	0
BCPS Synchronisation		1	0	0	0	0	0	0	0
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]		0	0	0	0	0	0	0	0
Angular Variation [mrad]		0	0	0	0	0	0	0	0
Acceleration at Start of Segment [mrad/sec2]		0	0	0	0	0	0	0	0
Acceleration at End of Segment [mrad/sec2]		0	0	0	0	0	0	0	0
Number of Support Points		0	0	0	0	0	0	0	0
BCPS Synchronisation		0	0	0	0	0	0	0	0

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Scanner Relative Profile 4

	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	2					· ·		Ü	Š
Profile ID	4								
Duration of Segment [msec]		1000	1000						
Angular Variation [µrad]		1440	0						
Acceleration at Start of Segment [mrad/sec2]		0	0						
Acceleration at End of Segment [mrad/sec2]		0	0						
Number of Support Points		1	1						
BCPS Synchronisation		1	0						
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]									
Angular Variation [µrad]									
Acceleration at Start of Segment [mrad/sec2]									
Acceleration at End of Segment [mrad/sec2]									
Number of Support Points									
BCPS Synchronisation									

Scanner Relative Profile 5

Scariller Kerative Frontie 5									
	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	2								
Profile ID	5								
Duration of Segment [msec]		1000	1000						
Angular Variation [µrad]		616	1232						
Acceleration at Start of Segment [mrad/sec2]		0	0						
Acceleration at End of Segment [mrad/sec2]		0	0						
Number of Support Points		1	1						
BCPS Synchronisation		1	0						
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]									
Angular Variation [µrad]									
Acceleration at Start of Segment [mrad/sec2]									
Acceleration at End of Segment [mrad/sec2]									
Number of Support Points									
BCPS Synchronisation									

	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	3	3		<u> </u>	3			3	Ü
Profile ID	6								
Duration of Segment [msec]		18	89	18					
Angular Variation [µrad]		84	1056	1140					
Acceleration at Start of Segment [mrad/sec2]		547	0	-547					
Acceleration at End of Segment [mrad/sec2]		547	0	-547					
Number of Support Points		18	1	18					
BCPS Synchronisation		1	0	0					
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]									
Angular Variation [µrad]									
Acceleration at Start of Segment [mrad/sec2]									
Acceleration at End of Segment [mrad/sec2]									
Number of Support Points									
BCPS Synchronisation									



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	Common Parameter	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8
Number of used Segments	16								
Profile ID	6								
Duration of Segment [msec]		125	125	125	125	125	125	125	125
Angular Variation [mrad]		0	1483	1483	0	0	1483	1483	0
Acceleration at Start of Segment [mrad/sec2]		195	0	-195	0	195	0	-195	0
Acceleration at End of Segment [mrad/sec2]		195	0	-195	0	195	0	-195	0
Number of Support Points		5	1	5	1	5	1	5	1
BCPS Synchronisation		1	0	0	0	0	0	0	0
	Common Parameter	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16
Duration of Segment [msec]		125	125	125	125	125	125	125	125
Angular Variation [mrad]		0	1483	1483	0	0	1483	1483	1
Acceleration at Start of Segment [mrad/sec2]		195	0	-195	0	195	0	-195	0
Acceleration at End of Segment [mrad/sec2]		195	0	-195	0	195	0	-195	0
Number of Support Points		5	1	5	1	5	1	5	1
BCPS Synchronisation		0	0	0	0	0	0	0	0



5.2.3 Cluster per Channel Table

This table defines the number of clusters in each channel. Only one table of this class exists.

Table Template:

MCMD: SET CLUSTERS PER CHANNEL (IOM Reference A6.32)

Columns:

Cluster Table ID: identifier of the corresponding Cluster Table Index; range = 1-4

Channel 1 - Channel 8: number of clusters within the particular detector channel;

range = 1a-8

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title
None			



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Cluster Table ID	Channel 1a	Channel 1b	Channel 2b	Channel 2a	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
1	3	3	2	3	3	3	3	3	3	3
2	2	3	3	3	10	9	9	11	3	3
3	3	4	4	4	9	8	8	10	3	3
4	1	1	1	1	1	1	1	1	1	1



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Cluster Definition Table ID	Channel 1 a	Channel 1b	Channel 2b	Channel 2 a	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
1	3	3	3	3	5	5	5	5	5	3
2	1	1	1	1	1	1	1	1	1	1
3	3	3	3	2	9	8	7	12	6	3
4	1	1	1	1	1	1	1	1	1	1

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5.2.4 Cluster Definition Table

This table defines the clustering scheme. A total of four tables of this class exist, corresponding to the number of different clusterings.

Table Template:

MCMD: SET CLUSTER DEFINITIONS (IOM Reference A6.31)

Rows:

Channel: identifier of the channel; range = 1a-8 (channels 1 and 2 are subdivided into

2 separate channels)

Cluster Index: identifier of the cluster; range = 1-64 (maximum)

Cluster Identifier: identifier of a cluster within a particular channel, i.e. channel cluster counter;

range = 0-15

Start Pixel: definition of the start pixel of a cluster; range = 0-8191

note that the numbering is continuous through all channels

Length: definition of the number of pixels contained in a cluster; range = 1-1024

Note that the Cluster Definition 4 is presently defined for test purposes only and therefore not used operationally.

At time of issue the following OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

OCR	Issue date	issued by	Title	Cluster Definition Table affected
none				



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Cluster Definitions 1	total numb	er of cluster	s: 29					
Channel		la			Ιb		2	ь
Cluster Index	1	2	3	4	5	6	7	8
Cluster Identifier	0	1	2	3	4	5	0	1
Start Pixel	0	5	216	744	1009	1019	1024	1119
Length	5	10	528	64	10	5	5	739
Channel		2a			3		4	
Cluster Index	9	10	11	12	13	14	15	16
Cluster Identifier	2	3	4	0	1	2	0	1
Start Pixel	1858	2033	2043	2048	2094	3067	3072	3118
Length	96	10	5	5	930	5	5	931
Channel	4		5			б		7
Cluster Index	17	18	19	20	21	22	23	24
Cluster Identifier	2	0	1	2	0	1	2	0
Start Pixel	4091	4096	4150	5115	5120	5165	6134	6144
Length	5	5	914	5	10	933	10	10
Channel	7	7		8				
Cluster Index	25	26	27	28	29	30	31	32
Cluster Identifier	1	2	0	1	2	0	0	0
Start Pixel	6217	7158	7168	7241	8182	0	0	0
Length	877	10	10	878	10	1	1	1
Channel								
Cluster Index	33	34	35	36	37	38	39	40
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel								
Cluster Index	41	42	43	44	45	46	47	48
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel								
Cluster Index	49	50	51	52	53	54	55	56
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel								
Cluster Index	57	58	59	60	61	62	63	64
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1



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Cluster Table ID 1

Cluster Table II/ I								
Channel		la			lb		2	ь
Cluster Index	1	2	3	4	5	6	7	8
Cluster Identifier	0	1	2	3	4	5	0	1
Start Pixel	0	5	197	552	842	1019	1024	1029
Length	5	192	355	290	177	5	5	71
Channel	2b		2a			ŝ	?	
Cluster Index	9	10	11	12	13	14	15	16
Cluster Identifier	2	3	4	5	0	1	2	3
Start Pixel	1100	1878	1972	2043	2048	2058	2081	2978
Length	778	94	71	5	10	23	897	89
Channel	3			4			۱,	;
Cluster Index	17	18	19	20	21	22	23	24
Cluster Identifier	4	0	1	2	3	4	0	1
Start Pixel	3067	3072	3077	3082	3991	4091	4096	4101
Length	5	5	5	909	100	5	5	5
Channel		5				б		
Cluster Index	25	26	27	28	29	30	31	32
Cluster Identifier	2	3	4	0	1	2	3	4
Start Pixel	4106	5097	5115	5120	5130	5144	6117	6134
Length	991	18	5	10	14	973	17	10
Channel			7				8	
Cluster Index	33	34	35	36	37	38	39	40
Cluster Identifier	0	1	2	3	4	0	1	2
Start Pixel	6144	6154	6192	7132	7158	7168	7178	8182
Length	10	38	940	26	10	10	1004	10
Channel	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1



Cluster Definitions 2 total number of clusters: 56

Cluster Definitions 2	total numb	er of cluster	rs: 56			I 1-			
Channel	I	а		Ιb			2a		
Cluster Index	1	2	3	4	5	6	7	8	
Cluster Identifier	0	1	2	3	4	0	1	2	
Start Pixel	0	216	744	768	1019	1024	1119	1215	
Length	5	528	24	40	5	5	96	643	
Channel		2b				3			
Cluster Index	9	10	11	12	13	14	15	16	
Cluster Identifier	3	4	5	0	1	2	3	4	
Start Pixel	1858	1910	2043	2048	2094	2140	2222	2325	
Length	52	44	5	5	46	82	103	205	
Channel			3				4		
Cluster Index	17	18	19	20	21	22	23	24	
Cluster Identifier	5	6	7	8	9	0	1	2	
Start Pixel	2530	2736	2777	2958	3067	3072	3118	3193	
Length	206	41	181	66	5	5	75	157	
Channel			4	(,	5	
Cluster Index	25	26	27	28	29	30	31	32	
Cluster Identifier	3	4	5	6	7	8	0	1	
Start Pixel	3350	3396	3817	3933	3956	4091	4096	4150	
Length	46	421	116	23	92	5	5	69	
Channel				5				6	
Cluster Index	33	34	35	36	37	38	39	40	
Cluster Identifier	2	3	4	5	6	7	8	0	
Start Pixel	4219	4410	4443	4857	4891	4926	5115	5120	
Length	191	33	414	34	35	138	5	10	
Channel				6	5				
Cluster Index	41	42	43	44	45	46	47	48	
Cluster Identifier	1	2	3	4	5	6	7	8	
Start Pixel	5177	5228	5458	5482	5650	5675	5849	5911	
Length	51	230	24	168	25	174	62	124	
Channel	(5		7			8		
Cluster Index	49	50	51	52	53	54	55	56	
Cluster Identifier	9	10	0	1	2	0	1	2	
Start Pixel	6035	6134	6144	6217	7158	7168	7241	8182	
Length	63	10	10	877	10	10	878	10	
Channel									
Cluster Index	57	58	59	60	61	62	63	64	
Cluster Identifier	0	0	0	0	0	0	0	0	
Start Pixel	0	0	0	0	0	0	0	0	
Length	1	1	1	1	1	1	1	1	



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Cluster Table ID 2

Chamel	Cluster Table II/ Z								
Cluster Identifier	Channel	la			2a				
Start Pixel	Cluster Index	1	2	3	4	5	6	7	8
Length	Cluster Identifier	0	1	0	1	0	0	0	0
Chamel	Start Pixel	0	552	1024	1878	2048	3072	4096	5120
Cluster Index	Length	552	472	854	170	1024	1024	1024	1024
Cluster Identifier	Channel	7	8	0	0	0	0	0	0
Start Pixel	Cluster Index	9	10	11	12	13	14	15	16
Length	Cluster Identifier	0	0	0	0	0	0	0	0
Channel 0 0 0 0 0 0 0 0 Cluster Index 17 18 19 20 21 22 23 24 Cluster Identifier 0 <td>Start Pixel</td> <td>6144</td> <td>7168</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Start Pixel	6144	7168	0	0	0	0	0	0
Cluster Index 17 18 19 20 21 22 23 24 Cluster Identifier 0 0 0 0 0 0 0 0 Start Pixel 0 0 0 0 0 0 0 0 Length 1	Length	1024	1024	1	1	1	1	1	1
Cluster Identifier 0	Channel	0	0	0	0	0	0	0	0
Start Pixel	Cluster Index	17	18	19	20	21	22	23	24
Length	Cluster Identifier	0	0	0	0	0	0	0	0
Channel 0 0 0 0 0 0 0 0 Cluster Index 25 26 27 28 29 30 31 32 Cluster Identifier 0 0 0 0 0 0 0 0 Start Pixel 0 0 0 0 0 0 0 0 0 Length 1	Start Pixel	0	0	0	0	0	0	0	0
Cluster Index 25 26 27 28 29 30 31 32 Cluster Identifier 0 0 0 0 0 0 0 0 Start Pixel 0 0 0 0 0 0 0 0 Length 1	Length	1	1	1	1	1	1	1	1
Cluster Identifier 0	Channel	0	0	0	0	0	0	0	0
Start Pixel 0 0 0 0 0 0 0 Length 1	Cluster Index	25	26	27	28	29	30	31	32
Length 1 <td>Cluster Identifier</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Cluster Identifier	0	0	0	0	0	0	0	0
Channel 0 0 0 0 0 0 0 0 Cluster Index 33 34 35 36 37 38 39 40 Cluster Identifier 0 <td>Start Pixel</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Start Pixel	0	0	0	0	0	0	0	0
Cluster Index 33 34 35 36 37 38 39 40 Cluster Identifier 0	Length	1	1	1	1	1	1	1	1
Cluster Identifier 0	Channel	0	0	0	0	0	0	0	0
Start Pixel 0 0 0 0 0 0 0 Length 1	Cluster Index	33	34	35	36	37	38	39	40
Length 1 4 4 45 46 47 48 48 Cluster Identifier 0	Cluster Identifier	0	0	0	0	0	0	0	0
Channel 0 0 0 0 0 0 0 0 Cluster Index 41 42 43 44 45 46 47 48 Cluster Identifier 0 <td>Start Pixel</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Start Pixel	0	0	0	0	0	0	0	0
Cluster Index 41 42 43 44 45 46 47 48 Cluster Identifier 0	Length	1	1	1	1	1	1	1	1
Cluster Identifier 0 0 0 0 0 0 0 0 Start Pixel 0	Channel	0	0	0	0	0	0	0	0
Start Pixel 0 0 0 0 0 0 0 0 Length 1	Cluster Index	41	42	43	44	45	46	47	48
Length 1 <td>Cluster Identifier</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Cluster Identifier	0	0	0	0	0	0	0	0
Channel 0 </td <td>Start Pixel</td> <td>0</td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td>0</td> <td>0</td>	Start Pixel	0		_				0	0
Cluster Index 49 50 51 52 53 54 55 56 Cluster Identifier 0 0 0 0 0 0 0 0 Start Pixel 0 0 0 0 0 0 0 0 Length 1 1 1 1 1 1 1 1 1	Length	1		1				_	_
Cluster Identifier 0 0 0 0 0 0 0 Start Pixel 0 0 0 0 0 0 0 0 Length 1 1 1 1 1 1 1 1 1	Channel	0	0	0	0	0	0	0	0
Start Pixel 0 0 0 0 0 0 0 0 Length 1	Cluster Index	49	50	51	52	53	54	55	56
Length 1 1 1 1 1 1 1 1	Cluster Identifier	0	0	0	0	0	0	0	0
	Start Pixel	0		0	0	0	0	0	0
	Length	1	1	1	1	1	1	1	1
Channel 0 0 0 0 0 0 0 0	Channel	0	0	0	0	0	0	0	0
Cluster Index 57 58 59 60 61 62 63 64	Cluster Index	57	58	59	60	61	62	63	64
Cluster Identifier 0 0 0 0 0 0 0	Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel 0 0 0 0 0 0 0	Start Pixel	0	0	0	0	0	0	0	0
Length 1 1 1 1 1 1 1	Length	1	1	1	1	1	1	1	1



Cluster Definitions 3

Cluster Definitions 3								
Channel		la			1	b		2b
Cluster Index	1	2	3	4	5	6	7	8
Cluster Identifier	0	1	2	3	4	5	6	0
Start Pixel	0	5	216	744	768	1009	1019	1024
Length	5	10	528	24	40	10	5	5
Channel		2b			2	а		3
Cluster Index	9	10	11	12	13	14	15	16
Cluster Identifier	1	2	3	4	5	6	7	0
Start Pixel	1119	1215	1319	1858	1911	2033	2043	2048
Length	96	104	539	53	43	10	5	5
Channel				3				
Cluster Index	17	18	19	20	21	22	23	24
Cluster Identifier	1	2	3	4	5	6	7	8
Start Pixel	2094	2140	2222	2677	2715	2797	2958	3066
Length	46	82	455	38	82	161	66	5
Channel		·		4				
Cluster Index	25	26	27	28	29	30	31	32
Cluster Identifier	1	2	3	4	5	6	7	8
Start Pixel	3072	3118	3193	3609	3817	3933	3956	4091
Length	5	75	416	208	116	23	92	5
Channel		·		5		•		
Cluster Index	33	34	35	36	37	38	39	40
Cluster Identifier	9	10	0	1	2	3	4	5
Start Pixel	4096	4150	4219	4582	4857	4891	4926	5115
Length	5	69	363	275	34	35	138	5
Channel				б				
Cluster Index	41	42	43	44	45	46	47	48
Cluster Identifier	6	7	8	9	10	0	1	2
Start Pixel	5120	5177	5228	5458	5482	5650	5675	5749
Length	10	51	230	24	168	25	74	218
Channel	б			7			8	
Cluster Index	49	50	51	52	53	54	55	56
Cluster Identifier	3	4	5	6	7	8	9	10
Start Pixel	5967	6134	6144	6217	7158	7168	7241	8182
Length	131	10	10	877	10	10	878	10
Channel								
Cluster Index	57	58	59	60	61	62	63	64
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1



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Cluster Table ID 3

Cluster Table II/ J								
Channel		la			lb		2.	ь
Cluster Index	1	2	3	4	5	6	7	8
Cluster Identifier	0	1	2	3	4	5	0	1
Start Pixel	0	5	197	552	748	1019	1024	1100
Length	5	192	355	196	94	5	5	114
Channel	2ъ	2	a			3		
Cluster Index	9	10	11	12	13	14	15	16
Cluster Identifier	2	3	4	0	1	2	3	4
Start Pixel	1214	1878	2043	2048	2081	2131	2211	2647
Length	664	94	5	10	50	80	436	75
Channel		ŝ	?			4	í	
Cluster Index	17	18	19	20	21	22	23	24
Cluster Identifier	5	6	7	8	0	1	2	3
Start Pixel	2722	2809	2944	3067	3072	3082	3118	3150
Length	87	135	34	5	5	36	32	535
Channel		4	ť			Ė	5	
Cluster Index	25	26	27	28	29	30	31	32
Cluster Identifier	4	5	6	7	0	1	2	3
Start Pixel	3685	3819	3925	4091	4096	4106	4152	4180
Length	134	106	66	5	5	46	28	525
Channel		5				б		
Cluster Index	33	34	35	36	37	38	39	40
Cluster Identifier	4	5	6	0	1	2	3	4
Start Pixel	4705	4863	5115	5120	5144	5227	5455	5481
Length	158	234	5	10	83	228	26	178
Channel				6				7
Cluster Index	41	42	43	44	45	46	47	48
Cluster Identifier	5	6	7	8	9	10	11	0
Start Pixel	5659	5687	5866	6020	6051	6065	6134	6144
Length	28	179	154	31	14	52	10	10
Channel			7				8	
Cluster Index	49	50	51	52	53	54	55	56
Cluster Identifier	1	2	3	4	5	0	1	2
Start Pixel	6192	6437	6585	7027	7158	7168	7178	8182
Length	245	148	442	105	10	10	1004	10
Channel	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1

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Cluster Table ID 4

Cluster Table II/ 4								
Channel	la	lb	26	2a	3	4	5	б
Cluster Index	1	2	3	4	5	6	7	8
Cluster Identifier	0	1	0	1	0	0	0	0
Start Pixel	0	552	1024	1878	2048	3072	4096	5120
Length	552	472	854	170	1024	1024	1024	1024
Channel	7	8	0	0	0	0	0	0
Cluster Index	9	10	11	12	13	14	15	16
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	6144	7168	0	0	0	0	0	0
Length	1024	1024	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	17	18	19	20	21	22	23	24
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	25	26	27	28	29	30	31	32
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	33	34	35	36	37	38	39	40
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	41	42	43	44	45	46	47	48
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1
Channel	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Cluster Identifier	0	0	0	0	0	0	0	0
Start Pixel	0	0	0	0	0	0	0	0
Length	1	1	1	1	1	1	1	1



6 Timeline and RTCS Tables

As pointed out in chapter 3, the execution of timelines requires access to tables which have to be defined outside the frame of STATE and COMMON Parameter tables. Such tables are the

- ⇒ RTCS Table
- ⇒ STATE RTCS INDEX Table
- ⇒ TIMELINE INDEX Table
- ⇒ TIMELINE Table

6.1 RTCS Tables

6.1.1 RTCS Table

This table stores 1000 Primitive Command Entries. Only one table of this class exists.

Table Template:

MCMD: SET RTCS (IOM Reference A6.43)

Columns:

Entry ID: identifier of the corresponding Primitive Command; range = 1-1000 definition of relative time tag in CT w.r.t. start of previous command,

range = 0-32765 (equivalent to 0-127.99 sec)

Command Header: title of Primitive Command

Note that the following table shows only the general layout for the first 53 entries. The full information about the RTCS-table is given in chapter 8 covering all Engineering Parameter Tables.



Entry ID	Delta Time	Command Header
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		+
41		
42		
43		+
44		
45		
46		
47		
48		+
49		
50		
51		
52		-
53		



6.1.2 STATE RTCS INDEX Table

This table stores the Start ID of the RTCS associated with each state. Only one table of this class exists.

Table Template:

MCMD: SET STATE RTCS INDEX TABLE (IOM Reference A6.55)

Columns:

Start Index: identifier of the entry number of the first primitive command of the RTCS in

the RTCS Table; range = 1-1000;

note that the 70 Start Indices are listed sequentially corresponding to an implicit sequence of state IDs, the latter starting at state ID=1 and ending at state ID=70

(as depicted in the list of states right to the RTCS Index table)

At time of issue no OCR's are affecting the table content of the ICU EEPROM.



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Start Index		RTCS	Start Index		RTCS
551	State ID 1	STT_01	551	State ID 36	STT_01
551	State ID 2	STT_01	551	State ID 37	STT_01
551	State ID 3	STT_01	551	State ID 38	STT_01
551	State ID 4	STT_01	551	State ID 39	STT_01
551	State ID 5	STT_01	551	State ID 40	STT_01
551	State ID 6	STT_01	551	State ID 41	STT_01
551	State ID 7	STT_01	551	State ID 42	STT_01
551	State ID 8	STT_01	551	State ID 43	STT_01
551	State ID 9	STT_01	551	State ID 44	STT_01
551	State ID 10	STT_01	551	State ID 45	STT_01
551	State ID 11	STT_01	601	State ID 46	STT_02
551	State ID 12	STT_01	601	State ID 47	STT_02
551	State ID 13	STT_01	551	State ID 48	STT_01
551	State ID 14	STT_01	601	State ID 49	STT_02
551	State ID 15	STT_01	601	State ID 50	STT_02
551	State ID 16	STT_01	601	State ID 51	STT_02
551	State ID 17	STT_01	951	State ID 52	STT_09
551	State ID 18	STT_01	651	State ID 53	STT_03
551	State ID 19	STT_01	551	State ID 54	STT_01
551	State ID 20	STT_01	551	State ID 55	STT_01
551	State ID 21	STT_01	551	State ID 56	STT_01
551	State ID 22	STT_01	551	State ID 57	STT_01
551	State ID 23	STT_01	651	State ID 58	STT_03
551	State ID 24	STT_01	701	State ID 59	STT_04
551	State ID 25	STT_01	651	State ID 60	STT_03
551	State ID 26	STT_01	901	State ID 61	STT_10
551	State ID 27	STT_01	801	State ID 62	STT_06
551	State ID 28	STT_01	601	State ID 63	STT_02
551	State ID 29	STT_01	601	State ID 64	STT_02
551	State ID 30	STT_01	851	State ID 65	STT_07
551	State ID 31	STT_01	601	State ID 66	STT_02
551	State ID 32	STT_01	601	State ID 67	STT_02
551	State ID 33	STT_01	601	State ID 68	STT_02
551	State ID 34	STT_01	701	State ID 69	STT_04
551	State ID 35	STT_01	751	State ID 70	STT_05



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Start Index	State ID	RTCS
551	1	STT_01
551	2	STT_01
551	3	STT_01
551	4	STT_01
551	5	STT_01
551	6	STT_01
551	7	STT_01
551	8	STT_01
551	9	STT_01
551	10	STT_01
551	11	STT_01
551	12	STT_01
551	13	STT_01
551	14	STT_01
551	15	STT_01
751	16	STT_05
951	17	STT_09
951	18	STT_09
951	19	STT_09
951	20	STT_09
951	21	STT_09
951	22	STT_09
551	23	STT_01
551	24	STT_01
551	25	STT_01
551	26	STT_01
551	27	STT_01
551	28	STT_01
551	29	STT_01
551	30	STT_01
551	31	STT_01
551	32	STT_01
551	33	STT_01
551	34	STT_01
551	35	STT_01

Start Index	State ID	RTCS
551	36	STT_01
551	37	STT_01
551	38	STT_01
951	39	STT_09
551	40	STT_01
551	41	STT_01
551	42	STT_01
551	43	STT_01
551	44	STT_01
551	45	STT_01
551	46	STT_01
601	47	STT_02
901	48	STT_10
601	49	STT_02
601	50	STT_02
601	51	STT_02
951	52	STT_09
651	53	STT_03
551	54	STT_01
551	55	STT_01
551	56	STT_01
551	57	STT_01
651	58	STT_03
701	59	STT_04
651	60	STT_03
901	61	STT_10
801	62	STT_06
551	63	STT_01
601	64	STT_02
851	65	STT_07
601	66	STT_02
551	67	STT_01
601	68	STT_02
701	69	STT_04
751	70	STT_05



6.2 Timeline Tables

6.2.1 TIMELINE INDEX Table

This table stores the identifiers of the start entry in the TIMELINE Table for the 63 instrument_timelines. Only one table of this class exists.

Table Template:

MCMD: SET TIMELINE INDEX TABLE (IOM Reference A6.58)

Columns:

Timeline ID: identifier of the onboard instrument_timelines; range = 1-63

Start ID Timeline: identifier of the Entry ID of the first state of an instrument_timeline in the

TIMELINE Table; range = 1-4096; for instrument_timelines not loaded in the ICU, the start index "0" must be used - see IOM for more details

The following table shows the definition as it was agreed between all parties to construct a firm template for all timelines. By using this fixed layout the flexibility of the MCMD is intentionally truncated.

Note: the content of this table is fixed and it is not planned to introduce any changes into this table.



EEPROM – ICU_SW V. 2.03

Counter	Timeline	START INDEX	START INDEX
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59 00000E81 3713 60 00000EC1 3777 61 00000F01 3841 62 00000F41 3905	57	00000E01	3585
60 00000EC1 3777 61 00000F01 3841 62 00000F41 3905	58	00000E41	3649
61 00000F01 3841 62 00000F41 3905	59	00000E81	3713
62 00000F41 3905	60	00000EC1	3777
	61	00000F01	3841
63 00000F81 3969	62	00000F41	3905
	63	00000F81	3969

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6.2.2 TIMELINE Table

This table stores the state sequences for the 63 onboard instrument_timelines. The table has 4096 entries. Only one table of this class exists.

Table Template:

MCMD: SET TIMELINE (IOM Reference A6.57)

Columns:

Entry ID: position identifier of a particular state in the TIMELINE table;

range = 1-4096

Time Tag: definition of the start time of a particular state relative to the time tag of the

preceding state in CT (for the first state in an instrument_timeline this parameter refers to the time tag of the *START TIMELINE* MCMD),

range = 0-16777215 (equivalent to 0-65535.996 sec)

State ID: identifier of a particular state in an instrument_timeline, range = 1-70

Note that the following table shows only the general layout (template) for the first 53 entries. RD 3 gives the full definition of all timelines contained in the TL-store. Furthermore RD3 will specify in the final issue also the contents (distinguished by a 'set'-nr.) of the TL-store for the different scenarios.



	Т	1
Entry ID	Time Tag	State ID
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
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26 27		
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7 Open Issues w.r.t. State Parameter Tables

The instrument states as presented here are based on the current knowledge about SCIAMACHY performance and operations after the definition of the first set of 'Final-Flight'-state parameter tables.

A source for potential state modifications is the behaviour and aging of instrument components with proceeding instrument lifetime and ongoing measurement activities in space. Results of instrument monitoring activities might require to tune certain parameters to the actual instrument status.



8 Engineering Parameter Tables

This chapter describes all remaining SCIAMACHY instrument onboard tables. All of these tables have the purpose to maintain the correct technical functions of the subsystems of SCIAMACHY and of the overall instrument.

The individual engineering tables permit the parameterised setting of different tasks like:

- Monitoring
- Timing and Commanding
- Initialising of Corrective Actions
- Setting of Engineering Parameters for Subsystems and Mechanisms

The engineering tables are considered as a fairly stable part of the onboard EEPROM. When in the following the tables are reproduced the EEPROM parameter version is given and the current RAM table version is not presented with all parameters but only with the altered ones on the appropriate pages. The reason for this diverting approach is, that with engineering parameter tables just a small, very limited number of modifications has occurred since the last burning of the EEPROM. Furthermore it is planned to load these modifications via fixed commands and not via the table interface - CTI. This means the related fixed commands are part of a distinct procedure (see RD1).

8.1 Monitoring Tables

The Engineering tables related hereto are all organised according to the ID-number of the parameter defined. When an ID is cited in any of these tables the identical parameter is designated by this ID. The following 3 tables are all related to only one Excel source file and can be derived therefrom:

- 1. Monitoring Table
- 2. Enable Monitoring Table
- 3. Inhibit Monitoring Table

In the following these 3 tables are described based on the template of the common Excel source and the common Excel source is depicted.

8.1.1 Monitoring Table

This table holds the status or limits against which a parameter defined by its ID is checked. The table is limited to 255 parameters. Only one table of this class exists.

Table Template:

MCMD: SET MONITORING (IOM Reference A6.40)

Header Line:

Checking State: identification of a distinct checking state for the application of the monitoring limits

Columns:

Parameter ID: identifies a particular instrument parameter against which status or limits are

checked:

range = 1...255 (column 1 - DEC; column 3 - HEX)

Enabled/Disabled: not used for Monitoring Table Type & m-Length: combines 2 parameters:



Type: '0' defines a set of expected states against which a digital parameter is

monitored;

'1' defines a value range for the monitoring of analog/digital parameters;

m-Length: defines the number of word of the microcommand (value = 4);

Filter: defines the number of tolerated status deviations (type 0) or limit violations

(type 1), before a history entry is generated;

Checking State: Identifier of the checking state for the application of the monitoring limits

(see header line)

High Limit or State 1: with 'type 0' this parameter defines state 1 permitted

with 'type 1' this parameter defines the maximum value permitted

Low Limit or State 2: with 'type 0' this parameter defines state 2 permitted

with 'type 1' this parameter defines the minimum value permitted

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

DCR/OCR	Issue date	issued by	Title
DR-SCIA-0100DO/97	03.09.97	DSS	Increased Filter Value in checking state IDLE for Parameter 94 & 100
DR-SCIA-0112DO/97	12.11.97	DSS	Monitoring Limit in checking state STATE for Parameter 94
DR-SCIA-0010DO/98	08.04.98	DSS	Modification of Calibration Curves for on-board Monitoring for Parameters 106, 107, 112
e-mail H.Kröger & T.Niessen	12.06.2002	Astrium; H.Kröger	Correct I0137 & I0138 SRC Cold stage & Parabolic Reflector Temperature
e-mail T.Niessen	04.11.2002	Astrium; T.Niessen	Correct I0138 SRC Parabolic Reflector Temperature
e-mail P. Luetzow	30.09.2002	Astrium; P. Luetzow	correct I0270 Mechanisms Status O/B Monitoring Limits to allow 71 decimal

8.1.2 Enable Monitoring Table

This table holds the parameters defined by its ID, which are individually enabled for monitoring. The table is limited to 255 parameters. Only one table of this class exists.

Table Template:

MCMD: ENABLE MONITORING (IOM Reference A6.7)

Header Line:

Checking State: identification of a distinct checking state for the application of the monitoring limits

Columns:

Parameter ID: identifies a particular instrument;

range = 1...255 (column 1 - DEC; column 3 – HEX)

Enabled/Disabled: parameters marked 'enabled' are identified for monitoring



not used for Enable Monitoring Table Type & m-Length: Filter: not used for Enable Monitoring Table

Checking State: Identifier of the checking state for which the monitoring applies (see header line)

High Limit or State 1: not used for Enable Monitoring Table Low Limit or State 2: not used for Enable Monitoring Table

NOTE: MCMD 'Enable Monitoring' may also be used to globally enable monitoring,

which does not alter the setting of the individual parameter.

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

CDR/OCR	Issue date	issued by	Title
none			

8.1.3 Inhibit Monitoring Table

This table holds the parameters defined by its ID, which are individually inhibited for monitoring. The table is limited to 255 parameters. Only one table of this class exists.

Table Template:

MCMD: INHIBIT MONITORING (IOM Reference A6.7)

Header Line:

Checking State: identification of a distinct checking state for the application of the monitoring limits is

inhibited

Columns:

Parameter ID: identifies a particular instrument;

range = 1...255 (column 1 - DEC; column 3 – HEX)

Enabled/Disabled: parameters marked 'disabled' are specified for monitoring

Type & m-Length: not used for Inhibit Monitoring Table Filter: not used for Inhibit Monitoring Table

Identifier of the checking state for which the monitoring is inhibited (see header Checking State:

line)

High Limit or State 1: not used for Inhibit Monitoring Table Low Limit or State 2: not used for Inhibit Monitoring Table

MCMD 'Inhibit Monitoring' may also be used to globally inhibit monitoring, NOTE:

which does not alter the setting of the individual parameter.

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

DCR/OCR	Issue date	issued by	Title
DR_SCIA_0009DO/99	08.12.99		Inhibit Monitoring for SDPU HK timeout due to SDPU dumps (I0201 = Fault ID 161)



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disabled	namen	dicabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	ulsabled	disabled	namen	dicabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	ENABLED / DISABLED	Checking State
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2 2	2 2	2 2	2 4	- t	4 4	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	1 1	44	t :	4 4	1 2	44	44	44	44	44	44	44	44	44	44	44	44	44	44	4	04	Type & m-Length	
01 9	_	2 9	_	-	_	-	-	-	-	_	_	-	+	+	_	_	-	-	-	01 01	01 01	01 01	-	-	-	_	-	-1-	_	-	2 9	_	+	-	-	-	_	-	01 01	01 01	_	_		_	-	_	-	\rightarrow	Filter CHECKING STATE	
0000	+	0000	-	+	+	+	+	+	-	+	1 0000	+	+	+	+	+	+	1 0000	-	1 0000	1 0000	0000	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1 0000	1 0000	1 0000	\rightarrow	0000	\rightarrow	-	+	0000	+	0	Limit High or State 1	
0 77 77	+			-	+	+	+	+	\vdash	+	\vdash	+	+	+	-	+	+	-	-	0 FFFF	-	0 FFFF	-	+	+	+	+	+		+	+	+	+	+	+	+	+-	_	0 FFFF	9777	\rightarrow	_	+	-	+	0 5	+	Б	Limit Low or State 2	
F Expected states	+	-	_	wordsm	\top	mgh/low	-	+	-	-	F high/low limit	\vdash	+	т	-	hgh/low	-	F high/low limit	_	т	+	+	+	1 .	+	+	wordsm	+	_	-	+	high/low	+	F high/low limit	= high/low	F high/low limit	\neg	_	$\overline{}$	high/low	$^{+}$	F high/low limit	-	Expect	Type & m-Length	Standby				
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32	2 2	30 65	31.	F 6	3 6	2В	2A	29	28	27	26	25	24	23	22	21	20	1F	Œ	1D	10	1B	1A	19	18	17	5 5	: 5	1, 14	:	12	5 =	10	; =	E	8	00	08	0A	09	08	07	8 8	3 5	2 2	3 8	3	01	Parameter ID HEX	
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01 02	21 22	01 02	_	+	_	+	+	-	\vdash	-	-	-	+	+	-	-	-	-	-	01 02	01 02	01 02	-	-	-	21 02	-	+	_	+	01 02	_	-	+	+	_	-	-	01 02	20 10	\rightarrow	_	\rightarrow	\rightarrow	-	01 02	-	\rightarrow	Filter CHECKING STATE	
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EEPROM - ICU SW V. 2.03 ENABLED / DISABLED Table 1.2 Type & m-Length Filter CHECKING STATE Limit Low or State 2 Expected states Legatory inert Expected states □ □ □ □ Limit High or State 1 Limit Low or State 2 MONITORING ENABLED / DISABLED Table 2.2 CHECKING STATE Limit High or State 1 Type & m-Length Limit Low or State 2 MONITORING disabled dis ENABLED / DISABLED CHECKING STATE Limit Low or State 2 Expected states | Expected sta states st



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$Final\text{-}Flight_Vers.FF10$ ENABLED / DISABLED Parameter ID HEX Type & m-Length Filter CHECKING STATE 0188 Limit High or State 1 Limit Low or State 2 State Type & m-Length Filter 384 Limit High or State 1 Limit Low or State 2



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Final-Flight_Vers.FF10

no modifications to the contents of the tables on the opposite side as burned in EEPROM – ICU_SW V.2.03



Limit Low or State 2

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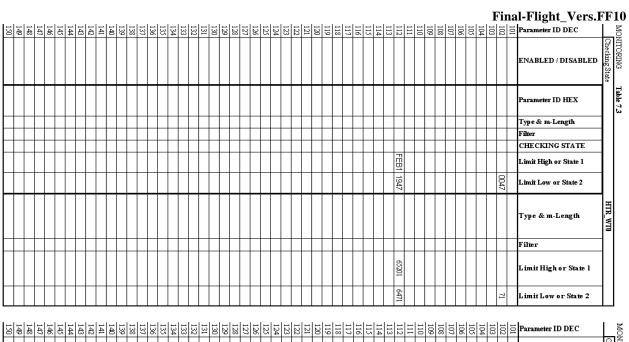
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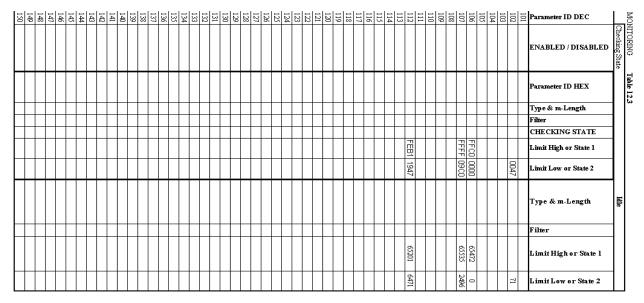
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high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	highflow limit	high/low limit	highflow limit	high/low limit	high/low limit	high/low limit	Expected states	high/low limit	high/low limit	high/low limit	ngn/low imit	high/low limit	high/low limit	high/low limit	Expected states	highflow limit	high/low limit	high/low limit	high/low limit	Expected states	high/low limit	Ту	pe & m-Length	Idle	:					
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EEPROM – ICU_SW V. 2.03

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high/low limit	high/low limit	high/low limit	high flow limit	high flow limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	highflow limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	highflow limit	high four limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	high/low limit	high/low limit	Expected states	high/low limit	highflow limit	high/low limit	Expected states	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	high/low limit	Туј	e & m-Length		State	
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high/low limit	high/low limit	highflow limit	high/low limit	timil wolvdgid	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	highflow limit	ngrouw man	high/low hmit	high/low limit	Expected states	high/low limit	high/low limit	high/low limit	Expected states	high flow limit	high/low hmit	high/low limit	Expected states	high/low limit	high/low limit	highflow limit	highflow limit	highflow limit	ngpuow imit	hishflow limit	Гуре & m-Length		SPARE 1										
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high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	highflow limit	nign/ow mait	ngrotow irrut	nign/ow mait	ngrotow irmi	ringly wording	highflow limit	highflow limit	highflow limit	high/low limit	highflow limit	high/low limit	timit wolvdgid	Expected states	high/low limit	high/low limit	Expected states	timit wolvdgid	high/low limit	high/low limit	highflour limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Ту	pe & m-Length	ı											
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MONITORING
Checking State ENABLED / DISABLED Table 13.3 Parameter ID HEX Type & m-Length Filter CHECKING STATE FF FF 8 Limit High or State 1 0000 Limit Low or State 2 State Type & m-Length Filter 65472 65535 65201 Limit High or State 1 6471 0 2496 Limit Low or State 2



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TMT	Parameter ID DEC	151	152	: 5	띪	156	157	158	159	160	161	162	163	164	165	166	3 57	2.0 ≅	7. / 150
Checking State	ENABLED / DISABLED	disabled	disabled	Τ	disabled	disabled	disabled	disabled	disabled	disabled	disabled	enabled	enabled	disabled	enabled	enabled	enabled	enabled	enabled
e lante 1.4	Parameter ID HEX	97	8	3 %	98	90	9D	9E	97	ΑO	A1	A2	A3	A4	Æ	A6	A7	A8	A9
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	Limit Low or State 2	FFFF	F		귀:	FFFF	FFFF	FFF	开开	8	8	900	8	FFF	9	8	8	8	9
Standbye	Type & m-Length	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states									
	Filter		-		-	-		-	-	-	-	-	0	0			0	0	1
	Limit High or State 1	0	-	9-	이.	0	0	-	0	-	-	12	2	-	-	-	2	N	-
	Limit Low or State 2	65535	6533	6533	6533	65535	65535	65535	65535	65535	6533	12	2	6535	-	-	2	2	1
-	Parameter ID DEC		1-	-	<u></u>	-	-	<u> </u>	-	<u>-</u>		-	<u> </u>		-	<u> </u>	<u> </u>	-	-
Checking State	ENABLED / DISABLED	151 disabled	152 disabled	153 disabled	ISS disabled	.56 disable	.57 disabled	.58 disabled	59 disabled	.60 disablec	l61 disabled	162 enabled	163 enabled	164 disabled	165 enabled	166 enabled	167 enabled	.68 enabled	69 enabled
State	Parameter ID HEX		<u> </u>	ed 99	_	ed 90	ed 9D	ed 9E	ed 9F	ed A0	ed A1	ed A2	ed A3	ed A4	ed AS	ed A6	ed A7	ed A8	ed A9
1.4	T 0 1 1	_	_						_										
	Type & m-Length Filter	44 01	44 01	_	4 9 9	44 01	44 01	44 01	44 01	<u>2</u>	Q 01	2	28	<u>2</u>	<u>2</u>	2 9	04 00	28)4 01
	CHECKING STATE	22	8		2 1	29	23	23	23	8	8	8	2	8	8	8	8	2	02
	Limit High or State 1	9	8			0000	0000	8	8	8	99	8	8	8	901	8	0002	02 0002	001
	Limit Low or State 2	FFFF	퓎		#	FFFF	FFFF	FFFF	FFFF	FFFF	FFF	8	8	FFF	8	8	0002	002	001
Decontamination	Type & m-Length	⊢ high/low limit			high/low limit	⊢ high/low limit	F high/low limit	F high/low limit	F high/low limit	F Expected states	F Expected states	Expected states	Expected states	F Expected states	Expected states	Expected states	2 Expected states	2 Expected states	Expected states
	Filter	-	-		-	-	-	-		-	-	-	0	-	-		0	0	1
	Limit High or State 1	0	-	0	<u>- </u>	0	0	0	0	0	0	14	-	0	-	-	2	2	-
	Limit Low or State 2	92232	65535	65535	6533	92239	92232	65535	65535	65535	65535	14	-	65535	1	-	2	2	1
— •	Parameter ID DEC		T :=:	: :::	<u></u>			 	<u></u>	<u> </u>	=	=	<u> </u>	<u> </u>	=	=	=	=	10
Checking State	ENABLED / DISABLED	151 disabled	.52 disabled	.53 disabled	55 disabled	56 disabled	157 disabled	58 disabled	59 disabled	.60 disabled	.61 disabled	162 enabled	163 enabled	164 disabled	l65 enabled	.66 enabled	167 enabled	.68 enabled	69 enabled
ate	Parameter ID HEX		 	3 %	_	90		3E	95	AO	A1	A2	A3	A4	æ	A6	A7	A8	A9
	Type & m-Length	44 (44	_	4:	44 (44 (44 0	44 (2	2	2	2	2	2	2	2	2	04 (
	Filter CHECKING STATE	01 03	93	_	의 (의 (01 03	01 03	93 83	93	9 8	93	28	2	8	93 83	91 83	9 8	B	<u>)1</u> 03
	Limit High or State 1	0000	8		8 8	0000	0000	8	8	8	8	03 000A	902	8	8	8	0002	03 0002	8
	Limit Low or State 2	0 FFFF				0 FFFF	9 FFFF	0 FFFF	0 FFFF	<u> </u>	9 7 7 9	A 000A	2 0002	1110	8	8	2 0002	2 0002	1001
Standby Refuse I	Type & m-Length	FF high/low limit			FF high/low limit	FF high/low limit	FF high/low limit	FF high/low limit	FF high/low limit	FF Expected states	FF Expected states)A Expected states	D2 Expected states	FF Expected states	D1 Expected states	D1 Expected states	D2 Expected states	D2 Expected states	D1 Expected states
	Filter	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Limit High or State 1	0	-	-	이.	0	0	-	-	-	-	8	2	-	-	-	2	N	-



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no modifications to the contents of the tables on the opposite side as burned in EEPROM – ICU_SW V.2.03



EEPROM – ICU_SW V. 2.03

Table A A A A A A A A A	V.		03																			
Table 54	169	168	167	166	65	164	163	162	161	160	159	158	157	156	155	154	153	152	151	Parameter ID DEC	0	Į,
MONITORING Table 54 A 10 10 10 10 10 10 10	enabled	enabled	enabled	enabled	enabled	disabled	enabled	enabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	ENABLED / DISABLED	hecking State	ITORING .
Company Table Ta	A.9	A8	A7	A6	æ	A4	A3	A2	A1	ΑO	9F	9E	99	ž	9B	9A	99	98	97	Parameter ID HEX		Table 4.4
CHECKING STATE	2	무						24		04 (-			44								
Checking State 1	2	5		5		Š Z		27						Š					_			
Charching State Parameter ID DEC Charching	8						8	8							00					Limit High or State 1		
Checking State Filter Checking State	1 0001	2 0002		2 0002		무류	2 0002	9 0009	0 FFFF	0 FFFF	<u> </u> FFFF	0 FFFF		픾		<u> </u> FFFF		<u>0</u> FFFF		Limit Low or State 2		
MONITORING Table 64 MONI	Expected states	Expected states	Expected states	Expected states	Expected states	high/low limit	Expected states	Expected states		high/low limit		high/low limit	high/low limit	high/low limit		high/low limit	high/low limit	high/low limit	high/low limit	Type & m-Length		
Checking State 2	-	-	-	0	-	-	-	-	1	1	1	1	-	-	-	1	1	1	1	Filter		
Checking State	-	2	2	2	-	0	2	9	0	0	0	0	0	0	0	0	0	0	0	Limit High or State 1		
Table 6.4		2	2	2	-	65535	2	9	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	Limit Low or State 2		
Table 6.4	16	16	16	15	15	15	15	16	16	16	ıs	15	15	٦.	ᅜ	IJ	15	15	15	Parameter ID DEC	1	×
Table 6.4 Type & m-Length Filter																				ENABLED / DISABLED	Checking State	ONITORING
Checking State Chec	A9	A8	A7	A6	ΑS	A4	A3	A2	A1	A0	9F	9E	9D	90	9B	9A	99	98	97	Parameter ID HEX		Table 5.4
Checking State	2	유	유			유		2		04		44	_	42								
Table 64 Table 64	2	모	모		_	뎓	_	묘		<u> </u>)1 Q		9	-				_			
Table 6.4	8																		-			
Checking State Chec	1 8	_	_	├	_	_											$\overline{}$		_			
Checking State Chec			_			_						_		_				_	-		Heater_Re	
Checking State Chec	ates	ites	tes	ites	ates	ites	ites	ates	ites	ates	ij.	ni	řį.	E.	E.	ij.	ni	ni.	nit		ise	
Checking State Chec	F	-	-	-	-	-	-	-	1	1	1	1	_	-	-	1	1	_	1			
Trans Checking State Trans Checking State Trans Checking State Trans	Ľ	_	_	_	_	_	2	Ξ	0	0										Limit High or State 1		
Checking State Trans Checking State Trans		-	-	-	-	-	2	=	0	0	5535	5535	5535		5535	5535	5535		5535	Limit Low or State 2		
Table 6.4 Trans 169	168	167	166	165	164	163	162	161	160	159	158	157		15	154	153		151	Parameter ID DEC	1	ĕ	
Table	enabled	enabled	enabled		enabled		enabled		enabled	enabled	disabled	enabled			disabled				disabled	ENABLED / DISABLED	Checking State	NITORING
Table	A9	A8	A7	A6	ΑS	A4	A3	A2	A1	ΑO	9F	9E	9Đ	90	9B	9A	99	98	97	Parameter ID HEX		Table 6.4
CHECKING STATE	_	_	-		_						-			_								
Table	=	-	_	_	-	_	-		-	-	-		-	-				-	-			
Trans	8	-	8		8		002		0000		000		0C1C	-					F280	Limit High or State 1		
Trans	0001	8	8	8	0001	8	\vdash	-	0000	0000	FFFF		_	Η.		-		-	_	Limit Low or State 2		
1 1 1 1 1 2 2 16 0 0 0 0 0 0 1 16 16 16 16 16 16 16 16 16 16 16 16 1	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	_	high/low limit	high/low limit		-		-			Type & m-Length	Trans	
- - - - - 2 16 0 0 0 7 1100 100	-	-	-	-	-	-	-	-	-	-	-	-	_	9	9	1 6	1 4	1 6		Filter		
- - - - - 2 5 0 0 0 0 0 0 0 0 0		-	-	-	-	-	2	16	0	0		7	100	7614 3		3039 3		2075 6		Limit High or State 1		
	-	-	-	-	-	-	2	16	0	0	5535	0	0	2645	2645	1054	2054	30368	0373	Limit Low or State 2		



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	L	Parameter ID DEC	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169
Checking State	,	ENABLED / DISABLED											disabled								
Table 24	1	Parameter ID HEX																			
	1	Type & m-Length		Г	Г	Г	Г	Г	Г	П		Г	Г								Г
	1	Filter								П											
	1	CHECKING STATE								П		Г	Г							Г	
	1	Limit High or State 1																			
		Limit Low or State 2																			
Heater_Refuse	_	Type & m-Length																			
	٦	Filter																			
		Limit High or State 1																			
Ш		Limit Low or State 2																			



