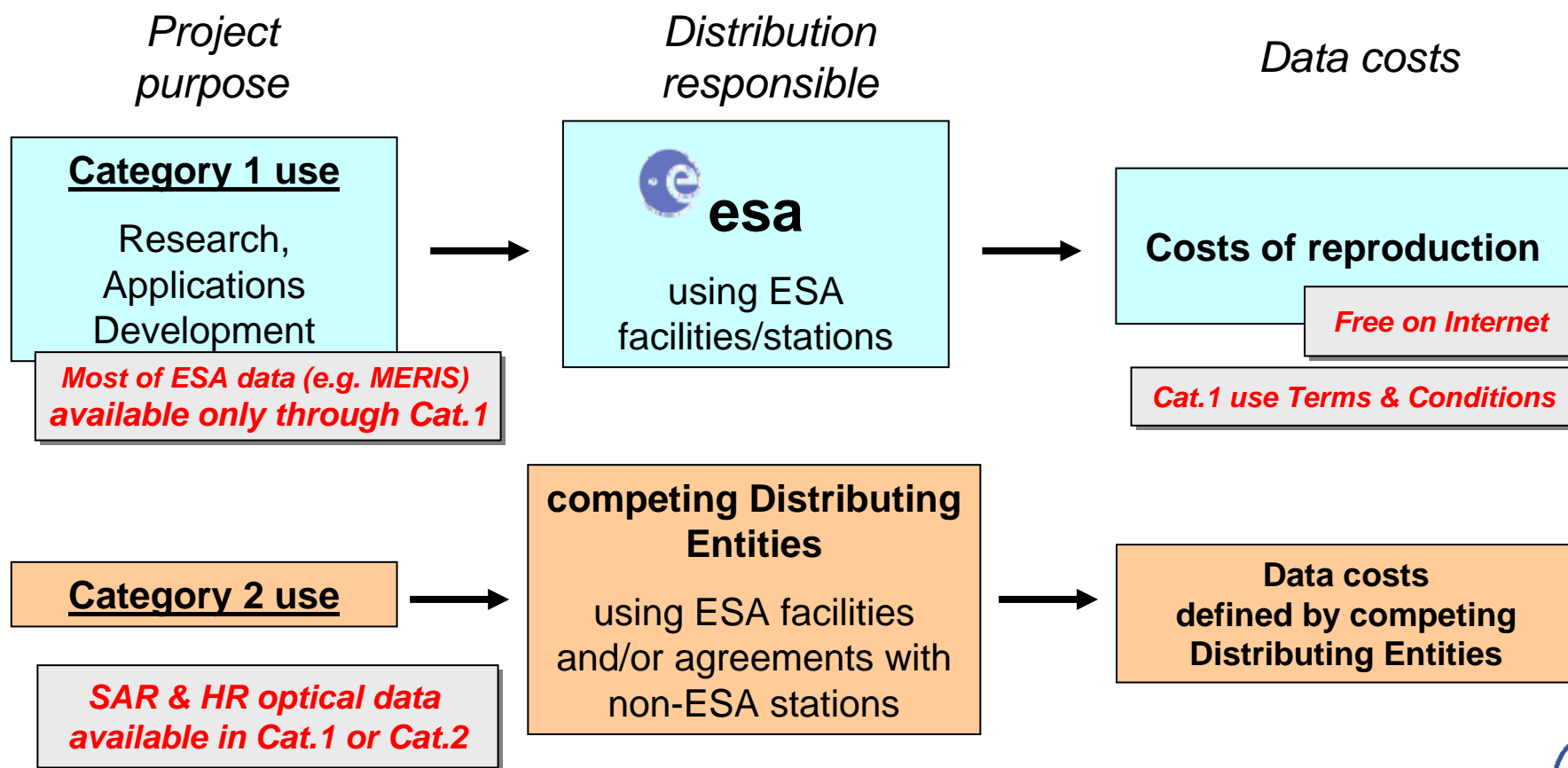


Access to ESA Earth Observation data

(past and current missions)

Data policy defined by ESA Member States:

- ❑ to stimulate a balanced development of Science, Public Utility and Commercial Applications, consistent with the mission objectives,
- ❑ to maximize the beneficial use of data from ESA EO satellites.



