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Towards an Operational INSAR Processor for Topographic Radar Mapping

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Abstract

DSS (Dornier Satellitensysteme) are developing an INSAR processor for operational application with airborne as well as spaceborne sensor systems. A basic requirement is that the data acquired by the airborne single-pass DO-SAR sensor during one flight day can in quasi real time be processed to a level allowing data quality control with respect to full INSAR evaluation.

The throughput requirements imply a block processing system and an overall data and parameter handling philosophy which allows to keep track of the large number of signal input and output and auxiliary data files involved.

The processor design is to some extent based on experience with the previous development, under ESA contract, of the IAB INSAR workstation installed at ESTEC.

Keywords: