

# The Bonn Geodetic VLBI Operation Center

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## Abstract

In 2006, the name of the GIUB Operation Center has been changed to IGGB Operation Center. It has continued to carry out similar tasks of organizing and scheduling various observing series as in 2005.

## 1. Center Activities

The IGGB VLBI Operation Center is located at the Institute for Geodesy und Geoinformation (formerly Geodetic Institute) of the University of Bonn, Nussallee 17, D-53115 Bonn, Germany. It has been organizing and scheduling VLBI observing sessions for more than twenty years. The observing series organized and scheduled in 2006 are the same as in 2005 except that the scheduling for the INT2 series (Wetzell - Tsukuba) had been handed over to BKG in Leipzig.



Figure 1. Observatories participating in the Europe sessions

- **Measurement of Vertical Crustal Motion in Europe by VLBI (EUROPE)**

In Europe, a series of special sessions has been scheduled for the determination of precise station coordinates and for long term stability tests. This year, six sessions with Ny-Ålesund, Onsala, Metsahovi, Svetloe, Zelenchukskaya, Effelsberg, Wettzell, Simeiz, Madrid (DSS65A), Medicina, Matera, and Noto were scheduled employing a new frequency setup for the recording with 16 instead of 14 channels and 4 MHz instead of 2 MHz bandwidth in fan-out mode (identical to the setup of the IVS-T2 sessions). The new Yebes 40 m telescope is in the process of being completed and will be included in the Europe sessions as soon as possible.

- **IVS-T2 series**

This series has been observed roughly every second month (6 sessions in 2006) primarily for maintenance and stabilisation of the VLBI terrestrial reference frame as well as for Earth rotation monitoring as a by-product. Each station of the global geodetic VLBI network is planned to participate several times per year in the T2 sessions. In view of the limitations in station days, priority was given to stronger and more robust networks with many sites over more observing sessions. Therefore, 12 to 16 stations have been scheduled in each session requiring multiple passes on the IVS correlators. The scheduling of these sessions has to take into account that a sufficient number of observations is planned for each baseline of these global networks. In summer 2006, the recording frequency setup was changed from 14 to 16 channels and from 2 MHz to 4 MHz channel bandwidth.

- **Southern Hemisphere and Antarctica Series (OHIG):**

Six sessions of the Southern Hemisphere and Antarctica Series with the Antarctic stations Syowa (Japanese) and O'Higgins (German) plus Fortaleza, Hobart, Kokee, HartRAO and DSS45 have been organized for maintenance of the VLBI TRF and Earth rotation monitoring. These sessions are clustered in time at periods when O'Higgins is manned depending on logistical circumstances and manpower available. Since late 2006 these sessions are also recorded with the same new frequency setup as in the IVS-T2 and Europe sessions.

## 2. Staff

Table 1. Personnel at IGGB Operation Center

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