

Study paper on INSAR applications with ESRIN quick look

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Abstract

SAR interferometry has demonstrated to be a powerful technique for the generation of Digital Elevation Models (DEM) and the detection of small surface movements. Nevertheless, the recent detection of atmospheric effects in SAR images could represent a critical limitation for interferometric applications.

A very high throughput interferometric processor could be the basis for a possible monitoring of atmospheric effects in SAR images and for the systematic survey of seismic activity and land subsidence. This article presents the preliminary results obtained by the exploitation such a interferometric system for the fast detection of atmospheric effects and surface elevation changes.