

ALTIMETRY DATA: SELECT YOUR CHOICE !

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Altimeter Products for Space Oceanography from Topex/Poseidon and Jason-1 Missions:

AVISO and PODAAC have been distributing altimetric data worldwide since 1992. An overview of available products for Jason-1 and Topex/Poseidon missions, describing their applications and features, is presented below. The following table is divided by product type and by time availability. **Near Real Time & Delayed Time Products** have different characteristics (media distribution, data coverage, time-delay availability ...). Their scientific uses and applications are various and thus, it is important to well know the product name adapted for each study.

PRODUCT TYPE	PRODUCT NAME			
	DELAYED TIME (data older than 1 week)		NEAR-REAL TIME (between a few hours to 1 week)	
	PO.DAAC	AVISO	PO.DAAC	AVISO
- Geostrophic Currents - Contents: geostrophic velocities derived from the altimeter sea level gradient (global coverage) Use: study of ocean variability (global oceanic circulation, study of the currents along the coast)	/	/	/	NRT-MSLA (1/3° x 1/3°) (combined)
- Gridded Sea Level Anomalies - Contents: gridded sea level height with respect to a seven year mean (1993-1999), corrected for all geophysical effects Use: study of ocean variability (mesoscale circulation, seasonal variation, El Niño)	SSHA (1°x1°) and (1/2°x1/2°)	MSLA (1/3° x 1/3°) (T/P) *		NRT-MSLA (1/3° x 1/3°) (T/P and Jason-1)
- Along-Track Sea Level Anomalies - Contents: along-track sea level height with respect to a seven year mean (1993-1999), corrected for all geophysical effects Use: study of ocean variability (mesoscale circulation, seasonal variations, El Niño)	J1ATG-SSHA (Jason-1) TPATG-SSHA (T/P)	SLA (T/P)	TPSSHA (T/P) J1SSHA (Jason-1)	NRT-SLA (T/P and Jason-1)
- Corrected Sea Surface Heights - Contents: along-track sea surface heights corrected for all geophysical effects, plus the mean sea surface Use: stationary or long-term geophysical and ocean phenomenon studies	/	CorSSH	/	/
- Geophysical Data Records - Contents: along-track altimetric measurement averaged over 1 second and corrections to apply Use: delayed precise products for geophysical studies and near real time products for operational oceanography	M-GDR (T/P) J-GDR (Jason1)	M-GDR (T/P) J-GDR (Jason1)	I-GDR (T/P and Jason-1)	I-GDR (T/P and Jason-1)
- Wind / Wave Data - Contents: along-track significant wave height and/or wind speed modulus Use: marine meteorology, ocean-atmosphere gas transfer studies	GDR SSHA	GDR Wind/Wave	OSDR (Jason1) Wind/Wave	OSDR (Jason-1)
- Sensor Geophysical Data Records - Contents: 20 Hz along-track waveform information Use: expert use, coastal, ice studies or anything requesting a different retracking function than the one used for ocean	S-GDR	S-GDR (Jason-1)	/	/

* In this table, T/P refers to the satellite Topex/Poseidon.

Diffusion & Distribution Media of products:

- CD ROM or DVD ROM (e.g. GDRs products, SLA and MSLA...)
- By anonymous Ftp (Jason-1) (JGDR and OSDR, NRT-SLA, NRT-MSLA...)
- by catalogue (on request, users can register and receive some products)
- By open Live Access Server for data visualisation (AVISO) or NEREIDS (PO.DAAC) (data older than 1 month)
- By direct OPENDAP to get data older than 1 month (AVISO)

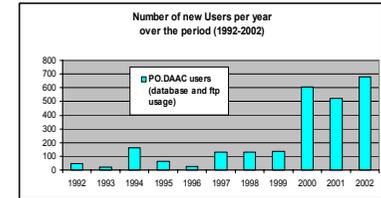
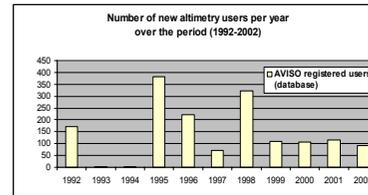


All information about ftp addresses, data request procedures are summarized in AVISO and PO.DAAC web sites.

AVISO and PO.DAAC users over the world:

• Evolution of user requests:

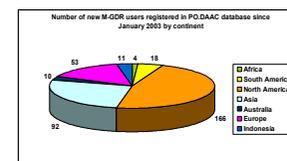
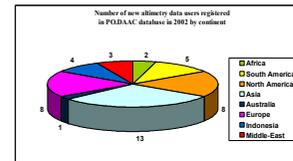
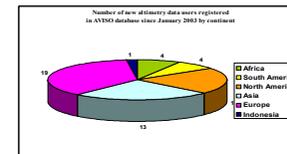
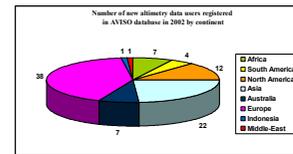
The requests of products remain constant but always important (without considering ftp usage). The recent availability of Jason-1 products should increase user requests in future years.



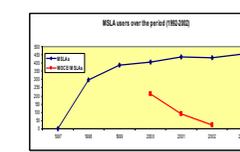
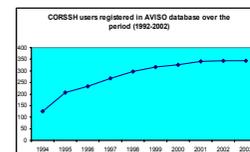
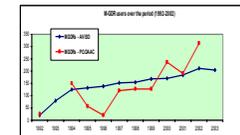
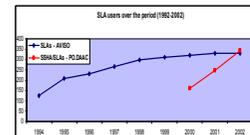
• Geographic distribution of the users:

Today, user requests come from various countries. The scientific community is growing larger and larger and there is a notable increase of requests coming from « emergent countries » (e.g., China). This point should be considered in order to facilitate data access on a daily basis.

The following graphs describe AVISO and PO.DAAC data user distributions by country in 2002 and 2003.



• Product request evolution over the period (1992-2002):



Conclusion:

Altimetry data products are now used by a wide community (PIs, scientists, students...). Data access has to remain easy and possible for all the users. FTP usage is more frequent today, but the request of CD-ROM/DVD ROM products is still relevant and proves that this type of distribution media needs to be maintained.

This poster presentation focuses on altimetry products from the Jason-1 and Topex/Poseidon missions; however, Envisat altimetry products are also available now, completing the series of altimetry data products.

We remind you that for all information about products, please contact both AVISO and PO.DAAC services.