S																					
169	168	167	166	165	164	163	162	161	160	159	158	157	156	155	154	153	152	151	Parameter ID DEC		OM
enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	disabled	disabled	enabled	disabled	disabled	enabled	enabled	disabled	disabled	ENABLED / DISABLED	Checking State	MONITORING
A9	A8	A7	A6	AS	A4	A3	A2	A1	AO	9F	9E	9D	90	9B	9A	99	98	97	Parameter ID HEX		Table 7.4
2	모	모	2	모	04	모	24	2	2	44	44	44	4	44	4	4	44	44	Type & m-Length		
9	9	2	2	2	91	2	9	2	므	01	2	므	므	므	므	2	9	므	Filter		
07	97	9	9	9	07	9	07	9	9	07	07	97	07	07	97	9	07	97	CHECKING STATE		
0001	9	0001	0001	0001	0001	0002	000D	0000	0000	0000	0000	0000	807A	807A	86B1	842D	F27B	F280	Limit High or State 1		
0001	8	001	0001	0001	0001	0002	000D	0000	0000	FFFF	FFFF	0000	7F85	7F85	794E	7D36	EBD0	EBD5	Limit Low or State 2		
Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Type & m-Length	HIR_WIO	
-	-	-	-	-	1	-	-	-	-	1	1	-	-	-	-	-	-	-	Filter		ı
-		-	-		1	2	13	-	0	0	0	0	32890	32890	34481	33837	62075	62080	Limit High or State 1		
-	-	-	_	-	1	2	13	0	0	65535	65535	0	32645	32645	31054	32054	60368	60373	Limit Low or State 2		

1		_			_	_	_							-	-	-	_			
	Parameter ID DEC	151	152	53	154	S	156	157	158	159	160	161	162	163	164	165	166	167	8	69
Checking State	ENABLED / DISABLED	disabled	disabled	enabled	enabled	disabled	disabled	enabled	disabled	disabled	enabled	peldene								
	Parameter ID HEX	97	98	99	9A	9B	90	9D	9E	9F	AO	Al	A2	A3	A4	ΑS	A6	A7	A8	6¥
	Type & m-Length	44	44	4	44	44	44	44	4	44	2	2	2	2	2	2	04	24	2	2
	Filter	91	므	2	01	므	01	9	2	9	9	9	9	9	9	9	01	9	2	9
	CHECKING STATE	8	8	8	8	8	80	8	8	8	8	8	8	8	8	8	8	8	8	8
	Limit High or State 1	F280	F27B	842D	86B1	807A	807A	0C1C	000	0000	0000	0000	0000	0002	0001	0001	0001	0001	001	8
	Limit Low or State 2	EBD5	EBD0	7D36	794E	7F85	7F85	0000	FFFF	FFFF	0000	0000	900	0002	0001	0001	0001	0001	001	8
HIR_WI	Type & m-Length	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
	Filter	-			1		1			-	-	-	-	-	-		1	1		_
	Limit High or State 1	62080	62075	33837	34481	32890	32890	3100	-	0	0	0	13	2	-	-	-	-	-	_
		60373	60368	32054	31054	32645	32645	0	65535	65535	0	0	13	2	-	-	1	1	-	_

		_	_			_			_	_	_	_			_			_	_	_
	Parameter ID DEC	121	52	53	154	동	8	157	128	159	160	161	162	8	164	65	166	167	168	169
Checking State	ENABLED / DISABLED	disabled	disabled	enabled	enabled	disabled	disabled	enabled	disabled	disabled	enabled									
	Parameter ID HEX	97	98	99	9A	9B	90	9D	9E	9F	AO	A1	A2	A3	A4	AS	A6	A7	A8	A9
ıl	Type & m-Length	44	44	4	44	44	44	44	4	44	모	2	모	2	04	모	2	모	모	Ω
ı	Filter	므	므	므	므	므	므	모	므	므	므	9	므	므	9	모	므	므	9	9
ı	CHECKING STATE	8	8	8	8	8	8	8	8	8	8	8	8	8	9	8	8	8	8	9
	Limit High or State 1	F280	F27B	842D	86B1	807A	807A	0C1C	0000	0000	000	8	900	0002	0001	0001	0001	0001	0001	0001
	Limit Low or State 2	EBD5	EBD0	7D36	794E	7F85	7F85	0000	FFFF	FFFF	000	8	0000	0002	0001	0001	0001	001	001	0001
HTR_WT2	Type & m-Length	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
	Filter	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	Limit High or State 1	62080	62075	33837	34481	32890	32890	3100	-	0	0	0	13	2	1	-	-	-	-	1
	Limit Low or State 2	60373	60368	32054	31054	32645	32645	0	65535	65535	0	0	13	2	1		-	-	-	1



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IMI	ı	Parameter ID DEC	151	152	153	154	155	156	157	158	159	160	161	162	163	164	163	166	167		2.(5
Checking Stat	onecking State	ENABLED / DISABLED	1 disabled	2 disabled	3 disabled	4 disabled	5 disabled	6 disabled	7 disabled	8 disabled	9 disabled	0 enabled	1 enabled	2 enabled	3 enabled	4 enabled	5 enabled	6 enabled	7 enabled	8 enabled	9 enabled
1 able 10.4	ľ	Parameter ID HEX	97	Ŧ	99	9A	98	Ή	99	99	99	ΑO	Αl	A2	A3	A4	AS	A6	A7	A8	A9
	1	Type & m-Length	44	44	4	4	44	44	4	4	4	모	2	2	2	2	2	2	2	2	04
	ł	Filter CHECKING STATE	91 A	9 A	<u>의</u>	2	9 2	93 A	9 A	<u> </u>	<u>=</u>	<u>□</u>	9 2	11 A	11 A	<u>□</u>	<u> </u>	<u>□</u>	11 A	01 A	01 A
	1	Limit High or State 1	0000	8	8	8	8	000	8	8	8	8	8	8	002	8	8	8	8	901	0001
	l	Limit Low or State 2	肝	0 FFF	O FFFF	0 FFFF	O FFFF	0 FFFF	0 FFFF	0 FFFF	0 FFFF	8	000	0000	2 0002	1 001	8	1 8	8	8	1 0001
	إ.						$\overline{}$		_	_	_							_	_	_	
PTC WAIT	TC_WAIT	Type & m-Length	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
	ł	Filter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	1	Limit High or State 1	0	0	0	0	0	9	0	0	0	0	0	13	2	_	_	_	-	1	1
╛	L	Limit Low or State 2	6535	6535	6535	65535	6535	65535	6535	65535	6535	0	0	ವ	2	-	-	-	-	-	-
M	1	Parameter ID DEC	151	152	133	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169
MIUNII URING	Onecking State	ENABLED / DISABLED	disabled	disabled	enabled	enabled	disabled	disabled	enabled	enabled	disabled	enabled									
Table 11.4		Parameter ID HEX	97	98	99	9A	918	%	99	9E	9F	AO	Αl	A2	A3	A4	AS	A6	A7	A8	A9
	l	Type & m-Length	44	4	44	4	44	44	4	4	44	모	2	2	2	모	모	2	무	2	04
	1	Filter	므	므	2	2	9	므	2	2	므	2	2	2	2	2	2	므	2	2	01
	1	CHECKING STATE	В	Φ	Φ	8	ω	8	8	Φ	В	8	ω	8	8	8	8	В	В	8	В
	l	Limit High or State 1	F280	F27B	842D	88	807A	807A	0C1C	907	8	8	8	8	98	8	8	8	8	8	001
	1	Limit Low or State 2	EBD5	EBDO	7D36	794E	7F85	7F85	8	8	FFF	8	8	8	992	8	8	8	8	8	0001
Heater	nean	Type & m-Length	high/low) high/low limit	high/low limit	high/low limit	high/low limi	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
1	=		limit	limit	limit	limit	limit	limit	limit	limit	limit	states									
		Filter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	l	Limit High or State 1	62080	62075	33837	34481	32890	32890	3100	~	0	0	-	ı,	2	-	-	-	-	-	-
		Limit Low or State 2	60373	60368	32054	31054	32645	32645	-	0	65335	0	0	13	2	-	-	-	-	-	1
MIC	1	Parameter ID DEC	151	152	153	154	15	156	157	158	159	160	161	162	163	164	5	166	167	168	169
MONITORING State	Checking State	ENABLED / DISABLED	disabled	disabled	enabled	enabled	disabled	disabled	enabled	enabled	disabled	enabled									
1able 12.4		Parameter ID HEX	97	98	99	9A	9B	8	8	9E	99	AO	Αl	A2	A3	A4	AS	A6	A7	A8	A9
		Type & m-Length		44	4	4	44	44	4	4	44	모	2	2	2	2	2	2	2	2	04
	ł	Filter CHECKING STATE	91 C	으 C	으	9	91 C	01 C	<u>의</u>	<u>의</u>	<u>9</u>	9 C	94 C	91 C	91 C	91 C	9 C	91 C	91 C	91 C	01 C
	1	Limit High or State 1) F280) F27B	842D	8681	807A	807A	0010	0007	000	000	000	0010	0002	8	8	001	8	0001	0001
	1	Limit Low or State 2	80 EBD5	78 EBD0	2D 7D36	B1 794E	-	7A 7F85	10 0000	07 0000	DO FFFF	0000	0000	10 000F	02 0002	01 0001	01 0001	01 0001	01 000	01 000	01 0001
	1						7F85 h														
Idle	IIIE	Type & m-Length	high/low limit	high/low limit	high/low limit	ugh/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
	-	Filter	1-00	1 6	<u>ا</u>	<u>ا</u>	<u>ا</u>	<u>ا</u>	<u></u>	-	-	-	-	-	-	-	-	-	-	-	1
		Limit High or State 1	62080	62075	33837	34481	32890	32890	310	~	0	0	-	15	2	-	-	-	-	-	-



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169	168	167	166	8	164	63	162	161	160	159	158	157	12	S	닿	ន	153	151	Parameter ID DEC		ĕ
								disabled											ENABLED / DISABLED	Checking State	MONITORING
																			Parameter ID HEX		Table 10.4
																			Type & m-Length		-
																			Filter		ı
																			CHECKING STATE		ı
																			Limit High or State 1		
																			Limit Low or State 2		
																			Type & m-Length	PTC_WAIT	
																		Π	Filter		ı
																			Limit High or State 1		
																			Limit Low or State 2		



																			03	2.	٧.
	\perp	Parameter ID DEC	151	153	13	¥	뜅	156	157	158	159	66	161	162	63	164	65	166	163	I	169
Checking State	ED	ENABLED / DISABLED	disabled	disabled	enabled	enabled	disabled	disabled	enabled	enabled	disabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled
1anue 13.4		Parameter ID HEX	97	%	99	9A	98	90	99	9E	95	AO	A1	A2	A3	A4	Æ	A6	A7	AS	A9
		Type & m-Length	44	44	44	4	44	44	44	44	44	2	2	2	2	2	2	2	2	2	2
		Filter	므	므	9	5	므	므	으	으	으	므	9	으	9	으	으	므	으	으	9
	\dashv	CHECKING STATE	D	<u>Р</u>	0	-	D	0	0	0	0	0	0	0	0	0	0	0	0	0	D 0
		Limit High or State 1	F280	F27B	BBg	즂	E13E	E	000	007	8	8	8	90	902	8	8	8	8	8	8
		Limit Low or State 2	EBD5	89	7D36	/94E	7F85	7F85	8	8	FFFF	000	000	90 10	0002	0001	001	<u>00</u>	<u>8</u>	<u>00</u>	<u>8</u>
State		Type & m-Length	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
	4	Filter	6	90	4	9					-	-	-	-	-	-					-
	_	Limit High or State 1	62080 6	62075 6	48601	63039	57662	57614	3100	7	0	-	0	16	2	-	-	-	_	_	-
		Limit Low or State 2	60373	60368	32054	31054	32645	32645	0	0	65535	0	0	16	2	-	-	-	-	-	<u></u>
<u> </u>		Parameter ID DEC	151	152	ដ	¥	15	156	157	158	159	160	161	162	<u>ස</u>	164	165	166	167	168	169
Checking State	ED	ENABLED / DISABLED	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled	enabled
1able 14.4		Parameter ID HEX	97	98	99	9A	98	8	99	Œ	9F	A0	Αl	A2	A3	A4	ΑS	A6	A7	A8	A.9
		Type & m-Length	44	42	₩	44	4	4	44	44	44	2	2	2	2	2	무	무	무	무	94
	\dashv	Filter CHECKING STATE	91 E	므	19	9	므	91 E	므	므	9 E	91 E	므	므	9 E	9 E	9 E	9 E	9 E	9 E	91 E
	\exists	Limit High or State 1	0000	8	-	-	-	-	8	-	-	8	8	88	0002	 991	 991	8	8	8	8
	\dashv	Limit Low or State 2)() FFFF	<u> </u>)0 FFFF	H111 0000	0000 FFFF	0000 FFFF	IO FFFF	0000 FFFF	0000 FFFF	000	800	8000	12 0002	11 001	13 100 100	<u> 1</u>	8	1 1 1 1 1 1 1 1	11 00 1
	긕	Linii Low or State 2	귀	中	귀	7	Ä	Ä	뀨	귀	귀	8	8	8	2	므	므	므	므	므	므
SPARE 1	ı	Type & m-Length	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
		Filter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
		Limit High or State 1			Ь		_			Ц_	Ш	-	0	Ξ	2	-	-	-	-	-	-
		Limit Low or State 2	65535	6535	6535	0,53	6535	6535	6535	6535	6535	0	0	=	2	-	-	-	-	-	
		Parameter ID DEC	151	152	ន	124	IJ	156	157	158	159	160	161	162	<u>15</u>	164	165	166	167	168	169
Checking State	D.	ENABLED / DISABLED	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	disabled	enabled	disabled	disabled	enabled	disabled	disabled	disabled	enabled
Table 15.4		Parameter ID HEX	97	8	┖	9A	98	92	8	8	97	ΑO	A1	A2	A3	A4	AS	A6	Α7	A8	A9
	\dashv	Type & m-Length Filter	44 01	44 01	4 0	44 01	44 01	44 01	44 01	44 01	44 01	04 01	200	44 01	94	04 00	94 01	94 01	모으	모	94 01
		CHECKING STATE	П	m	Ī	-	П	П	m	m	П	т	П	П	П	F	т	т	m	П	П
		Limit High or State 1	8			18	000	8	8	8	8	8	8	99	8			8	8	8	8
		Limit Low or State 2	FFFF	FF FF	FFFF	FFFF	FFF	FFF	FFFF	FFFF	FFFF	0000	0000	0009	FFFF	0001	0001	FFFF	FFFF	FFFF	0001
SPARE 2		Type & m-Length	high/low limit	high/low limit	high/low limit	high/low hmit	high/low limit	high/low limit	high/low limit	high/low limit	high/low limit	Expected states	Expected states	high/low limit	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states	Expected states
		Filter	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-
	_	Limit High or State 1		0	0	0	0	0	0	0	0	0	0	16	0	-	-	0	0	0	-
	_]	Limit Low or State 2	65535	65535	6535	65535	65535	65535	65535	65535	65535	0	0	9	65535	-	-	65535	65535	65535	-
_					•																



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169	150	167	166	165	164	153	162	161	166	159	158	157	12	15	154	153	152	151	Parameter ID DEC	L	Mo
								disabled											ENABLED / DISABLED	Checking State	MONITORING
																			Parameter ID HEX		Table 14.4
																			Type & m-Length		┺
																			Filter		l
																			CHECKING STATE		l
																			Limit High or State 1		
																			Limit Low or State 2		
																			Type & m-Length	SPARE_1	
																			Filter	l	l
																			Limit High or State 1		
																			Limit Low or State 2		



8.2 Corrective Action Tables

The Engineering tables related hereto are also all organised according to the fault ID-number of the parameter defined. When an ID is cited in any of these tables the identical parameter is designated by this ID.

The following 3 tables are all related to only one Excel source file – Corrective Action Mask - and can be derived therefrom:

- 1. CA Mask
- 2. Enable Autonomous Switching
- 3. Inhibit Autonomous Switching

In the following these 3 tables are described based on the template of the common Excel source and the common Excel source is depicted.

A further table – CA_matrix – is related to above 3 tables. This tables defines for the identical set of Fault Ids, which CA is assigned to a particular Fault ID as a function of instrument mode or transition to mode. The Excel sheet related hereto is depicted after the picture of the CA_Mask.

8.2.1 CA Mask Table

This table holds the information, for which Fault IDs a fault handling action shall be enabled/inhibited. The table is limited to 1023 Fault IDs.

Table Template:

MCMD: SET CA_MASK (IOM Reference A6.29)

Columns:

Fault ID: identifies a particular fault ID for which the fault handling action shall be

enabled/inhibited; for details see chapt.10 of RD1;

range = 256....1022 (column 1 - DEC; column 3 - HEX); ID 256....1022

are generated in the instrument SW

fault ID range 1...255 is mapped on parameter ID range 1...255. Fault ID 0 is default and not checked. With fault ID range 1...255 the MCMDs Enable Autonomous Switching and Inhibit Autonomous Switching are used.

CA_Mask: specifies whether fault handling for the quoted Fault ID is enabled/inhibited

(column 2 – HEX – 0 / 1 -; column 6 – alphanumeric)

SP EID Dec & HEX: not used for CA Mask

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

DCR/OCR	Issue date	issued by	Title
e-mail		H.Kröger; Astrium	correct CA-Mask for fault 86 to be disabled

8.2.2 Enable Autonomous Switching Table

This table holds the information, for which Parameter IDs an autonomous switch-down function shall be enabled as a CA in response to out-of-limit conditions of this parameter. The table is limited to 255 parameters. By default CA execution is enabled for all parameters.



Table Template:

MCMD: ENABLE AUTONOMOUS SWITCHING (IOM Reference A6.6)

Columns:

Fault ID: identifies a particular fault ID for which the fault handling action shall be

enabled; for details see chapt.10 of RD1; A Fault ID is generated in the ICU as

a result of limit checking and/or other detected faults.

Fault ID range 1...255 is mapped on parameter ID range 1...255. Fault ID 0 is

default and not checked.

range = 256....1022 not used for this table

CA_Mask: not used for this table SP EID Dec & HEX: not used for this table

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

DCR/OCR	Issue date	issued by	Title
none			

8.2.3 Inhibit Autonomous Switching Table

This table holds the information, for which Parameter IDs an autonomous switch-down function shall be inhibited as a CA in response to out-of-limit conditions of this parameter. The table is limited to 255 parameters. By default CA execution is enabled for all parameters.

Table Template:

MCMD: INHIBIT AUTONOMOUS SWITCHING (IOM Reference A6.16)

Columns:

Fault ID: identifies a particular fault ID for which the fault handling action shall be

inhibited; for details see chapt.10 of RD1;

fault ID range 1...255 is mapped on parameter ID range 1...255. Fault ID 0 is

default and not checked.

range = 256....1022 not used for this table

CA_Mask: not used for this table SP EID Dec & HEX: not used for this table

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

DCR/OCR	Issue date	issued by	Title
none			



CA_MASK		Table 1 of 21			
Fault ID	CA_MASK	Fault ID	SP EID	SP EID	CA_MASK ALPHA
DEC	HEX	HEX	DEC	HEX	
0	0	000			enable
1	1	001			disable
2	0	002			enable
3	0	003			enable
4	0	004			enable
5	0	005			enable
6	0	006			enable
7	0	007			enable
8	0	008			enable
9	0	009			enable
10	0	00A			enable
11	0	00B			enable
12	0	00C			enable
13	0	00D			enable
14	0	00E			enable
15	0	00F			enable
16	0	010			enable
17	0	011			enable
18	0	012			enable
19	0	013			enable
20	0	014			enable
21	0	015			enable
22	0	016			enable
23	Ö	017			enable
24	0	018			enable
25	Ö	019			enable
26	0	01A			enable
27	0	01B			enable
28	0	01C			enable
29	0	01D			enable
30	0	01E			enable
31	0	01F			enable
32	0	020			
	0	020			enable
33					enable
34	0	022			enable
35	0	023			enable
36	0	024			enable
37	0	025			enable
38	0	026			enable
39	0	027			enable
40	0	028			enable
41	0	029	_		enable
42	0	02A			enable
43	0	02B			enable
44	0	02C			enable
45	0	02D			enable
46	0	02E			enable
47	0	02F			enable
48	0	030			enable
49	0	031			enable



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CA_MASK		Table 2 of 21	_	r n	nal-Flight_Vers.FF10
Fault ID	CA_MASK	Fault ID	SP EID	SP EID	CA_MASK
DEC	HEX	HEX	DEC	HEX	ALPHA
50	0	032			enable
51	1	033			disable
52	1	034			disable
53	1	035			disable
54	1	036			disable
55	0	037			enable
56	1	038			disable
57	1	039			disable
58	1	03A			disable
59	1	03B			disable
60	0	03C			enable
61	1	03D			disable
62	1	03E	<u> </u>		disable
63	1	03F			disable
64	1	040			disable
65	Ö	041			enable
66	1	042			disable
67	1	043			disable
68	1	044			disable
69	1	045			disable
70	Ö	046	_		enable
71	1	047			disable
72	1	048	<u> </u>		disable
73	Ö	049	<u> </u>		enable
74	0	04A			enable
75	0	04B	+		enable
76	0	04C			enable
77	0	04D	<u> </u>		enable
78	0	04E	<u> </u>		enable
79	0	04F			enable
80	0	050	<u> </u>		enable
81	0	051			enable
82	0	052			enable
83	0	053			enable
84	0	054			enable
85	0	055			enable
86	1	056	1		disable
87	1	057			disable
88	1	058			disable
89	1	059			disable
90	0	05A	1		enable
91	0	05B	+		enable
92	0	05C	1		enable
93	0	05D	1		enable
94	1	05E	+		disable
95	1	05F	1		disable
96	0	060	1		enable
97	0	061	+		enable
98	0	062	+		enable
99	0	063	+		enable
- //	U	1 000			Landble



CA_MASK Table 3 of 21						
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA	
100	1	064			disable	
101	1	065			disable	
102	0	066			enable	
103	0	067			enable	
104	0	068			enable	
105	0	069			enable	
106	0	06A			enable	
107	0	06B			enable	
108	0	06C			enable	
109	1	06D			disable	
110	1	06E			disable	
111	1	06F			disable	
112	0	070			enable	
113	0	071			enable	
114	0	072			enable	
115	0	073			enable	
116	0	074			enable	
117	0	075			enable	
118	0	076			enable	
119	0	077			enable	
120	0	078			enable	
121	0	079			enable	
122	0	07A			enable	
123	0	07B			enable	
124	0	07C			enable	
125	0	07D			enable	
126	0	07E			enable	
127	0	07E			enable	
128	0	080			enable	
129	0	081			enable	
130	0	082			enable	
131	0	083				
					enable	
132	0	084			enable	
133 134	0	085 086			enable	
					enable	
135	0	087			enable	
136 137	0	088			enable	
	0	089			enable	
138	0	08A			enable	
139	0	08B			enable	
140	0	08C			enable	
141	0	08D			enable	
142	0	08E			enable	
143	0	08F			enable	
144	0	090			enable	
145	0	091			enable	
146	0	092			enable	
147	0	093			enable	
148	0	094			enable	
149	0	095			enable	



CA_MASK		Table 4 of 21			
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
150	0	096			enable
151	0	097			enable
152	0	098			enable
153	0	099			enable
154	0	09A			enable
155	0	09B			enable
156	0	09C			enable
157	0	09D			enable
158	1	09E			disable
159	Ö	09F			enable
160	ŏ	0A0			enable
161	Ö	0A1			enable
162	0	0A1			enable
	0	0A2 0A3			
163					enable
164	0	0A4			enable
165	0	0A5			enable
166	0	0A6			enable
167	0	0A7			enable
168	0	0A8			enable
169	0	0A9			enable
170	0	0AA			enable
171	0	0AB			enable
172	0	0AC			enable
173	0	0AD			enable
174	0	0AE			enable
175	0	0AF			enable
176	0	0B0			enable
177	0	0B1			enable
178	0	0B2			enable
179	0	0B3			enable
180	0	0B4			enable
181	0	0B5			enable
182	0	0B6			enable
183	ŏ	0B7			enable
184	ŏ	0B8			enable
185	ŏ	0B9			enable
186	0	OBA			enable
187	0	OBA OBB			enable
		OBC			
188	0				enable
189	0	0BD			enable
190	0	0BE			enable
191	0	0BF			enable
192	0	0C0	_		enable
193	0	0C1			enable
194	0	0C2			enable
195	0	0C3			enable
196	0	0C4			enable
197	0	0C5			enable
198	0	0C6			enable
199	0	0C7			enable



Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
200	0	0C8	220		enable
201	0	0C9			enable
202	0	0CA			enable
203	0	0CB			enable
204	ő	0CC			enable
205	ŏ	0CD			enable
206	Ö	OCE			enable
207	Ö	0CF			enable
208	0	0D0			enable
209	0	0D1			enable
210	0	0D1			
	0				enable
211		0D3			enable
212	0	0D4			enable
213	0	0D5			enable
214	0	0D6			enable
215	0	0D7			enable
216	0	0D8			enable
217	0	0D9			enable
218	0	0DA			enable
219	0	0DB			enable
220	0	0DC			enable
221	0	0DD			enable
222	0	0DE			enable
223	0	0DF			enable
224	0	0E0			enable
225	0	0E1			enable
226	0	0E2			enable
227	0	0E3			enable
228	0	0E4			enable
229	0	0E5			enable
230	0	0E6			enable
231	0	0E7			enable
232	0	0E8			enable
233	0	0E9			enable
234	0	0EA			enable
235	0	0EB			enable
236	0	0EC			enable
237	0	0ED			enable
238	0	0EE			enable
239	0	0EF			enable
240	0	0F0			enable
241	0	0F1			enable
242	0	0F2			enable
243	Ö	0F3			enable
244	ŏ	0F4			enable
245	0	0F5			enable
246	0	0F6			enable
247	0	0F7			enable
247	0	0F8	1		enable
249	0	0F9			enable



Fout ID CA MASK Fault ID SP EID DEC HEX	CA MASK		Table 6 of 21 EEPROM – ICU_SW V. 2.03						
DEC		CA MASK		SP EID	SP EID	CA MASK ALPHA			
251						_			
252	250	0	0FA			enable			
253	251	0	0FB			enable			
254	252	0	0FC			enable			
254	253	0	0FD			enable			
255 0	254	0	0FE			enable			
256			0FF						
257 0 101 enable enable enable 258 0 102 enable enable enable enable 259 0 103 enable enable 260 0 104 enable 256		100							
258 0 102 enable 259 0 103 enable 260 0 104 enable 261 0 105 enable 262 0 106 enable 263 0 107 enable 264 0 108 enable 265 0 109 enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 271 0 10F enable 272 0 111 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
259 0 103 enable 260 0 104 enable 261 0 105 enable 262 0 106 enable 263 0 107 enable 264 0 108 enable 265 0 109 enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 279 0 117 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
260 0 104 enable 261 0 105 enable 262 0 106 enable 263 0 107 enable 264 0 108 enable 265 0 109 enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 277 0 115 enable 277 0 115 enable 279 0 117 enable 280 0 118 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
261 0 106 enable 262 0 106 enable 263 0 107 enable 264 0 108 enable 265 0 109 enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
262 0 106 enable 263 0 107 enable 264 0 108 enable 265 0 109 enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 280 0 118 enable 281 0 119 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
263 0 107 enable 264 0 108 enable 265 0 109 enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 277 0 115 enable 279 0 117 enable 280 0 118 enable 281 0 119 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
264 0 108 enable 265 0 109 enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 277 0 115 enable 279 0 117 enable 280 0 118 enable 281 0 119 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
265 0 10A enable 266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 277 0 115 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
266 0 10A enable 267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 271 0 110 enable 272 0 111 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
267 0 10B enable 268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 287 0 11F <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
268 0 10C enable 269 0 10D enable 270 0 10E enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 288 0 120 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
269 0 10D enable 270 0 10E enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 281 0 11A enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
270 0 10E enable 271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 289 0 121 enable 290 0 122 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
271 0 10F enable 272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 281 0 11A enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 290 0 122 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
272 0 110 enable 273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
273 0 111 enable 274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
274 0 112 enable 275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
275 0 113 enable 276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 291 0 123 enable 293 0 125 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
276 0 114 enable 277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
277 0 115 enable 278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
278 0 116 enable 279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
279 0 117 enable 280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable									
280 0 118 enable 281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable									
281 0 119 enable 282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable									
282 0 11A enable 283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	280					enable			
283 0 11B enable 284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	281		119			enable			
284 0 11C enable 285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	282	0	11A			enable			
285 0 11D enable 286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	283	0	11B			enable			
286 0 11E enable 287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	284	0	11C			enable			
287 0 11F enable 288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	285	0	11D			enable			
288 0 120 enable 289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	286	0	11E			enable			
289 0 121 enable 290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	287	0	11F			enable			
290 0 122 enable 291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	288	0	120			enable			
291 0 123 enable 292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	289	0	121			enable			
292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	290	0	122			enable			
292 0 124 enable 293 0 125 enable 294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	291	0	123			enable			
294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	292	0	124			enable			
294 0 126 enable 295 0 127 enable 296 0 128 enable 297 0 129 enable	293	0	125			enable			
295 0 127 enable 296 0 128 enable 297 0 129 enable	294	0	126						
296 0 128 enable 297 0 129 enable	295	0	127						
297 0 129 enable	296		128						
270 U 12A enable '	298	0	12A			enable			
299 0 12B enable									



CA_MASK Table 7 of 21						
Fault ID	CA_MASK	Fault ID	SP EID	SP EID	CA_MASK ALPHA	
DEC	HEX	HEX	DEC	HEX		
300	0	12C			enable	
301	0	12D			enable	
302	0	12E			enable	
303	0	12F			enable	
304	0	130			enable	
305	0	131			enable	
306	0	132			enable	
307	0	133			enable	
308	0	134			enable	
309	0	135			enable	
310	0	136			enable	
311	0	137			enable	
312	0	138			enable	
313	0	139			enable	
314	0	13A			enable	
315	0	13B			enable	
316	0	13C			enable	
317	0	13D			enable	
318	0	13E			enable	
319	0	13F			enable	
320	0	140			enable	
321	Ö	141			enable	
322	Ö	142			enable	
323	0	143			enable	
324	0	144			enable	
325	0	145			enable	
326	0	146			enable	
327	0	147	+		enable	
328	0	148			enable	
329	0	149			enable	
330	0	14A				
	0				enable	
331		14B			enable	
332	0	14C			enable	
333		14D			enable	
334	0	14E			enable	
335	0	14F			enable	
336	0	150			enable	
337	0	151			enable	
338	0	152			enable	
339	0	153			enable	
340	0	154			enable	
341	0	155			enable	
342	0	156			enable	
343	0	157			enable	
344	0	158			enable	
345	0	159			enable	
346	0	15A			enable	
347	0	15B			enable	
348	0	15C			enable	
349	0	15D			enable	



CA_MASK	Table 8 of 21				OM - 100_5W V. 2.03
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
350	0	15E			enable
351	0	15F			enable
352	0	160			enable
353	0	161			enable
354	0	162			enable
355	0	163			enable
356	0	164			enable
357	0	165			enable
358	0	166			enable
359	0	167			enable
360	0	168			enable
361	0	169			enable
362	0	16A			enable
363	0	16B			enable
364	0	16C			enable
365	0	16D			enable
366	0	16E	+		enable
367	0	16F			enable
368	0	170			
					enable
369	0	171			enable
370	0	172			enable
371	0	173			enable
372	0	174			enable
373	0	175			enable
374	0	176			enable
375	0	177			enable
376	0	178			enable
377	0	179			enable
378	0	17A			enable
379	0	17B			enable
380	0	17C			enable
381	0	17D			enable
382	0	17E			enable
383	0	17F			enable
384	0	180			enable
385	0	181			enable
386	0	182			enable
387	0	183			enable
388	0	184			enable
389	0	185			enable
390	0	186			enable
391	0	187			enable
392	0	188			enable
393	0	189			enable
394	0	18A			enable
395	0	18B			enable
396	0	18C			enable
397	0	18D			enable
398	0	18E			enable
399	0	18F			enable
	j j				5.10.510



Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
400	0	190	DE0	IILA	enable
401	0	191			enable
402	Ö	192			enable
403	Ö	193			enable
404	1	194			disable
405	0	195	_		enable
406	0	196			enable
					enable
407	0	197			
408	0	198			enable
409	0	199			enable
410	0	19A			enable
411	0	19B			enable
412	0	19C			enable
413	0	19D			enable
414	0	19E			enable
415	0	19F			enable
416	0	1A0			enable
417	0	1A1			enable
418	0	1A2			enable
419	0	1A3			enable
420	0	1A4			enable
421	0	1A5			enable
422	0	1A6			enable
423	0	1A7			enable
424	0	1A8			enable
425	0	1A9			enable
426	0	1AA			enable
427	0	1AB			enable
428	0	1AC			enable
429	0	1AD			enable
430	0	1AE			enable
431	0	1AF			enable
432	0	1B0			enable
433	0	1B1			enable
434	0	1B2			enable
435	0	1B3			enable
436	0	1B4			enable
437	0	1B5			enable
438	0	1B6			enable
439	Ö	1B7			enable
440	0	1B8			enable
441	0	1B9			enable
442	0	1BA	-		enable
443	0	1BB	1		enable
444	0	1BC	-		enable
444	0		-		
		1BD			enable
446	0	1BE	-		enable
447	0	1BF	-		enable
448	0	1C0			enable
449	0	1C1			enable



CA_MASK -		Table 10 of 21	_		MI - 100_5W V. 2.03
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
450	0	1C2			enable
451	0	1C3			enable
452	1	1C4			disable
453	0	1C5			enable
454	0	1C6			enable
455	0	1C7			enable
456	0	1C8			enable
457	0	1C9			enable
458	0	1CA			enable
459	0	1CB			enable
460	0	1CC			enable
461	0	1CD			enable
462	0	1CE			enable
463	0	1CF			enable
464	0	1D0			enable
465	0	1D1			enable
466	Ö	1D2			enable
467	Ö	1D3			enable
468	Ö	1D3			enable
469	0	1D5			enable
470	0	1D6	+		enable
471	0	1D7			
471		1D7 1D8	_		enable
472	0	1D9	_		enable
474		1D9 1DA	_		enable
	0		_		enable
475	0	1DB 1DC	_		enable
476					enable
477	0	1DD			enable
478	0	1DE			enable
479	0	1DF			enable
480	0	1E0	0	0	enable
481	0	1E1	1	1	enable
482	0	1E2	2	2	enable
483	0	1E3	3	3	enable
484	0	1E4	4	4	enable
485	0	1 E 5	5	5	enable
486	0	1E6	6	6	enable
487	0	1E7	7	7	enable
488	0	1E8	8	8	enable
489	0	1E9	9	9	enable
490	0	1EA	10	A	enable
491	0	1EB	11	В	enable
492	0	1EC	12	С	enable
493	0	1ED	13	D	enable
494	0	1EE	14	E	enable
495	0	1EF	15	F	enable
496	0	1F0	16	10	enable
497	0	1F1	17	11	enable
498	0	1F2	18	12	enable
499	0	1F3	19	13	enable



Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
500	0	1F4	20	14	enable
501	0	1F5	21	15	enable
	0		22	16	
502		1F6			enable
503	0	1F7	23	17	enable
504	0	1F8	24	18	enable
505	0	1F9	25	19	enable
506	0	1FA	26	1A	enable
507	0	1FB	27	1B	enable
508	0	1FC	28	1C	enable
509	0	1FD	29	1D	enable
510	0	1FE	30	1E	enable
511	0	1FF	31	1F	enable
512	0	200	32	20	enable
513	0	201	33	21	enable
514	0	202	34	22	enable
515	0	203	35	23	enable
516	0	204	36	24	enable
517	0	205	37	25	enable
518	0	206	38	26	enable
519	0	207	39	27	enable
520	0	208	40	28	enable
521	0	209	41	29	enable
522	0	20A	42	2A	enable
523	0	20B	43	2B	enable
524	0	20C	44	2C	enable
525	0	20D	45	2D	enable
526	0	20E	46	2E	enable
527	0	20F	47	2F	enable
528	0	210			enable
529	0	211			enable
530	0	212			enable
531	0	213			enable
532	0	214			enable
533	0	215			enable
534	0	216			enable
535	0	217			enable
536	0	217			enable
537	0	219			enable
538	0	21A			enable
539	0	21A 21B			
		21D 21C			enable
540	0				enable
541	0	21D			enable
542	0	21E			enable
543	0	21F			enable
544	0	220			enable
545	0	221			enable
546	0	222			enable
547	0	223			enable
548	0	224			enable
549	0	225			enable



CA_MASK		Table 12 of 21			
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
550	0	226			enable
551	0	227			enable
552	0	228			enable
553	0	229			enable
554	0	22A			enable
555	0	22B			enable
556	0	22C			enable
557	0	22D			enable
558	0	22E			enable
559	0	22F			enable
560	0	230			enable
561	Ö	231			enable
562	ő	232			enable
563	Ö	233			enable
564	0	234			enable
565	0	235			enable
	0	236	_		
566					enable
567	0	237			enable
568	0	238			enable
569	0	239			enable
570	0	23A			enable
571	0	23B			enable
572	0	23C			enable
573	0	23D			enable
574	0	23E			enable
575	0	23F			enable
576	0	240			enable
577	0	241			enable
578	0	242			enable
579	0	243			enable
580	0	244			enable
581	0	245			enable
582	0	246			enable
583	0	247			enable
584	0	248			enable
585	0	249			enable
586	0	24A			enable
587	0	24B			enable
588	0	24C			enable
589	0	24D			enable
590	0	24E			enable
591	0	24F			enable
592	0	250			enable
593	0	251			enable
594	0	252			enable
595	0	253			enable
596	Ö	254			enable
597	ő	255			enable
598	0	256			enable
599	0	257			enable



CA_MASK	O L BELOTE	Table 13 of 21	en EID	GD EID	G4 344615 41 DII4
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
600	0	258	DEC	HEX	enable
601	0	259			enable
			_		
602	0	25A			enable
603	0	25B			enable
604	0	25C			enable
605	0	25D			enable
606	0	25E			enable
607	0	25F			enable
608	0	260			enable
609	0	261			enable
610	0	262			enable
611	0	263			enable
612	0	264			enable
613	0	265			enable
614	0	266			enable
615	0	267			enable
616	0	268			enable
617	0	269			enable
618	0	26A			enable
619	0	26B			enable
620	0	26C			enable
621	0	26D			enable
622	0	26E			enable
623	0	26F			enable
624	0	270			enable
625	0	271			enable
626	0	272			enable
627	0	273			enable
628	0	274			enable
629	0	275			enable
630	0	276			enable
631	0	277			enable
632	0	278			enable
633	0	279			enable
634	0	27A			enable
635	0	27B			enable
636	0	27C			enable
637	0	27D			enable
638	0	27E			enable
639	0	27F			enable
640	0	280			enable
641	0	281			enable
642	0	282			enable
643	0	283			enable
644	0	284			enable
645	0	285			enable
646	0	286			enable
647	0	287			enable
648	0	288			enable
649	0	289			enable



CA_MASK		Table 14 of 21	_			
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA	
650	0	28A			enable	
651	0	28B			enable	
652	0	28C			enable	
653	0	28D			enable	
654	0	28E			enable	
655	0	28F			enable	
656	0	290			enable	
657	0	291			enable	
658	0	292			enable	
659	0	293			enable	
660	ő	294			enable	
661	Ö	295			enable	
662	0	296			enable	
663	0	297			enable	
664		297				
	0				enable	
665	0	299			enable	
666	0	29A			enable	
667	0	29B			enable	
668	0	29C			enable	
669	0	29D			enable	
670	0	29E			enable	
671	0	29F			enable	
672	0	2A0			enable	
673	0	2A1			enable	
674	0	2A2			enable	
675	0	2A3			enable	
676	0	2A4			enable	
677	0	2A5			enable	
678	0	2A6			enable	
679	0	2A7			enable	
680	0	2A8			enable	
681	0	2A9			enable	
682	0	2AA			enable	
683	0	2AB			enable	
684	0	2AC			enable	
685	0	2AD			enable	
686	0	2AE			enable	
687	Ö	2AF			enable	
688	ŏ	2B0			enable	
689	0	2B1			enable	
690	0	2B2			enable	
		2B2 2B3				
691	0				enable	
692	0	2B4			enable	
693	0	2B5			enable	
694	0	2B6			enable	
695	0	2B7			enable	
696	0	2B8			enable	
697	0	2B9			enable	
698	0	2BA			enable	
699	0	2BB			enable	



Fault ID	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA		
DEC 700	0	2BC	DEC	HEX	enable		
	0						
701		2BD			enable		
702	0	2BE			enable		
703	0	2BF			enable		
704	0	2C0			enable		
705	0	2C1			enable		
706	0	2C2			enable		
707	0	2C3			enable		
708	0	2C4			enable		
709	0	2C5			enable		
710	0	2C6			enable		
711	0	2C7			enable		
712	0	2C8			enable		
713	0	2C9			enable		
714	0	2CA			enable		
715	0	2CB			enable		
716	0	2CC			enable		
717	0	2CD			enable		
718	0	2CE			enable		
719	0	2CF			enable		
720	0	2D0			enable		
721	0	2D1			enable		
722	0	2D2			enable		
723	0	2D3			enable		
724	0	2D4			enable		
725	0	2D5			enable		
726	0	2D6			enable		
727	0	2D7			enable		
728	0	2D8			enable		
729	0	2D9			enable		
730	0	2DA			enable		
731	0	2DB			enable		
732	0	2DC			enable		
733	0	2DD					
733	0	2DE			enable		
734	0	2DE 2DF			enable enable		
736	0	2E0			enable		
737	0	2E1			enable		
738	0	2E2			enable		
739	0	2E3			enable		
740	0	2E4			enable		
741	0	2E5			enable		
742	0	2E6			enable		
743	0	2E7			enable		
744	0	2E8			enable		
745	0	2E9			enable		
746	0	2EA			enable		
747	0	2EB			enable		
748	0	2EC			enable		
749	0	2ED			enable		



CA_MASK		Table 16 of 21			
Fault ID	CA_MASK	Fault ID	SP EID	SP EID	CA_MASK ALPHA
DEC	HEX	HEX	DEC	HEX	
750	0	2EE			enable
751	0	2EF			enable
752	0	2F0			enable
753	0	2F1			enable
754	0	2F2			enable
755	0	2F3			enable
756	0	2F4			enable
757	0	2F5			enable
758	0	2F6			enable
759	0	2F7			enable
760	0	2F8			enable
761	0	2F9			enable
762	0	2FA			enable
763	0	2FB			enable
764	0	2FC			enable
765	0	2FD			enable
766	0	2FE	1		enable
767	0	2FF			enable
768	0	300			enable
769	0	301			enable
770	0	302			enable
771	0	303			enable
772	0	304	-		enable
773	0	305			enable
774		306			
	0				enable
775	0	307			enable
776	0	308			enable
777	0	309			enable
778	0	30A			enable
779	0	30B			enable
780	0	30C			enable
781	0	30D			enable
782	0	30E			enable
783	0	30F			enable
784	0	310			enable
785	0	311			enable
786	0	312			enable
787	0	313			enable
788	0	314			enable
789	0	315			enable
790	0	316			enable
791	0	317			enable
792	0	318			enable
793	0	319	1		enable
794	0	31A	1		enable
795	0	31B	1		enable
796	0	31C			enable
797	0	31D	1		enable
798	0	31E	1		enable
799	0	31F	1		enable
	· · ·				1 3770070



CA_MASK		Table 17 of 21			
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA
800	0	320	DEC	IILX	enable
801	0	321			enable
802	0	322			enable
803	0	323	-		enable
	0	324			
804					enable
805	0	325			enable
806	0	326			enable
807	0	327			enable
808	0	328			enable
809	0	329			enable
810	0	32A			enable
811	0	32B			enable
812	0	32C			enable
813	0	32D			enable
814	0	32E			enable
815	0	32F			enable
816	0	330			enable
817	0	331			enable
818	0	332			enable
819	0	333			enable
820	0	334			enable
821	0	335			enable
822	0	336			enable
823	0	337			enable
824	0	338			enable
825	0	339			enable
826	0	33A			enable
827	0	33B			enable
828	0	33C			enable
829	0	33D			enable
830	0	33E			enable
831	0	33F			enable
832	0	340			enable
833	0	341			enable
834	0	342			enable
835	0	343			enable
836	0	344			enable
837	0	345			enable
838	0	346			
		347			enable
839	0				enable
840	0	348			enable
841	0	349			enable
842	0	34A			enable
843	0	34B			enable
844	0	34C			enable
845	0	34D			enable
846	0	34E			enable
847	0	34F			enable
848	0	350			enable
849	0	351			enable



CA_MASK		Table 18 of 21				
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA	
850	0	352			enable	
851	0	353			enable	
852	0	354			enable	
853	0	355			enable	
854	0	356			enable	
855	0	357			enable	
856	0	358			enable	
857	0	359			enable	
858	0	35A			enable	
859	0	35B			enable	
860	0	35C			enable	
861	Ö	35D			enable	
862	ŏ	35E			enable	
863	0	35F			enable	
864	0	360			enable	
865	0	361				
					enable	
866	0	362			enable	
867	0	363			enable	
868	0	364			enable	
869	0	365			enable	
870	0	366			enable	
871	0	367			enable	
872	0	368			enable	
873	0	369			enable	
874	0	36A			enable	
875	0	36B			enable	
876	0	36C			enable	
877	0	36D			enable	
878	0	36E			enable	
879	0	36F			enable	
880	0	370			enable	
881	0	371			enable	
882	0	372			enable	
883	0	373			enable	
884	0	374			enable	
885	0	375			enable	
886	0	376			enable	
887	0	377			enable	
888	0	378			enable	
889	0	379			enable	
890	0	37A			enable	
891	Ö	37B			enable	
892	ŏ	37C			enable	
893	ŏ	37D	_		enable	
894	0	37E			enable	
895	0	37E	1		enable	
896	0	380				
					enable	
897	0	381			enable	
898	0	382			enable	
899	0	383			enable	



Fault ID	CA_MASK	Fault ID	SP EID	SP EID	CA_MASK ALPHA
DEC	HEX	HEX	DEC	HEX	
900	0	384			enable
901	0	385			enable
902	0	386			enable
903	0	387			enable
904	0	388			enable
905	0	389			enable
906	0	38A			enable
907	0	38B			enable
908	0	38C			enable
909	0	38D			enable
910	0	38E			enable
911	0	38F			enable
912	0	390			enable
913	0	391			enable
914	0	392			enable
915	0	393			enable
916	0	394			enable
917	0	395			enable
918	0	396			enable
919	0	397			enable
920	0	398			enable
921	0	399			enable
922	0	39A			enable
923	0	39B			enable
924	0	39C			enable
925	0	39D			enable
926	0	39E			enable
927	0	39F			enable
928	0	3A0			enable
929	0	3A1			enable
930	0	3A2			enable
931	0	3A3			enable
932	0	3A4			enable
933	0	3A5			enable
934	0	3A6			enable
935	0	3A7			enable
936	0	3A8			enable
937	0	3A9			enable
938	0	3AA			enable
939	0	3AB			enable
940	0	3AC			enable
941	0	3AD			enable
942	0	3AE			enable
943	0	3AF			enable
944	0	3B0			enable
944	0	3B1			enable
945	0	3B1 3B2			enable
940	0	3B3			enable
7 1 /					
948	0	3B4			enable



CA_MASK		Table 20 of 21					
Fault ID DEC	CA_MASK HEX	Fault ID HEX	SP EID DEC	SP EID HEX	CA_MASK ALPHA		
950	0	3B6			enable		
951	0	3B7			enable		
952	0	3B8			enable		
953	0	3B9			enable		
954	0	3BA			enable		
955	0	3BB			enable		
956	0	3BC			enable		
957	0	3BD			enable		
958	0	3BE			enable		
959	0	3BF			enable		
960	0	3C0			enable		
961	0	3C1			enable		
962	0	3C2			enable		
963	0	3C3			enable		
964	0	3C4			enable		
965	0	3C5			enable		
966	0	3C6			enable		
967	0	3C7			enable		
968	0	3C8			enable		
969	0	3C9			enable		
970	0	3CA			enable		
971	0	3CB			enable		
972	0	3CC			enable		
973	0	3CD			enable		
974	0	3CE			enable		
975	0	3CF			enable		
976	0	3D0			enable		
977	0	3D1			enable		
978	0	3D2			enable		
979	0	3D3			enable		
980	0	3D4			enable		
981	0	3D5			enable		
982	0	3D6			enable		
983	Ö	3D7			enable		
984	0	3D8			enable		
985	0	3D9			enable		
986	Ö	3DA			enable		
987	Ö	3DB			enable		
988	Ö	3DC			enable		
989	ŏ	3DD			enable		
990	Ö	3DE			enable		
991	Ö	3DF			enable		
992	0	3E0			enable		
993	0	3E1			enable		
994	0	3E2			enable		
995	0	3E3			enable		
996	0	3E4			enable		
997	0	3E5			enable		
998	0	3E6			enable		
999	0	3E7			enable		
777	V	ומנ			T erranie		



CA_MASK Table 21 of 21

	Table 21 of 21							
CA_MASK	Fault ID	SP EID	SP EID	CA_MASK ALPHA				
HEX	HEX	DEC	HEX					
0	3E8			enable				
0	3E9			enable				
0	3EA			enable				
0	3EB			enable				
0	3EC			enable				
0	3ED			enable				
0	3EE			enable				
0	3EF			enable				
0	3F0			enable				
0	3F1			enable				
0	3F2			enable				
0	3F3			enable				
0	3F4			enable				
0	3 F 5			enable				
0	3F6			enable				
0	3F7			enable				
0	3F8			enable				
0	3F9			enable				
0	3FA			enable				
0	3FB			enable				
0	3FC			enable				
0	3FD			enable				
0	3FE			enable				
0	3FF			enable				
	HEX 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CA_MASK HEX Fault ID HEX 0 3E8 0 3E9 0 3EA 0 3EB 0 3ED 0 3ED 0 3EF 0 3F0 0 3F1 0 3F2 0 3F3 0 3F4 0 3F5 0 3F6 0 3F8 0 3FA 0 3FB 0 3FD 0 3FD 0 3FD	CA_MASK HEX Fault ID DEC 0 3E8 0 3E9 0 3EA 0 3EB 0 3EC 0 3ED 0 3EE 0 3FI 0 3F2 0 3F3 0 3F4 0 3F6 0 3F7 0 3F8 0 3FA 0 3FB 0 3FB 0 3FD	CA_MASK HEX Fault ID HEX SP EID DEC SP EID HEX 0 3E8 9 0 3E9 9 0 3EB 9 0 3EB 9 0 3EC 9 0 3ED 9 0 3EF 9 0 3FF 9 0 3F1 9 0 3F3 9 0 3F4 9 0 3F6 9 0 3F7 9 0 3FA 9 0 3FB 9 0 3FD 9 0 3FD 9				



8.2.4 CA_Matrix Table

The Engineering tables related hereto are also all organised according to the fault ID-number of the parameter defined. When an ID is cited in any of these tables the identical parameter is designated by this ID.

The CA_Matrix defines for a particular Fault Id, which CA is assigned to it as a function of instrument mode or transition to mode.

The table is limited to 1023 Fault IDs.

