BKG Data Center

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Abstract

This report summarizes the activities and background information of the IVS Data Center for the year 2001. 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:

![Diagram of data center connections]

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. These areas are protected and the users need to obtain username and password to get access (please contact the Data Center staff).

An incoming script is watching this 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 part of a 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

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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:

```plaintext
tftp.leipzig.ifag.de
uid: anonymous
pw: e-mail address
cd vlbi
```

respectively

```plaintext
WWW: http://www.leipzig.ifag.de/VLBI
```

Structure of BKG IVS Data Center:

- **vlbi/** : root directory
- **ivs-iers/** : VLBI products for IERS
- **ivs-pilot2000/** : directory for special investigations
- **ivs-pilot2001/** : directory for special investigations
- **ivscontrol/** : control files for data center
- **ivsdata/** : VLBI observation files
- **ivsdfiles/** : IVS documents
- **ivsprods/** : analysis products
  (earth orientation, terrestrial and celestial frames)

2. Technical Equipment

- HP 9000/D280/1 (HP UX 10.20 operating system)
- disc space: 190 GBytes (Raid system)
- internet rate: 2 MBit/sec
- backup: automatic tape library

3. Staff Members

Volkmart Thorandt (coordination, data analysis, data center, vt@leipzig.ifag.de)
Reiner Wojdziak (data center, web design, rw@leipzig.ifag.de)
Dieter Ulrich (data analysis, data center, dul@leipzig.ifag.de)
Gerald Engelhardt (data analysis, engelhardt@leipzig.ifag.de)

4. Future Plans

In 2002 the IVS Data Center will move to a separate computer in the so-called Secure Server Network.