Main points:

- to use the data provided for Category 1 use only **within the project team** (i.e. PI and co-PIs) and only for the purpose described in the project proposal
→ i.e. no data redistribution outside the Cat.1 use project team
- to widely **publish** the project results in **scientific publications** or presentations,
→ with data citation:
“[mission or instrument] Data provided by European Space Agency”
(to facilitate ESA web searching of publications, and subsequent reporting on mission/instrument achievements)

Each PI shall sign the Category 1 use Terms & Conditions.

Application for Category 1 use data access can be submitted to ESA at any time using the ESA Earth Observation Principal Investigator portal (<http://eopi.esa.int>)



ESA Earth Observation Principal Investigator Portal

<http://eopi.esa.int>

Data Access

- ESA Data Policy
- How to get data
- Open AOs
- Previous AOs

Update & reporting

Results & News

- Results
- News
- Search
- Focus on PI
- PI Training
- Information

About this site

- FAQ
- Related Links

Principal Investigator

Results

- Surface movements in Bologna (Po Plain, Italy) detected by multitemporal DInSAR
- Towards high resolution monitoring of coastal wind, waves and currents using SAR imagery
- Ground motion induced by lake level fluctuations in western USA
- Ground movement risks identified by TerraFirma
- JERS-1 and ERS-1 comparison for sea-ice monitoring
- Envisat witnesses Earth's largest crack

Update / Report

logon:
password:
GO

Ongoing Calls

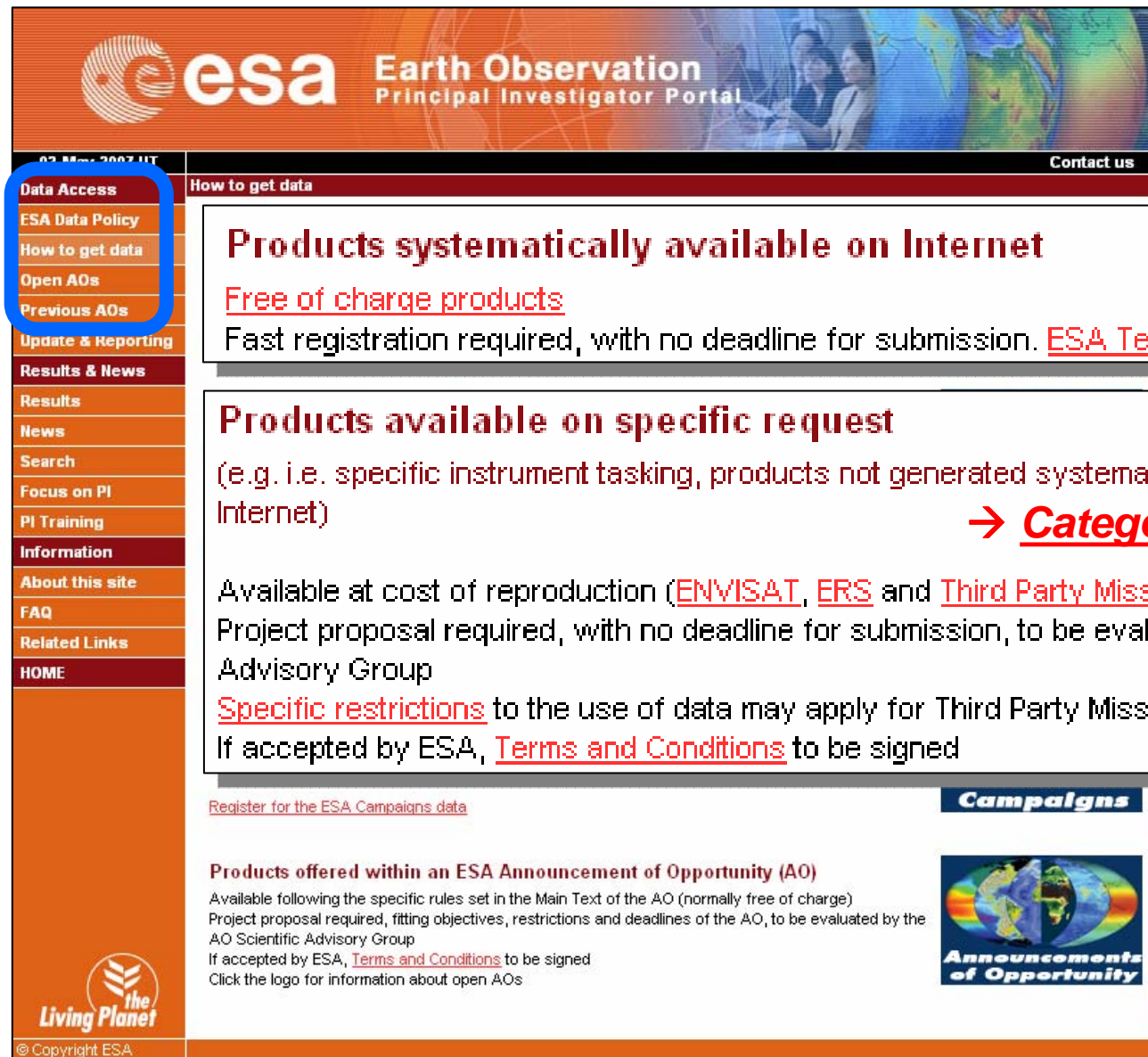
- SMOS
- IreLux AO
- Category-1
- Registration
- ESA EO Campaigns
- Third Party Missions

Focus on PI

- Prof. Dr. Richard Bamler
- 2007 ESA ENVISAT Symposium
- Advanced Training Course on Land Remote Sensing (Lisbon, Portugal, 2 to 7 September 2007)
- Main search

the Living Planet

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The screenshot shows the ESA Earth Observation Principal Investigator Portal. The header features the ESA logo and the text 'Earth Observation Principal Investigator Portal'. A navigation menu on the left includes links such as 'Data Access', 'ESA Data Policy', 'How to get data', 'Open AOs', 'Previous AOs', 'Update & Reporting', 'Results & News', 'Results', 'News', 'Search', 'Focus on PI', 'PI Training', 'Information', 'About this site', 'FAQ', 'Related Links', and 'HOME'. The 'Data Access' link is highlighted with a blue box. The main content area is divided into two sections: 'Products systematically available on Internet' and 'Products available on specific request'. The first section includes a link to 'Fast Registration' and mentions 'Free of charge products'. The second section includes a link to 'Category 1 Project Proposal' and mentions 'Available at cost of reproduction'. At the bottom, there is a section for 'Campaigns' and 'Announcements of Opportunity' with a logo for 'the Living Planet'.

Products systematically available on Internet

→ **Fast Registration**

Free of charge products

Fast registration required, with no deadline for submission. ESA Terms and Conditions to be signed.

Products available on specific request

(e.g. i.e. specific instrument tasking, products not generated systematically, products not available on Internet)

→ **Category 1 Project Proposal**

Available at cost of reproduction (ENVISAT, ERS and Third Party Missions)

Project proposal required, with no deadline for submission, to be evaluated by the Category-1 Scientific Advisory Group

Specific restrictions to the use of data may apply for Third Party Missions

If accepted by ESA, Terms and Conditions to be signed

Register for the ESA Campaigns data

Products offered within an ESA Announcement of Opportunity (AO)

Available following the specific rules set in the Main Text of the AO (normally free of charge)

Project proposal required, fitting objectives, restrictions and deadlines of the AO, to be evaluated by the AO Scientific Advisory Group

If accepted by ESA, Terms and Conditions to be signed

Click the logo for information about open AOs

Campaigns



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Products systematically available on Internet

