



MERIS ESL

**AMORGOS
Software Transfer Document**

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Change Record

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draft	13/07/2001	Draft	-	No
1.0	20/07/2005	First fully operational version		
1.1	10/11/2005	2 nd fully operational version		
2.0	22/12/2005	3 rd fully operational version, including FSG mode		
3.0	05/30/2005	4 th fully operational version, including FSG mode and Windows platform version		
3.1	27/01/2011	5 th version, updated for ENVISAT orbit change (mission s/w CFI update) Linux platform only	all	



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4.0	18/07/2011	6 th version updated for: Processing of MERIS RR L1b products Handling of both reprocessing 2 and reprocessing 3 data <u>Linux platform only</u>		
4.0.1	11/01/2012	Minor update to v4.0 allowing to process products generated by MERIS IPF versions 05.05L05 & 05.05L06 <u>Linux platform only</u>		



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1. INTRODUCTION

1.1 General

The purpose of the Software Transfer Document is to describe the procedure which installs the AMORGOS software on your system, starting from the standard set of deliverables you have received: the installation dvd-rom labelled "AMORGOS 4.0 INSTALLATION DVD-ROM" which contains

- the executable distribution of AMORGOS
- a dedicated test data set
- and the associated documentation.

This software transfer document includes a description of the system requirements that your system needs to fulfil, a description of the delivery set, and a detailed installation procedure.

This document also describes all the elements delivered on the Linux AMORGOS 4.0.1 distribution tar file.

A complete listing of distribution files is provided in section 4.

The executable distribution of AMORGOS

The executable distribution of AMORGOS 4.0.1 contains not only AMORGOS executable file, but also all input files necessary for test runs of the executable.

The detailed installation procedure of the distribution is described in section 4.

1.2 Intended readership.

This manual is intended to direct users of AMORGOS. It assumes familiarity of its reader with Linux operating system, but it is not required to be a system administrator.

This version of AMORGOS is intended to be installed on **LINUX platforms (32 and 64 bits) only.**

2. REFERENCES

2.1 Reference Documents

RD1	PO-ID-ACR-GS-2003	AMORGOS Software User Manual & Interface Control Document
RD2	PO-TN-MEL-GS-003	MERIS Input/Output Data Definition Format
RD3	PO-AD-ACR-GS-0003	AMORGOS Algorithm document 2.2A 20/07/2005
RD4	PO-RS-MDA-GS-2009	ENVISAT Product Specification
RD5	PO-IS-GMV-GS-0561	Envisat-1 Mission CFI Software -. Mission Conventions Document
RD6	PO-IS-DMS-GS-0557	Envisat-1 Mission CFI Software - PPF_LIB Software User Manual.
RD7	PO-IS-DMSGGS-0559	Envisat-1 Mission CFI Software - PPF_POINTING Software User Manual
RD8	PO-RP-ACR-GS-0014	Amorgos RR validation report V1r0

3. RELEASE NOTES

New features of Amorgos v4.0.1 are:

- Processing of MERIS L1b products generated by MERIS IPF versions 05.05L05 & 05.05L06. Those products were previously rejected by the software because of one of the Main Product Header keyword provided in an unexpected format, preventing identification of the software version of the Level 1 processor.

Amorgos v4.0.1 is otherwise identical to v4.0 and in particular presents the following additional features with respect to Amorgos v3.x:

- Processing of MERIS RR L1b products
- Handling of both reprocessing 2 and reprocessing 3 data

4. SOFTWARE INSTALLATION PROCEDURE

4.1 AMORGOS v4.0.1 Installation Process.

The installation process of the AMORGOS v4.0 distribution is the following:

Operation	Check
1. Check the system requirements	
2. Check your installation kit	
3. Perform the installation procedure	
4. Perform the test procedure	

4.1.1 System requirements

In order to proceed to the installation of the AMORGOS software, the user shall check that the following hardware and software requirements are fulfilled by the target system.

- 1- Linux station (kernel version 2.4)
- 2- 450 MB of disk storage or more in a single file system^(*).
- 3- DVD-ROM device.

