



A report of ASI activities in CERGOP II framework and discussion of the results

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The contribution of the Italian Space Agency at Matera (ASI/CGS) to CERGOP II project covered the following topics:

Monitoring of 2 sites affected by landslide phenomena, production and quality check of zenith total delays estimated for a global as well as regional GPS networks devoted to meteorology applications, RTK and navigation tests and critical analysis of long time GPS data series helpful for geodynamic as well atmospheric investigations. For what concern the landslides monitoring the two sites under investigation: Aliano and Avigliano are located in Basilicata region, (South of Italy). These sites are affected by a dramatic creep of the ground which in the past were the cause of severe damages to the buildings and roads in the areas. We will show the state of art of the activities performed to compare GPS with Permanent Scatter IN-SAR technique. At Avigliano site, finally a high resolution DTM based on kinematic GPS technique was built, to obtain more information about the current morphology of the landslide body,. For what concern the routine production of ZTD we will show a critical comparisons of our solutions with radio balloon observations and a discussion about the assessment of their reliability. Finally the results of a navigation experiment by using differential correction provided by EUREF-NTRIP service will be shown.