Earth Observation
Principal Investigator Portal

02-May-2007 UT

Data Access
ESA Data Policy
How to get data
Open AOs
Previous AOs
Update & Reporting
Results & News
Results
News
Search
Focus on PI
PI Training
Information
About this site
FAQ
Related Links
HOME

How to get data
Products systematically available on Internet
[Free of charge products](#)
Click the logo for more information
[Fast registration to get access to the data](#)
Products available on specific request
(e.g. i.e. specific instrument tasking, products not generated systematically, products not available on Internet)
Available at cost of reproduction ([ENVISAT](#), [ERS](#) and [Third Party Missions](#))
Project proposal required, with no deadline for submission, to be evaluated by the Category-1 Advisory Group
[Specific restrictions](#) to the use of data may apply for Third Party Missions
If accepted by ESA, [Terms and Conditions](#) to be signed
Click the logo for more information
[Submit a full proposal](#)
Products from ESA Airborne Campaigns
Data acquired by ESA airborne campaigns inside and outside Europe.
Resulting datasets, available on Internet or media, can be accessed by registering a request
Click the logo for more information
[Register for the ESA Campaigns data](#)
Products offered within an ESA Announcement of Opportunity (AO)
Available following the specific rules set in the Main Text of the AO (normally free of charge)
Project proposal required, fitting objectives, restrictions and deadlines of the AO, to be evaluated by the AO Scientific Advisory Group
If accepted by ESA, [Terms and Conditions](#) to be signed
Click the logo for information about open AOs

© Copyright ESA

Products systematically generated and available via fast registration - release April 3 2007

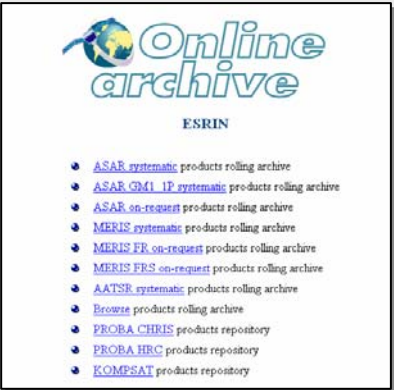
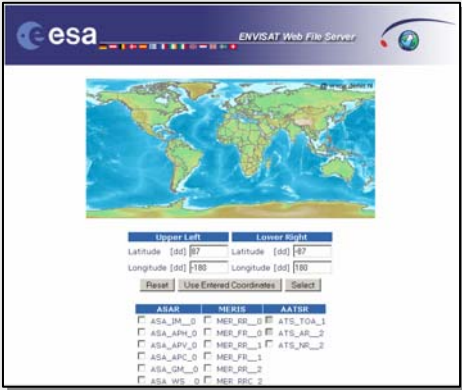