Table Template:

MCMD: SET CA_MATRIX (IOM Reference A6.30)

Header Line:

CA ID HEX: covers the Transition to Mode & Current Mode entry area for the particular CA

to be applied

Columns:

Fault ID: identifies a particular fault ID for which the appropriate fault handling action

shall be defined; for general flow diagramme see chapt.10 fig. 10-6 of RD1;

range = 1....1023 (column 1 - DEC; column 2 – HEX);

fault ID 1023 is assigned to EQSOL

Transition to: columns 3,5,7,9,11,13,15,17

specifies which fault handling action – CA applies for the Fault ID in the

transition to the quoted mode

Current Mode: columns 4,6,8,10,12,14,16,18

specifies which fault handling action – CA applies for the Fault ID in the quoted

mode

At time of issue the following CCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via MCMD.

DCR/OCR	Issue date	issued by	Title
DR-SCIA-0004DO/00	27.07.00	DSS	Correction of CA-matrix due to Patch & Dump handling problems
e-mail P.Lützow	16.09.2002	Astrium	fault ID 0796 to be treated acc. to DR-SCIA-0004DO/00



CA_MATRIX

Table 1 of 21

071_22211																	
									CA								
									HE	X							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
0	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0001	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
2	0002	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
3	0003	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
<u>4</u> 5	0004	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
6	0005 0006	0	0	0	0	2 2	2 2	2 2	2	2	2 2	2 2	2 2	2	2	2 2	2
7	0007	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
- 8	0008	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
9	0009	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
10	000A	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
11	000B	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
12	000C	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
13	000D	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
14	000E	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
15	000F	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
16 17	0010	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2 2	2
18	0011 0012	0	0	0	0	2 2	2 2	2 2	2	2 2	2 2	2 2	2 2	2	2	2	2
19	0012	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
20	0013	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
21	0015	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
22	0016	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
23	0017	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
24	0018	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
25	0019	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
26	001A	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
27	001B	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
28 29	001C 001D	0	0	0	0	2 2	2 2	2 2	2	2 2	2 2	2 2	2 2	2	2	2 2	2
30	001E	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
31	001F	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	0
32	0020	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
33	0021	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
34	0022	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
35	0023	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
36	0024	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	0
37	0025	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
38	0026	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
39 40	0027 0028	0	0	0	0	2 2	2	2 2	2 2	2 2	2 2	2 2	2 2	2	2 2	2 2	2
41	0028	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	0
42	0023 002A	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
43	002B	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
44	002C	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
45	002D	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
46	002E	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
47	002F	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
48	0030	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
49	0031	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1



CA_MATRIX Table 2 of 21

		CAID HEX															
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
50	0032	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
51	0033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	0034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	0035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	0036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0037	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
56 57	0038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58	0039 003A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	003A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0
60	003D	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
61	003D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	003E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	003F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0041	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
66	0042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68	0044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	0045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 71	0046	0	0	0	0	2	2	2	2	2	1	2	2	0	1	1	0
72	0047 0048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	0049	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
74	004A	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
75	004B	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
76	004C	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
77	004D	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
78	004E	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
79	004F	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
80	0050	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
81	0051	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
83	0052 0053	0	0	0	0	2 2	2	2 2	2 2	2	1 1	2	2 2	1	1 1	1 1	1
84	0054	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
85	0055	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	0
86	0056	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	0
87	0057	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	0058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	0059	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	005A	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
91	005B	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
92	005C	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
93	005D	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
94 95	005E	0	0	0	0	2 2	2	2 2	2 2	2	1	2	2 2	1 1	1	1 1	1
95	005F 0060	0	0	0	0	2	2	2	2	2 2	1 1	2	2	1	1	1	1
97	0060	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
98	0062	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
99	0063	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
		,		-						_	-			-		- 1	•

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CA_MATRIX

Table 3 of 21

			CAID HEX														
									H	EX		. 1					
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
100	0064	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
101 102	0065	0	0	0	0	2	2	2 2	2	2	1	2 2	2	1	1 1	1	1
102	0066 0067	0	0	0	0	2 2	2 2	2	2	2 2	2	2	2 2	2	2	1 2	2
104	0068	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
105	0069	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
106	006A	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
107	006B	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
108 109	006C 006D	0	0	0	0	2 2	2	2 2	2 2	2	1 1	2 2	2	1	1	1	1
110	006E	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
111	006F	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
112	0070	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
113	0071	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
114	0072	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
115 116	0073 0074	0	0	0	0	2 2	2	2 2	2 2	2	1 1	2 2	2 2	1 1	1 1	1	1
117	0075	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
118	0076	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
119	0077	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
120	0078	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
121	0079	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
122 123	007A 007B	0	0	0	0	2 2	2 2	2 2	2 2	2	2 2	2 2	2 2	2 2	2 2	2	2
124	007C	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
125	007D	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
126	007E	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
127	007F	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
128	0080	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
129	0081 0082	0	0	0	0	2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2	2
131	0083	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
132	0084	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
133	0085	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
134	0086	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
135	0087 0088	0	0	0	0	2 2	2 2	2	2 2	2 2	2 2	2 2	2	2	2	2	2
137	0088	0	0	0	0	2	2	2 2	2	2	2	2	2 2	2 2	2 2	2	2
138	0005 008A	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
139	008B	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
140	008C	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
141	008D	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
142	008E 008F	0	0	0	0	2	2	2 2	2	2	2 2	2 2	2 2	2	2 2	2	2
144	0090	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
145	0091	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
146	0092	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
147	0093	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
148	0094	0	0	0	0	2	2	2 2	2	2	2	2	2	2	2	2	2
149	0095	0	0	0	0	2	2	۷.	2	2	2	2	2	2	2		2



CA_MATRIX Table 4 of 21

		CAID															
		HEX															
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
150	0096	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
151	0097	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
152	0098	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
153 154	0099 009A	0	0	0	0	2 2	2	2 2	2	2	1 1	2 2	2	1	1	1	1
155	009A 009B	0	0	0	0	2	2	2	2 2	2	1	2	2	1	1	1	1
156	009C	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
157	009D	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
158	009E	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
159	009F	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
160	0A00	4	4	3	3	2	2	2	2	2	1	2	2	1	1	1	1
161	00A1	4	4	3	3	2	2	2	2	2	1	2	2	1	1	1	1
162 163	00A2 00A3	4	4	3	3	2 2	2 2	2 2	2 2	2	1 1	2	2	1	1	1	1 1
164	00A3 00A4	4	4	3	3	2	2	2	2	2	1	2	2	1	1	1	1
165	00A5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
166	00A6	4	4	3	3	2	2	2	2	2	1	2	2	1	1	1	1
167	00A7	4	4	3	3	2	2	2	2	2	1	2	2	1	1	1	1
168	8A00	4	4	3	3	2	2	2	2	2	1	2	2	1	1	1	1
169	00A9	4	4	3	3	2	2	2	2	2	1	2	2	1	1	1	1
170	00AA	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
171 172	00AB 00AC	0	0	0	0	2 2	2 2	2 2	2 2	2	1 1	2 2	2	1	1	1	1
173	00AD	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
174	00AE	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
175	00AF	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
176	00B0	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
177	00B1	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
178	00B2	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
179 180	00B3 00B4	0	0	0	0	2 2	2 2	2 2	2 2	2	1 1	2 2	2	1	1	1	1
181	00B4 00B5	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
182	00B6	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
183	00B7	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
184	00B8	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
185	00B9	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
186 187	00BA	0	0	0	0	2	2 2	2 2	2 2	2	1	2 2	2	1	1	1	1
188	00BB 00BC	0	0	0	0	2 2	2	2	2	2	1 1	2	2	1	1	1	1
189	00BD	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
190	00BE	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
191	00BF	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
192	00C0	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
193	00C1	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
194 195	00C2	0	0	0	0	2 2	2 2	2 2	2 2	2	1	2 2	2	1	1	1	1
195	00C3 00C4	0	0	0	0	2	2	2	2	2	1 1	2	2	1	1	1	1
197	00C4	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
198	00C6	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
199	00C7	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1





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		CAID HEX															
		. 2) JSE-E	e 1) USE-E	.2) USE-I	e 1) USE-I	OSE	de USE	8 5			e e	to ATION	de ATION	9	e e	8 10	9 E
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/ REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
200	00C8	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
201	00C9 00CA	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1	2 2	2 2	1 1	1 1	1	1 1
203	00CB	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
204	00CC	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
205	00CD	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
206	00CE	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
207	00CF	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
208	00D0 00D1	0	0	0	0	2 2	2	2 2	2	2	1	2	2 2	1	1 1	1	1
210	00D1	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
211	00D3	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
212	00D4	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
213	00D5	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
214	00D6	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
215	00D7	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
216	00D8 00D9	0	0	0	0	2 2	2	2 2	2 2	2 2	1	2 2	2	1	1 1	1	1
218	00D3	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
219	00DB	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
220	00DC	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
221	00DD	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
222	00DE	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
224	00DF 00E0	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1	2 2	2 2	1 1	1 1	1	1 1
225	00E1	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
226	00E2	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
227	00E3	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
228	00E4	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
229	00E5	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
230	00E6 00E7	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1	2 2	2 2	1	1 1	1	1
232	00E8	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
233	00E9	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
234	00EA	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
235	00EB	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
236	00EC	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
237	00ED 00EE	0	0	0	0	2 2	2 2	2 2	2 2	2	1	2 2	2 2	1	1 1	1	1
239	00EF	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
240	00F0	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
241	00F1	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
242	00F2	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
243	00F3	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
244	00F4 00F5	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1	2 2	2 2	1	1 1	1	1
245	00F6	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
247	00F7	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
248	00F8	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
249	00F9	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1



CA_MATRIX Table 6 of 21

									CA	.ID							
									H	EX							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-1	Transition to HEATER/ REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
250	00FA	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
251	00FB	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
252 253	00FC 00FD	0	0	0	0	2 2	2	2	2	2	1 1	2	2 2	1	1	1	1 1
254	00FE	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
255	00FF	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
256	0100	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
257	0101	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
258 259	0102	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
260	0103 0104	0	0	0	0	0	0	2	2	2	1	2 2	2 2	1	1	1	1 1
261	0104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
262	0106	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
263	0107	0	0	0	0	0	0	2	2	2	1	0	0	0	0	0	0
264	0108	0	0	0	0	0	0	2	2	2	1	0	0	0	0	0	0
265 266	0109 010A	0	0	0	0	0	0	2 2	2	0	0	0 2	0 2	0	0	0	0
267	010A 010B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
268	010C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
269	010D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
270	010E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
271	010F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
272	0110 0111	0	0	0	0	0	0	2	2 2	2	1	2 2	2 2	1 1	1	1	1 1
274	0111	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
275	0113	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
276	0114	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
277	0115	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
278	0116	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
279	0117 0118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
281	0119	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
282	011A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
283	011B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
284	011C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
285	011D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
286 287	011E 011F	0	0	0	0	0	0	2	2	2	1	2	2	0	0	0	0
288	0111	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	0
289	0121	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
290	0122	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
291	0123	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	0
292	0124 0125	0	0	0	0	0	0	2 2	2	2	1	2 2	2	1	1	1	0
293	0125	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	0
295	0127	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	0
296	0128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
297	0129	0	0	0	0	0	0	2	2	0	1	2	2	1	1	1	1
298	012A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
299	012B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1

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CA_MATRIX

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071_2671																	
									CA								
									H	X							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
300	012C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
301	012D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
302 303	012E 012F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
304	012F	0	0	0	0	0	0	2 2	2 2	2 2	1 1	2 2	2	1	1 1	1	1 1
305	0131	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
306	0132	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
307	0133	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
308	0134	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
309 310	0135	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
311	0136 0137	0	0	0	0	0	0	2	2	2	1 1	2	2	0	1	0	0
312	0138	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
313	0139	0	0	0	0	0	0	2	2	0	1	2	2	1	1	1	1
314	013A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
315	013B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
316 317	013C 013D	0	0	0	0	0	0	2	2	0	0	2 0	0	0	0	0	0
318	013E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	013F	0	0	0	0	0	0	0	0	0	0	Ŏ	0	0	0	0	0
320	0140	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
321	0141	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0
322	0142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
323 324	0143 0144	0	0	0	0	2 2	2	2 2	2 2	2 2	1 1	2 2	2	1	1 1	1	1
325	0145	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
326	0146	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
327	0147	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
328	0148	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
329	0149	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
330	014A 014B	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1 1	2 2	2 2	1	1 1	1	1 1
332	014C	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
333	014D	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
334	014E	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
335	014F	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
336 337	0150 0151	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1 1	2 2	2 2	1	1 1	1	1
338	0151	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
339	0153	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
340	0154	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
341	0155	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
342	0156	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
343 344	0157 0158	0	0	0	0	2 2	2	2 2	2 2	2 2	1 1	2 2	2	1	1 1	1	1 1
345	0158	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
346	015A	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
347	015B	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
348	015C	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
349	015D	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1



Final-Flight_Vers.FF10

no modifications to the contents of the tables on the opposite side as burned in EEPROM – ICU_SW V.2.03





CA_MATRIX

Table 8 of 21

CAID CARD 021_2021.			Table 0 0															
Column C																		
										Н	EX							
350 0156 0	FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/ REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
353 0.160 7		015E	0	0	0	0				2	2	1			1		1	
1351 10(6)	_																	
356	-					_												
356 O163 O																		
356 0164 0																		
337 0165 0 0 0 0 0 0 0 0 0																		
358 0166 0 0 0 0 0 0 0 0 0																		
300 0.168																		
341 0169 0 0 0 0 0 2 2 2 2 2	359	0167	0	0	0	0	0	0	0	0	0	0	0	0		0	0	
362 016A 0 0 0 0 0 2 2 2 2 2	-											1						
364 0166 0 0 0 0 0 2 2 2 2 2																		
346 016C 0 0 0 0 0 2 2 2 2 2																		
365 016D 0 0 0 0 0 2 2 2 2 2																		
366																		
368 0170 0 0 0 0 0 2 2 2 2																		
369			0	0	0	0						1		2			1	
370			0															
371 0173 0 0 0 0 0 2 2 2 2 2	-																	
372 0174 0 0 0 0 0 2 2 2 2 2																		
373 0175 0 0 0 0 0 2 2 2 2 2																		
374 0176 0																		
376																		
377 0179 0 0 0 0 0 2 2 2 2 2		0177	0	0	0	0	2	2	2	2		1			1	1	1	
378 017A 0 0 0 0 0 2 2 2 2 2																		
379 017B 0																		
380																		
381	-																	
382 017E 0 0 0 2 2 2 2 2 1 <td>-</td> <td></td>	-																	
384 0180 0 <td>382</td> <td>017E</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> <td>1</td> <td>2</td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td>	382	017E	0	0	0	0	2	2	2	2		1	2	2	1	1	1	1
385 0181 0 <td>383</td> <td>017F</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>1</td> <td>2</td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td>	383	017F	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
386 0182 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td>							_						_					
387 0183 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																		
388 0184 0 <td>-</td> <td></td>	-																	
389 0185 0 <td>-</td> <td></td>	-																	
390 0186 0 <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>	-												-					
392 0188 0 <td>390</td> <td>0186</td> <td>0</td>	390	0186	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
393 0189 0 <td></td> <td>0187</td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td>0</td>		0187	0		0	0	0	0		0		0	0					0
394 018A 0 <td>-</td> <td></td>	-																	
395 018B 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																		
396 018C 0 0 0 9 0 0 9 0 0 0 0 0 0 397 018D 0 0 0 0 0 0 0 9 0 0 0 0 0 0 398 018E 0							_											
397 018D 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																		
398 018E 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																		
					_													



$Final\text{-}Flight_Vers.FF10$

CA_MATRIX Table 8 of 21

									CA	ID							
									HE								
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
350	015E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
351 352	015F 0160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
353	0160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
354	0162	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
355	0163	-		-	-	-		-		-	-	-			-	-	-
356	0164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
357	0165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
358	0166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
359	0167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
360 361	0168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
362	0169 016A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
363	016B	-	-	-	-	-		-	-	-	-	-	-	-	-		-
364	016C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
365	016D	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
366	016E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
367	016F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
368 369	0170 0171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
370	0172	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
371	0173	-		-		-		-				-	-	-			-
372	0174	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
373	0175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
374 375	0176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
376	0177 0178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
377	0179	-	-	-	-	-		-	-	-		-	-	-	-	-	-
378	017A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
379	017B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
380	017C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
381 382	017D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
383	017E 017F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
384	0180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
385	0181	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
386	0182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
387	0183	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
388 389	0184 0185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
390	0186	-	-	-	-	-		-		-		-		-			-
391	0187	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
392	0188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
393	0189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
394	018A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
395 396	018B 018C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
390	018D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
398	018E	-	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-
399	018F	-	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-

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EEPROM – ICU_SW V. 2.03

CA_MATRIX

Table 9 of 21

	. 1021																
									CA								
									H	ΣX							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
400	0190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
401	0191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
402	0192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
403 404	0193 0194	0	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0
405	0194	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
406	0196	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
407	0197	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
408	0198	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
409	0199	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
410 411	019A 019B	0	0	0	0	2 2	2	2 2	2	2	1	2 2	2	1	1	1	1
412	019B	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
413	019D	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
414	019E	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
415	019F	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
416	01A0	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
417	01A1 01A2	0	0	0	0	2 2	2	2 2	2 2	2	1	2 2	2	1	1	1	1
419	01A3	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
420	01A4	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
421	01A5	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
422	01A6	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
423	01A7	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
424 425	01A8 01A9	0	0	0	0	2 2	2	2 2	2 2	2 2	1	2 2	2	1	1	1	1
426	01A3	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
427	01AB	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
428	01AC	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
429	01AD	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
430 431	01AE	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1	2 2	2 2	1	1	1	1
432	01AF 01B0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
433	01B1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
434	01B2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
435	01B3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
436	01B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
437	01B5 01B6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
439	01B0 01B7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
440	01B8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
441	01B9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
442	01BA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
443	01BB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
444	01BC 01BD	0	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0
446	01BE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
447	01BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
448	01C0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
449	01C1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



CA_MATRIX Table 10 of 21

									CA								
		.	.						HE	EX		H	H				
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
450	01C2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
451	01C3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
452 453	01C4 01C5	0	0	0	0	9	2	0 2	0 2	9	0	2	2	0	0	0	0
454	01C6	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
455	01C7	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
456	01C8	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
457	01C9	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
458 459	01CA 01CB	0	0	0	0	2 2	2	2 2	2 2	2 2	1 1	2 2	2 2	1	1 1	1 1	1 1
460	01CB	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
461	01CD	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
462	01CE	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
463	01CF	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
464 465	01D0 01D1	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1 1	2 2	2 2	1	1 1	1 1	1 1
466	01D1	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
467	01D3	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
468	01D4	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
469	01D5	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
470 471	01D6 01D7	0	0	0	0	2 2	2 2	2 2	2 2	2 2	1 1	2 2	2 2	1	1	1 1	1 1
472	01D8	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
473	01D9	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
474	01DA	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
475 476	01DB 01DC	0	0	0	0	2 2	2 2	2	2	2 2	1 1	2 2	2 2	1	1	1 1	1 1
477	01DD	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
478	01DE	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
479	01DF	0	0	0	0	2	2	2	2	2	1	2	2	1	1	1	1
480	01E0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
481 482	01E1 01E2	0	0	0	0	0	0	2 2	2 2	2 2	1 1	2 2	2 2	1	1	1 1	1
483	01E2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
484	01E4	0	0	0	Ö	0	0	2	2	2	1	2	2	1	1	1	1
485	01E5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
486	01E6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
487 488	01E7 01E8	0	0	0	0	0	0	2 2	2 2	2 2	1	2 2	2 2	1	1	1 1	1
489	01E9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
490	01EA	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
491	01EB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
492	01EC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
493 494	01ED 01EE	0	0	0	0	0	0	2 2	2 2	2 2	1	2 2	2 2	1	1 1	1 1	1
495	01EF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
496	01F0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
497	01F1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
498	01F2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
499	01F3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1





CA_MATRIX

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021_20211			Table 11														
									CA								
									H	EX							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/ REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
500	01F4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
501	01F5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
502	01F6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
504	01F7 01F8	0	0	0	0	0	0	2	2 2	2	1	2 2	2	1	1	1	1
505	01F9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
506	01FA	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
507	01FB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
508	01FC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
509	01FD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
510 511	01FE 01FF	0	0	0	0	0	0	2	2 2	2	1	2	2	1	1	1	1
512	0200	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
513	0201	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
514	0202	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
515	0203	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
516	0204	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
517 518	0205 0206	0	0	0	0	0	0	2	2 2	2	1	2	2	1	1	1	1
519	0206	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
520	0208	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
521	0209	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
522	020A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
523	020B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
524 525	020C 020D	0	0	0	0	0	0	2 2	2 2	2	1	2	2	1	1	1	1
526	020E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
527	020F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
528	0210	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
529	0211	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
530	0212	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
531	0213 0214	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
533	0215	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
534	0216	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
535	0217	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
536	0218	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
537	0219	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
538	021A 021B	0	0	0	0	0	0	2	2 2	2	1	2 2	2 2	1	1	1	1
540	021B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
541	021D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
542	021E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
543	021F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
544	0220	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
545 546	0221 0222	0	0	0	0	0	0	2	2 2	2	1	2	2 2	1	1	1	1
547	0222	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
548	0224	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
549	0225	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
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									CA								
		<u> </u>				<u> </u>			H	X T			1			-	
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
550	0226	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
551	0227	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
552 553	0228	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
554	0229 022A	0	0	0	0	0	0	2 2	2	2 2	1	2	2 2	1	1	1 1	1 1
555	022B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
556	022C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
557	022D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
558	022E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
559	022F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
560	0230	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
561 562	0231	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1 1	1
563	0232 0233	0	0	0	0	0	0	2 2	2 2	2 2	1	2 2	2 2	1 1	1	1	1 1
564	0234	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
565	0235	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
566	0236	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
567	0237	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
568	0238	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
569	0239	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
570	023A	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
571 572	023B 023C	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
573	023D	0	0	0	0	0	0	2	2	0	0	2	2 2	0	0	0	0
574	023E	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
575	023F	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
576	0240	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
577	0241	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
578	0242	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
579	0243	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
580	0244	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
581 582	0245 0246	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
583	0246	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
584	0248	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
585	0249	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
586	024A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
587	024B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
588	024C	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
589	024D	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
590	024E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
591	024F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
592 593	0250 0251	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
594	0251	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
595	0252	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
596	0254	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
597	0255	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
598	0256	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
599	0257	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0





CA_MATRIX

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021_2621.			Table 15														
									CA								
									H	EX							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
600	0258	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
601	0259	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
602	025A	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
603	025B	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
604	025C 025D	0	0	0	0	0	0	2	2	2	0	2	2	0	0	0	0
606	025E	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
607	025E	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
608	0260	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
609	0261	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
610	0262	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
611	0263	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
612	0264	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
613	0265	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
614	0266	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
615 616	0267 0268	0	0	0	0	0	0	2 2	2 2	2 2	1	2	2	1	1	1	1 1
617	0269	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
618	026A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
619	026B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
620	026C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
621	026D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
622	026E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
623	026F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
624 625	0270	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
626	0271 0272	0	0	0	0	0	0	2 2	2 2	2	1	2	2	1	1	1	1
627	0272	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
628	0274	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
629	0275	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
630	0276	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
631	0277	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
632	0278	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
633	0279	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
634	027A	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
635	027B 027C	0	0	0	0	0	0	2 2	2 2	0	0	2	2 2	0	0	0	0
637	027D	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
638	027E	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
639	027F	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
640	0280	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
641	0281	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
642	0282	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
643	0283	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
644	0284	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
645	0285	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
646	0286	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
647	0287 0288	0	0	0	0	0	0	2 2	2	2	1	2	2	1	1	1	1
649	0288	0	0	0	0	0	0	2	2 2	2	1	2	2	1	1	1	1
017	0207	V	V	V	V	V	v	۷	۷	۷	1	۷	۷	1	1	1	1



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									CA	TD.							
									H								
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
650	028A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
651	028B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
652 653	028C 028D	0	0	0	0	0	0	2 2	2	2	1	2 2	2 2	1 1	1 1	1 1	1 1
654	028E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
655	028F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
656	0290	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
657	0291	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
658	0292	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
659	0293	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
660	0294 0295	0	0	0	0	0	0	2 2	2	2 2	1	2 2	2 2	1 1	1	1 1	1 1
662	0295	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
663	0297	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
664	0298	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
665	0299	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
666	029A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
667	029B 029C	0	0	0	0	0	0	2	2	2	1 0	2	2	1 0	1 0	1 0	0
669	029D	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
670	029E	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
671	029F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
672	02A0	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
673	02A1	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
674 675	02A2 02A3	0	0	0	0	0	0	2 2	2 2	0	0	2 2	2 2	0	0	0	0
676	02A3	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
677	02A5	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
678	02A6	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
679	02A7	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
680	02A8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
681 682	02A9 02AA	0	0	0	0	0	0	2	2	2	0	2	2	0	0	0	0
683	02AA 02AB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
684	02AC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
685	02AD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
686	02AE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
687	02AF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
688	02B0 02B1	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2 2	1	1 1	1 1	1 1
690	02B1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
691	02B3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
692	02B4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
693	02B5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
694	02B6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
695	02B7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
696 697	02B8 02B9	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
698	02BA	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
699	02BB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
_				_						_						-	





 ${\it CA_MATRIX} \hspace{1.5cm} {\bf Table~15~of~21}$

021_2021			Table 15														
									CA								
									H	X							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
700	02BC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
701	02BD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
702	02BE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
703	02BF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
704 705	02C0 02C1	0	0	0	0	0	0	2 2	2 2	2	1 1	2 2	2	1	1	1	1
706	02C1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
707	02C3	0	0	ō	Ö	0	0	2	2	2	1	2	2	1	1	1	1
708	02C4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
709	02C5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
710	02C6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
711	02C7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
712 713	02C8	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2	1	1	1	1
714	02C9 02CA	0	0	0	0	0	0	2	2	2 2	1 1	2	2 2	1	1	1	1
715	02CB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
716	02CC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
717	02CD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
718	02CE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
719	02CF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
720 721	02D0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
721	02D1 02D2	0	0	0	0	0	0	2 2	2 2	2 2	1	2 2	2	1	1	1	1
723	02D2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
724	02D4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
725	02D5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
726	02D6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
727	02D7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
728	02D8	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
729	02D9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
730 731	02DA 02DB	0	0	0	0	0	0	2 2	2 2	0	0	2 2	2 2	0	0	0	0
732	02DB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
733	02DD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
734	02DE	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
735	02DF	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
736	02E0	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
737	02E1	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
738 739	02E2 02E3	0	0	0	0	0	0	2 2	2 2	2	1 1	2 2	2	1	1	1	1
740	02E3 02E4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
741	02E5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
742	02E6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
743	02E7	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
744	02E8	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
745	02E9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
746	02EA	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0
747	02EB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
748	02EC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
749	02ED	0	0	0	0	0	0	2	2	0	0	2	2	0	0	0	0



Final-Flight_Vers.FF10

no modifications to the contents of the tables on the opposite side as burned in EEPROM – ICU_SW V.2.03





CA_MATRIX

Table 16 of 21

011_1111																	
									CA HE								
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
750	02EE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
751	02EF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
752	02F0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
753 754	02F1 02F2	0	0	0	0	0	0	2 2	2 2	2 2	1 1	2 2	2 2	1	1 1	1	1 1
755	02F3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
756	02F4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
757	02F5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
758	02F6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
759	02F7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
760	02F8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
761 762	02F9 02FA	0	0	0	0	0	0	2 2	2	2	1 1	2 2	2	1 1	1	1	1
763	02FB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
764	02FC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
765	02FD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
766	02FE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
767	02FF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
768	0300	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
769	0301	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
770 771	0302 0303	0	0	0	0	0	0	2 2	2 2	2 2	1 1	2 2	2	1	1 1	1	1
7772	0303	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
773	0305	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
774	0306	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
<i>7</i> 75	0307	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
776	0308	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
777	0309	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
778 779	030A	0	0	0	0	0	0	2	2	2	1 1	2	2	1 1	1	1	1
780	030B 030C	0	0	0	0	0	0	2 2	2 2	2	1	2	2	1	1	1	1 1
781	030D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
782	030E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
783	030F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
784	0310	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
785	0311	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
786 787	0312	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
788	0313	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
789	0314	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
790	0315	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
791	0317	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
792	0318	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
793	0319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
794	031A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
795	031B	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0
796	031C	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0
797 798	031D 031E	7	7	7	7	7	7	7	7	7	7	7 7	7	7	7	7	7
799	031E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
177	0011	V	v	٧	· ·	V	v	۵	۵	۵	1	۵	۵	1	1	1	



$Final\text{-}Flight_Vers.FF10$

CA_MATRIX Table 16 of 21

		CA ID HEX															
FAULTID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-1	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
750	02EE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
751	02EF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
752 753	02F0 02F1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
754	02F1 02F2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
755	02F3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
756	02F4	-	-		-	-	-		-	-	-	-	-		-	-	-
757	02F5	-	-	-	-	-		-	-	-	-	-	-	-	-		
758	02F6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
759 760	02F7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
761	02F8 02F9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
762	02FA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
763	02FB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-
764	02FC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
765	02FD	-		-		-				-		-		-	-		
766	02FE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
767	02FF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
768 769	0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
770	0301 0302	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
771	0303	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
772	0304	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
773	0305	-	-	1	-	-	-		-	-	-	-	-	1	-	-	-
774	0306	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
775	0307	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
776 777	0308 0309	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
778	030A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
779	030B	-				-									-		
780	030C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
781	030D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
782	030E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
783	030F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
784 785	0310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
786	0311 0312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
787	0313	-		-		-						-		-	-		
788	0314	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
789	0315	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
790	0316	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
791	0317	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
792	0318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
793 794	0319 031A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
795	031A 031B	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-
796	031C	-	-	-	-	-	9	-	-	-	-	-		-	-	-	-
797	031D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
798	031E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
799	031F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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EEPROM – ICU_SW V. 2.03

CA_MATRIX

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021_2021			Table 17														
									CA								
									H	EX							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/ REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
800	0320	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
801	0321	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
802	0322	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
803	0323	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
804 805	0324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
806	0325 0326	0	0	0	0	0	0	2 2	2 2	2 2	1	2	2	1	1	1 1	1 1
807	0327	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
808	0328	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
809	0329	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
810	032A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
811	032B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
812	032C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
813	032D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
814	032E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
815 816	032F 0330	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1 1	1
817	0331	0	0	0	0	0	0	2 2	2 2	2	1	2	2	1	1 1	1	1
818	0332	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
819	0333	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
820	0334	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
821	0335	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
822	0336	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
823	0337	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
824	0338	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
825	0339	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
826	033A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
827 828	033B 033C	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2 2	1	1	1 1	1
829	033D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
830	033E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
831	033F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
832	0340	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
833	0341	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
834	0342	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
835	0343	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
836	0344	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
837	0345	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
838	0346 0347	0	0	0	0	0	0	2 2	2 2	2	1	2	2 2	1	1	1 1	1
840	0348	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
841	0349	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
842	034A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
843	034B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
844	034C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
845	034D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
846	034E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
847	034F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
848	0350	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7 7	7
049	0351	- /	- 1	- /	1	1	1	/	1	- 1	- 1	1	1	- 1	1	1	- 1



CA_MATRIX Table 18 of 21

									- CA	TD.							
		CAID HEX															
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/ REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
850	0352	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
851 852	0353 0354	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
853	0355	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
854	0356	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
855	0357	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
856	0358	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
857	0359	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
858	035A	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
859 860	035B 035C	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2 2	1 1	1	1	1
861	035D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
862	035E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
863	035F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
864	0360	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
865	0361	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
866 867	0362 0363	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
868	0364	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
869	0365	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
870	0366	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
871	0367	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
872	0368	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
873 874	0369	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
875	036A 036B	0	0	0	0	0	0	2 2	2	2	1	2	2 2	1	1	1	1 1
876	036C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
877	036D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
878	036E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
879	036F	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
880 881	0370 0371	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
882	0371	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
883	0373	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
884	0374	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
885	0375	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
886	0376	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
887	0377 0378	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
889	0379	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
890	037A	0	0	0	0	0	0	9	9	9	9	9	9	9	9	9	9
891	037B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
892	037C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
893	037D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
894 895	037E 037F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
896	0380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
897	0381	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
898	0382	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
899	0383	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





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021_2021.			Table 17	01 21													
									CA								
									HE	EX							
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
900	0384	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
901	0385	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
902 903	0386 0387	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
904	0388	0	0	0	0	0	0	0	0	0	0	<u> </u>	0	0	0	0	0
905	0389	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
906	038A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
907	038B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
908	038C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
909 910	038D 038E	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2	1	1	1	1
910	038E	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
912	0390	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
913	0391	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
914	0392	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
915	0393	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
916	0394	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
917	0395	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
918 919	0396 0397	0	0	0	0	0	0	2	2 2	2	1	2 2	2	1	1	1	1
920	0398	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
921	0399	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
922	039A	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
923	039B	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
924	039C	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
925 926	039D	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
927	039E 039F	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2	1	1	1	1
928	03A0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
929	03A1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
930	03A2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
931	03A3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
932	03A4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
933 934	03A5 03A6	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2	1	1	1	1
935	03A6 03A7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
936	03A8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
937	03A9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
938	03AA	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
939	03AB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
940	03AC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
941 942	03AD 03AE	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2	1	1	1	1
943	03AF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
944	03B0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
945	03B1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
946	03B2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
947	03B3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
948	03B4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
949	03B5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1



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									CA								
			HEX														
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
950	03B6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
951	03B7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
952	03B8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
953 954	03B9 03BA	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2	1	1	1	1
955	03BB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
956	03BC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
957	03BD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
958	03BE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
959	03BF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
960	03C0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
961	03C1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
962	03C2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
963	03C3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
964 965	03C4 03C5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
966	03C6	0	0	0	0	0	0	2 2	2	2	1	2 2	2 2	1	1	1	1
967	03C7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
968	03C8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
969	03C9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
970	03CA	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
971	03CB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
972	03CC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
973	03CD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
974 975	03CE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
976	03CF 03D0	0	0	0	0	0	0	2	2	2	1	2 2	2	1	1	1	1
977	03D0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
978	03D2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
979	03D3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
980	03D4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
981	03D5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
982	03D6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
983	03D7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
984	03D8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
985 986	03D9 03DA	0	0	0	0	0	0	2 2	2 2	2	1 1	2 2	2 2	1	1	1	1
987	03DA 03DB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
988	03DC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
989	03DD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
990	03DE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
991	03DF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
992	03E0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
993	03E1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
994	03E2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
995 996	03E3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
990	03E4 03E5	0	0	0	0	0	0	2 2	2 2	2	1	2 2	2 2	1	1	1	1
998	03E6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
999	03E7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1





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									CA HE								
FAULT ID DEC	FAULT ID HEX	Transition to 2) STANDBY/REFUSE-E	Current Mode 1) STANDBY/REFUSE-E	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE-I	Transition to HEATER/REFUSE	Current Mode HEATER/ REFUSE	Transition to STANDBY	Current Mode STANDBY	Transition to HEATER	Current Mode HEATER	Transition to DECONTAMINATION	Current Mode DECONTAMINATION	Transition to IDLE	Current Mode IDLE	Transition to TIMELINE	Current Mode TIMELINE
1000	03E8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1001	03E9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1002	03EA	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1003	03EB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1004	03EC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1005	03ED	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1006	03EE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1007	03EF	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1008	03F0	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1009	03F1	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1010	03F2	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1011	03F3	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1012	03F4	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1013	03F5	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1014	03F6	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1015	03F7	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1016	03F8	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1017	03F9	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1018	03FA	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1019	03FB	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1020	03FC	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1021	03FD	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1022	03FE	0	0	0	0	0	0	2	2	2	1	2	2	1	1	1	1
1023	0000	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6



8.3 Control tables

All tables of this grouping are related to characteristics of instrument controls. This covers mechanisms, drives and the thermal control.

8.3.1 Scanner constants

This table holds all values of the constants used in the scan algorithms. All parameters listed have their particular calibration. For details about a single parameter see RD7.

Table Template:

MCMD: SET SCANNER CONSTANTS (IOM Reference A6.46)

Columns:

Column 1: gives the alphanumeric name of the parameter

Parameter: specifies the value of the parameter in calibrated engineering units

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

<u>Note</u>: The tables given in this chapter are reflecting only the parameter settings for the inflight configuration ID 15 & 16.

DCR/OCR	Issue date	issued by	Title
DR-SCIA-0099DO/97	22.08.97	DSS	Scanner constants SF parameter update
DR-SCIA-0024DO/98	15.07.98	DSS	Update of zero offsets of scanner constants after ILOS calibration
DR-SCIA-0036DO/98	03.12.98	DSS	Update of zero offsets for Flight
DR-SCIA-0008DO/99	01.07.99	DSS	Update of SF quadrant thresholds in Scanner Constants MCMD for Flight
DR-SCIA-0001DO/01	12.03.01	Astrium	Encoder Zero Offsets for new ASM/PFM#2 and editorial changes
DR-SCIA-0002DO/01	11.04.01	Astrium	Final Encoder Zero Offsets for ASM/PFM#2 and editorial change



	Parameter
Transition Filter Time Constant (TF)	00,003
Proportion acceleration dur. / transition duration (λ)	0,2000
number of support points (nsup)	21
number of target detections	10
scale factor azimuth angular offset (Ksfa)	-,003621
scale factor elevation angular offset (Ksfe)	-,003478
correction scale factor azimuth angular offset	15416
correction scale factor elev. angular offset	15416
Quadrant Threshold s_min,A (10-05)	03500
Quadrant Threshold s_min,B (10-05)	03500
pointing error threshold A AZ F	,000105
pointing error threshold A ELV Y	,000052
pointing error threshold B AZ F	,000105
pointing error threshold B ELV Y	,000052
Init Velocity AZ	0,8000
Init Velocity ELV	0,8000
Init Timeout AZ	16,000
Init Timeout ELV	16,000
Encoder Zero Offset A AZ	-1,919862
Encoder Zero Offset AELV	-,349066
Encoder Zero Offset B AZ	-,349066
Encoder Zero Offset B ELV	-1,919862
SF OFFSET A AZ	6
SF OFFSET A ELV	8
SF TOTAL OFFSET A	2747
SF OFFSET B AZ	50
SF OFFSET B ELV	68
SF TOTAL OFFSET B	2491
1_t,obs	0003290000
F_t,obs	4,239098
<u>a_</u> 0	7159492,7
<u>i_</u> 0	1,720011279
Spare	0
Spare	0
N_ref	0014,314286
F_err	0
Q_err	0
Y_err	0



$FiFinal\text{-}Flight_Vers.FF10$

	Parameter
TF-Transition Filter Time Cons.	
lambda-Proportion accel. to trans.duration	
nsup-Number of support points	
number of target detections	
KSFAZ0-SF scale fact. offset AZ	-,003717
KSFELO-SF scale fact, offset EL	-,002859
KSFAZ3-SF corr. fact. offset AZ	
KSFEL3-SF corr. fact. offset EL	
smin, A-SF Quad. Thresh. Chain A	00165
smin,B-SF Quad.Thresh. Chain B	00045
pointing error threshold A AZ	
pointing error threshold A ELV	
pointing error threshold B AZ	
pointing error threshold B ELV	
Init Velocity AZ	
Init Velocity ELV	
Init Timeout AZ	
Init Timeout ELV	
alpha0-Encoder Zero Offset A AZ	-1,888122
eps0-Encoder Zero Offset A ELV	-,335696
alpha0-Encoder Zero Offset B AZ	-,317465
eps0-Encoder Zero Offset B ELV	-1,906641
SF OFFSET A AZ	1
SF OFFSET A ELV	1
SF TOTAL OFFSET A	
SF OFFSET B AZ	5
SF OFFSET B ELV	7
SF TOTAL OFFSET B	
1_t,obs-Horizon Tangent Length	
PHI_t,obs-Horizon Elev. Angle	
a_0-Kepler semimajor axis	
i_0-Kepler orbit inclination	
Spare	
Spare	
N_ref-Kepler orbit repetition	
PHI_err-Alignment Error Xou	,000011
THETA_err-Aligment Error You	,000029
PSI_err-Alignment Error Zou	-,003970





8.3.2 Scanner Control Parameters

This table holds the PID-controller parameters used for the scanner position control. All parameters listed have their particular calibration. For details about a single parameter see RD7.

Table Template:

MCMD: SET SCANNER CONTROL PARAMETERS (IOM Reference A6.47)

Columns:

Column 1: gives the alphanumeric name of the parameter

Parameter: specifies the value of the parameter in calibrated engineering units

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

DCR/OCR	Issue date	issued by	Title
None			



	Parameter
azimuth controller gain	
(K_r)	03,000
azimuth controller break	
frequency (w_r)	0094,8
azimuth controller	
damping factor (d_r)	00,540
azimuth realisation pole	
(w_T)	03242
azimuth torque sensitivity	
of mototr (K_T)	00,830
azimuth total inertia of	
rotating system (I_pl)	0,000670
azimuth sampling interval	
(T_c)	00,001
azimuth integration	
limitation threshold	
(Y_dMax)	0,008000
elevation controller gain	
(K_r)	06,300
elevation controller break	
frequency (w_r)	0100,0
elevation controller	
damping factor (D_r)	00,540
elevation realisation pole	
(w_T)	03242
elevation torque	
sensitivity of mototr	
(K_T)	00,830
elevation total inertia of	
rotating system (I_pl)	0,000358
elevation sampling	
interval (T c)	00,001
elevation integration	·
limitation threshold	
(Y_dMax)	00,002
· <u>-</u>	



8.3.3 Thermal Control Parameters

This table holds the thermal control parameters. All parameters listed have their particular calibration.

Table Template:

MCMD: SET THERMAL CONTROL (IOM Reference A6.56)

Columns:

Parameter ID: gives the parameter ID

ATC_OBM Parameter gives the alphanumeric name of the parameter

EU: specifies the value of the parameter in calibrated engineering units

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

Note: The tables given in this chapter are reflecting only the parameter settings for the inflight configuration ID 15 & 16.

As the thermal status of the instrument is subject to change due to external and internal thermal conditions, some parameters of this table (ID 37 to 46) are changed as result of the termal monitoring activities - see IOM chapt 12.3.2.2 PIN_401 & PIN_402. The latest status of these changes is always displayed on the web-site of SCIAMACHY Operations Support :

http://atmos.af.op.dlr.de/projects/scops/

DCR/OCR	Issue date	issued by	Title
DR_SCIA-0011DO/98	16.03.98	DSS	Revised settings of ATC constants (Flight Parameters)
DR_SCIA-0022DO/98	07.07.98	DSS	ATC Set-point update for new OBM Temperature (-18°C)
DR-SCIA-0001DO/99	22.01.99	DSS	ATC Set-points updated according to Flight Prediction
DR-SCIA-0003DO/99	16.04.99	DSS	ATC Radiator A power restriction (ground) & temp. setpoints (flight)



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EU		
Parameter ID	ATC OBM Parameter	EU
1	Kp_11	45
2	Kp_12	0
3	Kp_13	0
4	Ki_11	0,509
5	Ki_12	0
6	Ki_13	0
7	Kp_21	0
8	Kp_22	25
9	Kp_23	0
10	Ki_21	0
11	Ki_22	0,283
12	Ki_23	0
13	Kp_31	0
14	Kp_32	0
15	Kp_33	15
16	Ki_31	0
17	Ki_32	0
18	Ki_33	0,17
19	Ilimit_1	30
20	Ilimit_2	28
21	Ilimit_3	46
22	Heatflow_Offset_1	0,54
23	Heatflow_Offset_2	0,3
24	Heatflow_Offset_3	0,3
25	R_Heater_1	25,2
26	R_Heater_2	45,4
27	R_Heater_3	45,4
28	Volt_Max_Reduc_1	22,18
29	Volt_Max_Reduc_2	22,11
30	Volt_Max_Reduc_3	22,17
31	Volt_Max_Norm_1	22,18
32	Volt_Max_Norm_2	22,11
33	Volt_Max_Norm_3	22,17
34	KC1_1	0,07
35	KC1_2	0,11
36	KC1_3	0,42
37	Setpoint_Temp_1	-22,70
38	Setpoint_Temp_2	-20,20
39	Setpoint_Temp_3	-19,90
40	Sensor_Gain_Factor_1	-0,881
41	Sensor_Gain_Factor_2	-0,971
42	Sensor_Gain_Factor_3	-0,980
43	OBM_ATC_MAX_PWR	31,00
44	DAC1	0
45	DAC2	0
46	DAC3	0



$Final\text{-}Flight_Vers.FF10$

EU

EU Parameter ID	ATC OBM Parameter	EU
1	Kp_11	6
2	Kp_12	
3	Kp_13	
4	Ki 11	0,35
5	Ki 12	-,
6	Ki 13	
7	Kp_21	
8	Kp_22	
9	Kp_23	
10	Ki_21	
11	Ki 22	
12	Ki 23	
13	Kp_31	
14	Kp_32	
15	Kp_33	12
16	Ki_31	
17	Ki_32	
18	Ki_33	0,2
19	Ilimit_1	51
20	Ilimit_2	35
21	Ilimit_3	50
22	Heatflow_Offset_1	
23	Heatflow_Offset_2	
24	Heatflow_Offset_3	
25	R_Heater_1	
26	R_Heater_2	
27	R_Heater_3	
28	Volt_Max_Reduc_1	22,11
29	Volt_Max_Reduc_2	22,17
30	Volt_Max_Reduc_3	22,18
31	Volt_Max_Norm_1	22,11
32	Volt_Max_Norm_2	22,17
33	Volt_Max_Norm_3	22,18
34	KC1_1	
35	KC1_2	
36	KC1_3	0,11
37	Setpoint_Temp_1	-11,00
38	Setpoint_Temp_2	-17,40
39	Setpoint_Temp_3	-17,50
40	Sensor Gain Factor 1	-1,41
41	Sensor Gain Factor 2	-1,08
42	Sensor Gain Factor 3	-1,080
43	OBM_ATC_MAX_PWR	
44	DAC1	0,59
45	DAC2	0,9497
46	DAC3	0,03





8.3.4 Mechanism Control Parameters

This table holds the parameters defining the pulse duration for the actuator drives.

Table Template:

MCMD: SET MECHANISMS CONTROL (IOM Reference A6.38)

Columns:

Mechanisms: gives the drive group and drive nomenclature
Drive pulse duration specifies the value of the parameter in seconds

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

DCR/OCR	Issue date	issued by	Title
none			



Mechanism	Drive Pulse Duration	
	NC	0,30
LAT Mechanisms	AS	0,30
	ND	0,30
	AZ Cover	0000,0
MAD Mechanisms	ELV Cover	0000,0
	SRC Door	0000,0



8.4 Command tables

All tables of this grouping are related to commanding of timing sequences and the definition of conditions, when these sequences are applicable. This covers the Relative Time Command Sequences (RTCS) and the tables specifying mode switching and non-mode switching MCMD's.

8.4.1 RTCS Table

This table holds a total of max. 1000 parameters defining the timing of the various RTCS. Presently 29 different tables of this class exist.

Table Template:

MCMD: SET RTCS (IOM Reference A6.43)

Columns:

Counter DEC: entry number of the parameter in the RTCS pool

 Δ TT HEX: specifies the HEX-value of the delta time in ct (1/256 s)

CMD HEX: specifies the HEX-value of the 16-bit header word of the primitive CMD used at

this RTCS entry

Parameter Type: specifies whether the delta time parameter is coded directly in delta time

(immediate) or shall be taken from either the RTCS WAITS table or the

STATE_DURATION table

DT_ID: supplementary information; gives the alphanumeric name of a parameter to be

taken either from the RTCS_WAITS table or from the STATE_DURATION

table

ΔTT DEC: supplementary information; gives the alphanumeric name resp. the decimal

value of the delta time

Destination: supplementary information; gives the destination of the primitive CMD

CMD_Type: supplementary information about the type of primitive CMD

Command_Header: supplementary information; gives the alphanumeric name of the primitive CMD

specified in column 'CMD HEX'

Note: supplementary information; quotes at the start entry of the RTCS the abbreviated

name of the RTCS or 'SPARE', when not used

At the bottom of each of the 20 tables for information purposes the duration of the specified RTCS is given (units are ct's). To this sum the values of all 'WAITS' have to be added where applicable.

