The Bonn Geodetic VLBI Operation Center

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The GIUB VLBI Operation Center is located at the Geodetic Institute of the University of Bonn, Nussallee 17, D-53115 Bonn, Germany. In the past year the activities of the GIUB VLBI Operation Center were concentrated on the preparation and organization of several different observing programs:

- International Radio Interferometric Surveying South (IRIS-S)

 Twelve Sessions per year with the stations Wettzell, HartRAO, Fortaleza, Fairbanks and Westford.
- Continuous Observations of the Rotation of the Earth O'Higgins (CORE-OHIG)

with stations HartRAO, O'Higgins, Fortaleza, Hobart, Kokee and DSS45 plus one session also including the Japanese Antarctic station Syowa.

Measurement of Vertical Crustal Motion in Europe by VLBI (EURO)
 (EU Project FMRX-CT960071)
 Six sessions per year with the stations NyÅlesund, Onsala, Wettzell, Simeiz, Madrid (DSS65),

Six sessions per year with the stations Ny Alesund, Onsala, Wettzell, Simeiz, Madrid (DSS65), Yebes, Medicina, Matera and Noto. Effelsberg and TIGO-WTZL participated occasionally.

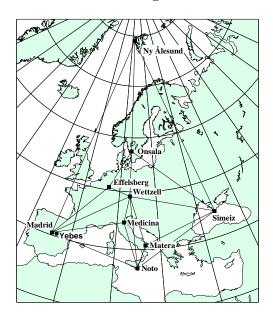


Figure 1. European VLBI network

• Phase delay and polarization test with a subset of European stations (appended to two EURO sessions)

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• Wettzell local ties (WTIES)

Two sessions between Wettzell 20-m telescope and TIGO-WTZL which are about 59 m apart

The operational tasks mainly consisted of preparing the detailed observing schedules for all sessions listed above. In addition, the dates and technical setups for the last two projects had to be organized while the dates for the first three series were fixed by the IVS CC. The schedules are prepared with the SKED software on HP-UX platforms.

One of the critical items which affects the preparation of the EURO sessions is radio frequency interference from televison transmitters at Matera. At this site the receiver is saturated at some of the S-band frequency channels and bandwidth synthesis, therefore, can be performed only with a subset of the usual series of channels. This reduction in channels has adverse effects degrading the signal-to-noise ratio and often corrupting the delay observables. Therefore, new frequency sequences had to be investigated on several occasions. Recently, the interference frequencies have remained relatively stable and the current setup permits undisturbed observations at all frequency sub-bands.

Arno Müskens takes care of the IRIS-S and the CORE-OHIG sessions while Axel Nothnagel is responsible for the EURO project.