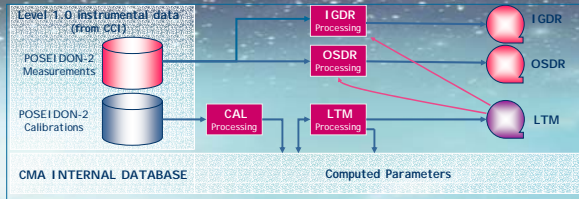


POSEIDON-2 Altimeter : Performance Summary

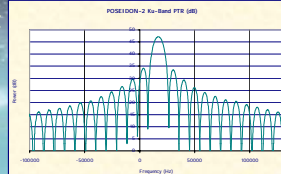


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Use of the POSEIDON-2 internal calibration data in the CMA Processing Chains

Point Target Response

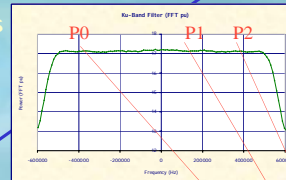


Useful to determine:
 ❖ the total Power of the PTR
 ❖ the internal travel between the transmission and the reference lines of the altimeter

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

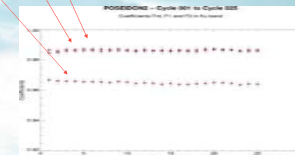


Useful to:
 ❖ correct the waveforms

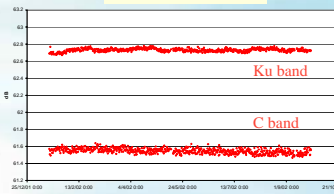
taken into account in the (I)GDR products

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

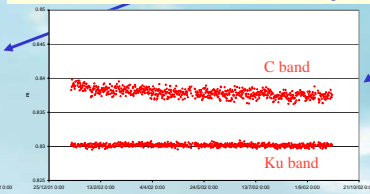
Evolution of the level P0, P1 and P2 of the filter since launch



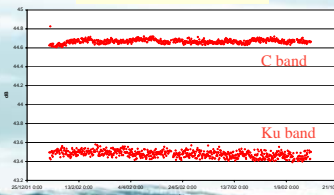
Total Power of the PTR



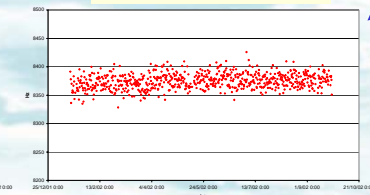
Difference of Travel between Emission and Reception lines



Maximum Value of the PTR



Width of the Main Lobe of the PTR



Conclusions :

- PTR and LPF 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