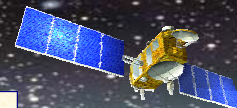


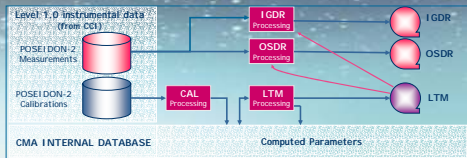
POSEIDON-2 Altimeter : Performance Summary

Pierre THIBAÛT, Joel DORANDEU - CLS, France
Nathalie STEUNOU, Guy CARAYON - CNES, France

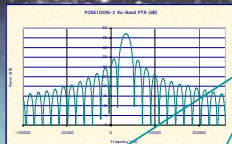


1) Use of the POSEIDON-2 internal calibration data in the CMA Processing Chains

Calibration sequences (PTR + LRF) are executed 3 times per day
Long Term Monitoring File (LTM) is produced once a day



Point Target Response

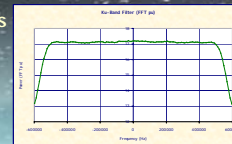


Useful to determine:
- the internal travel between the transmission and the reference lines of the altimeter
- the total power of the PTR

taken into account in the (I)GDR products

Useful to monitor the ageing of the components of the altimeter (width of the main lobe, levels and positions of the secondary lobes, dissymetries between lobes...)

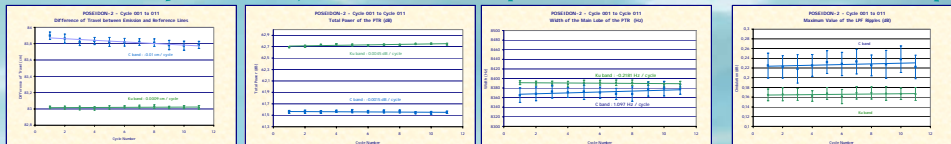
Low Pass Filter



Useful to:
- correct the waveform

taken into account in the (I)GDR products

Useful to monitor the ageing of the components of the altimeter (characteristics of the resolving chains, amplitude of the ripples, leakage spikes...)

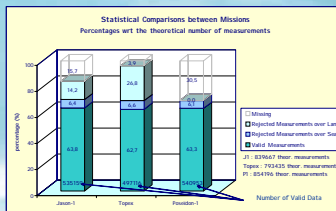


Conclusions :

- PTR and LRF in-flight measurements are fully compliant (with margins) with the instrument specifications
- There is no major evolution between the ground test measurements and the in-flight measurements
- Results are steady in space environment
- No need to increase the number of calibration measurements per day

2) Tracking performances : first results and comparison with TOPEX and POSEIDON-1

Jason 1: Cycle 007 from 15/03/2002 to 25/03/2002
TopeX : Cycle 350 from 15/03/2002 to 25/03/2002
Poseidon 1: Cycle from 5/02/1997 to 15/02/1997

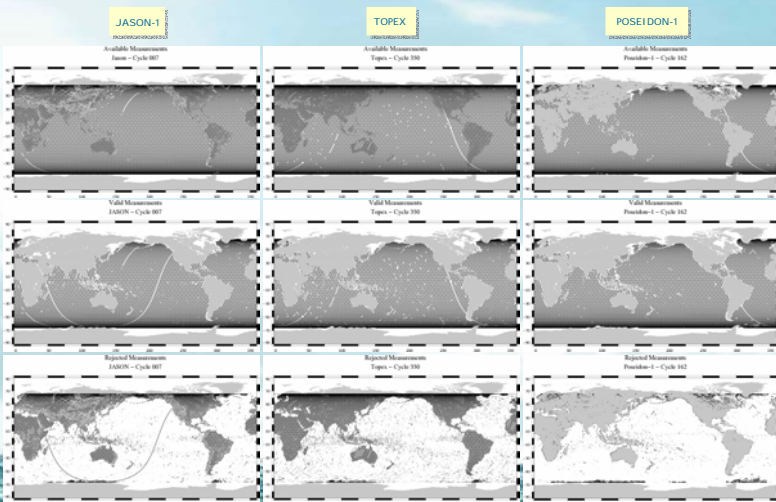


Editing Criteria (SI units)	Comments on Jason Data :
EARTH_RAD_FLG	Measurements from pass 99 and 148 are partially missing. Passes 246 and 247 are edited because JMR measurements are not present.
ICE_FLG	
OSWH-11	
7:CSH-20	
10-NB_DALT-20 for J1 and P1	
5-NB_DALT-10 for TopeX	
15:SSH_INTERR-00	
0:RMS_DALT-0.2 for J1 and P1	
0:RMS_DALT-0.2 for TopeX	
-0.2:ATT_FO_SG-0.16 for J1 and P1	
-2.5:DRY_TROP-1.9	Comments on TopeX Data :
-0.5:EM_PARAM-0	Due to a problem in the TopeX Ground Segment, measurements from pass 180 are not available. Measurements from passes 179 and 181 are partially available. Some data are also missing due to tape recorder problems.
-2:0:BARO_PBAR-2.0	Comments on Poseidon-1 Data :
-0.5:NET_TROP-0.001	Measurements are issued from the Geophysical Data Record File. In these products, there is no data over land surfaces.
-0.4:1:DNQ_BIFR-0.04	
-5.0:T1D_GOT19-5.0	
-0.5:T1D_FCL-0.5	
-1.0:T1D_TER-1.0	
-15.0:T1D_POL-15.0	
0:0:ALT_WIND-30.0	

Available Data

Valid Data

Rejected Data



Example over the Mediterranean Sea