(*) This figure ensures only that you can install AMORGOS properly; it does not include the size which would be required by executions.

4.1.2 Check your installation kit.

To do so, verify that you have all the elements of the installation delivery set.

The AMORGOS installation delivery set includes the following items:

- a Docs directory where you can find
 - ✓ *Amorgos_STD_i4r0.1.PDF, AMORGOS Software Transfer Document, PO-STD-ACR-GS-0004 Issue 4.0.1 (this document)*
 - ✓ *Amorgos_ICD-SUM_i4r0.PDF, AMORGOS Interface Control Document and Software User Manual, PO-ID-ACR-GS-0003 Issue 4.0*
- AMORGOS v4.0.1 distribution tar file AMORGOS.4.0.1.tar.gz

4.1.3 Perform the installation procedure

CONVENTION:

In the following text, a symbol like \$AMORGOS_INSTALL is used to describe your AMORGOS target installation directory *from the standpoint of this document*. In the following instructions, you should replace it by its appropriate value. This convention is used with several different directories.

1. Go into the target directory for restoring installation files.

Type the following command:
cd \$AMORGOS_INSTALL

2. Install the distribution files.

Type the following command :

```
> tar -xvf <path_to_tar_file>/AMORGOS.4.0.1.tar.gz
```

where <path_to_tar_file> is the path to the AMORGOS v4.0.1 distribution compressed tar file.

example :

```
> tar -xvf ./AMORGOS.4.0.tar.gz
```


This operation restores all the distribution files as listed in section 5.

4.1.4 Perform the test procedure

The organisation of the distribution tar file allows performing test runs of the executable immediately after installation, but it requires an additional 30 MB disk space in the same file system.

Move to the directory containing the executable file and launching script:

```
> cd bin
```

Typing the following command will cause the execution of the AMORGOS test:

FR test:

```
> ./amorgos.sh test_fr.ini
```

RR test :

```
> ./amorgos.sh test_rr.ini
```

Execution of this shell script will generate all output files in dedicated directories. For details on the delivery tree structure, see section 5.2.

5. CONFIGURATION STATUS LIST

The elements of configuration of AMORGOS are detailed in the following sections.

The AMORGOS 4.0 delivery set comprises the following elements:

- **tar file**

- *The AMORGOS 4.0.1 Installation tar file.*
(AMORGOS 4.0.1.tar.gz)

Note:

The installed files list is described in sections 5.1.

- **This document**

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In addition the following table lists the documents relevant to the AMORGOS 4.0 issue:

AMORGOS Software User Manual & Interface Control Document	PO-ID-ACR-GS-2003 Issue 4.0
MERIS Input / Output Data Document	PO-TN-MEL-GS-0003, Issue 7.3a
ENVISAT-1 Product Specifications	PO-RS-MDA-GS-2009, vol. 5, 6, 11 & 16

5.1 Detailed tar file content

The following sections provide the detailed content of all the created/updated files after complete restoration.

5.1.1 \$AMORGOS_INSTALL/AMORGOS.4.0.1/

```
drwxr-xr-x 2 croux acri 4096 2011-07-06 17:16 AuxDir
drwxr-xr-x 2 croux acri 4096 2011-07-06 16:51 bin
drwxr-xr-x 3 croux acri 4096 2011-07-06 17:10 test_fr
drwxr-xr-x 2 croux acri 4096 2011-07-06 17:09 test_fr_out
drwxr-xr-x 3 croux acri 4096 2011-07-06 16:55 test_rr
drwxr-xr-x 2 croux acri 4096 2011-07-06 17:09 test_rr_out
```

