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Access to ERS and Envisat LBR data

CGMS is informed about the ERS and Envisat data access, in particular in NRT.

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Access to ERS and Envisat LBR data

1.- INTRODUCTION

Besides the data distribution using physical media, ESA Earth Observation data has been distributed using different electronic systems since the launch of the ERS-1 satellite in 1991. Traditionally, the Low Bit Rate (LBR) products were and are distributed using a Web ftp Server through the open Internet, or <u>via</u> the WMO Global Telecommunication System (**GTS**) to the Meteorological Centres for ERS-1, ERS-2 products. For NRT (Near Real Time) applications, other systems have been implemented, using state-of-the art technology.

2.- STATUS

Envisat data is currently provided to about 1060 active Category 1 use projects. About half of the Category 1 use projects ask for ASAR High Bit Rate data, which are also requested for Category 2 use.

Near Real Time (NRT) data can be accessed through different systems:

- 1. Internet systems, allowing access to rolling archives of all Envisat products generated during the previous 7 days (15 days for ASAR Medium Resolution products). A sub-system, called Envisat Web File Server (EWFS), allows, via a geographic selection, to extract and download sub-products within the rolling archive, and is available for MERIS, AATSR and ASAR data.
- 2. Telecommunication satellite broadcast system (DDS broadcast), allowing access to Envisat data broadcast via Eutelsat satellite using a small receiving antenna. Apart from being part of the operational ground segment data flow, the DDS broadcast system, available for users in Europe and in Africa, currently broadcasts in NRT all MERIS Level 1 and Level 2 Reduced Resolution data, part of AATSR Level 1 and all AATSR Level 2 data, and all SCIAMACHY Level 1 data.

The "ftp-on-demand" service is being opened gradually to users, starting with Category 2 users and GMES projects. It is currently working at ESRIN, Kiruna and UK-PAC. This service allows registered user to receive an e-mail after the generation of an on-demand product with the information of where to pick-up the product on Internet.

On-line access to archived data on Internet is implemented for the MERIS Reduced Resolution dataset (MERCI web interface), for Atmospheric Chemistry data and in progress for Altimetry data. Archived data remains accessible on media, in particular for projects requesting large amount of data.

3.- LIST OF ENVISAT AND ERS LBR DATA AVAILABLE (May 2005)

List of Envisat products available via Internet (FTP server, Rolling Archive and Envisat Web File Server) or DDS (Data Dissemination System)

* ASAR:

Wave Mode Imagette Cross Spectra [ASA_WVS_1P]

Wave Mode Ocean Wave Spectra [ASA_WVW_2P] Global Monitoring Mode Image [ASA_GM1_1P]

* MERIS:

Level 1B Reduced Resolution Geolocated and Calibrated TOA Radiance [MER_RR_1P]

Level 2 Reduced Resolution Geophysical Product [MER_RR_2P]

Level 2 Reduced Resolution Cloud thickness and Water Vapour [MER_RRC_2P]

Level 2 Reduced Resolution Extracted Vegetation Indices [MER_RRV_2P]

Level 2 Reduced Resolution Cloud thickness and Water Vapour (Meteo) [MER_LRC_2P]

* RA2:

Fast Delivery Geophysical Data Record [RA2_FGD_2P]
Intermediate Geophysical Data Record (IGD) [RA2_IGD_2P]
Wind/Wave Product (Meteo) [RA2_WWV_2P]
Geophysical Data Record (GDR) [RA2_GDR_2P]

* AATSR:

Level 1 Gridded Brightness Temperature and Reflectance [ATS_TOA_1P]

Level 2 Averaged Surface Temperature [ATS_AR_2P]

Level 2 Gridded Surface Temperature [ATS_NR_2P]

Level 2 Averaged SST and BT (Meteo) [ATS_MET_2P]

* MIPAS:

Geolocated and Calibrated Spectra [MIP_NL_1P]
Temperature, Pressure and Atmospheric (TPA) Constituents Profiles [MIP_NL_2P]
Extracted TPA Constituents Profiles (Meteo) [MIP_NLE_2P]

* GOMOS:

Temperature and Atmospheric Constituents Profiles [GOM_NL_2P] Extracted Profiles (Meteo) [GOM_RR_2P]

* SCIAMACHY:

Localised Atmospheric Spectra [SCI_NL_1P]

Vertical Column Amounts of various trace gases [SCI_NL_2P]

Geolocated vertical column amounts from off-line processing [SCI_OL_2P]

Selected Vertical Column Amounts [SCI_RV_2P]

* DORIS:

Preliminary Orbit [DOR_POR_AX]
PreciseOrbit [DOR_VOR_AX]

List of ERS products available via Internet (FTP server, Rolling Archive and ENVISAT Web File Server) or DDS (Data Dissemination System)

* Altimeter:

Radar Altimeter Fast Delivery Product [ALT.URA] Radar Altimeter Ocean Geoid [ALT.OGE] Radar Altimeter Sea Surface Height Model [ALT.SSH] Radar Altimeter Sea Surface Topography [ALT.TOP]

* SAR:

Synthetic Aperture Radar Wave Fast Delivery Product [SWM.UWA]

* GOME:

GOME Calibrated and Geolocated Spectra [GOME.LVL13]
GOME Total Coloumn Amount of Trace Gases [GOME.LVL21]

* Wind Scatterometer:

Wind Scatterometer Fast Delivery Product [WSC.UWI]

4.- HOW TO REGISTER FOR CAT-1 LBR DATA

To access Cat-1 LBR data, interested people should register by providing short information about the following topics:

- Title of the proposal/coordinates of the research leader ("Principal Investigator")
- Short description of the proposal

The proposal should be submitted via http://eopi.esa.int/LBR. Contact is eohelp@esa.int