



RA-2 Sigma-0 absolute calibration, Phase E results

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The nadir backscattering coefficient, sigma-0, measured by radar altimeters is being used for wind-speed retrieval over ocean, using empirical methods. For this reason relative calibration between the different missions, traditionally performed, was sufficient. In the last past years scientist demonstrated the need to make use of an absolute value to be used within physically based models, and therefore an absolute calibration needed to be performed.

During the Envisat Commissioning Phase a newly-developed transponder was deployed in the Netherlands, giving promising results, presented during the Envisat Cal/Val Workshops. This paper describes the activities, performed during the Envisat Operational phase, for the deployment of the same transponder in Italy. It describes also the activities related to the planning of the altimeter in preset mode and presents the results obtained from the processing of the 4 measurements per cycle acquired over a period of ten months.