5.1.2 \$AMORGOS_INSTALL/AMORGOS.4.0.1/AuxDir/

```
-rw-r--r-- 1 croux acri 3757 2006-05-26 11:59 AUX_ATT_AX
-rw-r--r-- 1 croux acri 2917282 2011-07-05 17:56 MER_INS_AXVACR20080826_192134_20020321_193100_20200101_000000
-rw-r--r-- 1 croux acri 2940344 2006-05-26 14:39 MER_INS_AXVIEC20040407_182133_20020321_193100_20120321_193100
-rw-r--r-- 1 croux acri 2940344 2006-05-26 11:59 MER_INS_AXVIEC20050607_085028_20020321_193100_20120321_193100
-rw-r--r-- 1 croux acri 2940344 2006-05-26 14:40 MER_INS_AXVIEC20050708_134312_20050101_000000_20150101_000000
-rw-r--r-- 1 croux acri 21550 2006-05-26 11:59 Pointing_at_Pixels_FR_SaCS.m1
-rw-r--r-- 1 croux acri 30634 2006-05-26 11:59 Pointing_at_Pixels_FR_SaCS.m2
-rw-r--r-- 1 croux acri 30634 2006-05-26 11:59 Pointing_at_Pixels_FR_SaCS.m3
-rw-r--r-- 1 croux acri 30634 2006-05-26 11:59 Pointing_at_Pixels_FR_SaCS.m4
-rw-r--r-- 1 croux acri 26934 2006-05-26 11:59 Pointing_at_Pixels_FR_SaCS.m5
-rw-r--r-- 1 croux acri 5928 2011-07-05 17:22 Pointing_at_Pixels_RR_SaCS.m1
-rw-r--r-- 1 croux acri 5928 2011-07-05 17:22 Pointing_at_Pixels_RR_SaCS.m2
-rw-r--r-- 1 croux acri 5928 2011-07-05 17:22 Pointing_at_Pixels_RR_SaCS.m3
-rw-r--r-- 1 croux acri 5928 2011-07-05 17:22 Pointing_at_Pixels_RR_SaCS.m4
-rw-r--r-- 1 croux acri 5928 2011-07-05 17:22 Pointing_at_Pixels_RR_SaCS.m5
```

5.1.3 \$AMORGOS_INSTALL/AMORGOS.4.0.1/bin/

```
-rw-r--r-- 1 croux acri 0 2011-07-06 16:03 0
-rwxr-xr-x 1 croux acri 2703800 2012-01-05 15:58 amorgos
-rwxr-xr-x 1 croux acri 5308 2011-07-05 17:36 amorgos.sh
-rw-r--r-- 1 croux acri 245 2011-07-05 18:13 test_fr.ini
-rw-r--r-- 1 croux acri 245 2011-07-05 17:26 test_rr.ini
```

5.1.4 \$AMORGOS_INSTALL/AMORGOS.4.0.1/test_fr

```
-rw-r--r-- 1 croux acri 36132 2006-03-09 16:18 AUX_FRA_AX
```



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```
drwxr-xr-x 2 croux acri 4096 2006-06-01 11:52 dem_tiles
lrwxrwxrwx 1 croux acri 61 2012-01-05 15:55 DOR_VOR_AX -> DOR_VOR_AXVF-P20040610_142800_20040425_215528_20040427_002328
-rw-r--r-- 1 croux acri 206606 2006-03-07 09:38 DOR_VOR_AXVF-P20040610_142800_20040425_215528_20040427_002328
-rw-r--r-- 1 croux acri 331989435 2006-03-07 09:39 MER_FRS_1PNACR20040426_101249_000000982026_00194_11270_0000.N1
lrwxrwxrwx 1 croux acri 62 2012-01-05 15:55 MER_XRX_1P -> MER_FRS_1PNACR20040426_101249_000000982026_00194_11270_0000.N1
```

5.1.5 \$AMORGOS_INSTALL/AMORGOS.4.0.1/test_fr/dem_tiles

```
-rw-r--r-- 1 croux acri 12960000 2005-12-21 14:58 30N000E.GETASSE30
-rw-r--r-- 1 croux acri 12960000 2005-12-21 14:58 30N015W.GETASSE30
-rw-r--r-- 1 croux acri 12960000 2005-12-21 15:03 45N000E.GETASSE30
-rw-r--r-- 1 croux acri 12960000 2005-12-21 15:03 45N015W.GETASSE30
```

5.1.6 \$AMORGOS_INSTALL/AMORGOS.4.0.1/test_rr