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

DCR/OCR	Issue date	issued by	Title	RTCS table affected
DR-SCIA-0103DO/97	25.09.97	DSS	Modified state 65 with measurement data delivery	STT 07



RTCS Table

Table 1 of 20

Counter	ΔTT	CMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX	_ 71	_	DEC		_ 71		
1	000C	0300	immediate		12	ICU	Direct Cmd	NOP	NOP RTCS
2	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
3	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
4	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
5	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
6	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
7	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
8	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
9	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
10	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER CA	SPARE
11	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
12	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER CA	SPARE
13	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
14	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
15	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
16	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
17	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
18	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
19	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
20	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
21	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
22	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
23	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
24	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
25	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
26	000C	030B	immediate		12	ICU	Direct_Cmd	PURGE_MCMD_QUEUE	RST_STB
27	0008	0335	immediate		8	ICU	Direct_Cmd	RESET_SW_INDICATION	0
28	0008	0312	immediate		8	ICU	Direct_Cmd	RESET_POWER_FAIL_SIGNAL	0
29	0008	0313	immediate		8	ICU	Direct_Cmd	RESET_OBDH_CLOCK_LOSS_SIGNAL	0
30	0008	0333	immediate		8	ICU	Direct_Cmd	ENABLE_SP_SW_LOAD	0
31	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
32	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
33	0021	0306	immediate		33	ICU	Direct_Cmd	ENABLE_BCPS	0
34	001C	031D	immediate		28	ICU	Direct_Cmd	SET_CHECK_STATE_STANDBY	0
35	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
36	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
37	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
38	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
39	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
40	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
41	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
42	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
43	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
44	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
45	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
46	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
47	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
48	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
49	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
50	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

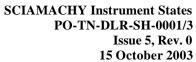


RTCS Table

Table 2 of 20

Counter	ΔΤΤ	CMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX			DEC				
51	000C	032B	immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	GTO_SRI
52	0008	030B	immediate		8	ICU	Direct_Cmd	PURGE_MCMD_QUEUE	0
53	0008	0302	immediate		8	ICU	Direct_Cmd	OPEN_DHC_RELAY	0
54	0021	0318	immediate		33	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
55	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
56	0021	030D	immediate		33	ICU	Direct_Cmd	STOP_PMTC_LL	0
57	0008	030F	immediate		8	ICU	Direct_Cmd	STOP_SDPU_LL	0
58	0008	0304	immediate		8	ICU	Direct_Cmd	OPEN_LVL_23_RELAY	0
59	0021	0312	immediate		33	ICU	Direct_Cmd	RESET_POWER_FAIL_SIGNAL	0
60	0008	0306	immediate		8	ICU	Direct_Cmd	ENABLE BCPS	0
61	001C	0333	immediate		28	ICU	Direct_Cmd	ENABLE_SP_SW_LOAD	0
62	0008	0314	immediate		8	ICU	Direct_Cmd	SELECT_HSM_DATA_RATE	0
63	0008	031F	immediate		8	ICU	Direct_Cmd	SET_CHECK_STATE_STB_REF_I	0
64	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
65	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
66	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
67	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
68	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
69	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
70	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
71	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
72	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
73	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
74	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
75	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
76	000C	032B	immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	GTO_SRE
77	0008	030B	immediate		8	ICU	Direct_Cmd	PURGE_MCMD_QUEUE	0
78	0008	0302	immediate		8	ICU	Direct_Cmd	OPEN_DHC_RELAY	0
79	0021	0318	immediate		33	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
80	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
81	0021	030D	immediate		33	ICU	Direct_Cmd	STOP_PMTC_LL	0
82	0008	030F	immediate		8	ICU	Direct_Cmd	STOP_SDPU_LL	0
83	0008	0304	immediate		8	ICU	Direct_Cmd	OPEN_LVL_23_RELAY	0
84	0021	0312	immediate		33	ICU	Direct_Cmd	RESET_POWER_FAIL_SIGNAL	0
85	0008	0306	immediate		8	ICU	Direct_Cmd	ENABLE_BCPS	0
86	001C	0333	immediate		28	ICU	Direct_Cmd	ENABLE_SP_SW_LOAD	0
87	0008	0314	immediate		8	ICU	Direct_Cmd	SELECT_HSM_DATA_RATE	0
88	0008	0320	immediate		8	ICU	Direct_Cmd	SET_CHECK_STATE_STB_REF_E	0
89	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
90	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
91	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
92	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
93	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
94	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
95	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
96	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
97	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
98	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
99	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
100	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

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RTCS Table	Table 3 of
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Counter	ΔΤΤ	CMD	Param Type	DT ID	ΔΤΤ	Destination	CMD Type	COMMAND HEADER	Note
DEC	HEX	HEX	_ 71	_	DEC		= 71		
101	000C	030B	immediate		12	ICU	Direct_Cmd	PURGE_MCMD_QUEUE	GTO_STB
102	0008	032B	immediate		8	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
103	0008	0302	immediate		8	ICU	Direct_Cmd	OPEN_DHC_RELAY	0
104	0021	0318	immediate		33	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
105	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
106	0021	030D	immediate		33	ICU	Direct_Cmd	STOP_PMTC_LL	0
107	0008	030F	immediate		8	ICU	Direct_Cmd	STOP_SDPU_LL	0
108	0008	0335	immediate		8	ICU	Direct_Cmd	RESET_SW_INDICATION	0
109	0008	0304	immediate		8	ICU	Direct_Cmd	OPEN_LVL_23_RELAY	0
110	0021	0301	immediate		33	ICU	Direct_Cmd	CLOSE_EQSOL_RELAY	0
111	0021	0312	immediate		33	ICU	Direct_Cmd	RESET_POWER_FAIL_SIGNAL	0
112	0008	0333	immediate		8	ICU	Direct_Cmd	ENABLE_SP_SW_LOAD	0
113	0008	0306	immediate		8	ICU	Direct_Cmd	ENABLE_BCPS	0
114	001C	0314	immediate		28	ICU	Direct_Cmd	SELECT_HSM_DATA_RATE	0
115	0008	031D	immediate		8	ICU	Direct_Cmd	SET_CHECK_STATE_STANDBY	0
116	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
117	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
118	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
119	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
120	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
121	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
122	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
123	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
124	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
125	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
126	000C	032B	immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	STB_DEC
127	0008	0303	immediate		8	ICU	Direct_Cmd	CLOSE_DHC_RELAY	0
128	0021	031E	immediate		33	ICU	Direct_Cmd	SET_CHECK_STATE_DECONT	0
129	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
130	8005	03FF	in_parameter_pool	WSD	WSD	ICU	Direct_Cmd	TERMINATE_RTCS	0
131	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
132	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
133	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
134	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
135	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
136	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
137	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
138	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
139	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
140	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
141	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
142	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
143	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
144	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
145	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
146	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
147	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
148	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
149	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
150	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE



RTCS Table

Table 4 of 20

Counter DEC	ΔTT HEX	CMD HEX	Param_Type	DT_ID	ΔTT DEC	Destination	CMD_Type	COMMAND HEADER	Note
			immediate			TOTT	Discot Co. 1	OPER CITECUL CELATE ODATE O	OUT THE
151	000C	032B 0333	immediate immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2 ENABLE_SP_SW_LOAD	STB_HTR 0
152 153	0008	0318	immediate		8	ICU	Direct_Cmd		0
	0008 003C	0316	immediate		60	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
154 155	0030	030C	immediate		33	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF START PMTC_LL	0
156	0200	030E	immediate		512	ICU	Direct_Cmd Direct_Cmd	START SDPU LL	0
157		030E	immediate		512	ICU	_		0
158	0200 0021	0305	immediate		33	ICU	Direct_Cmd	CLOSE_EQSOL_RELAY CLOSE_LVL_23_RELAY	0
159	0200	0312	immediate		512	ICU	Direct_Cmd Direct_Cmd	RESET POWER FAIL SIGNAL	0
	0200	0312	immediate		8	ICU		ENABLE BCPS	0
160 161	001C	1009	immediate		28	PMTC	Direct_Cmd	INITIALISE	0
162	0B60	0319	immediate		2912	ICU	Mode_Switching_Cmd Direct_Cmd	GET PMTC SELFTEST REPORT	0
-	0008	2007	immediate		8			INITIALISE	0
163	0008 0B36	031A	immediate			SDPU ICU	Mode_Switching_Cmd Direct_Cmd	GET SDPU SELFTEST REPORT	0
164	0008	220B	immediate		2870 8	SDPU	Auxiliary Cmd	SELFTEST SELFIEST_REPORT	0
165							Direct Cmd	NOP	0
166	7FFF	0300	immediate immediate		32767	ICU ICU		NOP	0
167	7FFF	0300			32767		Direct_Cmd	GET SDPU SELFTEST REPORT	
168	022F	031A	immediate		559	ICU	Direct_Cmd		0
169	0008	0326	immediate		8	ICU	Direct_Cmd	SET_CHECK_STATE_PTC_WAIT NOP	0
170	0008	0300	immediate	12101	8	ICU	Direct_Cmd		
171	8008	032B	in_parameter_pool	WSP	WSP	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2 RESET_MODE	0
172	0008	200A	immediate		8	SDPU	Mode_Switching_Cmd		0
173	039C	1018	immediate		924	PMTC	Mode_Switching_Cmd	RESET_MODE	0
174	0200	0323	immediate		512	ICU	Direct_Cmd	SET_CHECK_STATE_HTR_WTO	0
175	0008	0300	immediate	1210110	8	ICU	Direct_Cmd	NOP	0
176	8002	032B	in_parameter_pool	WSH0	WSH0	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
177	0008	1228	immediate		8	PMTC	Auxiliary_Cmd	UPDATE_ATC_OBM_PARAMETERS	0
178	0043	122D	immediate		67	PMTC	Auxiliary_Cmd	UPDATE_TC_SRC_PARAMETERS	0
179	0038	122E	immediate		56	PMTC	Auxiliary_Cmd	UPDATE_TC_TB_PARAMETERS	0
180	0038	122B	immediate		56	PMTC	Auxiliary_Cmd	UPDATE_SCAN_CONSTANTS	0
181	0043	122C	immediate		67	PMTC	Auxiliary_Cmd	UPDATE_SCAN_CTRL_PARAMETERS	0
182	003C	122A	immediate		60	PMTC	Auxiliary_Cmd	UPDATE_MECH_PARAMETERS	0
183	0039	1105	immediate		57	PMTC	Setup_Cmd	ATC_OBM_ON	0
184	0138	0324	immediate		312	ICU	Direct_Cmd	SET_CHECK_STATE_HTR_WT1	0
185	0008	0300	immediate	1210114	8	ICU	Direct_Cmd	NOP	0
186	8003	032B	in_parameter_pool	WSH1	WSH1	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
187	0008	1131	immediate		8	PMTC	Setup_Cmd	ATC_OBM_NORMAL_HTR_PWR_LIMITS	0
188	0138	1125	immediate		312	PMTC	Setup_Cmd	TC_SRC_COLD_STAGE_ON	0
189	0138	1127	immediate		312	PMTC	Setup_Cmd	TC_THERMAL_BUS_ON	0
190	0138	0325	immediate		312	ICU	Direct_Cmd	SET_CHECK_STATE_HTR_WT2	0
191	0008	0300	immediate	*******	8	ICU	Direct_Cmd	NOP	0
192	8004	032B	in_parameter_pool	WSH2	WSH2	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
193	0008	1106	immediate		8	PMTC	Setup_Cmd	BASIC_SCAN_PROFILES	0
194	004E	1119	immediate		78	PMTC	Setup_Cmd	SCANNER_AZ_ON	0
195	0038	111B	immediate		56	PMTC	Setup_Cmd	SCANNER_ELV_ON	0
196	1004	1119	immediate		4100	PMTC	Setup_Cmd	SCANNER_AZ_ON	0
197	0038	111B	immediate		56	PMTC	Setup_Cmd	SCANNER_ELV_ON	0
198	1004	110A	immediate		4100	PMTC	Setup_Cmd	NADIR_CAL_WINDOW_CLOSE	0
199	0084	1102	immediate		132	PMTC	Setup_Cmd	APERTURE_STOP_LARGE	0
200	0084	110D	immediate		132	PMTC	Setup_Cmd	ND_FILTER_OUT	0



RTCS Table

Table 5 of 20

Counter	ΔΤΤ	CIMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX	raian_type	ת_ות	DEC	Destination	CIVID_Type	COMMAND READER	11016
201	0084	0327	immediate		132	ICU	Direct Cmd	SET CHECK STATE HTR	0
202	0009	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
203	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
204	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
205	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
206	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
207	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
208	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
209	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
210	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
211	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
212	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
213	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
214	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
215	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
216	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
217	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
218	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
219	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
220	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
221	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
222	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
223	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
224	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
225	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
226	000C	031B	immediate		12	ICU	Direct Cmd	SAVE CHECK STATE	UPD ATC
227	0008	032B	immediate		8	ICU	Direct Cmd	SET CHECK STATE SPARE 2	0
228	0008	111A	immediate		8	PMTC	Setup Cmd	SCANNER AZ OFF	0
229	0038	111C	immediate		56	PMTC	Setup Cmd	SCANNER ELV OFF	0
230	0038	1104	immediate		56	PMTC	Setup Cmd	ATC OBM OFF	0
231	0138	1124	immediate		312	PMTC	Setup Cmd	TC SRC COLD STAGE OFF	0
232	0138	1126	immediate		312	PMTC	Setup Cmd	TC THERMAL BUS OFF	0
233	0138	1228	immediate		312	PMTC	Auxiliary Cmd	UPDATE ATC OBM PARAMETERS	0
234	0043	122D	immediate		67	PMTC	Auxiliary Cmd	UPDATE TO SRC PARAMETERS	0
235	0038	122E	immediate		56	PMTC	Auxiliary Cmd	UPDATE_TC_TB_PARAMETERS	0
236	0038	1105	immediate		56	PMTC	Setup Cmd	ATC OBM ON	0
237	0138	1131	immediate		312	PMTC	Setup Cmd	ATC OBM NORMAL HTR PWR LIMITS	0
238	0138	1125	immediate		312	PMTC	Setup Cmd	TC SRC COLD STAGE ON	0
239	0138	1127	immediate		312	PMTC	Setup Cmd	TC THERMAL BUS ON	0
240	0138	122B	immediate		312	PMTC	Auxiliary Cmd	UPDATE SCAN CONSTANTS	0
241	0043	122C	immediate		67	PMTC	Auxiliary Cmd	UPDATE SCAN CTRL PARAMETERS	0
242	003C	122A	immediate		60	PMTC	Auxiliary Cmd	UPDATE MECH PARAMETERS	0
243	0039	1119	immediate		57	PMTC	Setup_Cmd	SCANNER_AZ_ON	0
244	0038	111B	immediate		56	PMTC	Setup_Cmd	SCANNER_ELV_ON	0
245	1004	1119	immediate		4100	PMTC	Setup Cmd	SCANNER AZ ON	0
246	0038	111B	immediate		56	PMTC	Setup Cmd	SCANNER ELV ON	0
247	1004	031C	immediate		4100	ICU	Direct_Cmd	RESET_CHECK_STATE	0
248	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
249	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
250	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

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 $\verb|S.TABLE\| PFM\| EEPROM\| WORK_AREA\| Compare\| [RTCS_Wait.xls] Compare RTCS Table \\$

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Counter	ΔΤΤ	CMD	Param Type	DT ID	ΔΤΤ	Destination	CMD Type	COMMAND HEADER	Note
DEC	HEX	HEX	1		DEC	2 0000000000000000000000000000000000000			1,000
251	000C	032B	immediate		12	ICU	Direct Cmd	SET CHECK STATE SPARE 2	GTO HRF
252	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
253	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	,
254	0021	030D	immediate		33	ICU	Direct Cmd	STOP PMTC LL	,
255	0008	030F	immediate		8	ICU	Direct Cmd	STOP SDPU LL	0
256	0008	0309	immediate		- 8	ICU	Direct Cmd	RESET PMTC	0
257	0200	0308	immediate		512	ICU	Direct Cmd	RESET SDPU	Ů,
258	00B4	030E	immediate		180	ICU	Direct Cmd	START SDPU LL	Ů,
259	00B4	030C	immediate		180	ICU	Direct Cmd	START PMTC LL	Ů,
260	0200	0306	immediate		512	ICU	Direct Cmd	ENABLE BCPS	Ů,
261	001C	0314	immediate		28	ICU	Direct Cmd	SELECT HSM DATA RATE	Ů,
262	0008	0321	immediate		8	ICU	Direct Cmd	SET CHECK STATE HTR REF	,
263	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
264	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
265	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
266	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
267	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
268	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
269	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
270	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
271	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
272	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
273	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
274	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
275	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
276	000C	032B	immediate		12	ICU	Direct Cmd	SET CHECK STATE SPARE 2	MSR HTR
277	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
278	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
279	0021	0306	immediate		33	ICU	Direct Cmd	ENABLE BCPS	0
280	001C	200A	immediate		28	SDPU	Mode Switching Cmd	RESET MODE	0
281	0008	1018	immediate		8	PMTC	Mode Switching Cmd	RESET MODE	0
282	1E65	1105	immediate		7781	PMTC	Setup Cmd	ATC OBM ON	0
283	0138	1131	immediate		312	PMTC	Setup Cmd	ATC OBM NORMAL HTR PWR LIMITS	0
284	0138	1125	immediate		312	PMTC	Setup Cmd	TC SRC COLD STAGE ON	0
285	0138	1127	immediate		312	PMTC	Setup Cmd	TC THERMAL BUS ON	0
286	0138	110A	immediate		312	PMTC	Setup Cmd	NADIR CAL WINDOW CLOSE	0
287	0084	1102	immediate		132	PMTC	Setup Cmd	APERTURE STOP LARGE	0
288	0084	110D	immediate		132	PMTC	Setup Cmd	ND FILTER OUT	0
289	0084	0314	immediate		132	ICU	Direct Cmd	SELECT HSM DATA RATE	0
290	0008	0327	immediate		8	ICU	Direct Cmd	SET CHECK STATE HTR	0
291	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
292	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
293	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
294	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
295	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
296	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
297	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
298	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
299	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
300	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

1557 GTO_HRF

9590 MSR_HTR



RTCS Table

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Counter	ΔΤΤ	CMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX			DEC				
301	000C	032B	immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	HRF_HTR
302	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
303	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
304	0021	0306	immediate		33	ICU	Direct_Cmd	ENABLE_BCPS	0
305	001C	1009	immediate		28	PMTC	Mode_Switching_Cmd	INITIALISE	0
306	0B60	0319	immediate		2912	ICU	Direct_Cmd	GET_PMTC_SELFTEST_REPORT	0
307	0008	2007	immediate		8	SDPU	Mode_Switching_Cmd	INITIALISE	0
308	0B36	031A	immediate		2870	ICU	Direct_Cmd	GET_SDPU_SELFTEST_REPORT	0
309	0008	0333	immediate		8	ICU	Direct_Cmd	ENABLE_SP_SW_LOAD	0
310	0008	200A	immediate		8	SDPU	Mode_Switching_Cmd	RESET_MODE	0
311	039C	1018	immediate		924	PMTC	Mode_Switching_Cmd	RESET_MODE	0
312	0200	1228	immediate		512	PMTC	Auxiliary_Cmd	UPDATE_ATC_OBM_PARAMETERS	0
313	0043	122D	immediate		67	PMTC	Auxiliary_Cmd	UPDATE_TC_SRC_PARAMETERS	0
314	0038	122E	immediate		56	PMTC	Auxiliary_Cmd	UPDATE_TC_TB_PARAMETERS	0
315	0038	122B	immediate		56	PMTC	Auxiliary_Cmd	UPDATE_SCAN_CONSTANTS	0
316	0043	122C	immediate		67	PMTC	Auxiliary_Cmd	UPDATE_SCAN_CTRL_PARAMETERS	0
317	003C	122A	immediate		60	PMTC	Auxiliary_Cmd	UPDATE_MECH_PARAMETERS	0
318	0039	1105	immediate		57	PMTC	Setup_Cmd	ATC_OBM_ON	0
319	0138	0324	immediate		312	ICU	Direct_Cmd	SET_CHECK_STATE_HTR_WT1	0
320	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
321	8006	032B	in_parameter_pool	WRH1	WRH1	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
322	0008	1131	immediate		8	PMTC	Setup_Cmd	ATC_OBM_NORMAL_HTR_PWR_LIMITS	0
323	0138	1125	immediate		312	PMTC	Setup_Cmd	TC_SRC_COLD_STAGE_ON	0
324	0138	1127	immediate		312	PMTC	Setup_Cmd	TC_THERMAL_BUS_ON	0
325	0138	0325	immediate		312	ICU	Direct_Cmd	SET_CHECK_STATE_HTR_WT2	0
326	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
327	8007	032B	in_parameter_pool	WRH2	WRH2	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
328	0008	1119	immediate		8	PMTC	Setup_Cmd	SCANNER_AZ_ON	0
329	0038	111B	immediate		56	PMTC	Setup_Cmd	SCANNER_ELV_ON	0
330	1004	1119	immediate		4100	PMTC	Setup_Cmd	SCANNER_AZ_ON	0
331	0038	111B	immediate		56	PMTC	Setup_Cmd	SCANNER_ELV_ON	0
332	1004	110A	immediate		4100	PMTC	Setup_Cmd	NADIR_CAL_WINDOW_CLOSE	0
333	0084	1102	immediate		132	PMTC	Setup_Cmd	APERTURE_STOP_LARGE	0
334	0084	110D	immediate		132	PMTC	Setup_Cmd	ND_FILTER_OUT	0
335	0084	0327	immediate		132	ICU	Direct_Cmd	SET_CHECK_STATE_HTR	0
336	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
337	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
338	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
339	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
340	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
341	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
342	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
343	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
344	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
345	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
346	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
347	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
348	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
349	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
350	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

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Counter	ΔΤΤ	CMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX			DEC				
351	000C	032B	immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	SPR_INI
352	0008	1009	immediate		8	PMTC	Mode Switching Cmd	INITIALISE	0
353	0B60	0319	immediate		2912	ICU	Direct_Cmd	GET_PMTC_SELFTEST_REPORT	0
354	0008	2007	immediate		8	SDPU	Mode Switching Cmd	INITIALISE	0
355	0B36	031A	immediate		2870	ICU	Direct_Cmd	GET_SDPU_SELFTEST_REPORT	0
356	0008	032A	immediate		8	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_1	0
357	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
358	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
359	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
360	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
361	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
362	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
363	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
364	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA TRIGGER_CA	SPARE
365	0000	03EE	immediate		0	ICU	Direct_Cmd		SPARE
366	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
367	0000	03EE 03EE	immediate immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE SPARE
368	0000	03EE	immediate		0	ICU ICU	Direct_Cmd	TRIGGER_CA	SPARE
<u>369</u> 370	0000	03EE	immediate		0	ICU	Direct_Cmd Direct_Cmd	TRIGGER_CA	SPARE
371	0000	03EE	immediate		0	ICU		TRIGGER_CA TRIGGER_CA	SPARE
372	0000	03EE	immediate		0	ICU	Direct_Cmd		SPARE
373	0000	03EE	immediate		0	ICU	Direct_Cmd Direct_Cmd	TRIGGER_CA	SPARE
374	0000	03EE	immediate		0	ICU	-	TRIGGER_CA	SPARE
375	0000	03EE	immediate		0	ICU	Direct_Cmd Direct_Cmd	TRIGGER_CA TRIGGER_CA	SPARE
								_	
376	000C	032B	immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	SPR_RES 0
<u>377</u> 378	0008	0333 030D	immediate immediate		- 8	ICU ICU	Direct_Cmd Direct_Cmd	ENABLE_SP_SW_LOAD STOP_PMTC_LL	0
379	0008	030F	immediate		- 8	ICU	Direct Cmd	STOP SDPU LL	0
380	0008	0309	immediate		8	ICU	Direct Cmd	RESET PMTC	0
381	0200	0309	immediate		512	ICU	Direct Cmd	RESET_PINIC	0
382	0200 00B4	030E	immediate		180	ICU	Direct Cmd	START SDPU LL	0
383	00B4	030E	immediate		180	ICU	Direct Cmd	START PMTC LL	0
384	0200	0300	immediate		512	ICU	Direct Cmd	SET CHECK STATE HTR REF	0
385	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	
386	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER CA	SPARE
387	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER CA	SPARE
388	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
389	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
390	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
391	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER CA	SPARE
392	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER CA	SPARE
393	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
393	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
395	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
396	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
397	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
398	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
399	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
400	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER_CA	SPARE
+00	0000	UJEE	minediate		U	100	Direct Cilia	IIITOODK_OM	DLAKE

5826 SPR_INI



RTCS Table

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- Country	A mm		D M	TOTE TO	A mm	Destination	(7) (F) Th	COLOCATE LEADED	37-1-
Counter DEC	ΔTT HEX	CMD HEX	Param_Type	DT_ID	ΔTT DEC	Destination	CMD_Type	COMMAND HEADER	Note
						TOTT	D' 1 0 1	CER CITECIA CRARE CDARE	
401	000C	032B	immediate		12	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	STR_TML
402	0008	1106	immediate		8	PMTC	Setup_Cmd	BASIC_SCAN_PROFILES	0
403	004E	1112	immediate		78	PMTC	Setup_Cmd	RELATIVE_SCAN_PROFILE_1	0
404	0052	1113	immediate		82	PMTC	Setup_Cmd	RELATIVE SCAN PROFILE 2	0
405	0052	1114	immediate		82	PMTC	Setup_Cmd	RELATIVE SCAN PROFILE 3	0
406	0052	1115	immediate		82	PMTC	Setup_Cmd	RELATIVE SCAN PROFILE 4	0
407	0052	1116	immediate		82	PMTC	Setup_Cmd	RELATIVE_SCAN_PROFILE_5	0
408	0052	1117	immediate		82	PMTC	Setup_Cmd	RELATIVE_SCAN_PROFILE_6	0
409	0052	1123	immediate		82	PMTC	Setup_Cmd	TARGET_POSITION	0
410	0039	2205	immediate		57	SDPU	Auxiliary_Cmd	HSM_IF_ON	0
411	0032	0328	immediate		50	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
412	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
413	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
414	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
415	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
416	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
417	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
418	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
419	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
420	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
421	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
422	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
423	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
424	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
425	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
426	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
427	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
428	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
429	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
430	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
431	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
432	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
433	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
434	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
435	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
436	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
437	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
438	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
439	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
440	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
441	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
442	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
443	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
444	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
445	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
446	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
447	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
448	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
449	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
450	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE



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Counter	ΔΤΤ	CIMID	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX	_ 71	_	DEC				
451	000C	032B	immediate		12	ICU	Direct Cmd	SET CHECK STATE SPARE 2	HRP HTR
452	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
453	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
454	0021	0306	immediate		33	ICU	Direct Cmd	ENABLE BCPS	0
455	001C	0333	immediate		28	ICU	Direct Cmd	ENABLE SP SW LOAD	0
456	0008	200A	immediate		8	SDPU	Mode Switching Cmd	RESET MODE	0
457	039C	1018	immediate		924	PMTC	Mode Switching Cmd	RESET MODE	0
458	0200	1228	immediate		512	PMTC	Auxiliary_Cmd	UPDATE ATC OBM PARAMETERS	0
459	0043	122D	immediate		67	PMTC	Auxiliary_Cmd	UPDATE_TC_SRC_PARAMETERS	0
460	0038	122E	immediate		56	PMTC	Auxiliary_Cmd	UPDATE_TC_TB_PARAMETERS	0
461	0038	122B	immediate		56	PMTC	Auxiliary_Cmd	UPDATE_SCAN_CONSTANTS	0
462	0043	122C	immediate		67	PMTC	Auxiliary_Cmd	UPDATE_SCAN_CTRL_PARAMETERS	0
463	003C	122A	immediate		60	PMTC	Auxiliary_Cmd	UPDATE_MECH_PARAMETERS	0
464	0039	1105	immediate		57	PMTC	Setup_Cmd	ATC_OBM_ON	0
465	0138	0324	immediate		312	ICU	Direct_Cmd	SET_CHECK_STATE_HTR_WT1	0
466	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
467	8006	032B	in_parameter_pool	WRH1	WRH1	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
468	0008	1131	immediate		8	PMTC	Setup_Cmd	ATC_OBM_NORMAL_HTR_PWR_LIMITS	0
469	0138	1125	immediate		312	PMTC	Setup_Cmd	TC_SRC_COLD_STAGE_ON	0
470	0138	1127	immediate		312	PMTC	Setup_Cmd	TC_THERMAL_BUS_ON	0
471	0138	0325	immediate		312	ICU	Direct_Cmd	SET_CHECK_STATE_HTR_WT2	0
472	0008	0300	immediate		∞	ICU	Direct_Cmd	NOP	0
473	8007	032B	in_parameter_pool	WRH2	WRH2	ICU	Direct_Cmd	SET_CHECK_STATE_SPARE_2	0
474	0008	1119	immediate		∞	PMTC	Setup_Cmd	SCANNER_AZ_ON	0
475	0038	111B	immediate		56	PMTC	Setup_Cmd	SCANNER_ELV_ON	0
476	1004	1119	immediate		4100	PMTC	Setup_Cmd	SCANNER_AZ_ON	0
477	0038	111B	immediate		56	PMTC	Setup_Cmd	SCANNER_ELV_ON	0
478	1004	110A	immediate		4100	PMTC	Setup_Cmd	NADIR_CAL_WINDOW_CLOSE	0
479	0084	1102	immediate		132	PMTC	Setup_Cmd	APERTURE_STOP_LARGE	0
480	0084	110D	immediate		132	PMTC	Setup_Cmd	ND_FILTER_OUT	0
481	0084	0327	immediate		132	ICU	Direct_Cmd	SET_CHECK_STATE_HTR	0
482	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
483	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
484	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
485	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
486	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
487	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
488	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
489	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
490	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
491	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
492	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
493	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
494	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
495	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
496	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
497	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
498	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
499	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
500	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE



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Counter	ΔΤΤ	CMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX		-	DEC				
501	000F	0322	immediate		15	ICU	Direct Cmd	SET CHECK STATE TRANS	STT 11
502	0008	1103	immediate		8	PMTC	Setup Cmd	APERTURE STOP SMALL	0
503	0084	111D	immediate		132	PMTC	Setup Cmd	SCANNER MODE PARAMETERS	0
504	0045	1201	immediate		69	PMTC	Auxiliary Cmd	ANCILLARY DATA	0
505	003C	111F	immediate		60	PMTC	Setup Cmd	SETUP MEASUREMENT	0
506	03A7	2103	immediate		935	SDPU	Setup Cmd	CLUSTER DEFINITION	0
507	006C	0307	immediate		108	ICU	Direct Cmd	DISABLE BCPS	0
508	0014	210E	immediate		20	SDPU	Setup Cmd	SETUP MEASUREMENT	0
509	0011	1022	immediate		17	PMTC	Mode Switching Cmd	START MEASUREMENT	0
510	002A	200F	immediate		42	SDPU	Mode Switching Cmd	START MEASUREMENT	1406
511	000E	1130	immediate		14	PMTC	Setup Cmd	WLS LAMP ON	0
512	0038	0317	immediate		56	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA ON	0
513	0008	0315	immediate		8	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA ON	0
514	0008	0300	immediate		8	ICU	Direct Cmd	NOP	0
515	00D9	032C	immediate		217	ICU	Direct Cmd	COND ENABLE BCPS	0
516	001C	0329	immediate		28	ICU	Direct Cmd	SET CHECK STATE STATE	0
517	0008	0300	immediate		8	ICU	Direct Cmd	NOP	0
518	8000	0322	in parameter pool	WM	WM	ICU	Direct Cmd	SET CHECK STATE TRANS	0
519	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
520	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
521	0021	112F	immediate		33	PMTC	Setup Cmd	WLS LAMP OFF	0
522	0041	0300	immediate		65	ICU	Direct Cmd	NOP	0
523	8001	1102	in parameter pool	WSR	WSR	PMTC	Setup Cmd	APERTURE STOP LARGE	0
524	0084	0328	immediate		132	ICU	Direct Cmd	SET CHECK STATE IDLE	0
525	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
526	000F	0322	immediate		15	ICU	Direct Cmd	SET CHECK STATE TRANS	STT 14
527	0008	1103	immediate		8	PMTC	Setup Cmd	APERTURE STOP SMALL	0
528	0084	111D	immediate		132	PMTC	Setup Cmd	SCANNER MODE PARAMETERS	0
529	0045	1201	immediate		69	PMTC	Auxiliary Cmd	ANCILLARY DATA	0
530	003C	111F	immediate		60	PMTC	Setup Cmd	SETUP MEASUREMENT	0
531	03A7	2103	immediate		935	SDPU	Setup Cmd	CLUSTER DEFINITION	0
532	006C	0307	immediate		108	ICU	Direct Cmd	DISABLE BCPS	0
533	0014	210E	immediate		20	SDPU	Setup Cmd	SETUP MEASUREMENT	0
534	0011	1022	immediate		17	PMTC	Mode Switching Cmd	START MEASUREMENT	0
535	002A	200F	immediate		42	SDPU	Mode Switching Cmd	START MEASUREMENT	1406
536	000E	0300	immediate		14	ICU	Direct Cmd	NOP	0
537	0038	0317	immediate		56	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_ON	0
538	0008	0315	immediate		8	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_ON	0
539	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
540	00D9	032C	immediate		217	ICU	Direct_Cmd	COND_ENABLE_BCPS	0
541	001C	0329	immediate		28	ICU	Direct Cmd	SET CHECK STATE STATE	0
542	0008	0300	immediate		8	ICU	Direct Cmd	NOP	0
543	8000	0322	in parameter pool	WM	WM	ICU	Direct Cmd	SET CHECK STATE TRANS	0
544	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
545	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
546	0021	0300	immediate		33	ICU	Direct Cmd	NOP	0
547	0041	0300	immediate		65	ICU	Direct Cmd	NOP	0
548	8001	1102	in parameter pool	WSR	WSR	PMTC	Setup_Cmd	APERTURE STOP_LARGE	0
549	0084	0328	immediate		132	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
550	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0

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Counter DEC	ΔTT HEX	CMD HEX	Param_Type	DT_ID	ΔTT DEC	Destination	CMD_Type	COMMAND HEADER	Note
	000F	0322	immediate		15	ICU	Direct Cmd	SET CHECK STATE TRANS	STT 01
551 552	0001	111D	immediate		8	PMTC	Setup Cmd	SCANNER MODE PARAMETERS	0
553	0045	1201	immediate		69	PMTC	Auxiliary Cmd	ANCILLARY DATA	0
554	0045 003C	111F	immediate		60	PMTC	Setup Cmd	SETUP MEASUREMENT	0
555	00BC	2103	immediate		188	SDPU	Setup_Cmd Setup Cmd	CLUSTER DEFINITION	0
556	0080	210E	immediate		128	SDPU	Setup_Cmd	SETUP MEASUREMENT	0
557	0027	0307	immediate		39	ICU	Direct Cmd	DISABLE BCPS	0
558	0014	200F	immediate		20	SDPU	Mode Switching Cmd	START MEASUREMENT	527
559	000E	1022	immediate		14	PMTC	Mode Switching Cmd	START MEASUREMENT	0
560	0038	0317	immediate		56	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA ON	0
561	0008	0317	immediate		8	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA ON	0
562	0008	032C	immediate		8	ICU	Direct Cmd	COND ENABLE BCPS	0
563	001C	0329	immediate		28	ICU	Direct Cmd	SET CHECK STATE STATE	0
564	0008	0300	immediate		8	ICU	Direct Cmd	NOP	0
565	8000	0322	in parameter pool	WM	WM	ICU	Direct Cmd	SET CHECK STATE TRANS	0
566	0008	0318	immediate	11212	8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
567	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
568	0021	0300	immediate		33	ICU	Direct Cmd	NOP	0
569	8001	0328	in parameter pool	WSR	WSR	ICU	Direct Cmd	SET CHECK STATE IDLE	0
570	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
571	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
572	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
573	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
574	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
575	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
576	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
577	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
578	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
579	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
580	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
581	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
582	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
583	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
584	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
585	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
586	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
587	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
588	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
589	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
590	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
591	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
592	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
593	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
594	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
595	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
596	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
597	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
598	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
599	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
600	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

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0 STT_01_Tes



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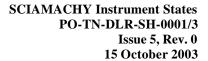
Counter	ΔΤΤ	CMD	Param_Type	DT ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX	raman_rypc	D1_ID	DEC	Destination	OIVID_Type		14000
601	000F	0322	immediate		15	ICU	Direct Cmd	SET CHECK STATE TRANS	STT 02
602	0001	1103	immediate		8	PMTC	Setup Cmd	APERTURE STOP SMALL	0
603	00084	1103	immediate		132	PMTC	Setup_Cmd	ND FILTER IN	0
604	0084	111D	immediate		132	PMTC	Setup_Cmd Setup Cmd	SCANNER MODE PARAMETERS	0
	0084		immediate		69	PMTC			0
605	0045 003C	1201	immediate		60	PMTC	Auxiliary_Cmd Setup_Cmd	ANCILLARY DATA	0
606	00BC	111F 2103	immediate		188	SDPU	Setup_Cmd Setup_Cmd	SETUP_MEASUREMENT	0
608	0080	2103 210E	immediate		128	SDPU	Setup_Crnd Setup Crnd	CLUSTER_DEFINITION	0
-							·-	SETUP_MEASUREMENT	0
609	0027	0307	immediate		39 20	ICU	Direct_Cmd	DISABLE_BCPS	<u> </u>
610	0014	200F	immediate			SDPU	Mode_Switching_Cmd	START_MEASUREMENT	791
611	000E	1022	immediate		14	PMTC	Mode_Switching_Cmd	START_MEASUREMENT	0
612	0038	0317	immediate		56	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_ON	0
613	0008	0315	immediate		8	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_ON	0
614	0008	032C	immediate		8	ICU	Direct_Cmd	COND_ENABLE_BCPS	0
615	001C	0329	immediate		28	ICU	Direct_Cmd	SET_CHECK_STATE_STATE	0
616	0008	0300	immediate	7773.6	8	ICU	Direct_Cmd	NOP	0
617	8000	0322	in_parameter_pool	WM	WM	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	0
618	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
619	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
620	0021	0300	immediate	TTTOT	33	ICU	Direct_Cmd	NOP	0
621	8001	1102	in_parameter_pool	WSR	WSR	PMTC	Setup_Cmd	APERTURE_STOP_LARGE	0
622	0084	110D	immediate		132	PMTC	Setup_Cmd	ND_FILTER_OUT	0
623	0084	0328	immediate		132	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
624	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
625	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
626	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
627	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
628	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
629	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
630	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
631	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
632	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
633	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
634	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
635	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
636	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
637	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
638	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
639	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
640	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
641	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
642	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
643	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
644	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
645	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
646	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
647	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
648	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
649	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
650	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE



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Counter	ΔΤΤ	CIMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX	r m mii_rypc	D1_ID	DEC	Destination	Olvid_lypo		11000
651	000F	0322	immediate		15	ICU	Direct Cmd	SET CHECK STATE TRANS	STT 03
652	0001	110B	immediate		8	PMTC	Setup Cmd	NADIR CAL WINDOW OPEN	0
653	0084	1103	immediate		132	PMTC	Setup Cmd	APERTURE STOP SMALL	0
654	0084	110C	immediate		132	PMTC	Setup_Cmd	ND FILTER IN	0
655	0084	111D	immediate		132	PMTC	Setup Cmd	SCANNER MODE PARAMETERS	0
656	0045	1201	immediate		69	PMTC	Auxiliary Cmd	ANCILLARY DATA	0
657	003C	111F	immediate		60	PMTC	Setup_Cmd	SETUP MEASUREMENT	0
658	012F	2103	immediate		303	SDPU	Setup Cmd	CLUSTER DEFINITION	0
659	0080	210E	immediate		128	SDPU	Setup Cmd	SETUP MEASUREMENT	0
660	0027	0307	immediate		39	ICU	Direct Cmd	DISABLE BCPS	0
661	0014	200F	immediate		20	SDPU	Mode Switching Cmd	START MEASUREMENT	1038
662	000E	1022	immediate		14	PMTC	Mode Switching Cmd	START MEASUREMENT	0
663	0038	0317	immediate		56	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA ON	0
664	0008	0315	immediate		8	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA ON	0
665	0008	032C	immediate		8	ICU	Direct Cmd	COND ENABLE BCPS	0
666	001C	0329	immediate		28	ICU	Direct Cmd	SET CHECK STATE STATE	0
667	0008	0300	immediate		8	ICU	Direct Cmd	NOP	0
668	8000	0322	in parameter pool	WM	WM	ICU	Direct Cmd	SET CHECK STATE TRANS	0
669	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
670	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
671	0021	0300	immediate		33	ICU	Direct Cmd	NOP	0
672	8001	110A	in parameter pool	WSR	WSR	PMTC	Setup Cmd	NADIR CAL WINDOW CLOSE	0
673	0084	1102	immediate		132	PMTC	Setup Cmd	APERTURE STOP LARGE	0
674	0084	110D	immediate		132	PMTC	Setup Cmd	ND FILTER OUT	0
675	0084	0328	immediate		132	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
676	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE RTCS	0
677	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
678	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
679	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
680	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
681	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
682	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
683	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
684	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
685	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
686	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
687	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
688	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
689	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
690	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
691	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
692	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
693	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
694	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
695	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
696	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
697	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
698	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
699	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
700	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE



RTCS Table

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	A 7777	en en			4			2010417	
Counter	ΔΤΤ	CMD	Param_Type	DT_ID	ΔTT	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX			DEC		T: 1 0 1		
701	000F	0322	immediate		15	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	STT_04
702	0008	111D	immediate		8	PMTC	Setup_Cmd	SCANNER_MODE_PARAMETERS	0
703	0045	1201	immediate		69	PMTC	Auxiliary_Cmd	ANCILLARY_DATA	0
704	003C	111F	immediate		60	PMTC	Setup_Cmd	SETUP_MEASUREMENT	0
705	03A7	2103	immediate		935	SDPU	Setup_Cmd	CLUSTER DEFINITION	0
706	006C	0307	immediate		108	ICU	Direct_Cmd	DISABLE_BCPS	0
707	0014	210E	immediate		20	SDPU	Setup_Cmd	SETUP_MEASUREMENT	0
708	0011	1022	immediate		17	PMTC	Mode_Switching_Cmd	START_MEASUREMENT	0
709	002A	200F	immediate		42	SDPU	Mode_Switching_Cmd	START_MEASUREMENT	1274
710	000E	1121	immediate		14	PMTC	Setup_Cmd	SLS_LAMP_ON	0
711	0038	0317	immediate		56	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_ON	0
712	0008	0315	immediate		8	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_ON	0
713	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
714	0019	032C	immediate		25	ICU	Direct_Cmd	COND_ENABLE_BCPS	0
715	001C	0329	immediate		28	ICU	Direct_Cmd	SET_CHECK_STATE_STATE	0
716	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
717	8000	0322	in_parameter_pool	WM	WM	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	0
718	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
719	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
720	0021	1120	immediate		33	PMTC	Setup_Cmd	SLS_LAMP_OFF	0
721	0041	0300	immediate		65	ICU	Direct_Cmd	NOP	0
722	8001	0328	in_parameter_pool	WSR	WSR	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
723	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
724	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
725	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
726	000F	0322	immediate		15	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	STT_12
727	0008	111D	immediate		8	PMTC	Setup_Cmd	SCANNER_MODE_PARAMETERS	0
728	0045	1201	immediate		69	PMTC	Auxiliary_Cmd	ANCILLARY_DATA	0
729	003C	111F	immediate		60	PMTC	Setup_Cmd	SETUP_MEASUREMENT	0
730	03A7	2103	immediate		935	SDPU	Setup_Cmd	CLUSTER_DEFINITION	0
731	006C	0307	immediate		108	ICU	Direct_Cmd	DISABLE_BCPS	0
732	0014	210E	immediate		20	SDPU	Setup_Cmd	SETUP_MEASUREMENT	0
733	0011	1022	immediate		17	PMTC	Mode_Switching_Cmd	START_MEASUREMENT	0
734	002A	200F	immediate		42	SDPU	Mode_Switching_Cmd	START_MEASUREMENT	1274
735	000E	0300	immediate		14	ICU	Direct_Cmd	NOP	0
736	0038	0317	immediate		56	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_ON	0
737	0008	0315	immediate		8	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_ON	0
738	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
739	0019	032C	immediate		25	ICU	Direct_Cmd	COND_ENABLE_BCPS	0
740	001C	0329	immediate		28	ICU	Direct_Cmd	SET_CHECK_STATE_STATE	0
741	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
742	8000	0322	in_parameter_pool	WM	WM	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	0
743	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
744	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
745	0021	0300	immediate		33	ICU	Direct_Cmd	NOP	0
746	0041	0300	immediate		65	ICU	Direct_Cmd	NOP	0
747	8001	0328	in_parameter_pool	WSR	WSR	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
748	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
749	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
750	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

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Counter DEC	ΔTT HEX	CMD HEX	Param_Type	DT_ID	∆TT DEC	Destination	CMD_Type	COMMAND HEADER	Note
		0322	immediate			TOTT	Direct Conf	OPER CLIPCOL OFFARE TEDANIC	OTTE OF
751	000F 0008	111D	immediate immediate		15	ICU PMTC	Direct_Cmd	SET_CHECK_STATE_TRANS	STT_05
752 753	0008	1201	immediate		8 69	PMTC	Setup_Cmd Auxiliary Cmd	SCANNER_MODE_PARAMETERS ANCILLARY DATA	0
	0045 003C		immediate immediate		60	PMTC	'-	<u>-</u>	0
754	03A7	111F 2103	immediate		935	SDPU	Setup_Cmd	SETUP_MEASUREMENT CLUSTER DEFINITION	0
755 756	03A7	0307	immediate		108	ICU	Setup_Cmd Direct Cmd	DISABLE BCPS	0
757	0014	210E	immediate		20	SDPU	<u>-</u>	SETUP MEASUREMENT	0
758	0014	1022	immediate		17	PMTC	Setup_Cmd Mode Switching Cmd	START MEASUREMENT	0
759	0011 002A	200F	immediate		42	SDPU	Mode Switching Cmd	START MEASUREMENT	1274
760	002A 000E	1130	immediate		14	PMTC		WLS LAMP ON	0
761	000E	0317	immediate		56	ICU	Setup_Cmd Direct Cmd	PMTC CYCLIC ANCILLARY DATA ON	0
762	0008	0317	immediate		9	ICU	_	SDPU CYCLIC ANCILLARY DATA ON	0
-	0008	0300	immediate			ICU	Direct_Cmd	NOP	0
763	00D9	0300 032C	immediate		8 217	ICU	Direct_Cmd Direct_Cmd	COND ENABLE BCPS	0
764	00D9 001C	0320	immediate			ICU	<u>-</u>	SET CHECK STATE STATE	0
765		0300			28 8		Direct_Cmd	NOP	0
766	0008		immediate	7773.6		ICU	Direct_Cmd		
767	8000	0322	in_parameter_pool	WM	WM	ICU	Direct_Cmd Direct_Cmd	SET_CHECK_STATE_TRANS	0
768	0008	0318	immediate immediate		8	ICU		PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
769	003C	0316			60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
770	0021	112F	immediate		33	PMTC	Setup_Cmd	WLS_LAMP_OFF	0
771	0041	0300	immediate	121012	65	ICU	Direct_Cmd	NOP	0
772	8001	0328	in_parameter_pool	WSR	WSR	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
773	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
774	0000	03EE	immediate immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
775	0000	03EE			0		Direct_Cmd	TRIGGER_CA	SPARE
776	000F	0322	immediate		15	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	STT_13
777	0008	111D	immediate immediate		8	PMTC	Setup_Cmd	SCANNER_MODE_PARAMETERS	0
778	0045	1201			69	PMTC	Auxiliary_Cmd	ANCILLARY_DATA	0
779	003C	111F	immediate		60	PMTC	Setup_Cmd	SETUP_MEASUREMENT	0
780	03A7 006C	2103	immediate immediate		935	SDPU ICU	Setup_Cmd	CLUSTER_DEFINITION	0
781		0307			108		Direct_Cmd	DISABLE_BCPS	0
782	0014	210E	immediate immediate		20 17	SDPU	Setup_Cmd	SETUP_MEASUREMENT	0
783	0011	1022 200F	immediate		42	PMTC	Mode_Switching_Cmd	START_MEASUREMENT START_MEASUREMENT	1274
784 785	002A 000E	0300	immediate		14	SDPU ICU	Mode_Switching_Cmd Direct Cmd	NOP	0
							-		0
786 787	0038	0317 0315	immediate immediate		56 8	ICU	Direct_Cmd Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_ON SDPU_CYCLIC_ANCILLARY_DATA_ON	0
									
788	8000	0300	immediate		217	ICU	Direct_Cmd	NOP COND ENABLE BCPS	0
789 790	00D9 001C	032C 0329	immediate immediate		217	ICU ICU	Direct_Cmd Direct_Cmd	SET CHECK STATE STATE	0
							<u>-</u>		
791	8000	0300	immediate	fzm v	8	ICU	Direct_Cmd	NOP	0
792	8000	0322	in_parameter_pool	WM	WM °	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	0
793	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	-
794	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
795	0021	0300	immediate		33	ICU	Direct_Cmd	NOP	0
796	0041	0300	immediate	121012	65	ICU	Direct_Cmd	NOP	0
797	8001	0328	in_parameter_pool	WSR	WSR	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
798	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
799	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
800	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

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Counter	ΔTT	CMD	Param_Type	DT_ID	Δ TT	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEE	HEX			ΔΕΧ				
801	000F	0322	immediate		15	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	STT_06
802	0008	110C	immediate		8	PMTC	Setup_Cmd	ND_FILTER_IN	0
803	0084	111D	immediate		132	PMTC	Setup_Cmd	SCANNER_MODE_PARAMETERS	0
804	0045	1201	immediate		69	PMTC	Auxiliary_Cmd	ANCILLARY_DATA	0
805	003C	111F	immediate		60	PMTC	Setup_Cmd	SETUP_MEASUREMENT	0
806	036F	2103	immediate		879	SDPU	Setup_Cmd	CLUSTER DEFINITION	0
807	0080	210E	immediate		128	SDPU	Setup Cmd	SETUP MEASUREMENT	0
808	0027	0307	immediate		39	ICU	Direct Cmd	DISABLE BCPS	0
809	0014	200F	immediate		20	SDPU	Mode Switching Cmd	START MEASUREMENT	0
810	000E	1022	immediate		14	PMTC	Mode Switching Cmd	START MEASUREMENT	0
811	0038	0317	immediate		56	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA ON	0
812	0008	0315	immediate		8	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA ON	0
813	0008	032C	immediate		8	ICU	Direct Cmd	COND ENABLE BCPS	0
814	001C	0329	immediate		28	ICU	Direct Cmd	SET CHECK STATE STATE	0
815	0008	0300	immediate		8	ICU	Direct Cmd	NOP	0
816	8000	0322	in parameter pool	WM	WM	ICU	Direct Cmd	SET CHECK STATE TRANS	0
817	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
818	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
819	0021	0300	immediate		33	ICU	Direct Cmd	NOP	0
820	8001	110D	in parameter pool	WSR	WSR	PMTC	Setup Cmd	ND FILTER OUT	0
821	0084	0328	immediate		132	ICU	Direct Cmd	SET CHECK STATE IDLE	0
822	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
823	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
824	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
825	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
826	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
827	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
828	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
829	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
830	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
831	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
832	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
833	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
834	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
835	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER CA	SPARE
836	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
837	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
838	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
839	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
840	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
841	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
842	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
843	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
844	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
845	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
846	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
847	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
848	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
849	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
850	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE

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Counter	ΔTT	CMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEΞ	HEX		_	ΔEX				
851	000F	0322	immediate		15	ICU	Direct Cmd	SET CHECK STATE TRANS	STT 07
852	0008	1119	immediate		8	PMTC	Setup Cmd	SCANNER AZ ON	0
853	0038	111B	immediate		56	PMTC	Setup Cmd	SCANNER ELV ON	0
854	1004	0307	immediate		4100	ICU	Direct Cmd	DISABLE BCPS	0
855	0014	2001	immediate		20	SDPU	Mode Switching Cmd	ADC CALIBRATION	0
856	0036	0306	immediate		54	ICU	Direct Cmd	ENABLE BCPS	0
857	001C	0300	immediate		28	ICU	Direct Cmd	NOP	0
858	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
859	8000	0328	in_parameter_pool	WM	WM	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
860	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
861	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
862	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
863	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
864	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
865	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
866	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
867	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
868	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
869	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
870	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
871	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
872	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
873	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
874	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
875	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
876	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
877	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
878	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
879	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
880	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
881	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
882	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
883	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
884	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
885	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
886	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
887	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
888	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
889	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
890	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
891	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
892	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
893	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
894	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
895	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
896	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
897	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
898	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
899	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE
900	0000	03EE	immediate		0	ICU	Direct_Cmd	TRIGGER_CA	SPARE

