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Poster

To extend and strengthen Gavdos operations, three Cal/Val facilities have been developed at several other locations, all on the mainland of West Crete. At first, the RDK1 site has been established in the Central-West Crete and which lies along the Jason No. 109 ascending track, while it serves as extension and validation of the Gavdos Cal/Val procedures. Secondly, in the South-West Crete, the CRS1 site has been created for the calibration of the Chinese HY-2 satellite. Finally, a site, called 'CDN2', located on a triple cross-over of the Jason, Sentinel-3A (orbit 14) & 3B (orbit 335) and AltiKa satellites, has already been identified, tested, and selected for altimeter calibration. Also, observations from tide gauges and other dedicated scientific sensors (i.e., GPS-Glonass-EGNOS-BeiDou receivers, meteorological, DORIS, SLR, etc.) installed at various Cal/Val facilities over the broader Crete/Gavdos region, will be used to provide a time series of absolute calibration values and drifts for the Sentinel-3 altimeter and radiometer. A new prototype microwave transponder has been developed and delivered in 2011 to serve as an alternative and independent technique for calibration of, mainly, European altimetric missions. Calibration of the transponder itself has been conducted at the Compact Payload Test Range facilities in the European Space Agency, in 2012. The operational capabilities of the microwave transponder have been already tested employing the Cryosat-2 satellite on TUC campus.

This work will present the preparatory steps taken, and the procedures to be followed for the establishment of a permanent calibration site for Sentinel-3 in the south west of Crete using the developed transponder. Calibration of both Sentinel-3A and Sentinel-3B as well as Jason satellites (and possibly AltiKa) will be performed with this ground infrastructure.

OSTS session

Regional and Global CAL/VAL for Assembling a Climate Data Record

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