Mission	Sensor	Product	Internet		DDS Europe
			Archived or Reprocessed	NRT and Recent	NRT
ENVISAT	ASAR	ASA_WSM_1P		last 14 days	
		ASA_JMM_1P		last 14 days	
		ASA_APM_1P		last 14 days	
		ASA_GM1_1P		last 7 days	
		ASA_WVS_1P	Full mission	last 7 days	
	MERIS	ASA_WVV_2P	Full mission	last 7 days	
		MER_RR_1P	Full mission	last 7 days	NRT
		MER_RR_2P	Full mission	last 7 days	NRT
		MER_RRC_2P	included in MER_RR_2P	last 7 days	NRT
		MER_RRV_2P	included in MER_RR_2P	last 7 days	NRT
	AATSR	MER_LRC_2P	included in MER_RR_2P	last 7 days	
		MER_FRS_1P		last 14 days	
		(European coverage)			
		ATS_TOA_1P		last 7 days	NRT
		ATS_NR_2P		last 7 days	NRT
	Altimeter	ATS_AR_2P		last 7 days	NRT
		ATS_MET_2P		last 7 days	
		RA2_FGD_2P		last 7 days	
		RA2_IGD_2P	Full mission		
		RA2_GDR_2P	Full mission		
ERS	Atm. Chemistry	RA2_MWS_2P	10 days of archive		
		RA2_WVV_2P	Full mission	last 7 days	
		SCI_NL_1P	Full mission	last 7 days	NRT
		SCI_NL_2P	Full mission until Nov. 2004		
		SCI_OL_2P	Full mission from Nov. 2004		
	DORIS	MIP_NL_1P	Full mission		
		MIP_NL_2P			
		DOR_DOP_1P		last 7 days	
		DOR_POR_AX	Full mission	last 7 days	
		DOR_VOR_AX	Full mission	last 7 days	
TPM	SAR	WSC.UWM	From 21/08/2003 onwards	NRT	
		SVM.UWA	From 16/11/2006 onwards	NRT	
		GOME.LVL13	From March 2005		
		GOME.LVL21	Full mission		
		ALT.URA	From 16/11/2006 onwards	NRT	
	Orbit	ORB.PRC	Full mission		
		ORB.PRL	Full mission		
		PROBA.CHRS.1A	All available data, including recent		
		PROBA.HRC.1A	All available data, including recent		
		TM (Landsat)	LANDSAT.TM.SCPR	European coverage	
TPM	EOC (Komsat-1)	KOMP.EOC.ECD	City dataset		
		ACE_FTS_L2V1.0	Full mission		
		ACE_FTS_L2V2.2	Full mission		
		ACE_MAESTRO_L2V	Full mission		
		MODIS	MODIS.NRT.Level1B	Last 30 days	
	SeaWinds (QuikSCAT)	QSCATT.Level 2A	Full mission		
		QSCATT.Level 2B	Full mission		

Updated list available at : <http://eopi.esa.int>

Envisat <u>NRT & recent</u> data		availability	period	coverage
DDS ←	MERIS Red. Resolution (1200 m) ASAR Medium Resolution (75 m) ASAR Global Monitoring (1000 m)	Systematic (i.e. processing of all data)	Rolling archive of last 7days	Worldwide coverage
DDS ←	AATSR Altimetry	Product available within 3 hours from acquisition (95%)		
DDS ←	SCIAMACHY, GOMOS			
Internet	MERIS Full Resolution (300 m) <i>Level 1 – Europe coverage</i>	Systematic	Rolling archive of last 20 days	Europe coverage
	MERIS Full Resolution (300 m) ASAR High Resolution (12.5 m)	On request	Few hours after acquisition	According to ins. planning
Envisat <u>archived</u> data		availability	period	coverage
	MERIS Red. Resolution (1200 m) Altimetry SCIAMACHY, MIPAS, GOMOS AATSR (<i>end 2007</i>)	Systematic (i.e. for each re-processing of the data)	Whole mission since mid-2002	Worldwide coverage
	MERIS Full Resolution (300 m) ASAR High Rate	On request	Whole mission since mid-2002	Worldwide coverage

Data from ESA ERS and Third Party Missions are also available on Internet

Which systems for access to NRT and recent data ?

Internet		Telecom satellite broadcast
 <p>7-days <u>Rolling Archives</u> (ftp or http)</p>	 <p>7-days <u>Web File Server</u> (http)</p>	 <p>Data Dissemination System (DDS) broadcast</p>
		<p>Same dataset for both</p>
<ul style="list-style-type: none"> • Complete product (e.g. MERIS orbit) • Each acquisition station has its own rolling archive 	<ul style="list-style-type: none"> • Geographical selection (with product subset to decrease data volume for download) • One unique web site for all acquisition stations 	<ul style="list-style-type: none"> • Europe reception coverage • Cost: 350 € + 1.2m antenna • Africa reception coverage (larger antenna size)
Suitable for users requesting small or infrequent dataset		Suitable for users requesting systematic and large dataset



