BKG Data Center

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Abstract

This report summarizes the activities and background information of the IVS Data Center for the year 2006. Included are information about functions, structure, technical equipment and staff members of the BKG Data Center.

1. BKG Data Center Functions

The BKG (Federal Agency for Cartography and Geodesy) Data Center is one of the three IVS Primary Data Centers. It archives all VLBI related data of IVS components and provides public access for the community. The BKG Data Center is connected to the OPAR and CDDIS Data Centers by mirroring the OPAR and the CDDIS file stocks several times per day. The following sketch shows the principle of mirroring:

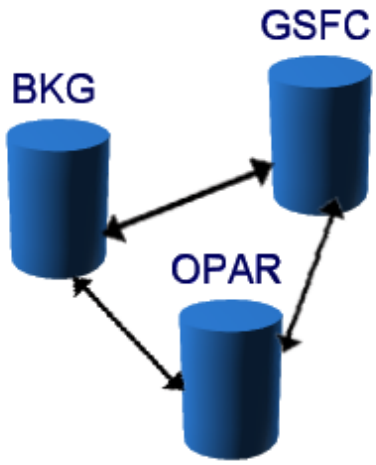

Figure 1. Principle of mirroring

IVS components can choose one of these Data Centers to put their data into the IVS network by using its incoming area which each of them has at its disposal. The BKG incoming area is protected and users need to obtain username and password to get access (please contact the Data Center staff).

An incoming script is watching the incoming area and checking the syntax of the files sent by IVS components. If it is o.k. the script moves the files into the data center directories; otherwise the files will be sent to a badfile area. Furthermore the incoming script informs the responsible staff at Data Center by sending e-mails about its activities. The incoming script is a part of the technological unit which is responsible for managing the IVS and the Operational Data Center and to carry out first analysis steps in an automatic manner. All activities are monitored to guarantee

data consistency and to control all analysis steps from data incoming to delivering of analysis products to IVS.

Public access to the BKG Data Center is available through FTP and HTTP:

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FTP:              ftp://ivs.leipzig.ifag.de/pub/vlbi/


HTTP:             http://www.leipzig.ifag.de/VLBI
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Structure of BKG IVS Data Center:

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vlbi/           : root directory
ivs-iers/       : VLBI products for IERS
ivs-pilot2000/  : directory for special investigations
ivs-pilot2001/  : directory for special investigations
ivs-pilotbl/    : directory for baseline time series
ivs-pilottro/   : directory for tropospheric time series
ivs-special/    : special CRF investigations
ivscontrol/     : controlfiles for the data center
ivsdata/        : VLBI observation files
ivsdocuments/   : IVS documents
ivsproducts/    : analysis products
                  (earth orientation, terrestrial and celestial frames,
                   troposphere, daily sinex files)
raw/            : raw files
```

2. Technical Equipment

DELL Server (SUSE Linux Enterprise 9.5 operating system)
disk space: 140 GBytes (Raid system)
internet rate: 34 MBit/sec
backup: automatic tape library

3. Staff Members

Volkmar Thorandt (coordination, data analysis, data center, volkmar.thorandt@bkg.bund.de)
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