SALP

GDR2MAR
TECHNICAL NOTE

Prepared by :	N Picot	CNES
Accepted by :		
Approved by ::	P. Féménias	ESA
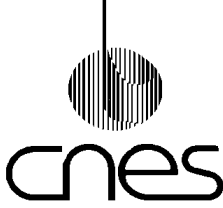
For	DS2	DS4	DS5	DH2	TP	ENVISAT	JASON1	DCY	LTA-SIRAL
Application to						X			
For	SMM	SALP							
Application to									

Configuration controlled Document	NON	by : CCM SALP	Since :
Document status :			

SUMMARY

Confidentiality : no	**Type :**
Key words : gdr2mar	
Summary : This note describes the gdr2mar utility installed on the F-PAC ftp server	

DOCUMENT CHANGE RECORD

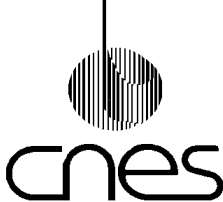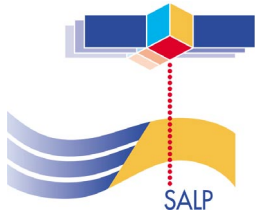| Issue	Date	Modifications	Visa

ABBREVIATIONS

Sigle	Definition

APPLICABLE AND REFERENCE DOCUMENTS

Reference	Document title
	DA1.
	DR1.
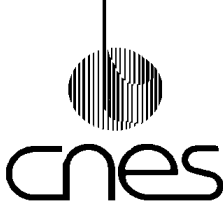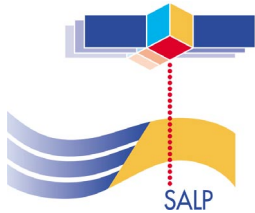
TBC AND TBD LIST

TBC/TBD	Paragraph	Brief description
		none

		Référence : SALP-NT-M-OP-15233-CN
		Issue : 1.0
		Date : April 6, 2004
		Page : 3/6
Title : gdr2mar Technical Note		

CONTENTS

		Référence : SALP-NT-M-OP-15233-CN
		Issue : 1.0
		Date : April 6, 2004
		Page : 4/6

Title : gdr2mar Technical Note

1. PURPOSE

This document presents the GDR2MAR utility installed on the F-PAC configuration.

2. PRESENTATION

The GDR2MAR utility is a program to convert the Envisat GDR altimeter data files into Meteo products, i.e. IMAR or FDMAR-like products (RA-2 Wind/Wave products "RA2_WWV_2P" files). The meteo, or MAR (for Marine Abridged Record) products are significantly smaller in size and still contain everything that most users of oceanic data might be interested in.

Both the GDR and MAR products are described in the Envisat Product Manuals (http://envisat.esa.int/dataproducts/).

A MAR product contains an ocean oriented (only ocean retracker) subset of the FD/I/GDR. It is operationally made available for near real time or quasi near real time meteorological and oceanographic applications. These subsets are called, respectively, FDMAR and IMAR.

2.1 DATA CONTENT

The only differences between the proposed GMAR files produced by GDR2MAR tool and the official IMAR and FDMAR products are:

1. Peakiness values are provided in the GMAR products generated by GDR2MAR. The Ku-band peakiness is found in bytes 141-142 and the S-band peakiness is found in bytes 143-144 in each data record. Units are as in the GDR files.

2. The SPH descriptor will always say IMAR, irrespective of the data source.

3. The product file name, include the string ".mar" at the end.

4. The product descriptor includes the string _MAR_, where normally _WWV_ is expected.

Note that the inclusion of the peakiness field for both Ku and S bands in the FDMAR and IMAR data products is currently planned.
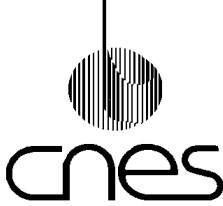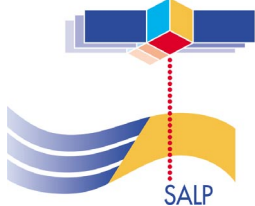
2.2 HOW TO USE GDR2MAR?

When logged on the F-PAC ftp server, an user has simply to type (for each file to be converted):

"get RA2_GDR_*lotsofnumbers*.N1.mar"

the wu-ftp server will run the gdr2mar program and the user will get from ftp, the file suffixed by ".mar".

As an example to get the MAR product corresponding to GDR file named:

RA2_GDR_2POF-P20031229_213430_00003018A023_00000_09573_2816.N1

		Référence : SALP-NT-M-OP-15233-CN
		Issue : 1.0
		Date : April 6, 2004
		Page : 5/6

Title : gdr2mar Technical Note

User has simply to type:

"get RA2_GDR_2POF-P20031229_213430_00003018A023_00000_09573_2816.N1.mar"

2.3 ABOUT THE MAKERS OF GDR2MAR

The utility GDR2MAR has been developed by Remko Scharroo, NOAA/LSA and includes the FASTIO routines created by John Lillibridge, NOAA/LSA.

DIFFUSION

INTERNAL :

N. PICOT	DCT/PO/AL	BP 2002	
P. SNINI	DCT/AQ/GP	"	
V. LUCAS	"	"	
P. BOUDOU	DCT/PS/CMI	BP 1501	
M.H. GOMEZ	DCT/AQ/GP	"	
F. MENOT	DCT/DSI/ES	BP 1311	

EXTERNAL :

R. LEONE		ESA/ESRIN	
P. FEMENIAS		ESA/ESRIN	
Eohelp desk		ESA/ESRIN	
M.P. GAUTIER		THALES	

(last page of the document)