

Routine Analysis of all available GNSS Stations in Greece: Processing Scheme and Dissemination of Products and Data.

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Dionysos Satellite Observatory and Higher Geodesy Laboratory of the National Technical University of Athens, have developed an automated processing scheme to accommodate the daily analysis of all available continuous GNSS stations in Greece. For the moment, a total of approximately 150 regional stations are processed, divided in 4 subnetworks.

GNSS data are processed routinely on a daily basis, via Bernese GNSS Software v5.0, developed by AIUB. Each network is solved twice, within a period of 20 days, first using ultra-rapid products (with a latency of ~ 10 hours) and then using final products (with a latency of ~ 20 days). Observations are processed using carrier phase, modelled to double differences in the ionosphere-free linear combination. Analysis results, include coordinate estimates, ionospheric corrections (TEC maps) and hourly tropospheric parameters (zenith delay). This processing scheme, has proved helpful in investigating in near real-time abrupt geophysical phenomena, as in the 2011 Santorini inflation episode and the 2014 Kephalonia earthquake events. All analysis results and products are made available via a dedicated webpage. Additionally, most of the GNSS data are hosted in a GSAC web platform, available to all interested parties.

Data and results are made available through the laboratory's dedicated website: http://dionysos.survey.ntua.gr/.