POSEIDON-2 Altimeter: Performance Summary

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POSEIDON-2 Ku-Band PTR (dB)

Usefull to determine the total Power of the PTR taken into account in the IGDR products.
Usefull to monitor the ageing of the components of the altimeter (width of the main lobe, levels and positions of the secondary lobes, dissymmetries between lobes …)

Point Target Response

Usefull to correct the waveforms taken into account in the (I)GDR products.
Usefull to monitor the ageing of the components of the altimeter (characteristics of the receiving chains, amplitude of the ripples, leakage spikes, …)

Low Pass Filter

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

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
- Regular CLS/CLS/IGDR product exchanges
- No need to increase the number of calibration measurements per day

Total Power of the PTR

Maximum Value of the PTR

Width of the Main Lobe of the PTR

Difference of Travel between Emission and Reception lines

Ku band

C band

Ku band

C band