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						KICO I dole		Table 16 01 20	
Counter	ΔTT	CMD	Param_Type	DT_ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEE	HEX	raam_rype	D1_1D	ΔΕΧ	Desmiduon	Cloid_Type	COMMINAND HEADER	14016
851	11111	11127			HL71				
852		0307				ICU	Direct Cmd	DISABLE BCPS	
853	0014	2001			20	SDPU	Mode Switching Cmd	ADC CALIBRATION	
854	0036	0306			54	3010	Mode_Switching_Child	ENABLE BCPS	
855	001C	0300			28	ICU	Direct Cmd	NOP	
856	0101	0300			257	100	Direct_cinu	NOP	
857	0101	111D			257	PMTC	Setup_Cmd	SCANNER MODE PARAMETERS	
858	0045	1201			69	PMTC	Auxiliary Cmd	ANCILLARY DATA	
859	003C	111F	immediate		60	PMTC	Setup_Cmd	SETUP MEASUREMENT	
860	00BC	2103			188	SDPU	Setup Cmd	CLUSTER DEFINITION	
861	0080	210E			128	SDPU	Setup_Cmd	SETUP_MEASUREMENT	0
862	0027	0307			39	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u></u>	DISABLE_BCPS	0
863	0014	200F			20	SDPU	Mode_Switching_Cmd	START MEASUREMENT	1143
864	000E	1022			14	PMTC	Mode Switching Cmd	START MEASUREMENT	0
865	0038	0317			56			PMTC_CYCLIC_ANCILLARY_DATA_ON	0
866	0008	0315			8			SDPU CYCLIC ANCILLARY DATA ON	0
867	0008	032C			8			COND ENABLE BCPS	0
868	001C	0300			28			NOP	0
869	0008	0300			8			NOP	0
870	8000	0300	in parameter pool	WM	WM			NOP	0
871	0008	0318			8			PMTC CYCLIC ANCILLARY DATA OFF	0
872	003C	0316			60			SDPU CYCLIC ANCILLARY DATA OFF	0
873	0021	0300			33			NOP	0
874	8001	1119	in parameter pool	WSR	WSR	PMTC	Setup Cmd	SCANNER AZ ON	0
875	0038	111B			56	PMTC	Setup Cmd	SCANNER_ELV_ON	0
876	1004	0328			4100			SET CHECK STATE IDLE	0
877	0008	03FF			8			TERMINATE RTCS	0
878								-	
879									
880									
881									
882									
883									
884									
885									
886									
887									
888									
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RTCS Table Table 19 of 20

Counter DEC	ΔTT HEX	CMD HEX	Param_Type	DT_ID	ΔTT DEC	Destination	CMD_Type	COMMAND HEADER	Note
						TOTT	Discot God	OPER CITECUL CENTER DE ANIC	OTT 10
901	000F 0008	0322 110C	immediate immediate		15 8	ICU PMTC	Direct_Cmd	SET_CHECK_STATE_TRANS	STT_10 0
902	0008	111D	immediate		132	PMTC	Setup_Cmd	ND_FILTER_IN SCANNER MODE PARAMETERS	0
	0084		immediate immediate				Setup_Cmd		0
904		1201			69	PMTC	Auxiliary_Cmd	ANCILLARY_DATA	0
905	003C	111F	immediate immediate		60	PMTC	Setup_Cmd	SETUP_MEASUREMENT	0
906 907	03A7 006C	2103 0307	immediate		935 108	SDPU ICU	Setup_Cmd Direct Cmd	CLUSTER_DEFINITION DISABLE BCPS	0
								-	0
908	0014	210E	immediate		20	SDPU	Setup_Cmd	SETUP_MEASUREMENT	0
909	0011	1022	immediate		17	PMTC	Mode_Switching_Cmd	START_MEASUREMENT	
910	002A	200F	immediate		42	SDPU	Mode_Switching_Cmd	START_MEASUREMENT	1406
911	000E	1130	immediate		14	PMTC	Setup_Cmd	WLS_LAMP_ON	0
912	0038	0317	immediate		56	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_ON	0
913	0008	0315	immediate		8	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_ON	0
914	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
915	00D9	032C	immediate		217	ICU	Direct_Cmd	COND_ENABLE_BCPS	0
916	001C	0329	immediate		28	ICU	Direct_Cmd	SET_CHECK_STATE_STATE	0
917	0008	0300	immediate	7777.6	8	ICU	Direct_Cmd	NOP	0
918	8000	0322	in_parameter_pool	WM	WM	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	0
919	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
920	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
921	0021	112F	immediate		33	PMTC	Setup_Cmd	WLS_LAMP_OFF	0
922	0041	0300	immediate	777070	65	ICU	Direct_Cmd	NOP	0
923	8001	110D	in_parameter_pool	WSR	WSR	PMTC	Setup_Cmd	ND_FILTER_OUT	0
924	0084	0328	immediate		132	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
925	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0
926	000F	0322	immediate		15	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	STT_15
927	0008	110C	immediate		8	PMTC	Setup_Cmd	ND_FILTER_IN	0
928	0084	111D	immediate		132	PMTC	Setup_Cmd	SCANNER_MODE_PARAMETERS	0
929	0045	1201	immediate		69	PMTC	Auxiliary_Cmd	ANCILLARY_DATA	0
930	003C	111F	immediate		60	PMTC	Setup_Cmd	SETUP_MEASUREMENT	0
931	03A7	2103	immediate		935	SDPU	Setup_Cmd	CLUSTER_DEFINITION	0
932	006C	0307	immediate		108	ICU	Direct_Cmd	DISABLE_BCPS	0
933	0014	210E	immediate		20	SDPU	Setup_Cmd	SETUP_MEASUREMENT	0
934	0011	1022	immediate		17	PMTC	Mode_Switching_Cmd	START_MEASUREMENT	0
935	002A	200F	immediate		42	SDPU	Mode_Switching_Cmd	START_MEASUREMENT	1406
936	000E	0300	immediate		14	ICU	Direct_Cmd	NOP	0
937	0038	0317	immediate		56	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_ON	0
938	0008	0315	immediate		8	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_ON	0
939	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
940	00D9	032C	immediate		217	ICU	Direct_Cmd	COND_ENABLE_BCPS	0
941	001C	0329	immediate		28	ICU	Direct_Cmd	SET_CHECK_STATE_STATE	0
942	0008	0300	immediate		8	ICU	Direct_Cmd	NOP	0
943	8000	0322	in_parameter_pool	WM	WM	ICU	Direct_Cmd	SET_CHECK_STATE_TRANS	0
944	0008	0318	immediate		8	ICU	Direct_Cmd	PMTC_CYCLIC_ANCILLARY_DATA_OFF	0
945	003C	0316	immediate		60	ICU	Direct_Cmd	SDPU_CYCLIC_ANCILLARY_DATA_OFF	0
946	0021	0300	immediate		33	ICU	Direct_Cmd	NOP	0
947	0041	0300	immediate		65	ICU	Direct_Cmd	NOP	0
948	8001	110D	in_parameter_pool	WSR	WSR	PMTC	Setup_Cmd	ND_FILTER_OUT	0
949	0084	0328	immediate		132	ICU	Direct_Cmd	SET_CHECK_STATE_IDLE	0
950	0008	03FF	immediate		8	ICU	Direct_Cmd	TERMINATE_RTCS	0

2051 +WSR+WM STT_10



RTCS Table

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Counter	ΔΤΤ	CMD	Param Type	DT ID	ΔΤΤ	Destination	CMD_Type	COMMAND HEADER	Note
DEC	HEX	HEX			DEC		71		
951	000F	0322	immediate		15	ICU	Direct Cmd	SET CHECK STATE TRANS	STT 09
952	0008	111D	immediate		8	PMTC	Setup Cmd	SCANNER MODE PARAMETERS	0
953	0045	1201	immediate		69	PMTC	Auxiliary Cmd	ANCILLARY DATA	0
954	003C	111F	immediate		60	PMTC	Setup Cmd	SETUP MEASUREMENT	0
955	036F	2103	immediate		879	SDPU	Setup Cmd	CLUSTER DEFINITION	0
956	0080	210E	immediate		128	SDPU	Setup Cmd	SETUP MEASUREMENT	0
957	0027	0307	immediate		39	ICU	Direct Cmd	DISABLE BCPS	0
958	0014	200F	immediate		20	SDPU		START MEASUREMENT	1218
959	000E	1022	immediate		14	PMTC		START MEASUREMENT	0
960	0038	0317	immediate		56	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA ON	0
961	0008	0315	immediate		8	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA ON	0
962	0008	032C	immediate		8	ICU	Direct Cmd	COND ENABLE BCPS	0
963	001C	0329	immediate		28	ICU	Direct Cmd	SET CHECK STATE STATE	0
964	0008	0300	immediate		8	ICU	Direct Cmd	NOP	0
965	8000	0322	in parameter pool	WM	WM	ICU	Direct Cmd	SET CHECK STATE TRANS	0
966	0008	0318	immediate		8	ICU	Direct Cmd	PMTC CYCLIC ANCILLARY DATA OFF	0
967	003C	0316	immediate		60	ICU	Direct Cmd	SDPU CYCLIC ANCILLARY DATA OFF	0
968	0021	0300	immediate		33	ICU	Direct Cmd	NOP	0
969	8001	0328	in parameter pool	WSR	WSR	ICU	Direct Cmd	SET CHECK STATE IDLE	0
970	0008	03FF	immediate		8	ICU	Direct Cmd	TERMINATE RTCS	0
971	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
972	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
973	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
974	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
975	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
976	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
977	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
978	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
979	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
980	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
981	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
982	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
983	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
984	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
985	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
986	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
987	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
988	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
989	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
990	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
991	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
992	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
993	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
994	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
995	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
996	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
997	0000	03EE	immediate		0	ICU	Direct Cmd	TRIGGER CA	SPARE
997	0000	03EE			0	ICU	Direct Cmd	TRIGGER CA	SPARE
999	0000	03EE	immediate immediate		0	ICU	Direct Cmd	TRIGGER_CA	SPARE
1000	0000	03EE			0	ICU		TRIGGER CA	SPARE
1000	0000	UDEE	immediate		V	T ICO	Direct_Cmd	TUTOOEV ON	DIAKE



8.4.2 RTCS Waits Table

This table holds the 'WAIT' parameters in the ICU, which may be used instead of a delta time within a RTCS

Table Template:

MCMD: SET RTCS WAITS (IOM Reference A6.44)

Columns:

WAIT Description: gives the abbreviated name of the WAIT parameter WAIT Parameter HEX: specifies the HEX value of the parameter in ct WAIT Parameter DEC: specifies the DEC value of the parameter in ct

WAIT ID HEX: specifies the HEX name of the WAIT as used in the RTCS pool

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

DCR/OCR	Issue date	issued by	Title
none			



Wait Description	Wait parameter HEX	Wait parameter DEC
WSH0	001C2000	1843200
WSH1	002A3000	2764800
WSH2	01518000	22118400
WSD	02BF2000	46080000
WRH1	002A3000	2764800
WRH2	01518000	22118400
WSP	0002D000	184320
W_SPARE_1	00000000	0
W_SPARE_2	00000000	0
W_SPARE_3	00000000	0
	see State	see State
VV 1V1	Duration Table	Duration Table
WSR	see State	see State
210 44	Duration Table	Duration Table

Table 1 of 1

Wait Description	Wait ID HEX
WSH0	8002
WSH1	8003
WSH2	8004
WSD	8005
WRH1	8006
WRH2	8007
WSP	8008
W_SPARE_1	8009
W_SPARE_2	800A
W_SPARE_3	800B
WM	8000
WSR	8001





8.4.3 RESET Index Table

This table contains the START indices for the RTCS used for the RESET commanding depending on the current mode of the ICU. There is only one table of this class.

Table Template:

MCMD: SET RESET INDEX TABLE (IOM Reference A6.42)

Columns:

Column 1: gives the name of the current mode

Start index/fault ID

HEX gives the HEX value of the START index of the RTCS to be applied for the

transition

ALPHAN gives the abbreviated name of the RTCS to be applied for the transition DEC

gives the DEC value of the START index of the RTCS to be applied for the

transition

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

DCR/OCR	Issue date	issued by	Title
none			



RESET_INDEX_TABLE

Table 1 of 1

		Start Index / Fault ID	
	HEX	ALPHAN	DEC
STANDBY/REFUSE-E	0065	GTO_STB	101
STANDBY/REFUSE-I	0065	GTO_STB	101
HEATER/ REFUSE	012D	HRF_HTR	301



8.4.4 Mode_Mode_Matrix

This table holds the information specifying of a mode switching request is permitted depending on the current mode resp. the transition to a mode the ICU is in at time of receiving this request. There exist 8 tables of this class.

Table Template:

MCMD: SET MODE_MODE MATRIX (IOM Reference A6.39)

<u>Header line</u>: every 4 columns the information for each one of the request types is repeated.

HEX: request type ID HEX

Alphan:alphanumeric name of request type

Columns:

Column 1: names the Current Mode resp. the Transition to a Mode HEX sub-column 1 specifies if the mode switching request is permitted (0/1)

HEX sub-column 2 specifies the HEX value of the START entry of the RTCS to be used

Alphan sub-column 1 repeats as word if the mode switching request is permitted

Alphan sub-column 2 gives the name of the RTCS to be used resp. in case the request is not permitted

the fault ID for the CA to be applied

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

DCR/OCR	Issue date	issued by	Title
none			



	AHH	_ 	AT PHAN	YH.	AT.I	AI.PHAN	YH.	Δī	AT.PHAN	AHH	_	AI.PHAN	Ath		AT.PHAN	VHH.	_ -	MAHGIN	VH.	Δī	AT.PHAN	Ä	14	MAHAI
	9	STANDI	STANDBY/REFUSE- E		STANDB!	STANDBY/REFUSE-I	В	HEATE	HEATER/ REFUSE	C	SI	STANDBY	D	н	HEATER	E	DECON	DECONTAMINATIO N	ч	ı	DLE	10		TIMELINE
		Allowed	Start Index / Fault ID		Allowed	Start Index / Fault ID		Allowed	Start Index / Fault ID		Allowed	Start Index / Fault ID		Allowed	Start Index / Fault ID		Allowed	Start Index / Fault ID		Allowed	Start Index / Fault ID		Allowed	Start Index / Fault ID
Transition to Mode R/W-Reset	0 0161	No	353 0	0162	NO	354	0 0163	NO	355	0 0164	NO	356	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode R/W-Reset	0 0161	NO	353 0	0162	NO	354	0 0163	NO	355	1 001A	YES	RST_STB	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Transition to 2) STANDBY/RBFUNE-B	0 0161	No	353 0	0162	NO	354	0 0163	NO	355	0 0164	NO	356	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode 1) STANDBY/RBFUSB-B	1 0001	YES	NOP_RTCS 0	0162	NO	354	0 0163	ON	355	0 0164	NO	356	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	ON	360
Transition to 2) STANDBY/REFUSE-I	1 004C	YES	GTO_SRE 0	0162	NO	354	0 0163	ON	355	0 0164	NO	356	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	ON	360
Current Mode 1) STANDBY/REFUSE-I	1 004C	YES	GTO_SRE 1	0001	YES	NOP_RTCS	0 0163	NO	355	0 0164	NO	356	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Transition to HEATER/ REFUSE	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	0 0163	NO	355	1 0033	YES	GTO_SRI	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode HEATER/ REFUNE	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	1 0001	YES	NOP_RTCS 1	1 0033	YES	GTO_SRI	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Transition to STANDBY	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	0 0163	NO	355	0 0164	NO	356	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode STANDBY	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	0 0163	NO	355	1 0065	YES	GTO_STB	1 0097	YES	STB_HTR	1 007E	YES	STB_DEC	0 0167	NO	359 0	0168	NO	360
Transition to HEATER	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	0 0163	NO	355	1 0065	YES	GTO_STB	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode HEATER	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	1 00FB	YES	GTO_HRF	1 0065	YES	GTO_STB	1 00E2	YES	UPD_ATC	0 0166	NO	358	0 0167	NO	359 1	0191	YES	STR_TML
Transition to DECONTAMINATION	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	0 0163	NO	355	1 0065	YES	GTO_STB	0 0165	NO	357	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode DECONTAMINATION	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	0 0163	NO	355	1 0065	YES	GTO_STB	0 0165	NO	357	1 0001	YES	NOP_RTCS	0 0167	NO	359 0	0168	NO	360
Transition to IDLE	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	1 00FB	YES	GTO_HRF	1 0065	YES	GTO_STB	1 0114	YES	MSR_HTR	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode IDLE	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	1 00FB	YES	GTO_HRF	1 0065	YES	GTO_STB	1 0114	YES	MSR_HTR	0 0166	NO	358	0 0167	NO	359 1	0191	YES	STR_TML
Transition to TIMELINE	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	1 00FB	YES	GTO_HRF	1 0065	YES	GTO_STB	1 0114	YES	MSR_HTR	0 0166	NO	358	0 0167	NO	359 0	0168	NO	360
Current Mode TIMELINE	1 004C	YES	GTO_SRE 1	0033	YES	GTO_SRI	1 00FB	YES	GTO_HRF	1 0065	YES	GTO_STB	1 0114	YES	MSR_HTR	0 0166	NO	358	1 0001	YES	NOP_RTCS 0	0168	NO	360

MODE_MODE_MATRIX Table 1 of 1



8.4.5 AUX_MCMD_Mode_Matrix

This table holds the information specifying of a nonmode switching (auxiliary) MCMD is permitted depending on the current mode resp. the transition to a mode the ICU is in at time of receiving this MCMD. In case the MCMD is not permitted the fault ID for the CA is specified. There exist 66 tables of this class.

Table Template:

MCMD: SET AUX_MCMD_MODE MATRIX (IOM Reference A6.28)

Header line: every 4 columns the information for each one of the MCMDs listed is repeated.

Columns:

Column 1: names the Current Mode resp. the Transition to a Mode HEX Allowed: specifies if the mode switching request is permitted (0/1)

HEX Fault ID: if allowed, specifies the HEX value of the START entry of the RTCS to be used

if not allowed, specifies the HEX value of the fault ID for the CA to be applied

DEC Allowed: same as HEX Allowed

DEC Fault ID: if allowed, specifies the DEC value of the START entry of the RTCS to be used if not allowed, specifies the DEC value of the fault ID for the CA to be applied

At time of issue the following DCR's or OCR's are affecting the table content of the ICU EEPROM such, that the consequent modifications are subject to RAM-updates via fixed MCMD.

DCR/OCR	Issue date	issued by	Title
DR-SCIA_114DO/97	01.12.97		ICU synchronisation in STANDBY and STANDBY/REFUSE only



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EF	CPR(PM -	- ICU	J_SV	V	V.	2.03												_		
	Current Mode TIMELINE	Transition to	Current Mode IDLE	Transition to DLE	Current Mode DECONTAMINATION	Transition to DECONTAMINATION	Current Mode HEATER	Transition to HEATER	Current Mode STANDBY	Transition to STANDBY	Current Mode HEATER/REFUSE	Transition to HEATER/ REFUSE	Current Mode 1) STANDBY/REFUSE-I	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE- E	Transition to 2) STANDBY/REFUSE-E		MCMD ID			AUX MCMD MODE MATRIX
	1			-				-		-		-	1			宀	Allowed	2	XHX	SET	١.
	000	00	000	000	000	000	000	000	000	000	000	000	000	000	000	000	Fault ID		×	SET_MONITORI NG	Table 1 of 7
	1			-						-			1	-			Allowed		DEC	βį	e 1of
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID		G) PRI	7
	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	Allowed		Ħ	H]
	000	8	000	000	000	000	000	00	000	00	000	000	000	000	000	000	Fault ID	02	XEE		
	1												1				Allowed		ы	INHIBIT_MONIT	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	2	DEC		
	1			-													Allowed		171		1
	000	8	000	000	00	00	000	00	000	000	000	000	000	000	000	000	Fault ID	03	XEE	ENABLE_MONIT	
) 1	1	1				1		1		1	1	1	11	11	1	Allowed		Н	ORING	
	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	Fault ID	w	DEC		
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AUX_MCMD_MODE_MATRIX

Table 2 of 7



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	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID		С	
	0	-			-								-				Allowed	24	XEX	SET_CLU
	124	00	000	00	8	000	000	00	8	000	000	000	000	8	000	000	Fault ID	4	×	SET_CLU
	0					1	1			1		-	1		1	1	Allowed	1.0	D	JSTERS_
	292	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	36	DEC	STERS_
	0												1				Allowed		н	띪
	125	00	00	000	000	000	000	000	8	00	000	000	000	000	000	000	Fault ID	25	Ä	4.0 1.0
	5 0					1	1			1			1		1	1	Allowed		\vdash	CO_ADI G TABLE
	293	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	37	DEC	
	3 0			ш				ш		ш		ш			<u>,_</u>		Allowed			- Z
					0	9								0			Fault ID	26	X	ET_EXPOSURE STATE_PARAM
	126	8	000	000	000	000	000	000	000	000	000	8	000	000	000	000			Ë	E X
	0 2	-			-	_	1					1	1				Allowed	38	DEC	osu.
	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID		C	₹ R
	0						1 (1 (Allowed	27	X	G SET
	127	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	Fault ID	~	×	₩ ₩
	0	-			-	-	1					-					Allowed	39	DEC	
	295	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	9	g	SET_DETECTOR
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	2	H	SH
	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	Fault ID	28	ĦX	PA-
	0	ō	0	ō	0	0	0	ō	ō	ō	ō	0	0	0	ō	0	Allowed	,	D	SET CO ADDIN SET EXPOSURE SET DETECTOR SET FUNCTION G TABLE STATE PARAM COMMAND W PARAMS
	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296	Fault ID	40	DEC	
	- 01				1~,	, J					- 01	_ O.	- 01	101		, ·			_	_ 4

AUX_MCMD_MODE_MATRIX

Table 4 of 7



AUX_MCMD_MODE_MATRIX

Table 5 of 7

			ı				ı			ı									J	ΕĮ
Current Mode TIMELINE	Transition to	Current Mode DLE	Transition to DLE	Current Mode DECONTAMINATION	Transition to DECONTAMINATION	Current Mode HEATER	Transition to HEATER	Current Mode STANDBY	Transition to STANDBY	Current Mode HEATER/ REFUSE	Transition to HEATER/ REFUSE	Current Mode 1) STANDBY/REFUSE-I	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE- E	Transition to 2) STANDBY/REFUSE-E		MCMD ID			
1	1	1	1	-		1	0	1	1	1	1	1	1	1	1	Allowed	N.	H	X SF1	277
000	000	000	000	000	8	00	129	000	00	000	000	000	000	000	000	Fault ID	29	XEE	MS CONTROL	á
н-	1	ш	Н	1	_	ш	0			Н	1	1	1	1	1	Allowed	7	IJ.		, TTF
0	0	0	0	0	0	0	297	0	0	0	0	0	0	0	0	Fault ID	41	DEC	OT IN	Á
0	0		0	-	0		0		0		0	1	0	1	0	Allowed	N	н		٦
12A	12A	000	12A	000	12A	000	12A	000	12A	000	12A	000	12A	000	12A	Fault ID	2A	XEH	SET_RTCS	
0	0	-	0	-	0	-	0		0		0	-1	0	1	0	Allowed	,	ы	RIC	
298	298	0	298	0	298	0	298	0	298	0	298	0	298	0	298	Fault ID	42	DEC	ξā	
0	0		0		0		0		0		0		0	1	0	Allowed		:r:	ζ/, 	3
12B	12B	00	12B	000	12B	00	12B	000	12B	000	12B	000	12B	000	12B	Fault ID	2B	X	TS TS WAL	ą
0	0		0		0		0		0		0	1	0	1	0	Allowed			Z Z	200
299	299	0	299	0	299	0	299	0	299	0	299	0	299	0	299	Fault ID	43	DEC	× A	7 F
1	0		1		1		1		1		1		1	1	9 1	Allowed		н	_	
000	12C	00	000	000	000	00	000	000	000	000	000	000	000	000	000	Fault ID	2C	X	SIC N	άl
1	0	0	0	1	0	0	0	1	1	0	0 1	0 1	0	0 1	0	Allowed			PRO	2
0	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	4	DEC	BASIC PROFILE	á
	1						0							1	1	Allowed				
000	00	00	000	000	000	00	12D	000	00	000	000	000	000	000	000	Fault ID	2D	X	CONSTANTS	άl
1	0 1	1	0 1	1	0	1	0	1	1	0 1	0	0 1	0	0 1	0	Allowed		Н	STA	2
-	0	0	0	0	0	0	301	0	0	0	0	0	0	0	0	Fault ID	25	DEC		É
							1 0							-1	1	Allowed			_	_
000	000	000	000	000	000	000	12E	000	000	000	000	000	000	000	000	Fault ID	2E	X	CONTROL	4
) 1	0	0	0	ŏ	ŏ	0	(H)	0 1	0 1	0	0	0 1	0)0 1	0 1	Allowed			CONTROL	١
-	-	0	0	0	0	0	302	-	-	0	0		0	0	0		4	DEC		15
			-		_	1)2 1		1	-	1		1		1	Fault ID		L	'	_
1 00	0 12F	2	1 000	000	1 000	000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 00	1 000	Allowed	2F	X	REL PROFILE	1
000 1	0 F 0	000 1	00	1	1	1	1	1	1	00	00 1	00 1	0	000 1	00	Fault ID Allowed		Н	PRO	\$
0	303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	47	DEC	HE	Ë
0	ن ا			_											1	Allowed			_	
	000	000	000	000	000		000		000				000		000	Fault ID	30	X	SEI_SCANNEK_ STATE PARAMS	1
130 0	0	0	0	0	0	000 1	0	000	0	000 1	000 1	000 1	0	000 1	00	Allowed		Н	PA.	Š
304	0	0	0	0	0	0	0	0	0	0	0	- 0	0	0	0		48	DEC	RAN	Ë
1				_	_											Fault ID			_	_
1 000	2	2	2	9	9	2	0 13	2	2	2	1 00	1 00	9	1 00	1 00	Allowed	31	X	≽ I	1
1	000 1	000 1	000 1	000	000 1	000 1	131 0	000 1	000 1	000 1	000 1	000 1	000 1	000 1	000 1	Fault ID Allowed			ARAMS	6
-	0	0	0	0	0	0	305	0	0	0	0	- 0	0	0	0		49	DEC		1
	1	1	1	<u> </u>		1	25	1	1	1	1	0 1	1	0 1	0 1	Fault ID				_
0 13				1 000	1 000								1 000		1 000	Allowed	32	X		1
132 0	000 1	000	000 1	00	00	000 1	000 1	000 1	000	000 1	000 1	000 1	00	000 1	00 1	Fault ID Allowed	\vdash	Н	EX TABLE IND	1
306	0	0	0	0	0	0	0	0	0	0	0	1 0	0	1 0	0		50	DEC	F. F. F.	1 5
R	\bot		L	\Box	\Box				\perp		L)			\Box	Fault ID			<u>L</u> É	<u> </u>





ΕI	EPRO	OM -	- ICU	J_SV	V	V.	2.03													
	Current Mode TIMELINE	Transition to	Current Mode DLE	Transition to DLE	Current Mode DECONTAMINATION	Transition to DECONTAMINATION	Current Mode HEATER	Transition to HEATER	Current Mode STANDBY	Transition to STANDBY	Current Mode HEATER/ REFUSE	Transition to HEATER/ REFUSE	Current Mode 1) STANDBY/REFUSE-I	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE- E	Transition to 2) STANDBY/REFUSE-E		MCMD ID		
	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Allowed	نیا	H	RA.
	133	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	Fault ID	33	XEH	SET STATE DU SET STATE RTC
	0					1	-										Allowed			T. I
	307	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	5	DEC	E A
			-														Allowed		Н	ro sq
	0 1				-	0										\perp		34	XEH	
	134	000	00	000	000	000	000	00	00	00	000	000	000	000	8	000	Fault ID		$\hat{}$	DEX
	0	-															Allowed	52	DEC	SET_STATE_RTC
	308	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	2	ධි	E SIG
	0	0			_	1						1	_			1	Allowed		н	H
	135	135	00	000	000	000	000	00	00	000	000	000	000	000	00	000	Fault ID	35	X	i i
	5 0	0	1	1	11	1	0 1	11	1	1	1	0	1	1	1	1	Allowed			SET_TIMELINE
	309	309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	53	DEC	
					_	_								_						
	0 1	0	1	1 0	1 0	1 0	1 C	1 0	1	1	1 0	1 0	1 0	1 0	1 0	1 0	Allowed	36	XH	SET_TIMELINE_ INDEX_TABLE
	136	136	8	000	000	000	000	8	8	8	000	000	000	000	8	000	Fault ID		^	
	0	0			-		1		-	-							Allowed	54	DEC	TAB
	310	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID		ä	면널
	0	0	-	0	1	0		0	1	0	1	0	1	0	-	0	Allowed		H	εā
	137	137	000	137	000	137	000	137	000	137	000	137	000	137	000	137	Fault ID	37	XEE	TAR
	0	0	-1	0		0	1	0		0	-1	0	1	0	-1	0	Allowed			START_RTCS
	311	311	0	311	0	311	0	311	0	311	0	311	0	311	0	311	Fault ID	55	DEC	ICS
	1	1			_			1	-	1	-								H	72
	1 0		0	1 0	-	0						1	1 0	-	0	0	Allowed	38	X	SET_RES
	000	00	8	000	000	000	000	8	8	8	000	000	00	00	8	000	Fault ID		$^{\sim}$	I_RES
		-			-	-			-			-	-	-		-	Allowed	56	DEC	ABLE ND
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	0	ä	#
	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	Allowed	3	田田	DU SE
	000	00	00	000	8	000	000	139	000	00	000	000	000	000	000	000	Fault ID	39	XEE	EB
	1	-			1	1	1	0	-1			1	1	1		1	Allowed		Ы	
	0	0	0	0	0	0	0	313	0	0	0	0	0	0	0	0	Fault ID	57	DEC	SET_PMTC_MO
								<u></u>									Allowed		н	υä
	000	000	00	000	000	000	000	00	00	00	000	000	000	000	000	000	Fault ID	3A	X	SET_AUX_MCM D_MODE_MATR
	0 1	0 1	0	0 1	0	0	0 1	0	0	0	0	0 1	0 1	0	0	0	Allowed		Н	
														\vdash		Н		58	DEC	M 'M
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID		12	田宮
	1 0	1	-		-		1 0	-	-	-	-	1	1		1		Allowed	3B	XEH	티틴
	000	000	000	000	000	000	000	000	000	00	000	000	000	000	000	000	Fault ID		×	SET PMTC MO SET AUX MCM SET MODE MO DULE ENABLE D MODE MATR DE MATRIX
	1						1			-					-		Allowed	59	DEC	隐周
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	ľ	S	×
	1	-				1	1					-	-	-	-	1	Allowed	ເມ	H	
	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	Fault ID	3C	XEE	REC
	1	-		1			1			1		1	1			1	Allowed	_	Н	DRECT_CMD
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	8	DEC	🖥
	1	I	I	1	1	1	l	I	I	I	1	1	1	1	1	ıl		1		

AUX_MCMD_MODE_MATRIX

Table 6 of 7

AUX_MCMD_MODE_MATRIX

Table 7 of 7



EEPROM – ICU_SW V. 2.0

																			EEI
Current Mode TIMELINE	Transition to	Current Mode DLE	Transition to DLE	Current Mode DECONTAMINATION	Transition to DECONTAMINATION	Current Mode HEATER	Transition to HEATER	Current Mode STANDBY	Transition to STANDBY	Current Mode HEATER/ REFUSE	Transition to HEATER/ REFUSE	Current Mode 1) STANDBY/REFUSE-I	Transition to 2) STANDBY/REFUSE-I	Current Mode 1) STANDBY/REFUSE- E	Transition to 2) STANDBY/REFUSE-E		MCMD ID		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	u	出	EXI
13D	13D	13D	13D	13D	13D	13D	13D	13D	13D	13D	13D	13D	13D	13D	13D	Fault ID	3D	HEX	EXEC_PRIMITIV E_CMD
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	61	DEC	
317	317	317	317	317	317	317	317	317	317	317	317	317	317	317	317	Fault ID	_	ä	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0	Allowed	3E	XEE	ENA
13E	13E	13E	13E	13E	13E	13E	13E	13E	13E	13E	13E	13E	13E	13E	13E	Fault ID	(-,	×	BLE_T PORT
0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0 3	Allowed	62	DEC	ENABLE_TEST_ PORT
318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	Fault ID		Ω	l I
0 1	0	0	0	0	0	0	0 1	0	0	0	0	0 1	0	0 1	0	Allowed	3F	X	TRI
13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	13F 0	Fault ID Allowed		H	TRIGGER_CA
319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	Fault ID	63	DEC	CA
9 1	9 1	9 1	9 1	9 1	9 1	9 1	0	9 1	9 1	9 1	9 1	9 1	9 1	9 1	9 1	Allowed			
000	000	000	000	000	000	000	140	000	000	000	000	000	000	000	000	Fault ID	40	X	ET_S
1	0	1	0	1	0	1	0	0	0	1	0 1	0 1	0	0 1	0	Allowed		H	SELF_TE
0	0	0	0	0	0	0	320	0	0	0	0	0	0	0	0	Fault ID	2	DEC	SET_SELF_TEST _PARAMS
0	0	0	0	0	0		0		0	0	0	0	0	0	0	Allowed	l.	Н	
141	141	141	141	141	141	00	141	000	141	141	141	141	141	141	141	Fault ID	41	X	ESET
0	0	0	0	0	0		0		0	0	0	0	0	0	0	Allowed		Ų.	RESET_TABLE
321	321	321	321	321	321	0	321	0	321	321	321	321	321	321	321	Fault ID	65	DEC	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	4	田	SET_SERVER_A LLOCATION_TA BLE
142	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142	Fault ID	42	HEX	C_SEI OCAI
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	66	DEC	RVER
322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	Fault ID	0,	G	TA TA
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	43	XEE	
000	8	8	000	000	8	8	8	8	00	000	8	000	000	000	00	Fault ID		×	,
0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0 (0	Allowed	67	DEC	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	Fault ID Allowed			
0 000	000	000	000	000	000	000	000	000	000	000	000	0 000	000	000	000	Fault ID	4	X	
ŏ	0	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	0	0	ŏ	0	ŏ	ŏ	ŏ	Allowed		H	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	68	DEC	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed		H	
000	000	000	000	000	000	00	000	000	000	000	000	000	000	000	000	Fault ID	45	XEEX	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	٥	Ď.	'
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	69	DEC	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	46	XEH	
000	8	8	8	000	8	8	8	8	8	8	8	000	00	000	8	Fault ID	0	×	,
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Allowed	70	DEC	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Fault ID	ľ	O	ı I



A Annex

A.1 Support Tables

The tables presented in chapters 5 and 6 are in a format as required by the instrument from a systems point of view (ground and space segment). However, to clearly understand the properties of individual states in some cases we feel it necessary to alter or even supplement such state parameter information.

In Annex 1 we list several tables serving this purpose. When any of these tables reflects parameters, which were called up already in the earlier tables but in differing units or context, then these parameters are given in the following tables always in the up to date value and not in the EEPROM value. Insofar we present only parameters corresponding to Table_version 21.004.

A.1.1 Pixel Exposure Time Parameter (sec)

This table gives the pixel exposure times for all states, both for the low and the high data rate, in <u>seconds</u>. It is equivalent to the Pixel Exposure Time parameter table in chapter 5.1.2 where the PETs are listed in Engineering Units (EU).

Table Template:

Columns:

State ID: identifier of state

Data Rate: data rate for which the exposure times apply; the Pixel Exposure Time

(PET) is specified separately for high and low data rate

Channel 1a - Channel 8: PET in SCIAMACHY measurement channels (including the separation

of the first two channels into virtual channels) in seconds

Note that the indices given on the right hand side of the table (e.g. N1-N8, L1-L7, etc.) define individual PET sets. Their nomenclature starting with state 46 is self explanatory. "N" stands for "Nadir" and "L" for "Limb". A summary of these PET sets and their connection to coadding tables applied is found in the next chapter (A1.218



$Final\text{-}Flight_Vers.FF10$

		or.		l 。			I	I			I	I _
_	Rate	Channel 1a	Channel 1b	Channel 2b	Channel 2a	<u></u>	4	<u>~</u>	9	<u>~</u>	<u></u>	corresponding
te –	a CC	ũ,	Ĕ	Ĕ	Ĕ	Channel	Channel	Channel	Channel	Channel 7	Channel	PET/Coadd-table
State ID	Data	Chi	ř.	ਤੌ	క్	Ch.	క్	క్	Ċ.	CH.	క్	
1	Low	10,00000	10,00000	10,00000	10,00000	1,00000	1,00000	10,00000	5,00000	1,00000	1,00000	N1
2	High	10,00000 10,00000	10,00000 1,00000	10,00000	10,00000	1,00000	1,00000	1,00000	5,00000	1,00000	1,00000	N1 N2
	Low High	10,00000	1,00000	1,00000	1,00000	1,00000 1,00000	1,00000	1,00000	0,50000 0,50000	1,00000 1,00000	1.00000	N2 N2
3	Low	5,00000	1,00000	1,00000	1,00000	0,25000	0,25000	0,50000	0,25000	1,00000	1,00000	N3
	High	5,00000	1,00000	1,00000	1,00000	0,25000	0,25000	0,50000	0,25000	1,00000	1,00000	N3
4	Low	1,00000	1,00000	0,50000	1,00000	0,25000	0,12500	0,50000	0,25000	1,00000	1,00000	N4
-5	High Low	1,00000 1,00000	1,00000 0,50000	0,50000 0,50000	1,00000 0,50000	0,25000 0,12500	0,12500 0,12500	0,50000 0,25000	0,25000 0,12500	1,00000 1,00000	1,00000	N4 N5
5	High	1,00000	0,50000	0,50000	0.50000	0,12500	0,12500	0,25000	0,12500	1,00000	1,00000	N5
6	Low	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,25000	0,12500	0,50000	0,50000	N6
	High	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,25000	0,12500	0,50000	0,50000	N6
7	Low	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,12500	0,50000	0,50000	N7
8	High Low	1,00000 5,00000	0,25000 5,00000	0,25000 1,00000	0,25000 1,00000	0,06250 1,00000	0,06250 1,00000	0,12500 1,00000	0,12500 5,00000	0,50000 1,00000	1,00000	N7 Dark Current 5
	High	5,00000	5,00000	1,00000	1,00000	1,00000	1,00000	1,00000	5,00000	1,00000	1,00000	Dark Current 5
9	Low	10,00000	10,00000	10,00000	10,00000	1,00000	1,00000	10,00000	5,00000	1,00000	1,00000	N1
	High	10,00000	10,00000	10,00000	10,00000	1,00000	1,00000	10,00000	5,00000	1,00000	1,00000	N1
10	Low	10,00000	1,000000	1,000000	1,00000	1,000000	1,00000	1,00000	0,50000	1,000000	1,000000	N2
11	High Low	10,00000 5,00000	1,00000 1,00000	1,00000 1,00000	1,00000 1,00000	1,00000 0,25000	1,00000 0,25000	1,00000 0,50000	0,50000 0,25000	1,00000 1.00000	1,00000	N2 N3
- ' '	High	5,00000	1,00000	1,00000	1,00000	0,25000	0,25000	0,50000	0,25000	1,00000	1,00000	N3
12	Low	1,00000	1,00000	0,50000	1,00000	0,25000	0,12500	0,50000	0,25000	1,00000	1,00000	N4
	High	1,00000	1,00000	0,50000	1,00000	0,25000	0,12500	0,50000	0,25000	1,00000	1,00000	N4
13	Low	1,00000	0,50000	0,50000	0,50000	0,12500	0,12500	0,25000	0,12500	1,00000	1,00000	N5
14	High	1,00000 1,00000	0,50000 0,25000	0,50000 0,25000	0,50000	0,12500 0,06250	0,12500 0,06250	0,25000 0.25000	0,12500 0,12500	1,00000 0,50000	1,00000 0,50000	N5 N6
14	Low High	1,00000	0,25000	0,25000	0,25000 0,25000	0,06250	0,06250	0,25000	0,12500	0,50000	0,50000	N6
15	Low	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,12500	0,50000	0,50000	N7
	High	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,12500	0,50000	0,50000	N7
16	Low	4,00000	4,00000	4,00000	4,00000	0,12500	0,03125	0,03125	0,00720	0,03125	0,06250	NDF Monitoring
17	High Low	4,00000 0,25000	4,00000 0,25000	4,00000 0,25000	4,00000 0,25000	0,12500 0,06250	0,03125 0,06250	0,03125 0,12500	0,00720 0,06250	0,03125 0,25000	0,06250	NDF Monitoring Sun_ASM_diffuser
- 17	High	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun_ASM_diffuser
18	Low	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun ASM diffuser
	High	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun_ASM_diffuser
19	Low	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun_ASM_diffuser
20	High	0,25000 0,25000	0,25000 0,25000	0,25000 0,25000	0,25000 0,25000	0,06250 0,06250	0,06250 0,06250	0,12500 0,12500	0,06250 0,06250	0,25000 0,25000	0,50000	Sun_ASM_diffuser Sun_ASM_diffuser
20	Low High	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun_ASM_diffuser
21	Low	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun_ASM_diffuser
	High	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun_ASM_diffuser
22	Low	0,25000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,06250	0,25000	0,50000	Sun_ASM_diffuser
23	High Low	0,25000 10,00000	0,25000 10.00000	0,25000 10,00000	0,25000 10,00000	0,06250 1,00000	0,06250 1,00000	0,12500 10.00000	0,06250 5,00000	0,25000 1,00000	0,50000 1,00000	Sun_ASM_diffuser N1
23	High	10,00000	10,00000	10,00000	10,00000	1,00000	1,00000	10,00000	5,00000	1,00000	1,00000	N1
24	Low	10,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	0,50000	1,00000	1,00000	N2
	High	10,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	0,50000	1,00000	1,00000	N2
25	Low	5,00000	1,000000	1,00000	1,00000	0,25000	0,25000	0,50000	0,25000	1,000000	1,00000	N3
26	High Low	5,00000 0,25000	1,00000 0,25000	1,00000 0,25000	1,00000 0.25000	0,25000 0,03125	0,25000 0,03125	0,50000 0,25000	0,25000 0,03125	1,00000 0,03125	1,00000 0,12500	N3 Dark Current 4
20	High	0,25000	0,25000	0,25000	0,25000	0,03125	0,03125	0,25000	0,03125	0,03125	0,12500	Dark Current 4
27	Low	1,50000	1,50000	1,50000	1,50000	0,75000	0,75000	1,50000	1,50000	1,50000	1,50000	L6
	High	1,50000	1,50000	1,50000	1,50000	0,75000	0,75000	1,50000	1,50000	1,50000	1,50000	L6
28	Low	1,50000	1,50000	0,75000	1,50000	0,37500	0,37500	0,37500	0,37500	1,50000	1,50000	L1
29	High Low	1,50000 1,50000	1,50000 1,50000	0,75000 0,75000	1,50000 1,50000	0,37500 0,06250	0,37500 0,06250	0,37500 0,18750	0,37500 0,06250	1,50000 1,50000	1,50000 1,50000	L1 L2
23	High	1,50000	1,50000	0,75000	1,50000	0,06250	0,06250	0,18750	0,06250	1,50000	1,50000	12
30	Low	1,50000	0,37500	0,37500	0,37500	0,06250	0,06250	0,37500	0,06250	0,37500	0,37500	L3
	High	1,50000	0,37500	0,37500	0,37500	0,06250	0,06250	0,37500	0,06250	0,37500	0,37500	L3
31	Low	1,50000	0,37500	0,37500	0,37500	0,18750	0,18750	0,37500	0,18750	0,37500	0,37500	L4
32	High Low	1,50000 1,50000	0,37500 0,37500	0,37500 0,37500	0,37500 0,37500	0,18750 0,18750	0,18750 0,18750	0,37500 0,37500	0,18750 0,18750	0,37500 0,37500	0,37500 0,37500	L4 L5
JZ	High	1,50000	0,37500	0,37500	0,37500	0,18750	0,18750	0,37500	0,18750	0,37500	0,37500	L5
33	Low	1,50000	1,50000	1,50000	1,50000	0,75000	0,75000	1,50000	1,50000	1,50000	1,50000	16
	High	1,50000	1,50000	1,50000	1,50000	0,75000	0,75000	1,50000	1,50000	1,50000	1,50000	L6
34	Low	1,50000	0,37500	0,37500	0,37500	0,18750	0,18750	0,37500	0,18750	0,37500	0,37500	L4
35	High Low	1,50000 1,50000	0,37500 1,50000	0,37500 0,75000	0,37500 1,50000	0,18750 0,37500	0,18750 0,37500	0,37500 0,37500	0,18750 0,37500	0,37500 1,50000	0,37500 1,50000	L4 L1
JÜ	High	1,50000	1,50000	0,75000	1,50000	0,37500	0,37500	0,37500	0,37500	1,50000	1,50000	L1 L1
						,		,				-





Fin	al-Fli	ight_Ver	s.FF10									
State ID	Data Rate	Channel 1a	Channel 1b	Channel 2b	Channel 2a	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8	corresponding PET/Coadd-table
36	Low	1,50000	1,50000	0,75000	1,50000	0,06250	0,06250	0,18750	0,06250	1,50000	1,50000	L2
	High	1,50000	1,50000	0,75000	1,50000	0,06250	0,06250	0,18750	0,06250	1,50000	1,50000	L2
37	Low High	1,50000 1,50000	0,37500 0,37500	0,37500 0,37500	0,37500 0,37500	0,06250 0,06250	0,06250 0,06250	0,37500 0,37500	0,06250 0,06250	0,37500 0,37500	0,37500 0,37500	L3 L3
38	Low	1,00000	0,37300	0,375000	0,37500	0,06250	0,06250	0,37500	0,00230	0,50000	0,50000	N7
	High	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,12500	0,50000	0,50000	N7
39	Low	2,00000	2,00000	0,25000	0,25000	0,12500	0,03125	0,03125	0,00720	0,00360	0,00720	WLS
40	High Low	2,00000 1,50000	2,00000 1,50000	0,25000 1,50000	0,25000 1,50000	0,12500 0,75000	0,03125 0,75000	0,03125 1,50000	0,00720 1,50000	0,00360 1,50000	0,00720 1,50000	WLS L6
40	High	1,50000	1,50000	1,50000	1,50000	0,75000	0,75000	1,50000	1,50000	1,50000	1,50000	L6
41	Low	1,50000	0,37500	0,37500	0,37500	0,18750	0,18750	0,37500	0,18750	0,37500	0,37500	L5
- 10	High	1,50000	0,37500	0,37500	0,37500	0,18750	0,18750	0,37500	0,18750	0,37500	0,37500	L5
42	Low High	1,00000 1,00000	1,00000	0,50000 0,50000	1,00000 1,00000	0,25000 0,25000	0,12500 0,12500	0,50000 0,50000	0,25000 0,25000	1,00000 1,00000	1,00000	N4 N4
43	Low	1,00000	0,50000	0,50000	0,50000	0,12500	0,12500	0,25000	0,12500	1,00000	1,00000	N5
	High	1,00000	0,50000	0,50000	0,50000	0,12500	0,12500	0,25000	0,12500	1,00000	1,00000	N5
44	Low	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,25000	0,12500	0,50000	0,50000	N6
45	High Low	1,00000 1,00000	0,25000 0,25000	0,25000 0,25000	0,25000 0,25000	0,06250 0,06250	0,06250 0,06250	0,25000 0,12500	0,12500 0,12500	0,50000 0,50000	0,50000	N6 N7
	High	1,00000	0,25000	0,25000	0,25000	0,06250	0,06250	0,12500	0,12500	0,50000	0,50000	N7
46	Low	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,12500	0,25000	0,06250	0,06250	Dark Current 1
47	High	0,06250	0,06250	0,06250 0,06250	0,06250 0,06250	0,06250	0,06250	0,12500	0,25000	0,06250	0,06250	Dark Current 1
47	Low High	0,06250 0,06250	0,06250 0,06250	0,06250	0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,03125 0,03125	0,03125 0,03125	0,06250	Sun Sun
48	Low	4,00000	4,00000	4,00000	4,00000	0,12500	0,03125	0,03125	0,00720	0,03125	0,06250	NDF Monitoring
	High	4,00000	4,00000	4,00000	4,00000	0,12500	0,03125	0,03125	0,00720	0,03125	0,06250	NDF Monitoring
49	Low High	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,03125 0,03125	0,03125 0,03125	0,06250	Sun Sun
50	Low	0,06250	0,06250	0,06250	0,08250	0,06250	0,06250	0,08250	0,03125	0,03125	0.12500	Sun_Fast_Sweep
	High	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	Sun_Fast_Sweep
51	Low	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,03125	0,03125	0,06250	Sun
52	High Low	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,03125	0,06250 0,03125	0,06250 0,03125	0,03125 0,03125	0,03125 0,06250	0,06250	Sun Sun_ESM_diffuser
52	High	0,06250	0,06250	0,06250	0,06250	0,03125	0,03125	0,03125	0,03125	0,06250	0,12500	Sun_ESM_diffuser
53	Low	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,03125	0,03125	0,06250	Sun
	High	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,03125	0,03125	0,06250	Sun
54	Low High	1,00000 1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000 1,00000	1,00000	Moon Moon
55	Low	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	Moon
	High	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	Moon
56	Low High	1,00000 1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	Moon
57	Low	1,00000	1.00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1.00000	Moon Moon
	High	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	1,00000	Moon
58	Low	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,03125	0,03125	0,06250	Sun
59	High Low	0,06250 4,00000	0,06250 4,00000	0,06250 2,00000	0,06250 2,00000	0,06250 0,12500	0,06250 0,03125	0,06250 0,25000	0,03125 0,25000	0,03125 1,00000	0,06250 1,00000	Sun SLS
33	High	4,00000	4,00000	2,00000	2,00000	0,12500	0,03125	0,25000	0,25000	1,00000	1,00000	SLS
60	Low	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	0,12500	Sun_Fast_Sweep
- 64	High		0,12500	0,12500	0,12500	0,12500	0,12500		0,12500			
61	Low High	2,00000 2,00000	2,00000	0,25000 0,25000	0,25000 0,25000	0,12500 0,12500	0,03125 0,03125	0,03125 0,03125	0,00720 0,00720	0,00360	0,00720	WLS WLS
62	Low	0,06250	0,06250	0,06250	0,06250	0,03125	0,03125	0,06250	0,03125	0,06250	0,12500	Sun_ESM_diffuser
	High	0,06250	0,06250	0,06250	0,06250	0,03125	0,03125	0,06250	0,03125	0,06250	0,12500	Sun_ESM_diffuser
63	Low High	1,00000 1,00000	1,00000	0,50000 0,50000	0,50000 0,50000	0,25000 0,25000	0,25000 0,25000	0,50000	0,50000	0,50000	0,50000	Dark Current 2 Dark Current 2
64	Low	0,06250	0,06250	0,06250	0,06250	0,25000	0,25000	0,50000 0,06250	0,03125	0,50000 0,06250	0,06250	Sun
	High	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,03125	0,06250	0,06250	Sun
65	Low	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	ADC Cal
66	High Low	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,06250	0,06250 0,03125	0,06250 0,06250	0,06250	ADC Cal Sun
00	High	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,06250	0,03125	0,06250	0,06250	Sun
67	Low	10,00000	10,00000	10,00000	10,00000	0,12500	0,12500	10,00000	0,12500	2,00000	2,00000	Dark Current 3
	High	10,00000	10,00000	10,000000	10,00000	0,12500	0,12500	10,000000	0,12500	2,00000	2,00000	Dark Current 3
68	Low High	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	0,12500 0,12500	Sun_Fast_Sweep Sun_Fast_Sweep
69	Low	40,00000	40,00000	40,00000	40,00000	20,00000	10,00000	40,00000	10,00000	2,00000	2,00000	SLS_diffuser
	High	40,00000	40,00000	40,00000	40,00000	20,00000	10,00000	40,00000	10,00000	2,00000	2,00000	SLS_diffuser
70	Low High	40,00000 40,00000	40,00000	40,00000	40,00000	10,00000	4,00000 4,00000	4,00000	1,00000	1,00000	2,00000	WLS_diffuser
	rngit	40,00000	1 40,00000	40,00000	40,00000	10,00000	I 4,00000	4,00000	1,00000	1,00000	2,00000	WLS_diffuser



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A.1.2 Integration Time

This table summarises the relation between PETs and Co-Adding factors for different measurement categories. The identifier of each Integration (PET*Co-Adding) table is used in several other support tables and in the state summary table in chapter 4.