Ireland

3 May, 11:15 UTC

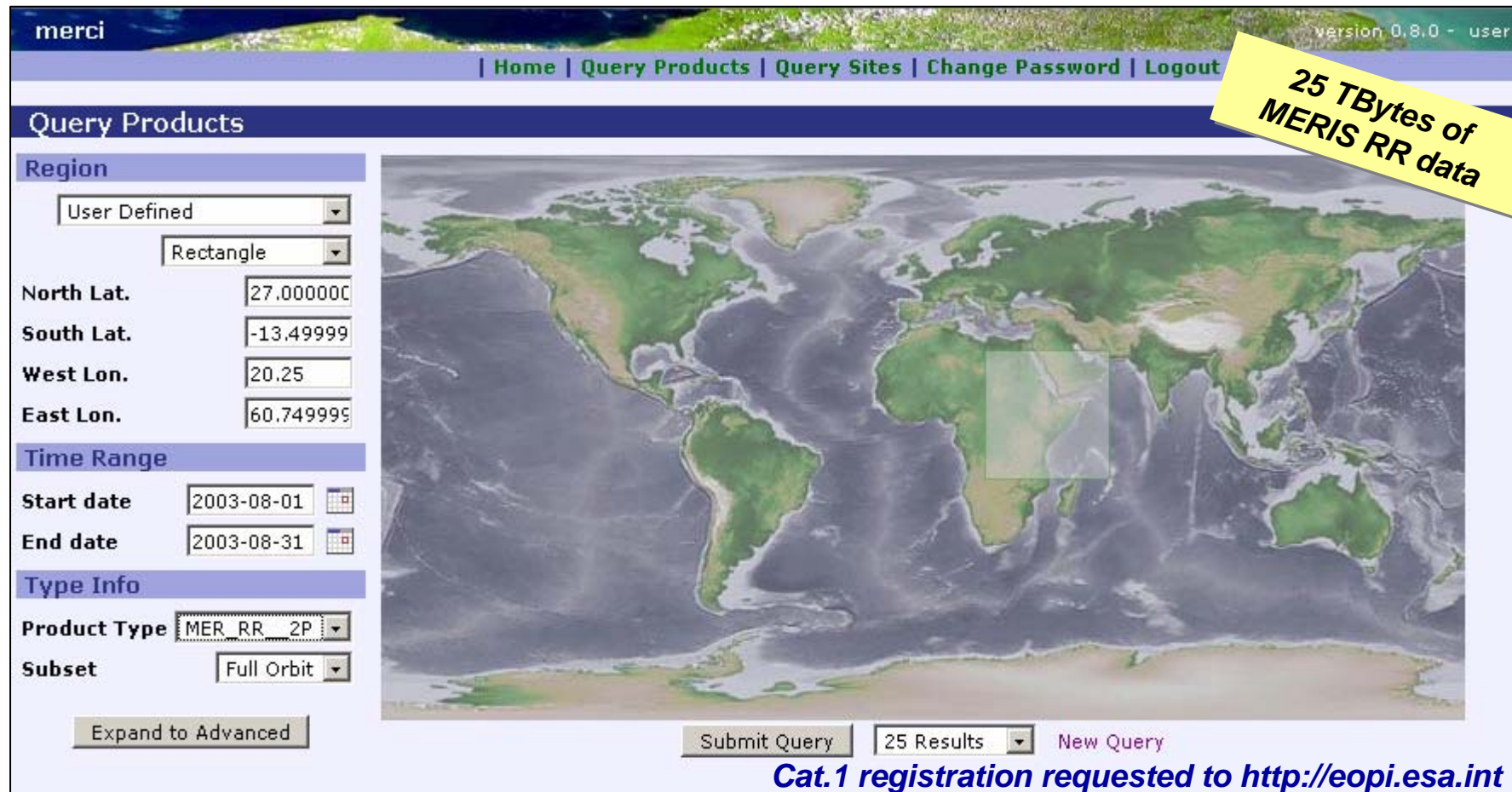
Envisat MERIS Full Resolution
Level 1 products available on-line
free of charge for registered Cat.1 PI's
(rolling archive of last 30 days)
- Europe coverage only -

European Space Agency
Agence spatiale européenne



Which systems for access to archived data ?

MERCI web interface, giving access
to global MERIS Reduced Resolution data archived since mid-2002



merci version 0.8.0 - user

[Home](#) | [Query Products](#) | [Query Sites](#) | [Change Password](#) | [Logout](#)

Query Products

Region

Region:
 Shape:
 North Lat.:
 South Lat.:
 West Lon.:
 East Lon.:

Time Range

Start date:
 End date:

Type Info

Product Type:
 Subset:

[New Query](#)

Cat.1 registration requested to <http://eopi.esa.int>

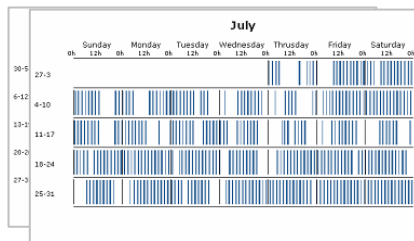
25 TBytes of MERIS RR data

MERCI web interface will be used also for Envisat/ERS (A)ATSR archived data (end 2007)

Alternative way to access to EO data:

→ Grid Processing-on-Demand (G-POD)

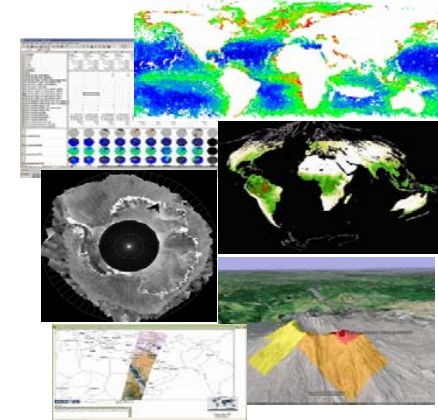
- Promote the development of new algorithms requiring large data and computing resources: *“bring the user’s algorithms to the data”*
- Build network of competences, promote e-collaboration and sharing of tools, easier transition from science algorithms to new user products ...
- 10 projects selected in mid-2006 through a Call for Proposal. Same approach will be continued in 2007/2008.



on-line data archives



user triggers and controls from the G-POD website its own processor running on eoGRID computers



