# ESOC Stations : Status and Monitoring Capability

**J.Tegedor, P. Alfaro, C. Garcia, I. Romero, F. Dilssner, M. Lorenzo, J. Dow**
ESA/ESOC, Robert-Bosch-str 5, Darmstadt, 64289, DE.

ESA/ESOC maintains its own network of GNSS stations around the world: 2 GPS + GLONASS, 8 GPS only and 1 EGNOS stations, as well as 7 GALILEO experimental stations. Currently at ESOC we are working on the development and deployment of new Galileo and EGNOS networks, the upgrade of several of the GPS stations into GPS+GLONASS and the establishment of new GNSS stations at ESA tracking sites. An overview of the GNSS stations under ESOC control will be presented, as well as the monitoring tools implemented to check the network's health.

In order to monitor the status and quality of the stations, several tools have been developed inside ESOC. Two monitoring strategies have been pursued: Checking directly the station's observation data and checking the processing results from several GNSS estimation runs (data rejection, convergence levels, residuals analysis). Overall there are monitoring tools in Real Time and Near Real Time, that automatically warn the operators of any problems detected, and collect data for long term analysis.