Table Template:

Rows: alternating

Clusterindex: running index of the cluster in subsequent channel; in the electronic

pdf formats cluster indices are colour coded for the different channels

Integration Time (s): Pixel Exposure Time multiplied by the coadding factor applicable.

Co-Adding Factor applied corresponds to the nominally used data rate. For clusters in Hot Mode the effective integration time is given.



								rinai-i
Integration Time (a)	1							
Integration Time (s) Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1,5	1,5	1,5	1,5	1,5	1,5	1,5	0,75
Cluster Index	9	10	11	12	13	14	15	16
	0,75	1,5	1,5		0,375	0,375	0,375	
Integration Time				1,5				0,375
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,375	0,375	0,375	0,375	0,375	0,375	0,375	0,375
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,375	0,375	0,375	0,375	0,375	0,375	0,375	0,375
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
		_	_			_	_	_
				L1 table				
				LITABIO				
Integration Time (a)	2							
Integration Time (s)		_	_		-	_	-	
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1,5	1,5	1,5	1,5	1,5	1,5	1,5	0,75
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,75	1,5	1,5	1,5	1,5	1,5	0,375	1,5
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	1,5	1,5	1,5	0,375	1,5	1,5	1,5	1,5
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,375	1,5	1,5	1,5	1,5	0,375	1,5	1,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
								_
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
				L2 table				
Integration Time (s)	3							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1,5	1,5	1,5	0,75	1,5	1,5	1,5	1,5
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,375	0,375	1,5	1,5	1,5	1,5	0,375	1,5
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	1,5	1,5	1,5	0,375	1,5	1,5	1,5	1,5
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,375	1,5	1,5	1,5	1,5	0,375	1,5	1,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	1,5	1,5	0,375	1,5	1,5	1,5	0,375	1,5
Cluster Index	41	42	43	44	45	46	47	48
	0	0	0	0	0	0	0	0
Integration Time								
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
		l o	0	0	0	1 0	0	0
Integration Time	0		_					
Integration Time	l		_					
Integration Time	0		-	L3 table				



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Integration Time (s)	4							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1,5	1,5	1,5	0,75	1,5	1,5	1,5	1,5
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,375	0,375	1,5	1,5	1,5	1,5	0,375	1,5
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	1,5	1,5	1,5	0,375	1,5	1,5	1,5	1,5
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,375	1,5	1,5	1,5	1,5	0,375	1,5	1,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	1,5	1,5	0,375	1,5	1,5	1,5	0,375	1,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
	0	0	0	0	0	0	0	0
Integration Time								
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
				L4 table				
				L4 (dbic				
Integration Time (s)	5	-2	2		Г	-	7	0
Cluster Index	1.5	2	3 1 E	0.75	5 1 E	6 1 E		8 1 E
Integration Time	1,5	1,5	1,5	0,75	1,5	1,5	1,5	1,5
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,375	0,375	1,5	1,5	1,5	1,5	0,375	1,5
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	1,5	1,5	1,5	0,375	1,5	1,5	1,5	1,5
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,375	1,5	1,5	1,5	1,5	0,375	1,5	1,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	1,5	1,5	0,375	1,5	1,5	1,5	0,375	1,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0
				L5 table				
Integration Time (s)	6							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	1,5	1,5	1,5	1,5	0,75	0,75	0,75	0,75
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,75	0,75	0,75	0,75	0,75	0,75	1,5	1,5
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time								
	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Co_Adding Factor	0	0	0	0	0	0	0	0
				L6 table				
				ro (anie				



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lata anatia a Tina (A)	24							1 11141	
Integration Time (s)	21	_	1 2		-	I 6	-	_	1
Cluster Index	10	2 10	3 10	10	5 10	6 10	20	8 10	4
Integration Time									
Cluster Index	9	10	11	12	13	14	15	16	
Integration Time	10	10	10	1	1	1	1	1	
Cluster Index	17	18	19	20	21	22	23	24	
Integration Time	1	1	1	1	1	1	1	1	
Cluster Index	25	26	27	28	29	30	31	32	
Integration Time	1	1	1	1	10	10	10	10	
Cluster Index	33	34	35	36	37	38	39	40	
Integration Time	10	10	10	5	5	5	5	5	1
Cluster Index	41	42	43	44	45	46	47	48	
ntegration Time	0	0	0	0	0	0	0	0	
Cluster Index	49	50	51	52	53	54	55	56	
ntegration Time	0	0	0	0	0	0	0	0	1
Cluster Index	57	58	59	60	61	62	63	64	•
Co_Adding Factor	0	0	0	n 00	0	02	0	0	•
CO_Adding Factor	U	U	0	0	0	0	, o	0	J
				N1 table					
ntegration Time (s)	22								-
Cluster Index	1	2	3	4	5	6	7	8	
ntegration Time	10	10	10	1	1	1	2	1	
Cluster Index	9	10	11	12	13	14	15	16	
ntegration Time	1	1	1	1	24	24	6	24	
Cluster Index	17	18	19	20	21	22	23	24	
ntegration Time	24	24	24	6	24	24	8	8	1
Cluster Index	25	26	27	28	29	30	31	32	
ntegration Time	20	8	8	24	24	6	24	24	•
Cluster Index	33	34	35	36	37	38	39	40	
ntegration Time	1	1	1	0,5	0,5	0,5	0,5	0,5	
Cluster Index	41	42	43	44	45	46	47	48	
ntegration Time	0	0	0	0	0	0	0	0	
Cluster Index	49	50	51	52	53	54	55	56	
ntegration Time	0	0	0	0	0	0	0	0	
Cluster Index	57	58	59	60	61	62	63	64	1
Co_Adding Factor	0	0	0	0	0	0	0	0	
									ı
				N2 table					1
				THE COUNTY					-
ntegration Time (s)	23								1
Cluster Index	4		1 2	4	5	6	7	8	1
	5	2 5	3	2	4	4	4	4	
ntegration Time						· ·			,
Cluster Index	9	10	11	12	13	14	15	16	
ntegration Time	1	1	4	1	6	6	1,5	6	
Cluster Index	17	18	19	20	21	22	23	24	
ntegration Time	6	6	6	1,5	6	6	1	1	
Cluster Index	25	26	27	28	29	30	31	32	
ntegration Time	0,25	1	1	6	12	3	12	12]
Cluster Index	33	34	35	36	37	38	39	40	
ntegration Time	2	2	0,5	1	1	1	0,25	1	1
Cluster Index	41	42	43	44	45	46	47	48	1
ntegration Time	0	0	0	0	0	0	0	0	1
	_	_			_	_	_		ł
Cluster Index	49	50	51	52	53	54	55	56	4
ntegration Time	0	0	0	0	0	0	0	0	4
Cluster Index	57	58	59	60	61	62	63	64	1
Co_Adding Factor	0	0	0	0	0	0	0	0	J
				N3 table]
									1
									4



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Integration Time (s)	24							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1	1	1	1	1	1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	1	1	1	1	1	0,25	0,25	0,25
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,25	0,25	0,25	1	0,5	0,25	0,125	0,125
	25	26	27	28	29	30	31	32
Cluster Index	0,125	0,125	0,5	<u>∠</u> 8 0,5	0,5	0,5	0,5	0,5
Integration Time								
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	0,5	0,5	0,5	0,5	0,5	0,25	0,25	0,25
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0,25	0,25	0,25	0,25	0,25	0,25	0,5	1
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	1	1	1	1	1	1	1	1
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
				N4 table				
Integration Time (s)	25							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1	1	1	0,5	0,5	1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,5	0,5	1	1	1	0,125	0,125	1
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,125	1	1	1	1	1	1	0,125
		26				_	-	32
Cluster Index	25 1	0,125	27 1	28 1	29 1	30 1	31 1	0,25
Integration Time					-			_
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	1	0,25	1	1	0,25	1	0,125	1
Cluster Index	41	42	43	44	45	46	47	48
Integration Time				1 1	0,125	l 1	l 1	1
Integration Time	0,125	1	0,125					
Cluster Index	49	50	51	52	53	54	55	56
	49 1		_	52 1	53 1	54 1		56 1
Cluster Index	49	50 1 58	51 1 59	1 60		54	55	
Cluster Index Integration Time	49 1	50 1	51 1	1	1	54 1	55 1	1
Cluster Index Integration Time Cluster Index	49 1 57	50 1 58	51 1 59	1 60	1 61	54 1 62	55 1 63	1 64
Cluster Index Integration Time Cluster Index	49 1 57	50 1 58	51 1 59	1 60	1 61	54 1 62	55 1 63	1 64
Cluster Index Integration Time Cluster Index	49 1 57	50 1 58	51 1 59	1 60 0	1 61	54 1 62	55 1 63	1 64
Cluster Index Integration Time Cluster Index	49 1 57	50 1 58	51 1 59	1 60 0	1 61	54 1 62	55 1 63	1 64
Cluster Index Integration Time Cluster Index Integration Time	49 1 57	50 1 58 0	51 1 59	1 60 0	1 61	54 1 62	55 1 63	1 64
Cluster Index Integration Time Cluster Index Integration Time	49 1 57 0	50 1 58 0	51 1 59 0	1 60 0	1 61	54 1 62 0	55 1 63 0	1 64
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index	49 1 57 0	50 1 58 0	51 1 59	1 60 0 N5 table	1 61 0	54 1 62	55 1 63	1 64 0
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time	49 1 57 0	50 1 58 0	51 1 59 0	1 60 0 N5 table	1 61 0	54 1 62 0	55 1 63 0	1 64 0
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Cluster Index Cluster Index	49 1 57 0	50 1 58 0	51 1 59 0	1 60 0 N5 table	1 61 0	54 1 62 0	55 1 63 0	1 64 0
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time	49 1 57 0 26 1 1 9 0,25	50 1 58 0	51 1 59 0	1 60 0 N5 table 4 0,25 12	1 61 0 5 0,25 13	54 1 62 0	55 1 63 0 7 1 15 0,25	1 64 0
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Cluster Index Cluster Index	49 1 57 0 26 1 1 9 0,25 17	50 1 58 0	51 1 59 0	1 60 0 N5 table 4 0,25 12 1	1 61 0 5 0,25 13 1	54 1 62 0	55 1 63 0 7 1 15 0,25 23	1 64 0
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time	26 1 9 0,25 17 0,25	50 1 58 0	51 1 59 0	1 60 0 N5 table 4 0,25 12 1 20	1 61 0 5 0,25 13 1 21	54 1 62 0	55 1 63 0 7 1 15 0,25 23 1	8 1 16 1 24 0,25
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	26 1 9 0,25 17 0,25 25	50 1 58 0	51 1 59 0	1 60 0 N5 table 4 0,25 12 1 20 1	5 0,25 13 1 21 1	54 1 62 0	55 1 63 0 7 1 15 0,25 23 1 31	8 1 16 1 16 1 24 0,25
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time	26 1 9 0,25 17 0,25 25 1	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25	51 1 59 0	1 60 0 N5 table 4 0,25 12 1 20 1 28	1 61 0 5 0,25 13 1 21 1 29	6 1 1 62 0	55 1 63 0 7 1 15 0,25 23 1 31	8 1 16 1 24 0,25 32 0,25
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	26 1 9 0,25 17 0,25 25 1 33	50 1 58 0 0 2 1 1 0,25 18 1 26 0,25 34	51 1 59 0	1 60 0 N5 table 4 0,25 12 1 20 1 28 1	1 61 0 5 0,25 13 1 21 1 29 1	54 1 62 0 0 6 1 14 1 22 1 30 1	55 1 63 0 7 1 15 0,25 23 1 31 1 39	8 1 16 1 24 0,25 32 0,25 40
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time	26 1 57 0 26 1 1 1 9 0,25 17 0,25 25 1 33 1	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5	51 1 59 0 3 1 11 1 1 19 1 27 1 35 1	1 60 0 N5 table 4 0,25 12 1 20 1 28 1	5 0,25 13 1 21 1 29 1 37 0,5	6 1 1 62 0 0	7 1 63 0 7 1 15 0,25 23 1 1 31 1 39 0,25	8 1 16 1 16 1 24 0,25 32 0,25 40 1
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	26 1 57 0 26 1 1 1 9 0,25 17 0,25 25 1 33 1	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5	51 1 59 0 3 1 11 11 1 19 27 1 35 1 43	1 60 0 N5 table 4 0,25 12 1 20 1 28 1 36 1	1 61 0 0 5 0,25 13 1 21 1 29 1 37 0,5	6 1 1 62 0 0 1 1 30 1 38 1 46	7 1 63 0 7 1 15 0,25 23 1 1 1 39 0,25 47	1 64 0 0 8 1 16 1 24 0,25 32 0,25 40 1
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	26 1 57 0 26 1 1 1 9 0,25 17 0,25 25 1 33 1	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5	51 1 59 0 3 1 11 1 1 19 1 27 1 35 1	1 60 0 N5 table 4 0,25 12 1 20 1 28 1	5 0,25 13 1 21 1 29 1 37 0,5	6 1 1 62 0 0	7 1 63 0 7 1 15 0,25 23 1 1 31 1 39 0,25 47	8 1 16 1 16 1 24 0,25 32 0,25 40 1
Cluster Index Integration Time Cluster Index Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	26 1 57 0 26 1 1 1 9 0,25 17 0,25 25 1 33 1	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5	51 1 59 0 3 1 11 11 1 19 27 1 35 1 43	1 60 0 N5 table 4 0,25 12 1 20 1 28 1 36 1	1 61 0 0 5 0,25 13 1 21 1 29 1 37 0,5	6 1 1 62 0 0 1 1 30 1 38 1 46	7 1 63 0 7 1 15 0,25 23 1 1 1 39 0,25 47	1 64 0 0 8 1 16 1 24 0,25 32 0,25 40 1
Cluster Index Integration Time Cluster Index Integration Time Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	49 1 57 0 26 1 1 9 0,25 17 0,25 25 1 33 1 41 0,25	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5 42 1	51 1 59 0 3 1 11 1 1 19 1 27 1 35 1 43 0,25	1 60 0 N5 table 4 0,25 12 1 20 1 28 1 36 1 44	1 61 0 5 0,25 13 1 21 1 29 1 37 0,5 45 0,25	54 1 62 0 0 6 1 14 1 22 1 30 1 38 1 46 1	7 1 63 0 7 1 15 0,25 23 1 1 31 1 39 0,25 47	8 1 16 1 16 1 24 0,25 32 0,25 40 1 48 1
Cluster Index Integration Time Cluster Index Integration Time Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time	49 1 57 0 26 1 1 9 0,25 17 0,25 25 1 33 1 41 0,25 49 1	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5 42 1 50 0,5	51 1 59 0 3 1 11 1 1 19 1 27 1 35 1 43 0,25 51 1	1 60 0 N5 table 4 0,25 12 1 20 1 28 1 36 1 44 1	1 61 0 0 5 0,25 13 1 21 1 29 1 37 0,5 45 0,25 53 1	54 1 62 0 0 6 1 14 1 22 1 30 1 38 1 46 1 54	55 1 63 0 7 1 15 0,25 23 1 31 1 39 0,25 47 1 55 0,5	8 1 16 1 16 1 24 0,25 32 0,25 40 1 48 1 56
Cluster Index Integration Time Cluster Index Integration Time Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time	49 1 57 0 26 1 1 1 9 0,25 17 0,25 25 1 33 1 41 0,25 49	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5 42 1	51 1 59 0 3 1 11 1 1 19 1 27 1 35 1 43 0,25 51	1 60 0 N5 table 4 0,25 12 1 20 1 28 1 36 1 44 1 52 0,5	1 61 0 0 5 0,25 13 1 21 1 29 1 37 0,5 45 0,25 53	54 1 62 0 0 6 1 14 1 22 1 30 1 38 1 46 1 54	55 1 63 0 7 1 15 0,25 23 1 31 1 39 0,25 47 1	8 1 16 1 16 1 24 0,25 32 0,25 40 1 48 1 56
Cluster Index Integration Time Cluster Index Integration Time Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	49 1 57 0 26 1 1 1 9 0,25 17 0,25 25 1 33 1 41 0,25 49 1 57	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5 42 1 50 0,5 58	51 1 59 0 3 1 11 1 1 19 1 27 1 35 1 43 0,25 51 1	1 60 0 N5 table 4 0,25 12 1 20 1 28 1 36 1 44 1 52 0,5 60	1 61 0 0 5 0,25 13 1 21 1 29 1 37 0,5 45 0,25 53 1 61	54 1 62 0 0 6 1 14 1 22 1 30 1 38 1 46 1 54 1 62	55 1 63 0 7 1 15 0,25 23 1 31 1 39 0,25 47 1 55 0,5 63	8 1 16 1 16 1 24 0,25 32 0,25 40 1 48 1 56 1
Cluster Index Integration Time Cluster Index Integration Time Integration Time Integration Time (s) Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index Integration Time Cluster Index	49 1 57 0 26 1 1 1 9 0,25 17 0,25 25 1 33 1 41 0,25 49 1 57	50 1 58 0 0 2 1 10 0,25 18 1 26 0,25 34 0,5 42 1 50 0,5 58	51 1 59 0 3 1 11 1 1 19 1 27 1 35 1 43 0,25 51 1	1 60 0 N5 table 4 0,25 12 1 20 1 28 1 36 1 44 1 52 0,5 60	1 61 0 0 5 0,25 13 1 21 1 29 1 37 0,5 45 0,25 53 1 61	54 1 62 0 0 6 1 14 1 22 1 30 1 38 1 46 1 54 1 62	55 1 63 0 7 1 15 0,25 23 1 31 1 39 0,25 47 1 55 0,5 63	8 1 16 1 16 1 24 0,25 32 0,25 40 1 48 1 56 1



								Final-Fl			
Intermedian Time (a)	27										
Integration Time (s)	27				-		7	- 0			
Cluster Index	1	2	3	4	5	6	7	8			
Integration Time	5	1	1	0,5	0,25	5	1	1			
Cluster Index	9	10	11	12	13	14	15	16			
ntegration Time	0,25	0,25	1	1	1	1	0,25	1			
luster Index	17	18	19	20	21	22	23	24			
ntegration Time	0,25	1	1	1	1	1	1	0,25			
luster Index	25	26	27	28	29	30	31	32			
ntegration Time	1	0,25	1	1	1	1	1	0,25			
luster Index	33	34	35	36	37	38	39	40			
tegration Time	1	1	1	1	1	1	0,25	1			
luster Index	41	42	43	44	45	46	47	48			
tegration Time	0,25	1	0,25	1	0,25	1	1	1			
luster Index	49	50	51	52	53	54	55	56			
egration Time	1	0,5	1	0,5	1	1	0,5	1			
uster Index	57	58	59	60	61	62	63	64			
tegration Time	0	0	0	0	0	0	0	0			
N7 table											
tegration Time (s)	32										
luster Index	1	2	3	4	5	6	7	8			
tegration Time	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625			
uster Index	9	10	11	12	13	14	15	16			
egration Time	0,0625	0,0625	0,0625	0,0625	0,125	0,125	0,125	0,125			
ıster Index	17	18	19	20	21	22	23	24			
	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125			
egration Time		_		_				_			
uster Index	25	26	27	28	29	30	31	32			
egration Time	0,125	0,125	0,125	0,0625	0,0625	0,0625	0,0625	0,0625			
luster Index	33	34	35	36	37	38	39	40			
tegration Time	0,03125	0,03125	0,03125	0,03125	0,03125	0,125	0,125	0,125			
uster Index	41	42	43	44	45	46	47	48			
egration Time	0	0	0	0	0	0	0	0			
uster Index	49	50	51	52	53	54	55	56			
egration Time	0	0	0	0	0	0	0	0			
uster Index	57	58	59	60	61	62	63	64			
egration Time	Ō	0	ō	0	Ō	0	0	0			
- g	_						_				
				Sun table							
ntegration Time (s)	36	1									
luster Index	11	2	3	4	5	6	7	8			
tegration Time	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125			
luster Index	9	10	11	12	13	14	15	16			
tegration Time	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125			
uster Index	17	18	19	20	21	22	23	24			
egration Time	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125			
uster Index	25	26	27	28	29	30	31	32			
egration Time	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125			
uster Index	33	34	35	36	37	38	39	40			
egration Time	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125			
uster Index	41	42	43	44	45	46	47	48			
egration Time	0	0	0	0	0	0	0	0			
luster Index	49	50	51	52	53	54	55	56			
tegration Time	0	0	0	0	0	0	0	0			
uster Index	57	58	59	60	61	62	63	64			
	0	0	29	0	0	0	0	04			
ntegration Time	, _U	U	_ U	U		U	U	, u			
			C f		. 4=bl=						
			Sun_t	ast_sweep	o (apie						



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Integration Time (s)	40	I	I	I	I	I	I	
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,125	0,125	0,125	0,125	0,0625	0,0625	0,0625	0,0625
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625	0,0625
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0,125
_ <u>-</u>		<u> </u>	_		_			
Cluster Index	41 0	42 0	43 0	44 0	45 0	46 0	47 0	48 0
Integration Time								
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
			Sun	_diffuser t	able			
			J					
Integration Time (s)	17							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1	1	1	1	1	1	1	1
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	1	1	1	1	1	1	1	1
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	1	1	1	1	1	1	1	1
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	1	1	1	1	1	1	1	1
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	1	1	1	1	1	1	1	1
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	1 7	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index				60			63	
	57	58	59 0		61 0	62		64
Integration Time	0	0	U	0	U	0	0	0
			801	1100				
			ASM	_diffuser	tapie			
1	40							
Integration Time (s)	48		_		-	-	7	_
Cluster Index	4	2	3	4	5	6	7	8
Integration Time	4	4	4	4	4	4	4	4
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	4	4	4	4	4	4	4	4
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	4	2	2	2	2	2	2	2
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	2	2	2	0,9216	0,9216	0,9216	0,9216	0,9216
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	2	2	2	2	2	4	4	4
	41	42	43	44	45	46	47	48
Cluster Index	0	0	0	0	0	0	0	0
Cluster Index Integration Time			51	52	53	54	55	56
	49	50	J 31					0
Integration Time Cluster Index		50 0	0	0	0	0	0	
Integration Time Cluster Index Integration Time	49 0	0	0					
Integration Time Cluster Index Integration Time Cluster Index	49			0 60 0	61 0	62 0	63 0	64 0
Integration Time Cluster Index Integration Time	49 0 57	0 58	0 59	60	61	62	63	64
Integration Time Cluster Index Integration Time Cluster Index	49 0 57	0 58	0 59 0	60	61 0	62	63	64



								Final-
Integration Time (s)	48	I	I	I	I	I	I	I
Cluster Index	1	2	3	4	5	6	7	- 8
Integration Time	4	4	4	4	4	4	4	4
Cluster Index	9	10	11	12	13	14	15	16
ntegration Time	4	4	4	4	4	4	4	4
Cluster Index	17	18	19	20	21	22	23	24
ntegration Time	4	2	2	20	2	2	2	2
Cluster Index	25	26	27	28	29	30	31	32
	25	20		0,9216		0,9216	0,9216	
Integration Time			2		0,9216			0,9216
Cluster Index	33	34	35	36	37	38	39	40
ntegration Time	2	2	2	2	2	4	4	4
Cluster Index	41	42	43	44	45	46	47	48
ntegration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
ntegration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
ntegration Time	0	0	0	0	0	0	0	0
			NDF	Monitoring	g table			
				,				
ntegration Time (s)	47							
Cluster Index	11	2	3	4	5	6	7	8
ntegration Time	1	1	1	1	1	1	1	1
Cluster Index	9	10	11	12	13	14	15	16
ntegration Time	1	1	1	1	1	1	1	1
luster Index	17	18	19	20	21	22	23	24
ntegration Time	1	1	1	1	1	1	1	1
Cluster Index	25	26	27	28	29	30	31	32
ntegration Time	1	1	1	1	1	1	1	1
	33	34	35	36	37	38	39	40
Cluster Index								1
ntegration Time	1	1	1 10	1	1 1	1	1 1	
Cluster Index	41	42	43	44	45	46	47	48
ntegration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
ntegration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
ntegration Time	0	0	0	0	0	0	0	0
				Moon tabl	e			
ntegration Time (s)	53							
Cluster Index	1	2	3	4	5	6	7	8
ntegration Time	4	4	4	4	4	4	4	4
Cluster Index	9	10	11	12	13	14	15	16
ntegration Time	4	4	4	4	4	4	4	4
Cluster Index	17	18	19	20	21	22	23	24
ntegration Time	4	2	2	2	2	2	4	4
luster Index	25	26	27	28	29	30	31	32
ntegration Time	4	4	4	4	4	4	4	4
Cluster Index	33	34	35	36	37	38	39	40
ntegration Time	4	4	4	4	4	4	4	4
luster Index	41	42	43	44	45	46	47	48
ntegration Time	0	0	0	0	0	0	0	0
luster Index	49	50	51	52	53	54	55	56
ntegration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
ntegration Time	0	0	0	0	0	0	0	0
				SLS table)			



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Integration Time (s)	57											
Cluster Index	1	2	3	4	5	6	7	8				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	9	10	11	12	13	14	15	16				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	17	18	19	20	21	22	23	24				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	25	26	27	28	29	30	31	32				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	33	34	35	36	37	38	39	40				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	41	42	43	44	45	46	47	48				
Integration Time	0	0	0	0	0	0	0	0				
	49	50	51	52	53	54	55	56				
Cluster Index		0	0		53							
Integration Time	0	_	_	0		0	0	0				
Cluster Index	57	58	59	60	61	62	63	64				
Integration Time	0	0	0	0	0	0	0	0				
			61.6									
	SLS_diffuser table											
Integration Time (a)	39											
Integration Time (s)		_					7					
Cluster Index	1 0.5	2	3	4	5	6	7	8				
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5				
Cluster Index	9	10	11	12	13	14	15	16				
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5				
Cluster Index	17	18	19	20	21	22	23	24				
Integration Time	0,5	0,25	0,25	0,25	0,25	0,25	0,25	0,25				
Cluster Index	25	26	27	28	29	30	31	32				
Integration Time	0,25	0,25	0,25	0,5	0,5	0,5	0,5	0,5				
Cluster Index	33	34	35	36	37	38	39	40				
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5				
Cluster Index	41	42	43	44	45	46	47	48				
Integration Time	0	0	0	0	0	0	0	0				
Cluster Index	49	50	51	52	53	54	55	56				
Integration Time	0	0	0	0	0	0	0	0				
Cluster Index	57	58	59	60	61	62	63	64				
Integration Time	Ö	0	0	0	o o	0	0	0				
integration rime	<u> </u>						-					
			,	WLS table)							
Integration Time (s)	59	1	1	1	1	1	1	1				
Cluster Index	1	2	3	4	5	6	7	8				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	9	10	11	12	13	14	15	16				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	17	18	19	20	21	22	23	24				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	25	26	27	28	29	30	31	32				
Integration Time	40	40	40	40	40	40	40	40				
		34	35	36	37	38	39					
Cluster Index	33							40				
Integration Time	40	40	40	40	40	40	40	40				
Cluster Index	41	42	43	44	45	46	47	48				
Integration Time	0	0	0	0	0	0	0	0				
Cluster Index	49	50	51	52	53	54	55	56				
Integration Time	0	0	0	0	0	0	0	0				
Cluster Index	57	58	59	60	61	62	63	64				
Integration Time	0	0	0	0	0	0	0	0				
			WLS	_diffuser	table							



Integration Time (s) Cluster Index	45	2	3	4	5	6	7	8
	1	1	1	1	1	1	1	1
Integration Time Cluster Index	9	10	11	12	13	14	15	16
			1					
Integration Time	1	1		1	0,5	0,5	0,5	0,5
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
		_	_	_	_	_	_	_
		Dai	rk current	table 1 (s	short dura	tion)		
Integration Time (s)	49							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	1	1	1	1	1	1	0,5	0,5
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
	25	26	27	28	29	30	31	32
Cluster Index		0,5					0,5	
Integration Time	0,5		0,5	0,5	0,5	0,5		0,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
		Dark	current ta	ible 2 (mo	edium du	ation)		
				•		,		
Integration Time (s)	50			I			1	
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	10	10	10	10	10	10	10	10
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	10	10	10	10	0,25	0,25	0,25	0,25
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,25	0,25	0,25	0,25	0,25	0,25	10	10
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	10	10	10	0,125	0,125	0,125	0,125	0,125
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	2	2	2	2	2	2	2	2
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0 50	0	0 50	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
		Da	rk current	table 3 (l	ong durat	tion)		



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Integration Time (s)	51							
Cluster Index	1	2	3	4	5	6	7	8
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	9	10	11	12	13	14	15	16
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	17	18	19	20	21	22	23	24
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	25	26	27	28	29	30	31	32
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	33	34	35	36	37	38	39	40
Integration Time	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Cluster Index	41	42	43	44	45	46	47	48
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	49	50	51	52	53	54	55	56
Integration Time	0	0	0	0	0	0	0	0
Cluster Index	57	58	59	60	61	62	63	64
Integration Time	0	0	0	0	0	0	0	0
			Dark	current ta	able 4			

		- n -					
		Dark	current ta	ible 4			
52	I	I				I	
1	2	3	4	5	6	7	8
5	5	5	5	5	5	1	1
9	10	11	12	13	14	15	16
1	1	1	1	1	1	1	1
17	18	19	20	21	22	23	24
1	1	1	1	1	1	1	1
25	26	27	28	29	30	31	32
1	1	1	5	5	5	5	5
33	34	35	36	37	38	39	40
1	1	1	1	1	1	1	1
41	42	43	44	45	46	47	48
0	0	0	0	0	0	0	0
49	50	51	52	53	54	55	56
0	0	0	0	0	0	0	0
57	58	59	60	61	62	63	64
0	0	0	0	0	0	0	0
		Dark	current ta	ıble 5			
	1 5 9 1 17 17 1 25 1 33 1 41 0 49 0	1 2 5 5 5 9 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	52 1 2 3 5 5 5 5 9 10 11 1 1 1 1 17 18 19 1 1 1 1 25 26 27 1 1 1 1 33 34 35 1 1 1 1 41 42 43 0 0 0 0 49 50 51 0 0 0 57 58 59 0 0 0	52 1 2 3 4 5 5 5 5 9 10 11 12 1 1 1 1 1 17 18 19 20 1 1 1 1 1 25 26 27 28 1 1 1 1 5 33 34 35 36 1 1 1 1 1 41 42 43 44 0 0 0 0 0 49 50 51 52 0 0 0 0 57 58 59 60 0 0 0	1 2 3 4 5 5 5 5 5 5 9 10 11 12 13 1 1 1 1 1 1 17 18 19 20 21 1 1 1 1 1 25 26 27 28 29 1 1 1 5 5 33 34 35 36 37 1 1 1 1 1 41 42 43 44 45 0 0 0 0 0 49 50 51 52 53 0 0 0 0 0 57 58 59 60 61	52 1 2 3 4 5 6 5 5 5 5 5 9 10 11 12 13 14 1 1 1 1 1 1 1 17 18 19 20 21 22 1 1 1 1 1 1 25 26 27 28 29 30 1 1 1 5 5 5 33 34 35 36 37 38 1 1 1 1 1 1 41 42 43 44 45 46 0 0 0 0 0 0 49 50 51 52 53 54 0 0 0 0 0 0 57 58 59 60 61 62 0 0 0 0 0	52 1 2 3 4 5 6 7 5 5 5 5 5 5 1 9 10 11 12 13 14 15 1 1 1 1 1 1 1 1 17 18 19 20 21 22 23 1 1 1 1 1 1 1 25 26 27 28 29 30 31 1 1 1 1 1 1 1 25 26 27 28 29 30 31 1 1 1 5 5 5 5 33 34 35 36 37 38 39 1 1 1 1 1 1 1 1 41 42 43 44 45



A.1.3 State Duration (sec)

This table defines the duration of state internal time intervals in <u>seconds</u>. It is equivalent to the State Duration parameter table in chapter 5.1.5 where all times are listed in Engineering Units (EU).

Table Template:

Columns:

State ID: identifier of state

Restart Time: definition of the elapse time between consecutive

RESTART commands in limb mode in seconds

(SDPU) Mode: selection of measurement mode for SDPU, either

"Standard" or "Limb"

SDPU Duration (Number of BCPS): definition of SDPU measurement mode in seconds,

corresponds to the duration of scan phases 2 to n-1

Wait Measurement Execution - WM: definition of the RTCS Wait parameter WM (the time to

wait for the termination of the nominal scan, i.e. excluding

the last phase of a scanner state) in seconds

State Duration: definition of the total duration of the state, including all

phases of the state (equivalent to the RTCS execution time)

in seconds

Scanner Reset Wait - WSR: definition of the RTCS Wait parameter WSR (the time to

wait for the termination of the last phase of a state) in

seconds



				I	State	Scanner	
			SDPU Duration	Wait Measurement	Duration	Reset Wait	
State ID	Restart Time	(SDPU) Mode	(sec)	Execution (sec)	(sec)	(sec)	
1	15,9375	STANDARD	80	79,90625	83,5625	0,6796875	Nadir 01
2	15,9375	STANDARD	80	79,90625	83,5625	0,6796875	Nadir 02
3	15,9375	STANDARD	80	79,90625	83,5625	0,6796875	Nadir 03
4	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 04
5	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 05
6	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 06
7	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 07
8	15,9375	STANDARD	40	39,91015625	43,55859375	0,671875	Dark_Current_Cal_5
9 10	15,9375 15,9375	STANDARD	80 80	79,90625 79,90625	83,5625 83,5625	0,6796875	Nadir 09 Nadir 10
11	15,9375	STANDARD STANDARD	80	79,90625	83,5625	0,6796875 0,6796875	Nadir 10 Nadir 11
12	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 12
13	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 13
14	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 14
15	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 15
16	15,9375	STANDARD	12	11,91015625	22,31640625	3,41015625	NDF Monitoring, ND Filter OUT
17	15,9375	STANDARD	30	29,91015625	39,2578125	3,671875	Sun_ASM_Diffuser
18	15,9375	STANDARD	30	29,91015625	39,2578125	3,671875	Sun_ASM_Diffuser
19	15,9375	STANDARD	30	29,91015625	39,2578125	3,671875	Sun_ASM_Diffuser
20	15,9375	STANDARD	30	29,91015625	39,2578125	3,671875	Sun_ASM_Diffuser
21	15,9375	STANDARD	30	29,91015625	39,2578125	3,671875	Sun_ASM_Diffuser
22	15,9375	STANDARD	32	31,91015625	41,2578125	3,671875	Sun_ASM_Diffuser_Atmosphere
23	15,9375	STANDARD	80	79,90625	83,5625	0,6796875	Nadir 23
24	15,9375	STANDARD	80	79,90625	83,5625	0,6796875	Nadir 24
25	15,9375	STANDARD	80	79,90625	83,5625	0,6796875	Nadir 25
26	15,9375	STANDARD	30	29,91015625	33,55859375	0,671875	Dark_Current_Cal_4
27	1,6875	LIMB	40,5	40,41015625	44,05859375	0,671875	Limb_Mesosphere
28	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 01_short
29 30	1,6875	LIMB LIMB	52,3125 52,3125	52,22265625 52,22265625	55,87109375	0,671875 0,671875	Limb 02_short
31	1,6875 1,6875	LIMB	52,3125	52,22265625	55,87109375 55,87109375	0,671875	Limb 03_short Limb 04_short
32	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 04_short
33	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 05_short
34	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 00_short
35	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 08_short
36	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 09_short
37	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 10_short
38	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir_Pointing_Left
39	15,9375	STANDARD	12	11,91015625	21,2578125	3,671875	Dark_Current_Cal_HM
40	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 13 _short
41	1,6875	LIMB	52,3125	52,22265625	55,87109375	0,671875	Limb 12_short
42	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 26
43	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 27
44	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 28
45	15,9375	STANDARD	65	64,91015625	68,55859375	0,671875	Nadir 29
46	15,9375	STANDARD	10	9,91015625	13,55859375		Dark_Current_Cal_1
47 48	15,9375 15,9375	STANDARD	66 12	65,91015625	70,98046875	0,03125	SO&C_Scan/Point NDF Monitoring, ND Filter IN
49	15,9375	STANDARD STANDARD	130	11,91015625 129,90625	23,34765625 134,9765625	3,41015625	2
50	15,9375	STANDARD	3	2,91015625	7,98046875	0,03125 0,03125	SO&C_Scan_long_duration SO&C Scan fast sweep
51	15,9375	STANDARD	64	63,91015625	68,98046875	0,03125	SO&C_Scar_las(_sweep SO&C_Point
52	15,9375	STANDARD	30	29.91015625	38,71484375	3,12890625	Sun_Diffusor_Cal_ND_0
53	15,9375	STANDARD	22	21,91015625	28,4609375	0,03125	Sub_Solar_Cal_Point
54	15,9375	STANDARD	12	11,91015625	15,578125	0,69140625	Moon_Cal_Scan
55	15,9375	STANDARD	142	141,90625	145,5820313		MO&C_Point_Troposphere
56	15,9375	STANDARD	40	39,91015625	43,578125	0,69140625	MO&C_Point
57	15,9375	STANDARD	128	127,90625	131,5820313	0,69921875	MO&C_Point_long_duration
58	15,9375	STANDARD	22	21,91015625	28,4609375	0,03125	Sub_Solar_Cal_Point/Scan
59	15,9375	STANDARD	12	11,91015625	21,57421875		Spectral_Lamp_Cal_Mirror
60	15,9375	STANDARD	22	21,91015625	28,4609375	0,03125	Sub_Solar_Cal_Scan
61	15,9375	STANDARD	12	11,91015625	23,34765625		White_Lamp (ND_IN)
62	15,9375	STANDARD	30	29,91015625	39,74609375		Sun_Diffusor_Cal_ND_I
63	15,9375	STANDARD	30	29,91015625	33,55859375	0,671875	Dark_Current_Cal_2
64	15,9375	STANDARD	4	3,91015625	8,98046875	0,03125	Sun_Nadir/Elev_Mir_Cal_Point
65	15,9375	STANDARD	20	19,91015625	42,19921875	0,671875	ADC/Cal_Scan/Maintenance
<u>66</u> 67	15,9375 15,9375	STANDARD	11 80	10,91015625	15,98046875	0,03125	Sun_Nadir/Elev_Mir_Cal_Scan
68	15,9375 15,9375	STANDARD STANDARD	3	79,90625 2,91015625	83,5625 7,98046875	0,6796875 0,03125	Dark_Current_Cal_3 Sun_Nadir/Elev_Mir_Cal_fast_sweep
69	15,9375	STANDARD	80	79,90625	89,578125	3,42578125	Spectral_Lamp_Cal_Diffusor
70	15,9375	STANDARD	80	79,90625	90,3203125	3,41796875	White_Lamp_Cal (ND_OUT)
	. 5,551.5	2		. 5,55525	55,5205125	2, 00010	



A.1.4 RTCS Duration

The RTCS Duration table shows how long the individual phases of a state will last. It supplements the State Duration table (chapter 5.1.5).

Table Template: Columns: Measurement Category Name: identifier of measurement category, appended by a sequential counter for identical categories State ID: identifier of the state identifier of the applicable RTCS RTCS: T Measurement Phase n (nominal), n=1-6: duration of all phases within the measurement window of a state in seconds; the activities of each phase are described in A 2; phases for the transition at the beginning and end of a state are not listed; note that Measurement Phase 6 is currently unused Nominal Measurement Duration: duration of measurement window as defined in seconds maximum duration for integration of science data Max. Integration Time: before submission to data packeting in seconds time required for preparing the instrument to T Set Up: execute the measurement of the state in seconds time required to execute the measurement phase of T Measurement: the state in seconds T Clean Up: time required to bring the instrument back from measurement to nominal configuration in seconds definition of SDPU measurement mode in seconds SDPU Duration (sec): Wait Measurement Execution - WM: definition of the RTCS Wait parameter WM (the time to wait for the termination of the nominal scan, i.e. excluding the last phase of a state, in seconds definition of the total duration of the state, including **State Duration:** all phases of the state (equivalent to the RTCS execution time plus add. 4 cts) in seconds Scanner Reset Wait - WSR: definition of the RTCS Wait parameter WSR (the time to wait for the termination of the last phase of

Table not updated and deleted

a state) in seconds





A.1.5 Co-Adding

The relation between State identifier, Co-Adding, Cluster definition, PETs and the data rates is summarized in the following table. It provides an overview of which combinations of these quantities are presently defined. Co-Adding Table IDs without assigned other parameters are not used.

Table Template:

Columns:

Coadding Table ID: identifier of the Co-Adding table; the Co-Adding tables are given in

chapter 5.1.6

Cluster Definition Index: selection of the clustering scheme; the Cluster Definition table is given

in chapter 5.2.4

PET: set of PETs as defined in the Pixel Exposure Time parameter support

table (chapter A 1.1)

Data Rate: data rate for which the exposure time set applies



Coadding Table ID	Cluster Definition Index	 PET/Coadd-table	Data Rate
1	1	L1	low
2	1	L2	low
3	1	L3	low
4	1	L4	low
5	1	L5	low
6	1	L6	low
<u></u>	l	Lb	IUW
8			
9			
10	1	L1-L6	high
11			
12			
13			
14			
15			
16			
17	1	ASM_Diff 1-6	low /high
18			
19			
20			
21	3	N1*	low
22	3	N2*	
			low
23	3	N3*	low
24	3	N4*	low
25	3	N5*	low
26	3	N6*	low
27	3	N7*	low
28			
29			
30	3	N1-N7*	high
31	1	Sun	low
32	1	Sun	high
33	'	Odii	myn
34			
	4	Com Foot Consen	1
35	1	Sun_Fast_Sweep	low
36	1	Sun_Fast_Sweep	high
37			
38			
39	1	Sun_Diffuser	low
40	1	Sun_Diffuser	high
41			
42			
43	1	ADC/scan	low
44	1	ADC/scan	high
45	1	Dark Current 1	low/high
46	· '		
47	1	Moon	low/high
48	1	NDF_Mon	low/high
		Dork Comment 0	low/high
49	1	Dark Current 2	low/high
50	1	Dark Current 3	low/high
51	1	Dark Current 4	low/high
52	1	Dark Current 5	low /high
53	1	SLS	low /high
54			
55	1	WLS	low /high
56			
57	1	SLS_Diffuser	low /high
58	· '	222_2	
59	1	WLS_Diffuser	low/high
60		**E0_Dillusei	iowingii
C1			
61		ı	
62		 	
62 63			
62 63 64			
62 63 64 65			
62 63 64 65 66			
62 63 64 65 66			
62 63 64 65 66 67			
62 63 64 65 66 67 68			
62 63 64 65 66 67			



A.1.6 Cluster Definition

This table provides supporting information for the definition of the clusters. It supplements the Cluster Definition table in chapter 5.2.4. For each cluster definition (indicated at top of each table), the clustering within all 8 channels is given.