innovative science products

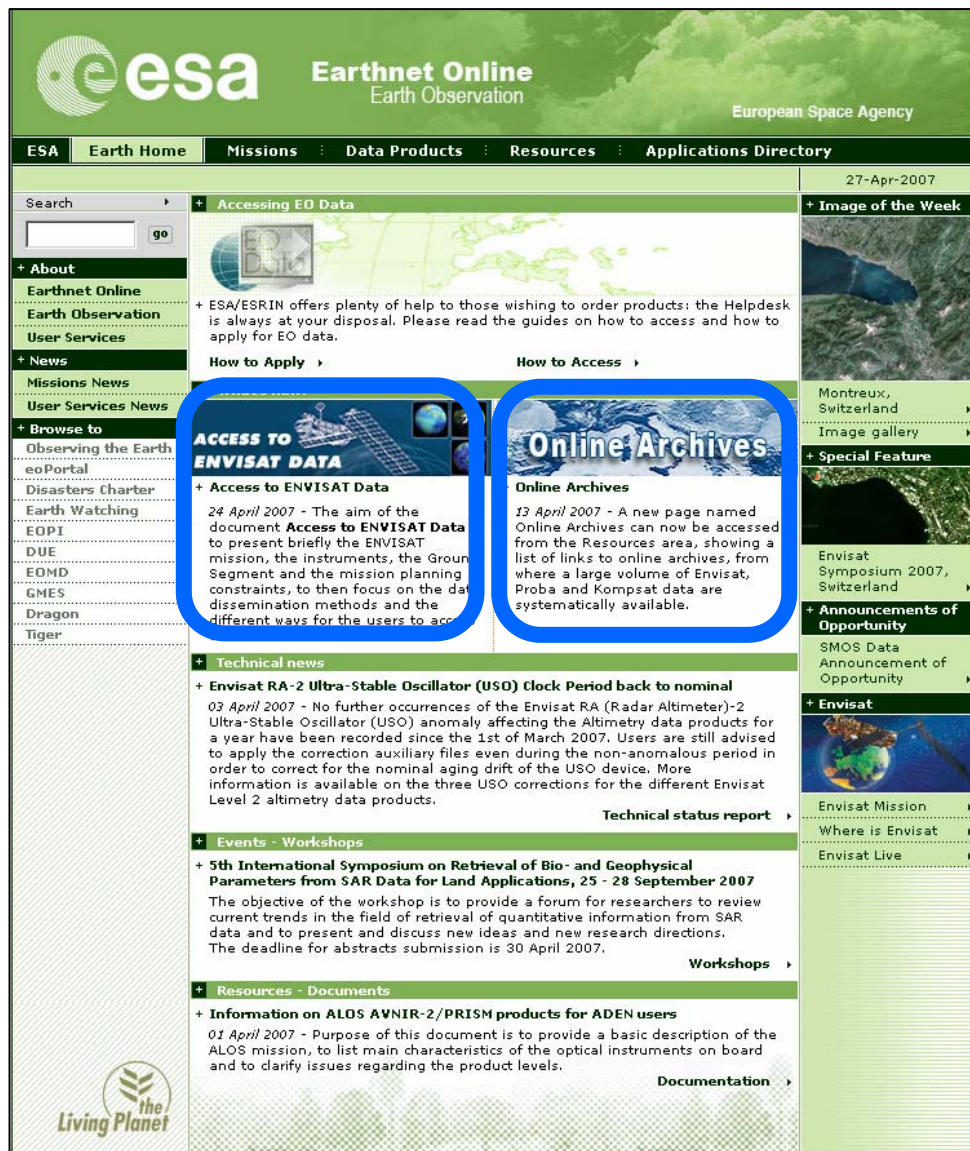
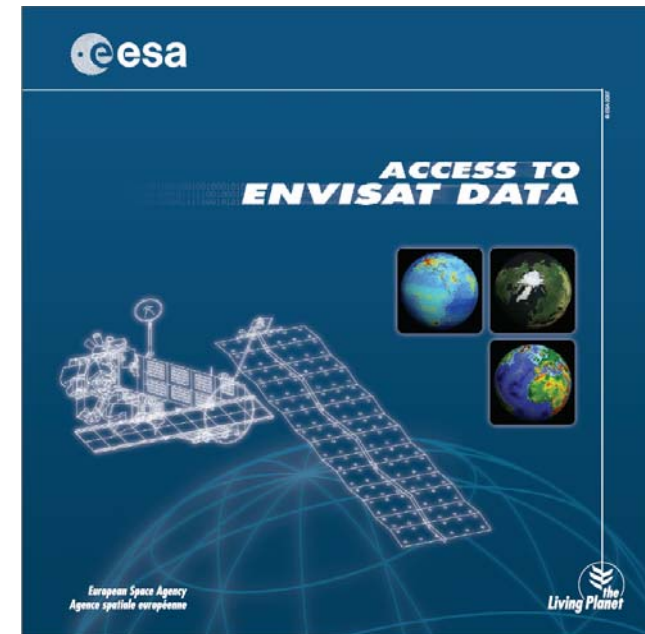
Alternative way to access to EO data:
→ ESA EO Toolboxes

The toolboxes (Open Source tools) facilitate the handling and exploitation of EO data (e.g. experimental Level 2 algorithms).



<http://earth.esa.int/resources/softwaretools/>

<http://earth.esa.int>

eohelp@esa.int

A constant objective:

→ *ease access to Earth Observation data*

- ☐ **Common objective for all missions data handled by ESA:**
Envisat, ERS, Earth Explorers,
and Third Party Missions (e.g. ALOS, SPOT-4, PROBA, ...)
- ☐ **Simplified data application procedures for Category 1 use**
- ☐ **Internet access to all Near Real Time (NRT) data**
- ☐ **Internet access to archived data gradually implemented (new dataset, new access systems)**
- ☐ **Development of alternative ways to provide data (e.g. processing on demand, toolboxes)**