```
-rw-r--r-- 1 croux acri 11132820 2011-07-05 17:26 AUX_FRA_AX
drwxr-xr-x 2 croux acri 4096 2011-07-05 18:17 dem_tiles
-rw-r--r-- 1 croux acri 206606 2011-07-05 17:24 DOR_POR_AXVF-P20110109_015200_20110106_215526_20110108_002326
lrwxrwxrwx 1 croux acri 61 2012-01-05 15:55 DOR_VOR_AX -> DOR_POR_AXVF-P20110109_015200_20110106_215526_20110108_002326
-rw-r--r-- 1 croux acri 38374398 2011-07-05 18:07 MER_RR_1PPACR20110107_101202_000001803098_00166_46301_MEG8.N1
lrwxrwxrwx 1 croux acri 62 2012-01-05 15:55 MER_XRX_1P -> MER_RR_1PPACR20110107_101202_000001803098_00166_46301_MEG8.N1
```

5.1.7 \$AMORGOS_INSTALL/AMORGOS.4.0.1/test_rr/dem_tiles

```
lrwxrwxrwx 1 croux acri 41 2012-01-05 15:55 30N000E.GETASSE30 -> ../../test_fr/dem_tiles/30N000E.GETASSE30
lrwxrwxrwx 1 croux acri 41 2012-01-05 15:55 30N015W.GETASSE30 -> ../../test_fr/dem_tiles/30N015W.GETASSE30
lrwxrwxrwx 1 croux acri 41 2012-01-05 15:55 45N000E.GETASSE30 -> ../../test_fr/dem_tiles/45N000E.GETASSE30
-rw-r--r-- 1 croux acri 12960000 2011-07-05 18:17 45N015E.GETASSE30
lrwxrwxrwx 1 croux acri 41 2012-01-05 15:55 45N015W.GETASSE30 -> ../../test_fr/dem_tiles/45N015W.GETASSE30
```

5.2 Detailed execution directory content

The following sections provide the detailed content of the executed tests (not delivered).

5.2.1 \$AMORGOS_INSTALL/AMORGOS.4.0/test_fr_out

```
-rw-r--r-- 1 croux acri 1165738 2012-01-11 16:04 altitude.tiff
-rw-r--r-- 1 croux acri 0 2012-01-11 16:04 errors.txt
-rw-r--r-- 1 croux acri 291944 2012-01-11 16:04 flags.tiff
-rw-r--r-- 1 croux acri 1165738 2012-01-11 16:04 latitude.tiff
-rw-r--r-- 1 croux acri 1165738 2012-01-11 16:04 longitude.tiff
-rw-r--r-- 1 croux acri 12559930 2012-01-11 16:04 MER_FSG_1P
```

```
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.01.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.02.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.03.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.04.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.05.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.06.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.07.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.08.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.09.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.10.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.11.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.12.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.13.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.14.tiff
-rw-r--r-- 1 croux acri 583208 2012-01-11 16:04 radiance.15.tiff
-rw-r--r-- 1 croux acri 2609 2012-01-11 16:04 status.txt
```

5.2.2 \$AMORGOS_INSTALL/AMORGOS.4.0/test_rr_out

```
-rw-r--r-- 1 croux acri 76522 2012-01-11 16:05 altitude.tiff
-rw-r--r-- 1 croux acri 0 2012-01-11 16:04 errors.txt
-rw-r--r-- 1 croux acri 19352 2012-01-11 16:05 flags.tiff
-rw-r--r-- 1 croux acri 76522 2012-01-11 16:05 latitude.tiff
-rw-r--r-- 1 croux acri 76522 2012-01-11 16:05 longitude.tiff
-rw-r--r-- 1 croux acri 843130 2012-01-11 16:05 MER_RRG_1P
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.01.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.02.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.03.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.04.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.05.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.06.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.07.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.08.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.09.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.10.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.11.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.12.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.13.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.14.tiff
-rw-r--r-- 1 croux acri 38408 2012-01-11 16:05 radiance.15.tiff
-rw-r--r-- 1 croux acri 3679 2012-01-11 16:05 status.txt
```