Table Template:

Upper section:

Columns:

Channel ID: identifier of the channel; range = 1-8

Channel - Start Pixel: identifier of the first used pixel in the channel (excluding blinded

pixels); range = 0-1023

Channel - End Pixel: identifier of the last used pixel in the channel (excluding blinded

pixels); range=0-1023

Channel - Length: number of used pixels in the channel (End Pixels- Start Pixel+1)

Channel Wavelength - Min: Start Pixel expressed in nm Channel Wavelength - Max: End Pixel expressed in nm

Lower section:

Columns:

Cluster ID: identifier of the cluster within the channel (including clusters with

unused and blinded pixels); range = 0-15

Cluster - Start Pixel: identifier of the first pixel in the cluster Cluster - End Pixel: identifier of the last pixel in the cluster

Cluster - Length: number of pixels in the cluster (End Pixels- Start Pixel+1)
Cluster Wavelength - Min: Start Pixel expressed in nm (only for clusters with used pixels)
Cluster Wavelength - Max: End Pixel expressed in nm (only for clusters with used pixels)
Cluster Wavelength - Max: End Pixel expressed in nm (only for clusters with used pixels)
Characterisation of unused and blinded pixels, virtual channels,

overlaps and major measurement targets (AE = aerosols)

Cluster Index: identifier of the cluster; range = 1-64 (maximum)

Cluster Identifier: same as "Cluster ID"

Start Pixel: same as "Cluster - Start Pixel" Length: same as "Cluster - Length"



		Channel		Channel War	velength [nm]			Pixel dalcu	dation	
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	th
1	5	841	837	213,29	313,92			842	314	nm
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	1	0	0	-
1	5	196	192	213,29	239,88	straylight	2	1	5	192
2	197	551	355	240,00	281,90	virtual channel la	3	2	197	355
3	552	841	290	282,01	313,92	virtual channel 1b	4	3	552	290
4	842	1018	177	314,03	333,80	unused pixel	5	4	842	177
5	1019	1023	5			Blinded Pixel	6	5	1019	
				ļ						
				ļ						
				 			_			
				ļ						

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Cluster Defini	tion 1				
		Channel		Channel Way	relength [nm]
Channel ID	Start Pixel	End Pixel	Length	Min	Max

Note: lower limit of PMD 1 should be 307 nm, but this is outside of channel limits

2	76	947	872	403,96	309,43			outsid	e of channe	el limits
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	7	0	1024	5
1	5	75	71	411,63	404,07	unused pixel	8	1	1029	71
2	76	853	778	403,96	320,14	virtual channel 2b	9	2	1100	778
3	854	947	94	320,02	309,43	virtual channel 2a	10	3	1878	94
4	948	1018	71	309,31	301,18	unused pixel	11	4	1972	71
5	1019	1023	5			Blinded Pixel	12	5	2043	5

Chrater	Definition	ł
Cluster	Demmuon	ı

		Channel		Channel Way	zelength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
3	33	929	897	391,88	605,48					
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	9	10			Blinded Pixel	13	0	2048	10
1	10	32	23	386,09	391,63	unused pixel	14	1	2058	23
2	33	929	897	391,88	605,48	Channel 3 (main part)	15	2	2081	897
3	930	1018	89	605,72	627,17	unused pixel	16	3	2978	89
4	1019	1023	5			Blinded Pixel	17	4	3067	5



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Cluster Delin	MOILI						_			
		Channel		Channel Way	velength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
4	10	918	909	597,60	789,85]			
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	18	0	3072	5
1	5	9	5	596,48	597,38	unused pixel	19	1	3077	5
2	10	918	909	597,60	789,85	Channel 4 (main part)	20	2	3082	909
3	919	1018	100	790,06	811,25	unused pixel	21	3	3991	100
4	1019	1023	5			Blinded Pixel	22	4	4091	5

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Cluster Definition 1

Cluster Delin	MOILI						_			
		Channel		Channel Way	zelength [nm]		1			
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
5	10	1000	776	776,24	1056,25]			
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	23	0	4096	5
1	5	9	5	774,73	775,94	unused pixel	24	1	4101	5
2	10	1000	991	776,24	1056,25	Channel 5 (main part)	25	2	4106	991
3	1001	1018	18	1056,53	1061,40	unused pixel	26	3	5097	18
4	1019	1023	5			Blinded Pixel	27	4	5115	5
							<u> </u>			
							<u> </u>			
							<u> </u>			

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Cluster Definition 1

		Channel		Channel Way	zelength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
6	24	996	973	990,84	1750,09]			
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	9	10			Blinded Pixel	28	0	5120	10
1	10	23	14	979,55	990,03	unused pixel	29	1	5130	14
2	24	996	973	990,84	1750,09	Channel 6/6+ (main part)	30	2	5144	973
3	997	1013	17	1750,92	1764,24	unused pixel	31	3	6117	17
4	1014	1023	10			Blinded Pixel	32	4	6134	10
						·				
						·				



Cluster Defin	ition 1					
		Channel		Channel Way	velength [nm]	
Channel ID	Start Pixel	End Pixel	Length	Min	Max	
7	48	987	940	1939,99	2040,19	
		Cluster		Cluster Wav	elength [nm]	Description

		Cluster		Cluster Wav	elength [nm]	Description]			
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	9	10			Blinded Pixel	33	0	6144	10
1	10	47	38	1935,55	1939,88	unused pixel	34	1	6154	38
2	48	987	940	1939,99	2040,19	Channel 7 (main part)	35	2	6192	940
3	988	1013	26	2040,29	2042,70	unused pixel	36	3	7132	26
4	1014	1023	10			Blinded Pixel	37	4	7158	10

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Cluster Definition 1

		Channel		Channel Way	velength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
8	10	1013	1004	2260,61	2384,49		1			
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	9	10			Blinded Pixel	38	0	7168	10
1	10	1013	1004	2260,61	2384,49	Channel 8	39	1	7178	1004
2	1014	1023	10			Blinded Pixel	40	2	8182	10
				1		l	1			

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Cluster Definition	ın 7

	Channel		Channel Wavelength [nm]							
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
1	216	807	592	240	314					
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	4	4	5			Blinded Pixel	1	0	0	5
	5	215	211			unused pixel				
1	216	743	528	240,00	305,99	virtual channel 1a	2	1	216	528
2	744	767	24	306,11	308,99	virtual channel 1b	3	2	744	24
3	768	807	40	309,12	314,00	overlap region	4	3	768	40
	808	1018	211			unused pixel				
4	1019	1023	5			Blinded Pixel	5	4	1019	5

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Cluster Definition 2

Cluster Defin	ution 2									
		Channel		Channel Wa	velength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
2	95	929	835	405	309					
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	0	4	5			Blinded Pixel	6	0	1024	5
	5	94	90			unused pixel				
1	95	190	96	405,00	394,06	overlap region	7	1	1119	96
2	191	833	643	393,95	320,05	virtual channel 2b	8	2	1215	643
3	834	885	52	319,94	314,06	virtual channel 2a	9	3	1858	52
4	886	929	44	313,95	309,00	overlap region	10	4	1910	44
	930	1018	89			unused pixel				
5	1019	1023	5			Blinded Pixel	11	5	2043	5

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Cluster Definition 2

	Channel		Channel Wa	velength [nm]						
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
3	46	975	930	394	620					
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	0	4	5			Blinded Pixel	12	0	2048	5
	5	45	41			unused pixel				
1	46	91	46	394,00	404,95	overlap region	13	1	2094	46
2	92	173	82	405,19	424,90		14	2	2140	82
3	174	276	103	425,14	449,95	NO2	15	3	2222	103
4	277	481	205	450,20	499,82	Ozone	16	4	2325	205
5	482	687	206	500,07	549,94		17	5	2530	206
6	688	728	41	550,18	559,91	AE	18	6	2736	41
7	729	909	181	560,16	603,94		19	7	2777	181
8	910	975	66	604,19	620,00	overlap region	20	8	2958	66
	976	1018	43			unused pixel				
9	1019	1023	5			Blinded Pixel	21	9	3067	5



Cluster Defin	ition 2							I IIIGI-I	ngnt_ v t	113.1110
		Channel		Channel Wa	velength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
4	46	976	931	604	805					
		Cluster		Cluster Way	elength [nm]	Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	0	4	5			Blinded Pixel	22	0	3072	5
	5	45	41			unused pixel				
1	46	120	75	604,00	619,99	overlap region	23	1	3118	75
2	121	277	157	620,21	653,93		24	2	3193	157
3	278	323	46	654,14	663,87	AE	25	3	3350	46
4	324	744	421	664,08	754,86		26	4	3396	421
5	745	860	116	755,07	779,93	Clouds	27	5	3817	116
6	861	883	23	780,15	784,90		28	6	3933	23
7	884	975	92	785,12	804,78	overlap region	29	7	3956	92
	976	1018	43			unused pixel				
8	1019	1023	5			Blinded Pixel	30	8	4091	5

1024

			1024							
Cluster Defir	nition 2									
		Channel		Channel War	velength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
5	54	967	914	785	1050					
		Cluster	•	Cluster Wav	elength [nm]	Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	0	4	5			Blinded Pixel	31	0	4096	5
	5	53	49			unused pixel				
1	54	122	69	785,00	804,74	overlap region	32	1	4150	69
2	123	313	191	805,03	860,18		33	2	4219	191
3	314	346	33	860,47	869,75	AE	34	3	4410	33
4	347	760	414	870,04	989,92		35	4	4443	414
5	761	794	34	990,21	999,79	AE	36	5	4857	34
6	795	829	35	1000,08	1009,95		37	6	4891	35
7	830	967	138	1010,24	1050,00	overlap region	38	7	4926	138
	968	1018	51			unused pixel				
8	1019	1023	5			Blinded Pixel	39	8	5115	5
							1			

Cluster Defin	iition 2									
		Channel		Channel Way	elength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
6	45	977	933	1000	1750					
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	0	9	10			Blinded Pixel	40	0	5120	10
	10	56	47			unused pixel				
1	57	107	51	1009,66	1049,89	overlap region	41	1	5177	51
2	108	337	230	1050,70	1234,98		42	2	5228	230
3	338	361	24	1235,78	1254,29	AE	43	3	5458	24
4	362	529	168	1255,10	1389,48		44	4	5482	168
5	530	554	25	1390,29	1409,60	Water Vapour	45	5	5650	25
6	555	728	174	1410,41	1549,62		46	6	5675	174
7	729	790	62	1550,43	1599,52	Water/Ice	47	7	5849	62
8	791	914	124	1600,32	1699,30	Water/Ice	48	8	5911	124
9	915	977	63	1700,11	1750,00	Water/Ice	49	9	6035	63
	978	1013	36			unused pixel				
10	1014	1023	10			Blinded Pixel	50	10	6134	10



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Oldboot Doll.										
	Channel			Channel Wa	velength [nm]		1			
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
7	73	949	877	1940	2040					
		Cluster		Cluster Wavelength [nm]		Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	0	9	10			Blinded Pixel	51	0	6144	10
	10	72	63			unused pixel				
1	73	949	877	1940,00	2040,00		52	1	6217	877
	950	1013	64			unused pixel				
2	1014	1023	10			Blinded Pixel	53	2	7158	10

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Cluster Definition 2

Cluster Delli	10112			T		Т	_			
		Channel		Channel War	velength [nm]					
Channel ID	Start Pixel	End Pixel	Length	Min	Max					
8	73	950	878	2265	2380					
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster	Start	
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Pixel	Length
0	0	9	10			Blinded Pixel	54	0	7168	10
	10	72	63			unused pixel				
1	73	950	878	2265,00	2380,00		55	1	7241	878
	951	1013	63			unused pixel				
2	1014	1023	10			Blinded Pixel	56	2	8182	10



Cluster Defin	tion 3									
		Channel		Channel Wa	velength [nm]			Pixel calcu		
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	
1	5	841	837	213,29	313,92			842	314	nm
		Cluster		Cluster Way	velength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	1	0	0	5
1	5	196	192	213,29	239,88	straylight	2		5	192
2	197	551	355	240,00	281,90	virtual channel la	3			355
3	552	747	196	282,01	303,54	virtual channel 15	4			196
4	748		94	303,65			5			94
4		841			313,92	overlap region, PMD 1	,	4	/48	94
	842	1018	177	314,03	333,80	unused pixel		_	4040	
5	1019	1023	5			Blinded Pixel	6	5	1019	3
_										
			1024	•	•		•			
Cluster Defin	ition 3									
		Channel		Channel Wa	velength [nm]		1	Pixel calcu	1ation	
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixel	Waveleng	+h
2	76	947	872	403,96	309.43		1	278	382	
	/6		872				-	2/8	382	nm
		Cluster		Cluster Way	velength [nm]	Description		I		
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	7	0	1024	5
	5	75	71	411,63	404,07	unused pixel				
1	76	189	114	403,96	391,87	overlap region 2b	8	1	1100	114
2	190	853	664	391,76	320,14	UV DOAS, PMD 1	9		1214	664
3	854	947	94	320,02	309,43	overlap region 2a, UV DO	-		1878	94
	948	1018	71	309,31	301,18	unused pixel				
4	1019	1023	5		,	Blinded Pixel	11	4	2043	5
	1017	1025				Dimidou i ikoi	 		20-15	
-										
				-						
			1024							
Cluster Defin	tion 3									
		Channel		Channel Wa	velength [nm]			Pixel calcu	lation	
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	th
3	33	929	897	391,88	605,48			612	530	nm
		Cluster		Cluster Way	velength [nm]	Description	1			
					T	· · · · · · · · · · · · · · · · · · ·	Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	O O	9	10	101111	101 dV	Blinded Pixel	12			
				204.00	201.62		12	0	2048	10
	10	32	23	386,09	391,63	unused pixel			2001	
1	33	82	50	391,88	404,10	overlap region	13		2081	50
2	83	162	80	404,34	423,73		14			80
3	163	598	436	423,97	526,96	VIS DOAS, PMD 2	15			436
4	599	673	75	527,20	544,56		16			75
5	674	760	87	544,80	565,08	AE	17			87
6	761	895	135	565,31	597,28		18			135
7	896	929	34	597,52	605,48	overlap region	19	7	2944	34
	930	1018	89	605,72	627,17	unused pixel				
8	1019	1023	5			Blinded Pixel	20	8	3067	5
					1			1		

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Cluster	Definition	-5

	Channel Channel Wavelength [nm]			velength [nm]]	Pixel calcu	lation		
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	th
4	10	918	909	597,60	789,85]	116	620	nm
		Cluster		Cluster Wav	elength [nm]	Description]			
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	21	0	3072	5
	5	9	5	596,48	597,38	unused pixel				
1	10	45	36	597,60	605,43	overlap region	22	1	3082	36
2	46	77	32	605,65	612,53		23	2	3118	32
3	78	612	535	612,75	725,99	PMD 3, AE	24	3	3150	535
4	613	746	134	726,19	753,77		25	4	3685	134
5	747	852	106	753,98	775,92	O2(A)	26	5	3819	106
6	853	918	66	776,13	789,85	overlap region	27	6	3925	66
	919	1018	100	790,06	811,25	unused pixel				
7	1019	1023	5			Blinded Pixel	28	7	4091	5

1024

Cluster Definition 3

		Channel		Channel Way	velength [nm]			Pixel dalcu	lation	
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	th
5	10	1000	991	776,24	1056,25			483	910	nm
		Cluster		Cluster Wav	elength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	4	5			Blinded Pixel	29	0	4096	5
	5	9	5	774,73	775,94	unused pixel				
1	10	55	46	776,24	789,74	overlap region	30	1	4106	46
2	56	83	28	790,04	798,06		31	2	4152	28
3	84	608	525	798,35	946,62	PMD 4/7, AE	32	3	4180	525
4	609	766	158	946,90	990,40		33	4	4705	158
5	767	1000	234	990,68	1056,25	overlap region, (AE)	34	5	4863	234
	1001	1018	18	1056,53	1061,40	unused pixel				
6	1019	1023	5			Blinded Pixel	35	6	5115	5

1024

Cluster Definition 3

		Channel		Channel War	velength [nm]			Pixel calcu	lation	
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	th
6	24	996	973	990,84	1750,09			637	1470	nm
		Cluster		Cluster Wav	elength [nm]	Description	,			
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	9	10			Blinded Pixel	36	0	5120	10
	10	23	14	979,55	990,03	unused pixel				
1	24	106	83	990,84	1056,23	overlap region	37	1	5144	83
2	107	334	228	1057,02	1233,24		38	2	5227	228
3	335	360	26	1234,01	1253,14	AE	39	3	5455	26
4	361	538	178	1253,90	1388,96		40	4	5481	178
5	539	566	28	1389,72	1410,36	Water Vapour	41	5	5659	28
6	567	745	179	1411,12	1548,51		42	6	5687	179
7	746	899	154	1549,30	1670,70	Water/Ice cloud & PMD 5	43	7	5866	154
8	900	930	31	1671,51	1695,84		44	8	6020	31
9	931	944	14	1696,65	1707,26	add. Water/Ice cloud	45	9	6051	14
10	945	996	52	1708,08	1750,09		46	10	6065	52
	997	1013	17	1750,92	1764,24	unused pixel				
11	1014	1023	10			Blinded Pixel	47	11	6134	10



Cluster Defini	tion 3						_		A -	
		Channel		Channel Way	velength [nm]		1	Pixel calcu	lation	
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	th
7	48	987	940	1939,99	2040,19			48	1940	nm
		Cluster		Cluster Wav	elength [nm]	Description]			
						_	Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	9	10			Blinded Pixel	48	0	6144	10
	10	47	38	1935,55	1939,88	unused pixel				
1	48	292	245	1939,99	1967,79		49	1	6192	245
2	293	440	148	1967,90	1984,05	CO2	50	2	6437	148
3	441	882	442	1984,15	2029,89		51	3	6585	442
4	883	987	105	2029,99	2040,19	CO2, H2O	52	4	7027	105
	988	1013	26	2040,29	2042,70	unused pixel				
5	1014	1023	10			Blinded Pixel	53	5	7158	10
							<u> </u>			
							<u> </u>			

			1024							
Cluster Defin	tion 3									
		Channel		Channel Wa	velength [nm]			Pixel calcu	dation	
Channel ID	Start Pixel	End Pixel	Length	Min	Max			Pixe1	Waveleng	th
8	10	1013	1004	2260,61	2384,49			46	2265	nm
		Cluster		Cluster Way	relength [nm]	Description				
							Cluster	Cluster		
Cluster ID	Start Pixel	End Pixel	Length	Min	Max		Index	Identifier	Start Pixel	Length
0	0	9	10			Blinded Pixel	54	0	7168	10
1	10	1013	1004	2260,61	2384,49	PMD 6, Ch. 8, unused pixe	55	1	7178	1004
2	1014	1023	10			Blinded Pixel	56	2	8182	10
				1		I	I			1

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A.1.7 Scan Profiles

Four support tables are listed. They provide a short description of the purpose of each Basic Scan Profile (one for azimuth and one for elevation - see chapters 5.1.1 and 5.2.1), of the Relative Scan Profiles (see chapter 5.1.1 and 5.2.2) and of the correction applied to the Nominal Scan Profile via the Scanner State Parameter tables (see chapter 5.1.1).

Table Template:

Basic Profiles (azimuth and elevation) - Columns:

Basic Scan Profile Identifier: identifier and purpose of each Basic Scan Profile

Position [10⁻⁶ rad]: definition of the scanner start position of a basic scan profile in µrad

(identical to parameters in Basic Scan Profile - 5.2.1)

Position deg: definition of the scanner start position of a basic scan profile in degree Rate [10⁻⁶ rad/sec]: definition of the scanner rate in µrad/sec (identical to parameters in

Basic Scan Profile - 5.2.1)

Rate deg/sec: definition of the scanner rate in degree/sec

Description of the

intended use of profile: purpose of corresponding profile

Corrections - Columns:

Description of Correction Function: identifier and purpose of each correction function applied

to the Nominal Scan Profile

Relative Profile - Columns:

Relative Scan Profile Identifier: identifier and purpose of each Relative Scan Profile Rel. Position for factor=1 [10⁻³ deg]: maximum relativ angular position variation within a

Relative Profile in 10⁻³ deg



\perp		12 inte	11 inte	10 inte	9 dark	8 mirr	7 scar	6 sun	5 poir	4 sub	3 sun	2 limb	1 nadir	0 no scan			14 m.s	┸			10 sun	9 dark	8 mirr	7 scar	6 sun	5 moc	4 sun	3 sun	2 limb	1 nad	0 no scan	
WEST - THOUSE THE TALL THE COLD	WAS - NDE-monitoring NDEM IN/OHT	internal relative radiometric calibration	internal wavelength / relative radiometric calbration with diffusor	internal wavelength calbration with mirror	dark current (pointing 250km altitude); Sun_ASM_diffuser	mirror degradation mode sun pointing / scanning	scanner maintenance	sun pointing with ESM diffusor	pointing 150km altitude; limb-mesosphere	sub solar calibration	sun pointing / scanning with mirror; start 17,2km above horizon	limb azimuth scanning / pointing	F	scan	Elevation Basic Scan Profile Identifier		m sun affection (elevation 1/,2 km acove norizon commously)	sun asm danuser of position	sun_asm_diffuser_U4/position4	sun asm diffuser 03/position 3	sun asm diffuser 02/position 2	dark current (pointing in flight direction)	mirror degradation mode sun pointing / scanning	scanner maintenance	sun pointing with ESM diffusor	moon pointing / scanning with mirror; start 17,2km above horizon	sun_asm_diffuser_01/position1	sun pointing / scanning with mirror; start 17,2km above horizon	limb azimuth scanning / pointing	nadir; all other states without ASM	scan	Azimuth Basic Scan Profile Identifier
0000100277	000126279	0000183658	0003319617	0000170480	-0000196437	0000570714	-0006283185	0002879793	-0000213849	0000986111	-0000234032	-0000237101	-0000794125	-0000261799	[10-6 rad]	Position	-00004/1239	0406715000	0003150047	0003228859	0003263766	-0000785398	-0000468621	-0006283185	-0000468621	-0001003564	0003298672	-0000471239	-0000785398	0000000000	00000000000	Position [10-6 rad]
12 (000	10.6720	10,5228	190,2000	9,7678	-11,2550	32,6995	-360,0000	165,0000	-12,2526	56,5000	-13,4090	-13,5849	-45,5000	-15,0000	deg	Position	-27,0000	27,0000	183,0000	185,0000	187,0000	-45,0000	-26,8500	-360,0000	-26,8500	-57,5000	189,0000	-27,0000	-45,0000	0,0000	0,0000	Position deg
0000000000	UUUUUUUUUU	0000000000	0000000000	0000000000	0000000000	0000000222	0000000000	0000000000	0000000000	0000000000	0000000445	0000000000	0000000000	0000000000	[10-6 rad/sec]	Rate	0000000227	-00000007	-0000000145	-0000008145	-0000008145	0000000000	0000000131	0000000000	0000000131	-0000000174	-0000008145	0000000131	0000000000	0000000000	0000000000	Kate [10-6 rad/sec]
0,0000	0000	0,0000	0,0000	0,0000	0,0000	0,0127	0,0000	0,0000	0,0000	0,0000	0,0255	0,0000	0,0000	0,0000	deg/sec	Rate	0,0250	-0,4007	-0,4667	-0,4667	-0,4667	0,0000	0,0075	0,0000	0,0075	-0,0100	-0,4667	0,0075	0,0000	0,0000	0,0000	Kate deg/sec
ESM projection at 17.7 km above however	ESIM pointing to WI S under pop optimal angle (10.673 deg)	ESM pointing to WLS (10.523 deg)	ESM pointing diffusor to internal calibration sources (10.2 + 180 deg)	ESM pointing to SLS (9.768 deg)	ESM pointing at 250 km above horizon	ESM following sun via extra_mirror with half angular velocity from start at 150 km above horizon	ESM position for 360 deg revolution of scanner bearings	ESM diffusor in fixed ESM pos. of 180-15 deg - timing required for normal incidence of sun on ESM	ESM pointing at 150 km above horizon	ESM pointing to mean sun elevation within sub-solar window	ESM following sun from start at 17,2 km above horizon (= fix angle of ESM related to FOO)	ESM pointing one elevation step below horizon (3 km)	ESM pointing in slightly shifted nadir direction (-z) - start position for nadir_pointing_left	ESM position IDLE	Description of the intended use of profile	J	Ahm romowing usjectory or sun irom position or sumse	White Design of the State of th	ASM Diffuser 4- starting position +3 deg diffuser normal	ASM Diffuser 3 - starting position +5 deg diffuser normal	ASM Diffuser 2 - starting position +7 deg diffuser normal, ASM diffuser atmosphere	ASM pointing in direction of velocity vector (-y)	ASM following sun trajectory	ASM position for 360 deg revolution of scanner bearings	ASM following sun trajectory	ASM following moon trajectory from mean position of the full moon (245 deg)	ASM_Diffuser_1 - starting position +9 deg diffuser normal	ASM following trajectory of sun from position of sunnise	ASM pointing in direction of velocity vector (-y)	ASM new unused position pointing into telescope, mirror not used	ASM new position IDLE	Description of the intended use of profile



	Description of Correction Function
0	no correction
1	optical zero correction
2	correct with earth model without yaw steering
3	correct with earth model with yaw steering
4	sun/moon acquisition, switch to sun follower readout A
5	sun/moon acquisition, switch to sun follower readout B
6	sun/moon pointing, switch to sun follower readout A
7	sun/moon pointing, switch to sun follower readout B
8	sun/moon tracking using S/C AOCS
9	improved sun/moon tracking using S/C AOCS

	Relative Scan Profile Identifier	Rel. Position for factor=1 [10-3 deg]
0	no relative scan	0,00000000
1	limb elevation steps	4,75554970
2	nadir elevation scan	3851,76607400
3	limb azimuth scan	2145,72694300
4	sun / moon scanning with mirror elevation	82,50592250
5	all pointing modes w. prediction/correction:	70,58840036
	- limb azimuth pointing direction	
	- sun pointing with mirror azimuth & elevation	
	- sun scanning with mirror azimuth	
	- sun pointing with diffusor	
	- subsolar calibration	
	- moon pointing with mirror azimuth	
	- moon scanning with mirror azimuth & elavation	
6	- fast sweep	84,96964100



A.2 State Description

The following state descriptions summarise the activities within each state. They should be considered as summaries of the measurement performance within each state and as a quick reference guide to understand the sequence of individual state events.

State Descriptions

The state descriptions summarise the activities within each state. They should be considered as summaries of the measurement performance within each state and as a quick reference guide to understand the sequence of individual state events.

The description of each state is given in the form of a table. The table content is as follows

Header	state ID with acronym, the measurement type and measurement
	category
ILOS	strategy and targeting of the instantaneous line of sight (ILOS)
Scan	type of scan, centre of scan motion, width, number of repetitions and velocity resp. duration
Swath	image of the scan of the instantaneous field of view (IFOV) on the
16	earth surface
Measurement Duration	measurement duration, partly split into different measurement
	phases
Exposure Control	pixel exposure time
Integration Time	range of integration times = pixel exposure time* co-adding
Pixel Size (Ground Pixel)	spatial resolution (dependant on selected integration time)

The state descriptions presented here are those for nominal operations, i.e. they represent the final flight states as of October 2003 (FFS_021215 incl. OCR_009). This final flight state version had been uploaded December 15th, 2002 and in subsequent corrective mcmd-sequences.

State ID	State Acronym	State ID	State Acronym	State ID	State Acronym	State ID	State Acronym
<u>01</u>	nad01	<u>19</u>	ascd03	<u>37</u>	limb10	<u>55</u>	mop03
<u>02</u>	nad02	<u>20</u>	ascd04	<u>38</u>	lnad01	<u>56</u>	mop01
<u>03</u>	nad03	<u>21</u>	ascd05	<u>39</u>	dcchm	<u>57</u>	mop02
<u>04</u>	nad04	<u>22</u>	asad01	<u>40</u>	limb13	<u>58</u>	sscp01
<u>05</u>	nad05	<u>23</u>	nad23	<u>41</u>	limb12	<u>59</u>	lsc01
<u>06</u>	nad06	<u>24</u>	nad24	<u>42</u>	nad26	<u>60</u>	sscs01
<u>07</u>	nad07	<u>25</u>	nad25	<u>43</u>	nad27	<u>61</u>	lwc01
<u>08</u>	dcc05	<u>26</u>	dcc04	<u>44</u>	nad28	<u>62</u>	escd02
<u>09</u>	nad09	<u>27</u>	elimb01	<u>45</u>	nad29	<u>63</u>	dcc02
<u>10</u>	nad10	<u>28</u>	limb01	<u>46</u>	dcc01	<u>64</u>	nmep01
<u>11</u>	nad11	<u>29</u>	limb02	<u>47</u>	sos02	<u>65</u>	adc01
<u>12</u>	nad12	<u>30</u>	limb03	<u>48</u>	lwnd01	<u>66</u>	nmes02
<u>13</u>	nad13	<u>31</u>	limb04	<u>49</u>	sos01	<u>67</u>	dcc03
<u>14</u>	nad14	<u>32</u>	limb05	<u>50</u>	scs01	<u>68</u>	nmes01
<u>15</u>	nad15	<u>33</u>	limb06	<u>51</u>	sop01	<u>69</u>	lsd01
<u>16</u>	lwnd02	<u>34</u>	limb11	<u>52</u>	escd01	<u>70</u>	lwd01
<u>17</u>	ascd01	<u>35</u>	limb08	<u>53</u>	sscp02		
<u>18</u>	ascd02	<u>36</u>	limb09	<u>54</u>	mos01		



State ID 01	Scientific measurement	Nadir
nad01	Description	<u> </u>
	Description In State 01 the Fourth atmosphere is ches	naved contains the line of sight (LOS) towards
ILOS		erved centering the line of sight (LOS) towards us Line of Sight), SCIAMACHY uses for the
	measurement only the nadir/elevation so	
Scan		olume above the subsatellite point along the
Scan		ation of the measurement. The scan motion of the
	ESM moves the ILOS in crosstrack dire	
		of -45.5°, corresponding to a slightly shifted
		thift is to avoid partial obscuration of the nadir
		can. The motion of the ESM is controlled by
		can of about 61.6°. This profile produces a
	_ · · · · · · · · · · · · · · · · · · ·	-45,5° basic position) of fixed duration for 4
	seconds in positive direction and a flyba	ack (reverse motion) to the original angular
	position within 1 second. The 4 second	forward motion produces a scan of the ground
		cending north-south pass of the orbit). The
		on its right side and maintains the original angular
	position on the left side.	
Swath		is set to 940 km by setting the scan speed to
		t position (for the descending north-south pass of
		left of the subsatellite point (ESM angular
		ound position of the backward scan of 475 km
Measurement	right of the subsatellite point (ESM ang	to 80 s, which results in 16 forward and flyback
duration	scans. A stretch of 4.77° of the orbit is	
Exposure		letector arrays (channels) is controlled by a subset
control		s of the channels (6 plus 4 virtual) respectively
		ng co-adding factors. The exposure parameters
	for nad01 are set to produce optimal sig	nals for the orbital position 183°. The definitions
	are summarised in PET table N1.	
Integration		by the exposure control (exposure time* co-
time		they are listed in integration_time table 21.
Pixel size		the motion of the <u>Instantaneous Field of View</u>
(Ground pixel)		5° corresponding to approx. 25 km * 0.6 km on
		e integration time. The motion is a combined
		Il motion of the spacecraft. Since the integration
		or forward and flyback is different by a factor 4
		prox. 92 km * 960 km (along track * across
	track) and approx. 32 km * 240 km.	

State ID 02	Scientific measurement	Nadir
nad02		
ILOS	Description	
ILOS	see state ID 01	
Scan	see state ID 01; speed 16°/s	
Swath	see state ID 01; width 940 km	
Measurement	The duration of the measurement is set	to 80 s, which results in 16 forward and flyback
duration	scans. A stretch of 4.77° of the orbit is	bassed during this time.
Exposure	see state ID 01	
control	The exposure parameters for nad02 are	set to produce optimal signals for the orbital



	position -3° to 5° and 175° to 183°. The definitions are summarised in table PET table N2.
Integration	The individual integration times are set by the exposure control (exposure time* co-
time	adding factor). For nad02 low rate data they are listed in integration_time table 22.
Pixel size	see state ID 01
(Ground pixel)	The ground pixel size varies between approx. 92 km* 960 km (along track* across track)
	and approx. 32 km* 240 km.

State ID 03 nad03	Scientific measurement	Nadir
ILOS	Description	
ILOS	see state ID 01	
Scan	see state ID 01; speed 16°/s	
Swath	see state ID 01; width 940 km	
Measurement	The duration of the measurement is set to 80 s, which results in 16 forward and flyback	
duration	scans. A stretch of 4.77° of the orbit is passed during this time.	
Exposure	see state ID 01	
control	The exposure parameters for nad03 are set to produce optimal signals for the orbital	
	position 5° to 16° and 164° to 175°. The definitions are summarised in PET table N3.	
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For nad03 low rate data they are listed in integration_time table 23.	
Pixel size	see state ID 01	
(Ground pixel)	The ground pixel size varies between approx. 59 km* 960 km (along track* across track)	
	and approx. 27 km* 60 km.	

State ID 04	Scientific measurement	Nadir
nad04		
ILOS Description		
ILOS	see state ID 01	
Scan	see state ID 01; speed 16°/s	
Swath	see state ID 01; width 940 km	
Measurement	The duration of the measurement is set to 65 s, which results in 13 forward and flyback	
duration	scans. A stretch of 3.88° of the orbit is passed during this time.	
Exposure	see state ID 01	
control	The exposure parameters for nad04 are set to produce optimal signals for the orbital	
	position 16° to 26° and 154° to 164°. The definitions are summarised in PET table N4.	
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For nad04 low rate data they are listed in integration_time table 24.	
Pixel size	see state ID 01	
(Ground pixel)	The ground pixel size varies between approx. 32 km* 240 km (along track* across track)	
	and approx. 26 km* 30 km.	

State ID 05 nad05	Scientific measurement	Nadir
ILOS	Description	
see state ID 01		
Scan	see state ID 01; speed 16°/s	



Swath	see state ID 01; width 940 km
Measurement	The duration of the measurement is set to 65 s, which results in 13 forward and flyback
duration	scans. A stretch of 3.88° of the orbit is passed during this time.
Exposure	see state ID 01
control	The exposure parameters for nad05 are set to produce optimal signals for the orbital
	position 26° to 36° and 144° to 154°. The definitions are summarised in PET table N5.
Integration	The individual integration times are set by the exposure control (exposure time* co-
time	adding factor). For nad05 low rate data they are listed in integration_time table 25.
Pixel size	see state ID 01
(Ground pixel)	The ground pixel size varies between approx. 32 km* 240 km (along track* across track)
	and approx. 26 km* 30 km.

State ID 06	Scientific measurement	Nadir
nad06		
ILOS	Description	
iLos	see state ID 01	
Scan	see state ID 01; speed 16°/s	
Swath	see state ID 01; width 940 km	
Measurement	The duration of the measurement is set to 65 s, which results in 13 forward and flyback	
duration	scans. A stretch of 3.88° of the orbit is passed during this time.	
Exposure	see state ID 01	
control	The exposure parameters for nad06 are set to produce optimal signals for the orbital	
	position 36° to 70° and 110° to 144°. The definitions are summarised in PET table N6.	
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For nad06 low rate data they are listed in integration_time table 26.	
Pixel size	see state ID 01	
(Ground pixel)	The ground pixel size varies between approx. 32 km* 240 km (along track* across track)	
	and approx. 27 km* 60 km.	

State ID 07 nad07	Scientific measurement	Nadir
ILOS	Description	
ILOS	see state ID 01	
Scan	see state ID 01; speed 16°/s	
Swath	see state ID 01; width 940 km	
Measurement duration	The duration of the measurement is set to 65 s, which results in 13 forward and flyback scans. A stretch of 3.88° of the orbit is passed during this time.	
Exposure control	see state ID 01 The exposure parameters for nad07 are set to produce optimal signals for the orbital position 70° to 110°. The definitions are summarised in PET table N7.	
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For nad07 low rate data they are listed in integration_time table 27.	
Pixel size (Ground pixel)	see state ID 01 The ground pixel size varies between apand approx. 27 km* 60 km.	oprox. 59 km* 960 km (along track* across track)

State ID 08 Calibration Dark_Current_Calibration
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dcc05		
ILOS	Description In State 08 the ILOS is pointing in flight direction to an altitude safely above the earth atmosphere (250km above horizon, basic profile 9) to eliminate atmospheric influences on the dark current measurement. To adjust the ILOS, SCIAMACHY uses for the measurement the nadir/elevation scan mirror (ESM) and the azimuth scan mirror (ASM).	
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the measurement is set to 40 s.	
Exposure control	The exposure parameters for dcc05 are summarized in PET table Dark_Current_5.	
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For dcc05 low rate data they are listed in integration_time table 52.	
Pixel size	n.a.	

State ID 09	Scientific measurement	Nadir
nad09		
ILOS	Description	
iLos	see state ID 01	
Scan	see state ID 01	
	To adjust the view to a quasi telescopic	close look the swath is set to 117 km by setting
	the scan speed to 2°/s.	
Swath		Centering of the scan gives a start position of the
		scending north-south pass of the orbit) of the
	subsatellite point (ESM angular position	n -49,35°) and a turnaround position of the
	forward scan of 51 km west of the subsatellite point (ESM angular position -41,65°).	
Measurement	The duration of the measurement is set to 80 s, which results in 16 forward and flyback	
duration	scans. A stretch of 4.77° of the orbit is passed during this time.	
Exposure	see state ID 01	
control	The exposure parameters for nad09 are set to produce optimal signals for the orbital	
	position 183°. The definitions are summarised in PET table N1.	
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For nad09 low rate data they are listed in integration_time table 21.	
Pixel size	The ground pixel size is determined by the motion of the <u>Instantaneous Field of View</u>	
(Ground pixel)	(IFOV) of the instrument of $1.8^{\circ} * 0.045^{\circ}$ corresponding to approx. $25 \text{ km} * 0.6 \text{ km}$ on	
	ground - over the atmosphere during the integration time. The motion is a combined	
	motion of the scan mirror and the orbital motion of the spacecraft. Since the integration	
	time is diverse, and the angular speed for forward and flyback is different by a factor 4	
	the ground pixel size varies between approx. 92 km* 117 km (along track* across track)	
	and approx. 32 km* 30 km.	

State ID 10 nad10	Scientific measurement	Nadir
ILOS	Description	
see state ID 09		
Scan	see state ID 09; speed 2°/s	
Swath	see state ID 09; width 117 km	



Measurement	The duration of the measurement is set to 80 s, which results in 16 forward and flyback
duration	scans. A stretch of 4.77° of the orbit is passed during this time.
Exposure	see state ID 09
control	The exposure parameters for nad10 are set to produce optimal signals for the orbital
	position -3° to 5° and 175° to 183°. The definitions are summarised in PET table N2.
Integration	The individual integration times are set by the exposure control (exposure time* co-
time	adding factor). For nad10 low rate data they are listed in integration_time table 22.
Pixel size	see state ID 09
(Ground pixel)	The ground pixel size varies between approx. 92 km* 117 km (along track* across track)
	and approx. 32 km* 30 km.

State ID 11 nad11	Scientific measurement	Nadir
ILOS	Description	
ilos	see state ID 09	
Scan	see state ID 09; speed 2°/s	
Swath	see state ID 09; width 117 km see state ID 09; width 117 km	
Measurement	The duration of the measurement is set to 80 s, which results in 16 forward and flyback	
duration	scans. A stretch of 4.77° of the orbit is passed during this time.	
Exposure	see state ID 09	
control	The exposure parameters for nad11 are set to produce optimal signals for the orbital	
		The definitions are summarised in PET table N3.
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For nad11 low rate data they are listed in integration_time table 23.	
Pixel size	see state ID 09	
(Ground pixel)	The ground pixel size varies between approx. 59 km* 117 km (along track* across track)	
	and approx. 27 km* 7.5 km.	

State ID 12 nad12	Scientific measurement	Nadir	
	Description		
ILOS	see state ID 09		
Scan	see state ID 09; speed 2°/s		
Swath	see state ID 09; width 117 km		
Measurement	The duration of the measurement is set to 65 s, which results in 13 forward and flyback		
duration	scans. A stretch of 3.88° of the orbit is passed during this time.		
Exposure	see state ID 09		
control	The exposure parameters for nad12 are set to produce optimal signals for the orbital		
	position 16° to 26° and 154° to 164° .	The definitions are summarised in PET table N4.	
Integration	The individual integration times are set by the exposure control (exposure time* co-		
time	adding factor). For nad12 low rate data they are listed in integration_time table 24.		
Pixel size	see state ID 09		
(Ground pixel)	The ground pixel size varies between approx. 32 km* 30 km (along track* across track)		
	and approx. 26 km* 3.75 km.		

State ID 13	Scientific measurement	Nadir
nad13		



ILOS	Description
	see state ID 09
Scan	see state ID 09; speed 2°/s
Swath	see state ID 09; width 117 km
Measurement	The duration of the measurement is set to 65 s, which results in 13 forward and flyback
duration	scans. A stretch of 3.88° of the orbit is passed during this time.
Exposure	see state ID 09
control	The exposure parameters for nad13 are set to produce optimal signals for the orbital
	position 26° to 36° and 144° to 154°. The definitions are summarised in PET table N5.
Integration	The individual integration times are set by the exposure control (exposure time* co-
time	adding factor). For nad13 low rate data they are listed in integration_time table 25.
Pixel size	see state ID 09
(Ground pixel)	The ground pixel size varies between approx. 32 km* 30 km (along track* across track)
	and approx. 26 km* 3.75 km.

State ID 14	Scientific measurement	Nadir
nad14		
ILOS	Description	
ILOS	see state ID 09	
Scan	see state ID 09; speed 2°/s	
Swath	see state ID 09; width 117 km	
Measurement	The duration of the measurement is set to 65 s, which results in 13 forward and flyback	
duration	scans. A stretch of 3.88° of the orbit is passed during this time.	
Exposure	see state ID 09.	
control	The exposure parameters for nad14 are set to produce optimal signals for the orbital	
	position 36° to 70° and 110° to 144° .	The definitions are summarised in PET table N6.
Integration		by the exposure control (exposure time* co-
time	adding factor). For nad14 low rate data	they are listed in integration_time table 26.
Pixel size	see state ID 09	
(Ground pixel)	The ground pixel size varies between ap	pprox. 32 km* 30 km (along track* across track)
	and approx. 27 km* 7.5 km.	

State ID 15	Scientific measurement	Nadir
nad15		
ILOS	Description	
ILOS	see state ID 09	
Scan	see state ID 09; speed 2°/s	
Swath	see state ID 09; width 117 km	
Measurement	The duration of the measurement is set to 65 s, which results in 13 forward and flyback	
duration	scans. A stretch of 3.88° of the orbit is passed during this time.	
Exposure	see state ID 09.	
control	The exposure parameters for nad15 are set to produce optimal signals for the orbital	
	position 70° to 110° . The definitions as	re summarised in PET table N7.
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For nad15 low rate data they are listed in integration_time table 27.	
Pixel size	see state ID 09	
(Ground pixel)	The ground pixel size varies between ap	prox. 59 km* 117 km (along track* across track)
	and approx. 27 km* 7.5 km.	



State ID 16	Monitoring	NDF_Monitoring, ND Filter OUT
lwnd02		
	Description	
	For the purpose of monitoring the ND filter, the WLS is observed via the ESM under a	
ILOS	'non-optimal' angle of 10.673° with the ND filter being 'OUT'.	
	In phase1 the position of the ESM is acc	quired and in measurement phase 2 the ESM
	points to the WLS under this angle (basic scan profile 13).	
Scan	no scan	
Swath	n.a.	
Measurement	The duration of the measurement is set to 12 s.	
duration		
Exposure	The exposure parameters for lwnd02 are summarised in PET table NDF_Monitoring.	
control	Note that channel 6 uses the Hot Mode (see Hot Mode table) with a PET of 14.4 ms.	
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For lwnd02 low rate data they are listed in integration_time table 48. The	
	integration time given for channel 6 is the	he effective integration time which results from
	the Hot Mode. Readouts of channel 6 as	re obtained every 4 sec.
Pixel size	n.a.	

State ID 17	Calibration	Sun_ASM_Diffuser_Calibration
ascd01		
ILOS	In state ID 17 sunlight is reflected onto the entrance slit of the spectrometer via the ASM diffuser which is mounted on the rear side of the ASM mirror. The Sun incidence angle onto the diffuser amounts to between 48.2° -65.5° . This is caused by the apparent motion of the Sun in azimuth (323.2° -326.5° for ascd01) and the required scan of the ASM of 14° during the measurement. The measurement starts when the Sun has reached an elevation of 22.5°, i.e. the angle of 'reflection' into the telescope is 22.5°. The aperture stop is set to 'large' and the ND filter is 'OUT'. In phase 1 the position of the ESM at 11.255° (corresponds to an altitude of 250 km, basic profile 9) and the position of the ASM are calculated (basic profile 4 without azimuth correction and H/W- constellation 1, ASM diffuser normal points towards +9° at the start of the state, i.e. ASM mirror normal = ASM angle amounts to 189°) and acquired. The ESM stays in this position fixed for the duration of the state. In the measurement phase 2 the ASM diffuser executes the scan of 14° thus changing the angle of incidence.	
Scan	A scan of 14° is performed. The scan speed amounts to 0.47°/s.	
Swath	n.a.	
Measurement duration	The duration of the measurement is set	to 30 s.
Exposure control	The exposure parameters for ascd01 are	summarised in PET table Sun_ASM_diffuser.
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For ascd01 high rate data they are listed in integration_time table 17.	
Pixel size	n.a	



State ID 18	Calibration	Sun_ASM_Diffuser_Calibration
ascd02		
	Description	
ILOS	see state ID 17	
	The state ascd02 is executed when the solar azimuth angle amounts to 326.5° -329.5°.	
Scan	see state ID 17; speed 0.47°/s	
Swath	n.a.	
Measurement	The duration of the measurement is set to 30 s.	
duration		
Exposure	The exposure parameters for ascd02 are summarised in PET table Sun_ASM_diffuser.	
control		
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For ascd02 high rate data they are listed in integration_time table 17.	
Pixel size	n.a.	

State ID 19	Calibration	Sun_ASM_Diffuser_Calibration
ascd03		
	Description	
ILOS	see state ID 17	
	The state ascd02 is executed when the solar azimuth angle amounts to 329.5° -332.5°.	
Scan	see state ID 17; speed 0.47°/s	
Swath	n.a.	
Measurement	The duration of the measurement is set to 30 s.	
duration		
Exposure	The exposure parameters for ascd03 are summarised in PET table Sun_ASM_diffuser.	
control		
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For ascd03 high rate data they are listed in integration_time table 17.	
Pixel size	n.a	

State ID 20 ascd04	Calibration	Sun_ASM_Diffuser_Calibration
ILOS	Description see state ID 17 The state ascd04 is executed when the s	solar azimuth angle amounts to 332.5° -335.5°.
Scan	see state ID 17; speed 0.47° /s	
Swath	n.a.	
Measurement duration	The duration of the measurement is set to 30 s.	
Exposure control	The exposure parameters for ascd04 are summarised in PET table Sun_ASM_diffuser.	
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For ascd04 high rate data they are listed in integration_time table 17.	
Pixel size	n.a.	



State ID 21 ascd05	Calibration	Sun_ASM_Diffuser_Calibration	
ILOS	Description see state ID 17	'	
ILOS	The state ascd05 is executed when the solar azimuth angle amounts to 335.5° -337.9°.		
Scan	see state ID 17; speed 0.47° /s	see state ID 17; speed 0.47°/s	
Swath	n.a.		
Measurement duration	The duration of the measurement	is set to 30 s.	
Exposure control	The exposure parameters for ascd	05 are summarised in PET table Sun_ASM_diffuser.	
Integration time	- C	re set by the exposure control (exposure time* co- te data they are listed in integration_time table 17.	
Pixel size	n.a.	-	

State ID 22	Monitoring	Sun_ASM_Diffuser_Atmosphere
asad01	D	
ILOS	In state asad01 the Sun is observed via the ASM diffuser while it rises through the atmosphere. Thus the atmosphere shall be used as a cut-off filter. For the ASM diffuser position an average angle relative to the Sun (basic profile 10, as for state ID ascd02) is used. During the measurement the ASM diffuser executes a scan of 14.9° as for the states ID 17-21. Since the azimuth angle of the Sun varies over a year (323.2° -337.9°), the incidence angle onto the ASM diffuser changes between 46.2° -74.9°. The ESM remains fixed throughout the measurement. The aperture stop is set to 'large' and the ND filter is 'OUT'. The measurement starts when the Sun has reached an altitude of 17.2 km. In phase 1 the pointing position of the ESM at an altitude of 17.2 km (corresponds to an ESM angle of -13.41°, basic profile 14) and the position of the ASM are calculated (basic profile 10 without azimuth correction and H/W- constellation 1, ASM diffuser normal points towards +7° at the start of the state, i.e. ASM mirror normal = ASM angle amounts to 187°) and acquired. The ESM stays in this position fixed for the duration of the state. In the measurement phase 2 the ASM diffuser executes the scan of 14° while the Sun is rising.	
Scan	A scan of 14.9° is performed. The scan speed amounts to 0.47°/s.	
Swath	n.a.	
Measurement duration	The duration of the measurement is set	to 32 s.
Exposure control	The exposure parameters for asad01 are	summarised in PET table Sun_ASM_diffuser.
Integration time		by the exposure control (exposure time* coat they are listed in integration_time table 17.
Pixel size	n.a.	

State ID 23	Scientific measurement	Nadir_pointing
nad23		



	Description	
	In state ID 23 the earth atmosphere is observed pointing the line of sight (LOS) towards	
	Nadir. To adjust the ILOS, SCIAMACHY uses for the measurement only the nadir/	
	elevation scan mirror (ESM).	
	By the orbital motion the atmospheric volume above the subsatellite point along the	
ILOS	ground track is observed during the duration of the measurement. No scan motion of the	
	ESM via a relative scan profile is invoked, since all factors are set to zero. The ESM is	
	standing still in the basic position controlled by basic profile 1 yielding a position of -	
	45,5°, corresponding to a slight shift in nadir (-z) for the ILOS.	
	The relative scan profile 2 is used only for the purpose of maintaining scanner control	
	because of the applied Earth model correction throughout the measurement.	
Scan	no scan	
Swath	No swath is implied due to the stand still of the ESM. Principally the IFOV in dispersion	
	direction of 0.045° (0.6 km) determines the 'swath'.	
Measurement	The duration of the measurement is set to 80 s, which results in 16 consecutive still	
duration	sequences. A stretch of 4.77° of the orbit is passed during this time.	
Exposure	The exposure parameters for nad23 are set to produce optimal signals for the orbital	
control	position 183°. The definitions are summarised in PET table N1.	
Integration	The individual integration times are set by the exposure control (exposure time* co-	
time	adding factor). For nad23 low rate data they are listed in integration_time table 21.	
Pixel size	The ground pixel size is determined by the motion of the Instantaneous Field of View	
(Ground pixel)	(IFOV) of the instrument of 1.8°* 0.045° corresponding to approx. 25 km* 0.6 km on	
	ground - over the atmosphere during the integration time. The motion of the IFOV is	
	contrary to the 'scanning' nadir observations only caused by the orbital motion of the	
	spacecraft and its pointing stability. Since the integration time is diverse, the ground	
	pixel size varies between approx. 92 km* 1 km (along track* across track) and approx.	
	32 km* 0.6 km.	

State ID 24 nad24	Scientific measurement	Nadir_pointing	
пос	Description	Description	
ILOS	see state ID 23		
Scan	see state ID 23; no scan		
Swath	see state ID 23; none		
Measurement	The duration of the measurement is set to 80 s, which results in 16 consecutive still		
duration	sequences. A stretch of 4.77° of the orbit is passed during this time.		
Exposure	see state ID 23		
control	The exposure parameters for nad24 are set to produce optimal signals for the orbital		
	position -3° to 5° and 175° to 183°	. The definitions are summarised in PET table N2.	
Integration	The individual integration times ar	e set by the exposure control (exposure time* co-	
time	adding factor). For nad24 low rate data they are listed in integration_time table 22.		
Pixel size	see state ID 23		
(Ground pixel)	The ground pixel size varies between approx. 92 km* 1 km (along track* across track)		
	and approx. 32 km* 0.6 km.		

State ID 25 nad25	Scientific measurement	Nadir_pointing	
H OG	Description		
ILOS	see state ID 23		
Scan	see state ID 23; no scan		



Swath	see state ID 23; none
Measurement	The duration of the measurement is set to 80 s, which results in 16 consecutive still sequences. A
duration	stretch of 4.77° of the orbit is passed during this time.
Exposure	see state ID 23
control	The exposure parameters for nad24 are set to produce optimal signals for the orbital position 5° to
	16° and 164° to 175°. The definitions are summarised in PET table N3.
Integration	The individual integration times are set by the exposure control (exposure time* co-adding
time	factor). For nad25 low rate data they are listed in integration_time table 23.
Pixel size	see state ID 23
(Ground pixel)	The ground pixel size varies between approx. 59 km * 1 km (along track * across track) and
	approx. 27 km * 0.6 km.

State ID 26 dcc04	Calibration	Dark_Current_Calibration
ILOS	Description see state ID 08 ILOS pointing in flight direction to 250 km altitude above horizon.	
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the measurement is set to 30 s.	
Exposure control	see state ID 08 The exposure parameters for dcc04 are summarized in PET table Dark_Current_4.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For dcc04 low rate data they are listed in integration_time table 51.	
Pixel size	n.a.	

State ID 27	Scientific measurement	Limb_Mesosphere
elimb01		_
ILOS	Description In State 27 the earth mesosphere is observed centring the line of sight (LOS) towards the tangent to the earth horizon in the forward direction of the orbit (horizontal distance ca. 3290 km). Contrary to the other limb states, state ID 27 executes a sequence of measurements starting at high (150 km) and descending to low altitudes (approx. 80 km). To adjust the ILOS, SCIAMACHY uses for the measurement the azimuth mirror (ASM) and the nadir/elevation scan mirror (ESM). No relative profile is applied to the ASM, i.e. no horizontal scan is performed. The basic position of the ASM is controlled by basic profile 2 yielding a position of -45°, corresponding to flight direction (-y) for the ILOS. The ESM moves, with a timing as for the scanning limb observations, the ILOS a defined number of angular step towards -z direction. The basic starting position of the ESM is at 150 km (basic profile 5). The elevation step is controlled by relative profile 1, which adjusts the vertical step of the ESM in elimb01 to 0.0285° corresponding to a height resolution approx. 3 km. 23 elevation	
G	steps are programmed, i.e. yielding a stop altitude of approx. 80 km.	
Scan Swath	no scan	
Measurement duration	The duration of the measurement is set to 40.5 s.	
Exposure control	The exposure parameters for elimb01 are set to produce optimal signals in the eclipse phase of the orbit. The definitions are summarised in PET table L6.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For elimb01 low rate data they are listed in integration_time table 6.	
Pixel size ('column' pixel)	The atmospheric 'column pixel' size is dete the instrument of 1.8° * 0.045° corresponding	rmined by the <u>Instantaneous Field of View (IFOV)</u> of ng to approx. 103 km * 2.6 km at the distance of the f the spacecraft during the integration time determines



the column depth. Since the ASM stands still during a 'scanning period', the column pixel size
has the size of the IFOV of approx. 103 km * 3.6 km (across track * height - incl. cycle step
height error) also for different integration times.

C4-4- ID 20	C -:t::::	T that allows
State ID 28 limb01	Scientific measurement	Limb_short
11111001	Description	
ILOS	In State 28 the earth atmosphere is observed centering the line of sight (LOS) towards the tangent to the earth horizon in the forward direction of the orbit (horizontal distance ca. 3290 km). This tangent point shall coincide with the subsatellite point of the corresponding nadir observation at this horizontal distance. To adjust the ILOS, SCIAMACHY uses for the measurement the azimuth mirror (ASM) and the nadir/elevation scan mirror (ESM). Instrument specific correction algorithms are applied to ASM accounting for the yaw steering of ENVISAT and for the Earth rotation during the time elapsed (approx. 450 s) between this measurement and the correlated nadir measurement. The basic position of the ESM, which shall be one elevation step below the horizon, is corrected for the varying horizontal height caused by the earth ellipsoid.	
Scan	The atmospheric volume at the horizon (subsatellite point of the corresponding nadir observation) is observed by directing the IFOV with the ASM. The scan motion of the ASM moves the ILOS in crosstrack direction. The basic position of the ASM is controlled by basic profile 2 yielding a position of -45°, corresponding to flight direction (-y) for the LOS. The motion of the ASM is controlled via relative scan profile 3, which is centered around the -y-direction. This profile produces for 1.5 seconds a relative motion (relative to -45° basic position) of constant angular velocity in positive direction and with the alternating inverted profile the ASM returns to the original angular position. The total angular motion of the ASM is approx. 8.5°, which is approx. 17° for the LOS. To account for the decline of the horizon a further correction is applied during this azimuth scan. Correction 3 maintains a constant distance above the horizon by adjusting the ESM position accordingly. Between the forward and reverse motion of the ASM, the ESM is controlled to move the ILOS a defined angular step towards zenith (+z), thus producing a meandering pattern for the ILOS path. The first measurement position for the ESM is one elevation step below the local earth horizon at point of observation. The elevation step is controlled by relative profile 1, which adjusts the vertical step of the ESM in limb01 to 0.0570° (LOS) corresponding to a height resolution of approx. 3 km30 elevation steps and azimuth scans are programmed reaching to an altitude of about 93 km. After the completion of the scans the ESM is moved by elevation basic profile 9 to an angle of about -11.255° (about 250 km above horizon) and the ASM to -45° (flight direction), which is the	
Swath		muth swath is set to 960 km by setting the ASM scan speed to all to the one of the corresponding nadir observation.
Measurement		52.31 s, covering a total of 30 scans and the attached dark
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure control	The exposure of the focal plane line parameters setting the exposure time	ear detector arrays (channels) is controlled by a subset of es of the channels (6 plus 4 virtual) respectively the defined dding factors. The exposure parameters for limb01 are set to
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb01 low rate data they are listed in integration_time table 1.	
Pixel size ('column' pixel)	step) of the atmosphere of the Instar 0.045° during the integration time. The tangent to the horizon. The orbit determines the column depth. Since	e is determined by the scan motion in one layer (elevation naneous Field of View (IFOV) of the instrument of 1.8° * The IFOV corresponds to 103 km * 2.6 km at the distance of al motion of the spacecraft during the integration time the integration time is diverse, the column pixel size varies (across track * height - incl. cycle step height error) and



State ID 29	Scientific measurement	Limb_short
limb02		
ILOS	Description	
ilos	see state ID 28	
Scan	see state ID 28; ASM: approx. 8.5° (mirror) corresponding to approx. 17° LOS; ESM: 34 steps
Swath	see state ID 28; width 960 km	
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark	
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 28.	
control	The exposure parameters for limb02 are set to produce optimal signals for the orbital position -	
	20° to -12°. The definitions are summarised	in PET table L2.
Integration	The individual integration times are set by t	he exposure control (exposure time* co-adding
time	factor). For limb02 low rate data they are listed in integration_time table 2.	
Pixel size	see state ID 28	
('column' pixel)	The column pixel size varies between approx. 1060 km * 3.6 km (across track * height - incl.	
	cycle step height error) and approx. 230 km	* 2.6 km.

