

## **Status of NRT access to Envisat and ERS selected products**

CGMS is informed about availability of ERS and Envisat products in Near real time

This page is left blank intentionally

## **Status of NRT access to Envisat and ERS selected products**

### **1.- INTRODUCTION**

The status of the ERS-1, ERS-2 and Envisat missions is available in paper ESA-WP-01.

### **2.- ERS**

The High Bit Rate SAR data are acquired based on user demand by ESA and National & Foreign stations. The acquired data are being shipped to the Production and Archiving Facility (PAF). Due to the high data volume ERS HR data are off-line produced based on production orders. However since 1 April the observations within the Matera coverage can be made available in NRT on best effort basis. This service was started in September for Cat 2 users. Since beginning of 2004, it has further been extended to the Cat 1 users requiring NRT service due to the nature of research as specified in the Cat1 project proposals.

The ERS-2 Low Bit Rate data are being acquired by the standard ESA station network consisting of Kiruna, Maspalomas, Gatineau, and Prince Albert, and being made in near real time being in BUFR format via the GTS network.

Since the recorder failure in June 2003, the station network was extended with West Freugh (8 September 2003), providing Scatterometer data in NRT, and Matera (3 March 2004) making GOME data in real time available to DLR and KNMI for NRT processing and data distribution via ftp.

At current stage, the integration of Miami, Hobart, McMurdo, and Beijing looks very promising and would allow NRT data distribution of GOME and Scatterometer data.

### **3.- ENVISAT**

The Envisat Global Mission data (i.e. from Low Bit Rate instruments) are acquired using two acquisition stations located at Kiruna (Sweden) and Svalbard (Norway). The data acquired in Kiruna are processed in Near Real Time. The data acquired in Svalbard are transmitted to ESA/ESRIN where they are processed with an average 12 hours delay. In order to shorten this delay, the ESA data relay satellite, Artemis, will be used from Summer 2004 onwards, to transmit the global mission data in substitution to the Svalbard station. Use of Artemis will allow having the complete Envisat Global Mission data processed in Near Real Time (i.e. 3 hours from data acquisition).

A subset of these data, called the Envisat meteorological products, are converted into BUFR format and made freely accessible on-line through ftp servers (password needed) to users having submitted a scientific proposal to ESA. Such products are:

- The Altimeter wind/wave product
- The ASAR wave mode cross spectra and wave spectra products
- The AATSR averaged sea surface temperature product

- The MERIS cloud thickness and water vapour product
- The GOMOS extracted profiles product
- The SCIAMACHY vertical column amounts of various trace gases product

The Envisat Regional Mission data (i.e. from ASAR and MERIS High Bit Rate instruments) are acquired using the satellite on-board recorders or the ESA data relay satellite Artemis. These capabilities allow ESA to acquire and process in Near Real Time Envisat Regional Mission data for any part of the world, using two acquisition stations located at Kiruna and at ESA/ESRIN.

The Regional Mission data acquired and processed in Near Real Time by ESA are progressively made available on-line to selected users under specific conditions.

Non-ESA stations can also acquire Regional Mission data within their station mask, and provide specialised Near Real Time services to their customers (e.g. ice chart services, ship monitoring).