ESA/ESOC IGS network operations. Present and Future

Garcia, C.¹; Andrés, Y.¹; Romero, I.¹; Rojo, E.¹; Dow, J.²

¹GMV at ESOC, GERMANY; ²ESA/ESOC, GERMANY

ESA/ESOC has been involved from the start in the provision of GNSS data to the IGS community. Currently a network of 11 worldwide distributed receivers are operated in 10 different locations: Kiruna(Sweden), Kourou(French Guiana), Malindi(Kenya), Maspalomas(Canary Islands), New Norcia(Australia), Perth(Australia), Redu(Belgium), Villafranca(Spain), Cebreros(Spain) and Tahiti(French Polynesia). ESOC makes every effort to continuously update the infrastructure and provide the necessary data to support the generation of all the IGS products. A Hydrogen maser was installed in New Norcia in 2002 and it has been followed by a second one in Cebreros in 2005. There is a planned new redundant Hydrogen Maser for Kourou for 2006/2007. A combined GPS + GLONASS receiver was installed at Kourou in 2002 and recently 2 new units have been acquired and will be deployed soon to improve the worldwide GLONASS network coverage. Additionally with the creation of the ESOC Navigation Facility there is currently a general overhaul of the infrastructure to adapt it to a more operational scenario. Most of the stations contribute data to the network centres in all latency modes: real time 1Hz data, 15 minutes 1 Hz files, hourly and daily 30 seconds files. ESOC is also involved in the deployment of the first experimental Galileo receivers.