State ID 30 limb03	Scientific measurement	Limb_short
ILOS	Description	
ILUS	see state ID 28	
Scan	see state ID 28; ASM: approx. 8.5° (mirror) = approx. 17° LOS; ESM: 34 steps
Swath	see state ID 28; width 960 km	
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark	
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 28.	
control		to produce optimal signals for the orbital position -
	12° to 9° and 146° to 157°. The definitions are summarised in PET table L3.	
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb03 low rate data they are listed in integration_time table 3.	
Pixel size	see state ID 28	
('column' pixel)	The column pixel size varies between approx. 1060 km * 3.6 km (across track * height - incl.	
	cycle step height error) and approx. 230 km	* 2.6 km.

State ID 31 limb04	Scientific measurement	Limb_short
ILOS	Description	
iLOS	see state ID 28	
Scan	see state ID 28; ASM: approx. 8.5° (mirror) = approx. 17° LOS; ESM: 34 steps
Swath	see state ID 28; width 960 km	
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark	
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 28.	
control	The exposure parameters for limb04 are set to produce optimal signals for the orbital position 9°	
	to 20° and 125 ° to 146°. The definitions are	e summarised in PET table L4.
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb04 low rate data they are listed in integration_time table 4.	
Pixel size	see state ID 28	
('column' pixel)		ox. 1060 km * 3.6 km (across track * height - incl.
	cycle step height error) and approx. 230 km	* 2.6 km.

State ID 32	Scientific measurement	Limb_short
limb05		



ILOS	Description
ILUS	see state ID 28
Scan	see state ID 28; ASM: approx. 8.5° (mirror) = approx. 17° LOS; ESM: 34 steps
Swath	see state ID 28; width 960 km
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.
Exposure	see state ID 28.
control	The exposure parameters for limb05 are set to produce optimal signals for the orbital position 20°
	to 125°. The definitions are summarised in PET table L5.
Integration	The individual integration times are set by the exposure control (exposure time* co-adding
time	factor). For limb05 low rate data they are listed in integration_time table 5.
Pixel size	see state ID 28
('column' pixel)	The column pixel size varies between approx. 1060 km * 3.6 km (across track * height - incl.
	cycle step height error) and approx. 230 km * 2.6 km.

State ID 33 limb06	Scientific measurement	Limb_short
Description		
ILOS	see state ID 28	
Scan	see state ID 28; ASM: approx. 8.5° (mirror) = approx. 17° LOS; ESM: 34 steps
Swath	see state ID 28; width 960 km	
Measurement duration	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 28.	
control	The exposure parameters for limb06 are set to produce optimal signals for the orbital position > 157°. The definitions are summarised in PET table L6.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For limb06 low rate data they are listed in integration_time table 6.	
Pixel size	see state ID 28	
('column' pixel)	The column pixel size varies between approx. 1060 km * 3.6 km (across track * height - incl. cycle step height error) and approx. 580 km * 2.6 km.	

State ID 34	Scientific measurement	Limb_short
limb11		(No swath)
ILOS	Description	
ILUS	see state ID 28	
Scan	see state ID 28	
	No relative profile is applied to the ASM. T	the basic position of the ASM is also controlled by
	basic profile 2 yielding a position of -45°, c	orresponding to flight direction (-y) for the ILOS.
	This position is maintained throughout the s	state, i.e. no horizontal scan is performed.
Swath	No swath is implemented. The ASM is stand	ding still. The pixel dimension in azimuth is of a
	similar size (approx. 103 km) as the swath	of the corresponding nadir observation (120 km).
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark	
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 28	
control	The exposure parameters for limb11 are set to produce optimal signals for the orbital position 9°	
	to 25° and 125° to 146°. The definitions are summarised in PET table L4.	
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb11 low rate data they are listed in integration_time table 4.	
Pixel size	see state ID 28	
('column' pixel)	The atmospheric 'column pixel' size is determined by the <u>Instantaneous Field of View</u> (IFOV) of	
	the instrument of 1.8° * 0.045° corresponding to approx. 103 km * 2.6 km at the distance of the	
		f the spacecraft during the integration time determines
	1	ll during a 'scanning period', the column pixel size
	has the size of the IFOV of approx. 103 km * 3.6 km (across track * height - incl. cycle step	



height error) also for different integration times.

State ID 35	Scientific measurement	Limb_short
limb08		(No swath)
ILOS	Description	
iLOS	see state ID 34	
Scan	see state ID 34; no horizontal scan	
Swath	n.a.	
Measurement duration	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 34	
control	The exposure parameters for limb08 are set to produce optimal signals for the orbital position $<$ - 20° . The definitions are summarised in PET table L1.	
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb08 low rate data they are listed in integration_time table 1.	
Pixel size	see state ID 34	
('column' pixel)	Since the ASM stands still during a 'scanning period', the column pixel size has the size of the	
		rack * height - incl. cycle step height error) also for
	different integration times.	

State ID 36	Scientific measurement	Limb_short
limb09		(No swath)
ILOS	Description	
ILOS	see state ID 34	
Scan	see state ID 34; no horizontal scan	
Swath	n.a.	
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark	
duration	current measurement. A stretch of 3.12° of	the orbit is passed during this time.
Exposure	see state ID 34	
control	The exposure parameters for limb09 are set to produce optimal signals for the orbital position -	
	20° to -12°. The definitions are summarised in PET table L2.	
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb09 low rate data they are listed in integration_time table 2.	
Pixel size	see state ID 34	
('column' pixel)	Since the ASM stands still during a 'scanning period', the column pixel size has the size of the	
	IFOV of approx. 103 km * 3.6 km (across to	rack * height - incl. cycle step height error) also for
	different integration times.	

State ID 37	Scientific measurement	Limb_short
limb10		(No swath)
ILOS	Description	
ilos	see state ID 34	
Scan	see state ID ID 34; no horizontal scan	
Swath	n.a.	
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark	
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 34	
control	The exposure parameters for limb10 are set to produce optimal signals for the orbital position -	
	12° to 157°. The definitions are summarised in PET table L3.	
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb10 low rate data they are listed in integration_time table 3.	
Pixel size	see state ID 34	
('column' pixel)	Since the ASM stands still during a 'scanning period', the column pixel size has the size of the	



IFOV of approx. 103 km * 3.6 km (across track * height - incl. cycle step height error) also for
different integration times.

State ID 38	Monitoring	Nadir_pointing_left
mador	Description	
ILOS	In state ID 38 the earth atmosphere is observed pointing the line of sight (LOS) towards Nadir at the extreme left w.r.t. flight direction (approx. 30.5°). This measurement has the purpose to monitor the angle dependent degradation of the ESM mirror. To adjust the ILOS, SCIAMACHY uses for the measurement only the nadir/ elevation scan mirror (ESM). The extreme left position is obtained by using basic profile 1, yielding a position of -45,5°, and a superimposed relative profile 5 which adds -15.95° to the ESM mirror normal. The motion to reach this offset position lasts 4 sec. Once the extreme left position is acquired, the ESM stays in that configuration for the complete measurement phase.	
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the measurement is 65 s. A stretch of 3.88° of the orbit is passed during this time.	
Exposure control	The exposure parameters for lnad01 are set to produce unsaturated signals throughout the orbit°. The definitions are summarised in PET table N7.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For lnad01 low rate data they are listed in integration_time table 27.	
Pixel size (Ground pixel)	the instrument of 1.8°* 0.045° correspondir atmosphere during one integration time. The nadir observations only caused by the orbital	motion of the Instantaneous Field of View (IFOV) of ng to approx. 25 km* 0.6 km on ground - over the ng motion of the IFOV is contrary to the 'scanning' al motion of the spacecraft and its pointing stability. Sound pixel size varies between approx. 59 km* 1 km km* 0.6 km

State ID 39 dcchm	Calibration	Dark_Current_Calibration_Hot_Mode
deemii	Description	
ILOS	In state ID 39 the dark signal is measured for exposure times < 31.25 msec in channels 6-8 for the purpose of correcting WLS measurements. In phase 1 the WLS-position of the ESM (10.523°) is acquired and in measurement phase 2 the ESM points to the WLS (basic scan profile 12).	
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the measurement is 12 s. For the total duration of the measurement phase the WLS is off thus yielding only a dark current signal with state settings identical to those of the WLS state (ID 61).	
Exposure control	The exposure parameters for dcchm are summarised in PET table WLS.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For dcchm low rate data they are listed in integration_time table 55.	
Pixel size	n.a.	

State ID 40 limb13	Scientific measurement	Limb_short (No swath)	
ILOS	Description		
	see state ID 34		
Scan	see state ID 34; no horizontal scan		



Swath	n.a.
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.
Exposure	see state ID 34
control	The exposure parameters for limb13 are set to produce optimal signals for the orbital position >
	157°. The definitions are summarised in PET table L6.
Integration	The individual integration times are set by the exposure control (exposure time* co-adding
time	factor). For limb13 low rate data they are listed in integration_time table 6.
Pixel size	see state ID 34
('column' pixel)	Since the ASM stands still during a 'scanning period', the column pixel size has the size of the
	IFOV of approx. 103 km * 3.6 km (across track * height - incl. cycle step height error) also for
	different integration times.

State ID 41		Limb (No swath)
	Description	(NO Swatti)
see state ID 34		
Scan	see state ID 34; no horizontal scan	
Swath	n.a.	
Measurement	The duration of the measurement is 52.31 s, covering a total of 30 scans and the attached dark	
duration	current measurement. A stretch of 3.12° of the orbit is passed during this time.	
Exposure	see state ID 34	
control	The exposure parameters for limb10 are set to produce optimal signals for the orbital position 20° to 125°. The definitions are summarised in PET table L5.	
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For limb12 low rate data they are listed in integration_time table 5.	
Pixel size	see state ID 34	
('column' pixel)		g period', the column pixel size has the size of the ack * height - incl. cycle step height error) also for

State ID 42	Scientific measurement	Nadir_pointing	
nad26			
ILOS	Description		
ILOS	see state ID 23		
Scan	see state ID 23; no scan		
Swath	see state ID 23; none		
Measurement	The duration of the measurement is set to 65 s, which results in 13 consecutive 'still' sequences.		
duration	A stretch of 3.88° of the orbit is passed during this time.		
Exposure	see state ID 23		
control	The exposure parameters for nad26 are set to produce optimal signals for the orbital position 16°		
	to 26° and 154° to 164°. The definitions are summarised in PET table N4.		
Integration	The individual integration times are set by the exposure control (exposure time* co-adding		
time	factor). For nad26 low rate data they are listed in integration_time table 24.		
Pixel size	see state ID 23		
(Ground pixel)	The ground pixel size varies between approx. 32 km * 1 km (along track * across track) and		
	approx. 26 km * 0.6 km.		

State ID 43 nad27	Scientific measurement	Nadir_pointing	
	Description		
ILOS	see state ID 23		
Scan	see state ID 23; no scan	·	



Swath	see state ID 23; none	
Measurement	The duration of the measurement is set to 65 s, which results in 13 consecutive 'still' sequences.	
duration	A stretch of 3.88° of the orbit is passed during this time.	
Exposure	see state ID 23	
control	The exposure parameters for nad27 are set to produce optimal signals for the orbital position 26°	
	to 36° and 144° to 154°. The definitions are summarised in PET table N5.	
Integration	The individual integration times are set by the exposure control (exposure time* co-adding	
time	factor). For nad27 low rate data they are listed in integration_time table 25.	
Pixel size	see state ID 23	
(Ground pixel)	The ground pixel size varies between approx. 32 km * 1 km (along track * across track) and	
	approx. 26 km * 0.6 km.	

State ID 44 nad28	Scientific measurement	Nadir_pointing	
II OG	Description		
ILOS	see state ID 23		
Scan	see state ID 23; no scan		
Swath	see state ID 23; none		
Measurement duration	The duration of the measurement is set to 65 s, which results in 13 consecutive 'still' sequences. A stretch of 3.88° of the orbit is passed during this time.		
Exposure	see state ID 23		
control	The exposure parameters for nad28 are set to 70° and 110° to 144°. The definitions are	o produce optimal signals for the orbital position 36° summarised in PET table N6.	
Integration time	The individual integration times are set by t factor). For nad28 low rate data they are list	the exposure control (exposure time* co-adding sed in integration_time table 26.	
Pixel size	see state ID 23		
(Ground pixel)	The ground pixel size varies between approapprox. 27 km * 0.6 km.	x. 32 km * 1 km (along track * across track) and	

State ID 45 nad29	Scientific measurement	Nadir_pointing	
ILOS	Description		
ILUS	see state ID 23		
Scan	see state ID 23; no scan		
Swath	see state ID 23; none	see state ID 23; none	
Measurement duration	The duration of the measurement is set to 65 s, which results in 13 consecutive 'still' sequences. A stretch of 3.88° of the orbit is passed during this time.		
Exposure	see state ID 23		
control	The exposure parameters for nad29 are set to 110°. The definitions are summarised in	to produce optimal signals for the orbital position 70° PET table N7.	
Integration time	The individual integration times are set by t factor). For nad29 low rate data they are list	he exposure control (exposure time* co-adding ted in integration_time table 27.	
Pixel size	see state ID 23		
(Ground pixel)	The ground pixel size varies between approapprox. 27 km * 0.6 km.	x. 59 km * 1 km (along track * across track) and	

State ID 46 dcc01	Calibration	Dark_Current_Calibration
	Description	
ILOS	see state ID 08	
	ILOS pointing in flight direct	ction to 250 km altitude above horizon.
Scan	no scan	
Swath	n.a.	



Measurement duration	The duration of the measurement is set to 10 s.
Exposure control	The exposure parameters for dcc01 are summarized in PET table Dark_Current_1.
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For dcc01 low rate data they are listed in integration_time table 45.
Pixel size	n.a.

State ID 47	Scientific measurement	SO&C_Scanning/
sos02	Calibration	Pointing
	Description	
ILOS	In state ID 47 the ILOS is directed towards the Sun during sunrise resp. the Sun whilst ascending. To adjust the ILOS, SCIAMACHY uses for the measurement the nadir/elevation scan mirror (ESM) and the azimuth scan mirror (ASM). In the start phase the position of the ASM is calculated based on the position of the Sun defined in the <i>START TIMELINE MCMD</i> (correction 8 of basic scan profile 3 and relative profile 5). The position of the ESM is calculated (pointing to an altitude 17.2 km above the calculated point of sunrise). Both mirrors acquire their calculated position. In phase 2 ASM tracks the propagated Sun position, whereas ESM starts to scan ±0.33° around 17.2 km. This phase is determined to balance the effects of the atmospheric refraction on shape and motion of the Sun. At the end of this phase the centre of the Sun should coarsely coincide with the ILOS. In Phase 3 the Sun follower (SFS) takes over, acquires and tracks the Sun with the ASM, the ESM continues scanning while now following the rising target with the predicted velocity. In phase 4 the ESM maintains this scan motion. The ASM points to the Sun (correction 6). In phase 5 the Sun has passed the upper edge of the atmosphere. The ESM has stopped scanning and acquires also the Sun (correction 4 of basic profile 3 and relative profile 5). In the final phase (6) both mirrors track	
Scan	the Sun (correction 6 resp. correction 4). A scan of $\pm 0.33^{\circ}$ of the ILOS in elevation direction is implemented during phases 2-4, when	
Scali	ILOS is centered to 17.2 km or following the rising Sun. After completion of one scan the scanning direction is inverted for the subsequent scan. Scan duration is 2s each direction. Totally 16 scans are performed in phase 2, 2 scans in phase 3 and 14 in phase 4.	
Swath	n.a.	
Measurement duration	The initial phase of pointing to an altitude of 17.2 km above the location of sunrise has a duration of 32 s. The sun acquisition and pointing phase takes 4 s and the consecutive tracking/ scanning of the sun another 28 s. State ID 47 is concluded with a measurement of 2 s pointing to the Sun above the atmosphere. Total duration of sos02 is 66 s.	
Exposure control	The irradiation of the focal plane by the Sun is reduced by two mechanisms: An aperture stop (primitive cmd <i>APERTURE STOP SMALL</i>) reduces the collecting area of the telescope and a neutral density filter reduces the light flux (primitive cmd <i>ND FILTER IN</i>). The exposure parameters for sos02 are summarised in PET table Sun.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For sos02 high rate data they are listed in integration_time table 32. A resolution of approx. 0.02° corresponding to 1.2 km at horizontal distance resp. 0.165° (10 km) is achieved.	
Pixel size	n.a.	

State ID 48	Monitoring	NDF_Monitoring, ND Filter IN
lwnd01		
	Description	
	For the purpose of monitoring the ND filter, the WLS is observed via the ESM under a 'non-	
ILOS	optimal' angle of 10.673° with the ND fil	ter being 'IN'.
	In phase 1 the position of the ESM is acqu	nired and in measurement phase 2 the ESM points to the
	WLS under this angle (basic scan profile 1	13).
Scan	no scan	



Swath	n.a.	
Measurement	The duration of the measurement is set to 12 s.	
duration		
Exposure	The exposure parameters for lwnd01 are summarised in PET table NDF_Monitoring. Note that	
control	channel 6 uses the Hot Mode (see Hot Mode table) with a PET of 14.4 ms.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For lwnd01 low rate data they are listed in integration_time table 48. The integration time given for channel 6 is the effective integration time which results from the Hot Mode. Readouts of channel 6 are obtained every 4 sec.	
Pixel size	n.a.	

State ID 49	Scientific measurement	SO&C_Scanning_Long_Duration
sos01	Calibration	
	Description see state ID 47.	
		first 3 phases with the same strategy as in ID 47.
ILOS		with ASM tracking the Sun and ESM following the
	track of the Sun with ESM basic profile 3 corrected with correction 8 whilst it scans. This phase	
	<u> -</u>	un has nearly reached the upper edge of the FOV of
	the limb baffle.	
Scan		lirection is implemented during phases 1-4, when
		e rising Sun. After completion of a scan the scanning
	direction is inverted for the subsequent scan. Scan duration is 2s each direction. Totally 16 scans	
	are performed in phase 2, 2 scans in phase 3	3 and 47 in phase 4.
Swath	n.a.	
Measurement	The initial phase of pointing to an altitude of 17.2 km above the location of sunrise has a duration	
duration	of 32 s. The Sun acquisition and pointing pl	hase takes 4 s and the consecutive tracking/scanning of
duration	of 32 s. The Sun acquisition and pointing pothe sun another 94 s. Total duration of sos0	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s.
	of 32 s. The Sun acquisition and pointing potthe sun another 94 s. Total duration of sos0. The irradiation of the focal plane by the Sun	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. n is reduced by two mechanisms: An aperture stop
duration	of 32 s. The Sun acquisition and pointing pithe sun another 94 s. Total duration of sos0 The irradiation of the focal plane by the Sun (prim.cmd <i>APERTURE STOP SMALL</i>) redu	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. n is reduced by two mechanisms: An aperture stop uces the collecting area of the telescope and a neutral
duration Exposure	of 32 s. The Sun acquisition and pointing pithe sun another 94 s. Total duration of sos0. The irradiation of the focal plane by the Sun (prim.cmd <i>APERTURE STOP SMALL</i>) redudensity filter reduces the light flux (prim.cr	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. n is reduced by two mechanisms: An aperture stop
duration Exposure control	of 32 s. The Sun acquisition and pointing pithe sun another 94 s. Total duration of sos0. The irradiation of the focal plane by the Sun (prim.cmd <i>APERTURE STOP SMALL</i>) redudensity filter reduces the light flux (prim.cr sos01 are summarised in PET table Sun.	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. In is reduced by two mechanisms: An aperture stop uces the collecting area of the telescope and a neutral and ND FILTER IN). The exposure parameters for
duration Exposure	of 32 s. The Sun acquisition and pointing pithe sun another 94 s. Total duration of sos0. The irradiation of the focal plane by the Sun (prim.cmd <i>APERTURE STOP SMALL</i>) reduces the light flux (prim.cr sos01 are summarised in PET table Sun. The individual integration times are set by the summarised in PET table Sun.	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. In is reduced by two mechanisms: An aperture stop uces the collecting area of the telescope and a neutral and ND FILTER IN). The exposure parameters for the exposure control (exposure time* co-adding
duration Exposure control	of 32 s. The Sun acquisition and pointing pithe sun another 94 s. Total duration of sos0. The irradiation of the focal plane by the Sur (prim.cmd <i>APERTURE STOP SMALL</i>) reduces the light flux (prim.cr sos01 are summarised in PET table Sun. The individual integration times are set by t factor). For sos02 high rate data they are lis	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. In is reduced by two mechanisms: An aperture stop uces the collecting area of the telescope and a neutral and ND FILTER IN). The exposure parameters for the exposure control (exposure time* co-adding ted in integration_time table 32. A resolution of
Exposure control Integration	of 32 s. The Sun acquisition and pointing pithe sun another 94 s. Total duration of sos0. The irradiation of the focal plane by the Sur (prim.cmd <i>APERTURE STOP SMALL</i>) reduces the light flux (prim.cr sos01 are summarised in PET table Sun. The individual integration times are set by t factor). For sos02 high rate data they are lis	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. In is reduced by two mechanisms: An aperture stop uces the collecting area of the telescope and a neutral and ND FILTER IN). The exposure parameters for the exposure control (exposure time* co-adding
Exposure control Integration	of 32 s. The Sun acquisition and pointing pithe sun another 94 s. Total duration of sos0. The irradiation of the focal plane by the Sur (prim.cmd <i>APERTURE STOP SMALL</i>) reduces the light flux (prim.cr sos01 are summarised in PET table Sun. The individual integration times are set by t factor). For sos02 high rate data they are lis	hase takes 4 s and the consecutive tracking/scanning of 1 is 130 s. In is reduced by two mechanisms: An aperture stop uces the collecting area of the telescope and a neutral and ND FILTER IN). The exposure parameters for the exposure control (exposure time* co-adding ted in integration_time table 32. A resolution of

State ID 50	Calibration	SO&C_Scanning (fast_sweep)
scs01		
	Description	
	as a calibration source i.e. the solar position shall be well above the	
	atmosphere. ASM and ESM a	re used to control the ILOS. Both mirrors shall follow the Sun track
		ince this profile is constructed to cover sunrise around an altitude of
	17.2 km (see ID 47) it must be	e corrected for higher Sun elevation. Correction 8 uses the angular
ILOS	parameters of the Sun as they	are contained in the MCMD START TIMELINE to calculate the
	correction terms for the two mirrors. These parameters are valid for the start of the measurement	
	phase. Updates are performed	with each relative profile.
	In phase 1 the positions for bo	oth mirrors are calculated (correction 8) and acquired. In phase 2
	both mirrors are following the corrected, propagated Sun trajectory and the ESM is in addition	
performing a scan (fast_sweep - relative profile 6) over the Sun.		p - relative profile 6) over the Sun.
Scan	When the centre of the ILOS is	is following the rising Sun, scans over the Sun in elevation direction
	of approx. 2.72° (LOS) are pe	rformed. They are controlled by relative profile 6 (fast sweep),
	which produces a scan of 0.12	25 s duration in one direction and then holds this position for another



	0.125 s. The scan speed (LOS) is 21.7°/s in the not accelerated segments of profile 6. The direction of the scan is inverted after each scan. In total 12 scans over the Sun of the type fast_sweep are performed during the measurement phase 2.
Swath	n.a.
Measurement duration	Total duration of scs01 is 3 s.
Exposure control	The irradiation of the focal plane by the Sun is reduced by two mechanisms: An aperture stop (prim.cmd <i>APERTURE STOP SMALL</i>) reduces the collecting area of the telescope and a neutral density filter reduces the light flux (prim.cmd <i>ND FILTER IN</i>). The exposure parameters for scs01 are summarised in PET table Sun_Fast_Sweep. They are all set to 0.125 s.
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For scs01 high rate data they are listed in integration_time table 36.
Pixel size	n.a.

G ID 51	G 1	COOC D : :	
State ID 51	Scientific measurement	SO&C_Pointing	
sop01	Calibration		
	Description		
	In state ID 51 the ILOS is directed towards the Sun during sunrise resp. the Sun whilst ascending.		
		the measurement the nadir/elevation scan mirror	
	(ESM) and the azimuth scan mirror (ASM). State ID 51 follows a similar strategy in the lower		
	atmosphere as ID 47 and ID 49.		
ILOS		isition of sunrise position for ASM and 17.2 km	
		17.2 km and ASM following Sun track- and phase 3 -	
		scanning - are identical to ID 47/49. In phase 4 ASM	
		d scanning and acquires the sun (correction 4). In	
		n (correction 6) as the ASM and both mirrors track	
	the Sun centre till above the atmosphere.		
Scan	the ILOS is centred to 17.2 km scanning the rising Sun. Scan duration is 2s. After completion of a		
	scan the scanning direction is inverted for the subsequent scan. Totally 24 scans over the Sun are		
	performed during the phases 2 and 3.		
Swath	n.a.		
Measurement	The initial phase of pointing to an altitude of 17.2 km above the location of sunrise has a duration		
duration	of 36 s. The Sun acquisition and pointing phase - only via ASM - takes 12 s and the consecutive		
		M control via SFS - another 16 s. The final phase 5 -	
pointing to the Sun - provides several seconds of measurement time above the a		ds of measurement time above the atmosphere. Total	
	duration of sop01 is 64 s.		
Exposure	The irradiation of the focal plane by the Sun is reduced by two mechanisms: An aperture stop		
control	(prim.cmd <i>APERTURE STOP SMALL</i>) reduces the collecting area of the telescope and a not density filter reduces the light flux (prim.cmd <i>ND FILTER IN</i>). The exposure parameters for		
	sop01 are summarised in PET table Sun.		
Integration	The individual integration times are set by the exposure control (exposure time* co-adding		
time	factor). For sop01 high rate data they are listed in integration_time table 32.		
Pixel size	n.a.		

State ID 52 escd01	Calibration	Sun _ESM_Diffuser_Calibration ND-Filter OUT
	Description	•
ILOS		



	In state ID 52 no image of the Sun is projected onto the entrance slit of the spectrometer. For calibration purposes the ESM diffuser is reflecting the sunlight into the telescope. This diffuser is a layer deposited on the rear side of the ESM. The angle between the SCIAMACHY optical axis and the diffuser normal shall amount to 15° to prevent vignetting from the scanner housing while the incident solar light has an angle of 'reflection' of 22.5° into the telescope. In phase 1 the position of the ESM at 165° (backside of ESM under 15° inclination) and the position of the ASM are calculated (basic profile 6 with azimuth correction 8 and H/W-constellation 4) and acquired. The ESM stays in this position fixed for the duration of the state. In the measurement phase 2 ASM follows the motion of the Sun with the corrected rate from the <i>START TIMELINE MCMD</i> . The timing of the state has to be planned in such a way, that the ascending Sun meets the requirement of 22.5° incidence angle at the start of the measurement phase.
Scan	no scan
Swath	n.a.
Measurement duration	The measurement phase has a duration of 30s.
Exposure control	escd01 is performed without additional reduction of the sunlight. The ND-filter is not used in escd 01 (primitive cmd <i>ND FILTER OUT</i>). The exposure parameters for escd01 are summarised in PET table Sun_ESM_diffuser.
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For escd01 high rate data they are listed in integration_time table 40.
Pixel size	n.a.

State ID 53	Calibration	Sub_Solar_Calibration_Pointing
sscp02		
ILOS	In state ID 53 the Sun is observed at high elevation through the sub_solar port (primitive cmd <i>NADIR CAL WINDOW OPEN</i>). In this configuration only the ESM can be used, therefore no capability exists to adjust the LOS in azimuth direction towards the Sun. To provide the required angular configuration the <i>START TIMELINE MCMD</i> for this state must be timed to fullfil the fixed angular correlation of the Sun position as related to the fixed IFOV in azimuth of SCIAMACHY in the sub_solar_window, which has a FOV of 1.72° (azimuth)* 14.78° (elevation) In azimuth the IFOV is further reduced by the small aperture used with solar observations (0.72°). The centerline of the aperture coincides with the centerline of the sub_solar_window. In phase 1 the position of the ESM is calculated and acquired within the sub_solar_window applying correction 8 to basic profile 4 (sub_solar) for the actual position of the Sun contained in <i>START TIMELINE MCMD</i> . In phase 2 the ESM waits in this position for the Sun to come fully into the aperture. In phase 3 the ESM acquires the Sun with the SFS (correction 4) centering the slit (0.045°) on the Sun, during phase 4 the solar disk continues moving in azimuth direction through the aperture caused by the orbital motion. The ESM follows the solar track with correction 9, where the calculated Sun position is propagated with corrections derived from the SFS, whilst the Sun moves out of the aperture.	
Scan	no scan	
Swath	n.a.	
Measurement duration	The initial phase of pointing to the partially obscured sun has a duration of 7 s. The Sun acquisition phase take 6 s and the consecutive tracking/pointing to the vanishing sun another 9 s. Total duration of sscp02 is 22 s.	
Exposure control	The irradiation of the focal plane detectors (channels) by the Sun is reduced by two mechanisms: an aperture stop (primitive cmd <i>APERTURE STOP SMALL</i>) reduces the collecting area of the telescope and a neutral density filter reduces the light flux (primitive cmd <i>ND FILTER IN</i>). The exposure parameters for sscp02 are summarised in PET table Sun.	
Integration time	The individual integration times are set by the exposure control (exposure time* co-adding factor). For sscp02 low rate data they are listed in integration_time table 31.	
Pixel size	n.a.	



State ID 54	Calibration	Moon_Scanning	
mos01		•	
	Description	Description	
	In state ID 54 the moon is used as a calibra	ation source i.e. the lunar position shall be well above	
		o control the ILOS. Both mirrors shall follow the track	
of the moon.			
		the resulting angular positions of both mirrors are	
		rection 5 uses the angular data of the moon as they are	
ILOS		<i>E</i> to calculate the correction terms for the two mirrors.	
		2. Updates are performed with each relative profile. In	
	phase 2 both mirrors are acquiring the centre of the moon using the SFS with APERTURE S		
LARGE (phase type 1 and correction 5 - readout B). In phase 3 the ASM follow			
	pointing mode stirred by the SFS loop and the ESM follows the track of the moon using		
	updated correction terms derived from correction 9 (improved tracking using AOCS), wh		
~	performs nominal scans over the moon.		
Scan	A scan of $\pm 0.33^{\circ}$ of the ILOS in elevation direction is implemented during phase 3, when ILOS is		
	centred to the moon and following his track. Scan duration is 2 s each direction. The scan		
~ .	direction is inverted after each scan. 5 nominal scans over the moon are performed.		
Swath	n.a.		
Measurement	The acquisition/pointing phase 2 of mos01 takes 2 s. The scanning phase 3 takes 10 s. Total		
duration	duration of mos01 is 12 s.		
Exposure	The exposure parameters for mos01 are summarised in PET table Moon.		
control			
Integration	For mos01 low rate data they are listed in integration_time table 47.		
time			
Pixel size	n.a.		

State ID 55 mop03	Scientific measurement Calibration	MO&C_Pointing_Troposphere
ILOS	Description In state ID 55 the moon is used to measure the atmosphere in occultation. Contrary to ID 56 - MO&C_Pointing - the measurement starts, when the moon crosses the height of about 5 km above the horizon. This requires exact tuning of the start of the timeline, since in pointing mode the dimensions of the spectrometer slit determine the observed area. In phase 1 the predicted moon position and the resulting angular position of ASM and ESM are calculated (correction 5 of basic profile 3 resp. 14) and acquired. The timeline including mop03 starts sufficiently in time to allow the SFS to acquire the moon already well within the troposhere at an altitude of about 5 km. In phase 2 both mirrors are acquiring the centre of the moon using the SFS (correction 5 - readout B). With successful acquisition, the ILOS in phase 3 follows the moon in pointing mode for 14 s. At the end of this phase the moon has reached an altitude of 17.2 km. In phase 4 the pointing to the lunar center continues up to an altitude close to the upper edge of the TCFOV of the limb baffle. In case acquisition was not successful in the lower atmosphere, the moon is supposed to be tracked from an altitude of 17.2 km (phase 4). Note: the execution of this state during SODAP proved, that this measurement scheme is not feasible due to the atmospheric observation conditions at low altitudes. The execution of this	
Scan	state is presently suspended. no scan	
Swath	n.a.	
Measurement duration	The acquisition/pointing phase 2 of mop03 takes 2 s. The pointing phase (phase 3) in the troposphere and lower stratosphere takes 14s and measurements above 17.2 km last for 126 s. Total duration is 142 s.	
Exposure control	The exposure parameters for mems01 are summarised in PET table Moon.	
Integration time	For mop03 low rate data they are listed in integration_time table 47.	



Pixel size	n.a.

State ID 56	Scientific measurement	MO&C_Pointing
mop01	Calibration	_ 0
	Description	
ILOS	In state ID 56 the moon is used to measure the atmosphere in occultation. Contrary to ID 51 - SO&C_Pointing - the measurement starts, when the moon crosses the height of 17.2 km above the horizon. This requires exact tuning of the start of the timeline, since in pointing mode the dimensions of the spectrometer slit determine the observed area. In phase 1 the predicted moon position and the resulting angular position of ASM and ESM are calculated (correction 8 of basic profile 3 resp. 14) and acquired. The moon should have a height of 17.2 km above the horizon. In phase 2 both mirrors are tracking the centre of the moon using AOCS information. In phase 3 the ASM and ESM acquire the moon with the SFS (correction 5 - readout B). This occurs at an altitude of about 70 km. Phase 4 follows the moon up to the top of the atmosphere, now with both the pointing ASM and the ESM being controlled via the SFS (correction 7).	
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the initial pointing phase (phase 2) without SFS control amounts to 16 s. The acquisition/pointing phase 3 of mop01 takes 2 s. The tracking phase 4 takes 22 s. Total duration of mop01 is 40 s.	
Exposure control	The exposure parameters for mop01 are summarised in PET table Moon.	
Integration time	For mop01 low rate data they are listed in integration_time table 47.	
Pixel size	n.a.	

State ID 57	Scientific measurement	Moon_Pointing_Long-Duration
mop02	Calibration	
	Description	
ILOS	calibration measurements above the atmosp	e moon pointing phase 4 is extended until the moon
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the initial pointing phase (phase 2) without SFS control amounts to 16 s. The acquisition/pointing phase 3 of mop01 takes 2 s. The tracking phase 4 takes 110 s. Total duration of mop02 is 128 s.	
Exposure control	The exposure parameters for mop02 are summarised in PET table Moon.	
Integration time	For mop02 low rate data they are listed in integration_time table 47.	
Pixel size	n.a.	

Calibration	Sub_Solar_Calibration_Pointing/ Scanning	
Description		
		Scanning



-			
	In state ID 58 the Sun is observed at high elevation similar to state ID 53.		
	In phase 1 the position of the ESM in the sub_solar_window is calculated with basic profile 4		
	applying correction 8 for the actual position of the Sun contained in START TIMELINE MCMD		
	and acquired. In phase 2 the ESM follows the propagated track of the Sun waiting for her to come		
	fully into the aperture due to the orbital motion. In phase 3 the ESM acquires the Sun with the		
	SFS (correction 4) centring the slit (0.045°) on the Sun and during this phase the solar disk moves		
	in azimuth direction through the aperture caused by the orbital motion while being tracked by the		
	ESM via SFS. In phase 4 the ESM performs 2 nominal scans over the Sun (relative profile 4)		
	while the centre of the scan is maintained on the middle of the Sun using correction 9, where the		
	calculated Sun position is propagated with the corrections derived from the SFS. In phase 5 the		
	Sun moves out of the aperture being tracked with the now standing still ESM (correction 9).		
Scan	A scan of $\pm 0.33^{\circ}$ of the ILOS in elevation direction centred on the Sun is implemented during		
	phase 4. Scan duration is 2 s. Two nominal scans are performed.		
Swath	n.a.		
Measurement	The initial phase of pointing to the partially obscured sun has a duration of 7 s. The Sun		
duration	acquisition and pointing phase takes 2 s, the scan phase 5 takes 4 s and the consecutive		
	tracking/pointing to the vanishing Sun another 9 s. Total duration of sscp01 is 22 s.		
Exposure	The irradiation of the focal plane detectors (channels) by the Sun is reduced by two mechanisms:		
control	An aperture stop (primitive cmd APERTURE STOP SMALL) reduces the collecting area of the		
	telescope and a neutral density filter reduces the light flux (primitive cmd ND FILTER IN). The		
	exposure parameters for sscp01 are summarised in PET table Sun.		
Integration	The individual integration times are set by the exposure control (exposure time* coadding factor).		
time	For sscp01 low rate data they are listed in integration_time table 31.		
Pixel size	n.a.		

State ID 59	Calibration	Spectral_Lamp_Calibration
lsc01		
	Description	
ILOS	In state ID 59 SCIAMACHY's spectral lamp is used as a spectral line source for wavelength calibration. The ESM is used to project the spectral light into the telescope. In phase 1 the SLS position of the ESM (9.768°) is acquired and in measurement phase 2 the ESM points to the SLS (basic scan profile 10). In this state a longer duration for cooldown is required.	
Scan	no scan	
Swath	n.a.	
Measurement duration	Measurement duration of lsc01 is 12 s.	
Exposure control	The exposure parameters for lsc01 are summarised in PET table SLS.	
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For lsc01 low rate data they are listed in integration_time table 53.	
Pixel size	n.a.	

State ID 60	Calibration	Sub_Solar_Calibration_Scanning
sscs01		(fast_sweep)
Description		
	In state ID 60 the Sun is observed at high el	evation similar to state ID 53.
In phase 1 the ESM is positioned with basic profile 4 in the sub_solar_window correction 8 for the actual position of the Sun contained in START TIMELINI		profile 4 in the sub_solar_window applying
		un contained in START TIMELINE MCMD. In phase 2
	the basic position of the ESM follows the propagated track of the Sun centre (correction 8) and	
	performs additionally fast_sweeps over the Sun, which moves through the aperture in azimuth	
	direction caused by the orbital motion.	
Scan	When the centre of the ILOS is following in	elevation direction the Sun, scans over the Sun in
	elevation direction of ca. 2.72° are performed	
	(fast_sweep), which produces a scan of 0.12	25 s duration in one direction and then holds this



	proition for amother 0.125s. The scan speed (LOS) is 21.7°/s in the not accelerated segments of profile 6. The direction of the scan is inverted after each scan. Totally 88 scans over the Sun of the type fast_sweep are performed during the measurement phase.
Swath	n.a.
Measurement duration	The measurement phase (scanning fast_sweep of the part time obscured Sun) has a duration of 22 s.
Exposure control	The irradiation of the focal plane detectors (channels) by the sun is reduced by two mechanisms: An aperture stop (primitive cmd <i>APERTURE STOP SMALL</i>) reduces the collecting area of the telescope and a neutral density filter reduces the light flux (primitive cmd <i>ND FILTER IN</i>). The exposure parameters for sscs01 are summarised in PET table Sun_Fast_Sweep. The effective exposure of all pixels to the Sun is 31.25 msec, since due to the fast_ sweep motion of the ILOS the IFOV scans over the complete Sun within this time.
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For sscs01 low rate data they are listed in integration_time table 35.
Pixel size	n.a.

State ID 61 lwc01	Calibration	White_Lamp_Calibration
	Description	
ILOS	In state ID 61 SCIAMACHY´s white lamp is used as a light source for radiometric calibration. The ESM is used to project the white light into the telescope.	
iLos		0.523°) is acquired and in measurement phase 2 the
	ESM points to the WLS (basic scan profile 12).	
	In this state a longer duration for cooldown is required.	
Scan	no scan	
Swath	n.a.	
Measurement	Measurement duration of lwc01 is 12 s.	
duration		
Exposure	The exposure parameters for lwc01 are summarised in PET table WLS.	
control		
Integration	The individual integration times are set by the exposure control (exposure time* coadding factor).	
time	For lwc01 low rate data they are listed in in	tegration_time table 55.
Pixel size	n.a.	

State ID 62	Calibration	Sun _Diffuser_Calibration
escd02		ND-Filter IN
	Description	
ILOS	see state ID 52 The ESM diffuser position is at 165° (backside of ESM under 15° inclination), the ASM is	
	following the motion of the Sun. The timing of the state has to be planned in such a way, that the ascending Sun meets the requirement of 22.5° incidence angle at the start of the measurement phase.	
Scan	no scan	
Swath	n.a.	
Measurement duration	The measurement phase has a duration of 30 s.	
Exposure control	escd02 is performed with additional reduction of the sun light compared to ID 52. The ND-filter is used in escd02 (primitive cmd <i>ND FILTER IN</i>). The exposure parameters for escd02 are summarised in PET table Sun_ESM_diffuser.	
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For escd02 high rate data they are listed in integration_time table 40.	
Pixel size	n.a.	



State ID 63 dcc02	Calibration	Dark-Current_Calibration
ILOS	Description see state ID 08 ILOS pointing in flight direction	n to 250 km altitude above horizon
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the measuremen	nt is set to 30 s.
Exposure control	The exposure parameters for doc	c02 are summarized in PET table Dark_Current_2.
Integration time	_	are set by the exposure control (exposure time* co-adding they are listed in integration_time table 49.
Pixel size	n.a.	

State ID 64	Calibration	Sun_Nadir/Elevation_Mirror
nmep01		Calibration_Pointing
	Description	
ILOS	In state ID 64 the Sun is used as calibration source. ID 64 uses the extra_mirror for a second reflection of the ESM (H/W-constellation 5). The correction algorithms used take account of the doubled mirror deflection. Basic profile 8 used for ESM and ASM also accounts for the extra_mirror. In phase 1 the calculation of the predicted Sun position and the resulting angular positions by both mirrors are performed. Correction 4 uses the angular data of the Sun as they are contained in the MCMD START TIMELINE to calculate the correction terms for the twomirrors. These terms are valid for the start of phase 2. The positions are acquired by ASM and ESM. In phase 2 both mirrors are acquiring the centre of the Sun using the SFS (phase type 1 and correction 4 - readout A). In phase 3 the ILOS is following the Sun in pointing mode stirred by the SFS loop.	
Scan	no scan	
Swath	n.a.	
Measurement duration	The pointing phases 2 plus 3 of nmep01 take 4 s.	
Exposure control	(primitive cmd APERTURE STOP SMALL)	n is reduced by two mechanisms: An aperture stop reduces the collecting area of the telescope and a primitive cmd <i>ND FILTER IN</i>). The exposure PET table Sun.
Integration time	The individual integration times are set by the exposure control (exposure time * coadding factor). For nmep01 high rate data they are listed in integration_time table 32.	
Pixel size	n.a.	

State ID 65	Calibration	ADC_Calibration & Scanner Maintenance	
adc01			
	Description		
	In State ID 65 the Analogue Digital Conve	erter is calibrated. At the same time the maintenance of	
ILOS	the scanners is performed, which require one full revolution of each scanner per orbit to ensure		
ILOS	full performance. To synchronise source se	equence counter measurement data packets are	
	produced. This is no scientific measurement state but a maintenance state, which is executed each		
	orbit in no minal operations conditions.		
Scan	Scan Scanner motions (ASM & ESM) for one full revolution within the state duration are		
	implemented.		
Swath	n.a.		
Measurement	The duration of the measurement is set to 20 s.		
duration			
Exposure	The exposure parameters for adc01 are sun	nmarized in PET table ADC_Cal.	
control			



Integration	The individual integration times are set by the exposure control (exposure time* co-adding
time	factor). For adc01 low rate data they are listed in integration_time table 43.
Pixel size	n.a.

State ID 66	Calibration	Sun_Nadir/Elevation_Mirror
nmes02		Calibration_Scanning
	Description	
ILOS	In state ID 66 the Sun is used as calibration source. It uses the same constellation as ID 64, but scans the Sun via the double reflection from the ESM by means of the extra_mirror. In phase 1 the calculation of the predicted Sun position and the resulting angular positions of both mirrors are performed. Correction 4 uses the angular data of the Sun as they are contained in the MCMD START TIMELINE to calculate the correction terms for the two mirrors. These terms are valid for the start of phase 2. The positions are acquired by the ASM and ESM. In phase 2 both mirrors are acquiring the centre of the Sun using the SFS (phase type 1 and correction 4 - readout A). In phase 3 the ASM is following the Sun in pointing mode stirred by the SFS loop and the ESM performs nominal scans over the Sun following her track using correction 9 (SFS-corrected propagated Sun positions).	
Scan	In phase 3 the nominal_scan of $\pm 0.33^{\circ}$ of the ILOS in elevation direction centred on the Sun is implemented. Because of the double reflection off the ESM, its angular motion is halved as compared to the standard nominal_scan. Scan duration is 2 s. The scanning direction is inverted for each subsequent scan. In total 5 scans are performed.	
Swath	n.a.	
Measurement duration	The pointing phase 2 of nmes02 takes 1 s ar 11 s.	nd the scanning phase 3 takes 10 s. Total duration is
Exposure control	The irradiation of the focal plane by the sun is reduced by two mechanisms: An aperture stop (prim.cmd <i>APERTURE STOP SMALL</i>) reduces the collecting area of the telescope and a neutral density filter reduces the light flux (primitive cmd <i>ND FILTER IN</i>). The exposure parameters for nmes02 are summarised in PET table Sun.	
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For nmes02 high rate data they are listed in integration_time table 32.	
Pixel size	n.a.	

State ID 67 dcc03	Calibration	Dark-Current_Calibration
ILOS	Description see state ID 08 ILOS pointing in flight direction	to 250 km altitude above horizon.
Scan	no scan	
Swath	n.a.	
Measurement duration	The duration of the measurement is set to 80 s.	
Exposure control	The exposure parameters for dcc03 are summarized in PET table Dark_Current_3.	
Integration time		are set by the exposure control (exposure time* co-adding hey are listed in integration_time table 50.
Pixel size	n.a.	

State ID 68 nmes01	Calibration	Sun_Nadir/Elevation_Mirror Calibration_Scanning (fast_sweep)
	Description	
ILOS		



	In state ID 68 the Sun is used as calibration source. It uses the same constellation as ID 64 and ID 66, but the scan of the Sun via the extra_mirror is of the type fast_sweep. In phase 1 the calculation of the predicted Sun position and the resulting angular positions of both mirrors are performed. Correction 8 uses the angular data of the Sun as they are contained in the MCMD START TIMELINE to calculate the correction terms for the two mirrors. These terms are valid for the start of phase 2. The positions are acquired by the ASM and ESM. In phase 2 the ASM follows the propagated track of the Sun. The same does the ESM and performs additionally the fast_sweeps over the solar disk whilst it follows the Sun centre.
Scan	In phase 2 scans of the type fast_sweep over the sun of ca. 2.72° are performed. They are controlled by relative profile 6 (fast_sweep), which produces a scan of 0.125 s duration in one direction and then holds this position for another 0.125s. The scan speed (LOS) is 21.7°/s in the not accelerated segments of profile 6. The direction of the scan is inverted after each scan. Because of the double reflection off the ESM its angular motion of the mirror is halved as compared to the standard fast_sweep. In total 12 scans are performed.
Swath	n.a.
Measurement duration	The scanning phase 2 takes 3 s.
Exposure control	The irradiation of the focal plate by the sun is reduced by two mechanisms: An aperture stop (primitive cmd <i>APERTURE STOP SMALL</i>) reduces the collecting area of the telescope and a neutral density filter reduces the light flux (primitive cmd <i>ND FILTER IN</i>). The exposure parameters for nmes01 are summarised in PET table Sun_Fast_Sweep. The effective exposure of all pixels to the Sun is 31.25 msec, since due to the fast_ sweep motion of the ILOS the IFOV scans over the complete Sun within this time.
Integration time	The individual integration times are set by the exposure control (exposure time* coadding factor). For nmes01 high rate data they are listed in integration_time table 36.
Pixel size	n.a.

State ID 69 lsd01	Calibration	Spectral_Lamp_Diffuser_Monitoring	
ILOS	Description		
	In state ID 69 SCIAMACHY's spectral lamp is used as a spectral line source to calibrate the		
	spectral characteristics of SCIAMACHY's ESM diffuser. The diffuser is deposited on the		
	backside of the ESM.		
	In phase 1 the position of the ESM (190.2°) is acquired and in measurement phase 2 the ESM		
	diffuser normal points to a direction between SLS and WLS (basic scan profile 11).		
	In this state a longer duration for cooldown is required.		
Scan	no scan		
Swath	n.a.		
Measurement	Measurement duration of lsd01 is 80 s.		
duration			
Exposure	The exposure parameters for lsd01 are summarised in PET table SLS_Diffuser.		
control			
Integration	The individual integration times are set by the exposure control (exposure time* coadding factor).		
time	For lsd01 low rate data they are listed in in	tegration_time table 57	
Pixel size	n.a.		

State ID 70 lwd01	Calibration	White_Lamp_Diffuser_Monitoring	
	Description		
	In state ID 70 SCIAMACHY 's white lamp is used as a light source to calibrate the radiometric		
	characteristics of SCIAMACHY 's ESM diffuser. The diffuser is deposited on the backside ESM.		
ILOS			
	In phase 1 the position of the ESM (190.2°) is acquired and in measurement phase 2 the ESM		
	diffuser normal points to a direction between SLS and WLS (basic scan profile 11).		
	In this state a longer duration for cooldowr	is required.	



Scan	no scan
Swath	n.a.
Measurement	Measurement duration of lwd01 is 80 s.
duration	
Exposure	The exposure parameters for lwd01 are summarised in PET table WLS_Diffuser.
control	
Integration	The individual integration times are set by the exposure control (exposure time* coadding factor).
time	For lwd01 low rate data they are listed in integration_time table 59.
Pixel size	n.a.