

# BKG Data Center

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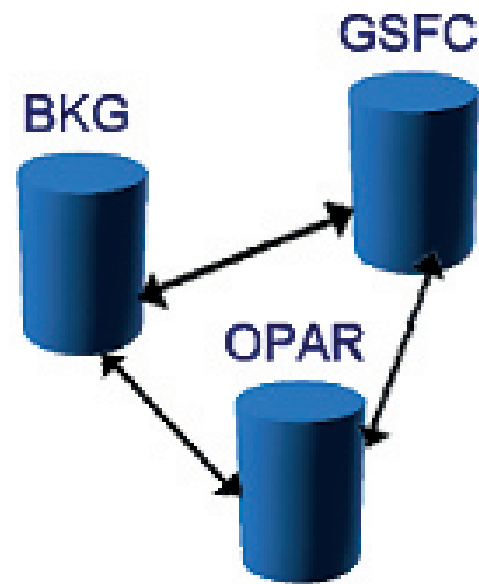
**Abstract** This report summarizes the activities and background information of the IVS Data Center for the years 2015 and 2016. Included are information about functions, structure, technical equipment, and staff members of the BKG Data Center.

## 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 GSFC CDDIS Data Centers by mirroring the OPAR and the CDDIS file stocks several times per day. The sketch in Figure 1 shows the principle of mirroring.

IVS components can choose one of these Data Centers to put their data into the IVS archives by using its incoming area, which each Data Center has at its disposal. The BKG incoming area is protected, and users need to obtain a username and password to get access.

An incoming script watches the incoming area and checks the syntax of the files sent by IVS components. If it is okay, the script moves the files into the Data Center directories. Otherwise the files will be sent to a bad-file area. Furthermore, the incoming script informs the responsible staff at the Data Center by sending e-mails about its activities. The incoming script is part of the



**Fig. 1** Principle of mirroring.

technological unit which is responsible for managing the IVS and the Operational Data Center and for carrying out the first analysis steps in an automatic manner. All activities are monitored to guarantee data consistency and to control all analysis steps from data arrival to delivery of analysis products to IVS.

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

<ftp://ivs.bkg.bund.de/pub/vlbi/>

<http://ivs.bkg.bund.de/vlbi/>

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### Structure of the BKG IVS Data Center:

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vlbi/           : root directory
ivscontrol/    : controlfiles for the data center
ivsdata/       : VLBI observation files
ivsdocuments/  : IVS documents
ivsproducts/   : analysis products
  crf/         : celestial frames
  trf/         : terrestrial frames
  eops/        : earth orientation (24h sessions)
  eopi/        : earth orientation (Intensive sessions)
  daily_sinex/ : daily sinex files (24h sessions)
  int_sinex/   : daily sinex files (Intensive sessions)
trop/         : troposphere
```

## 2 Technical Equipment

The BKG IVS Data Center is based on a DELL Server (SUSE Linux operating system), disk space of 500 GBytes (Raid system), and a backup system operated by an automatic tape library.

## 3 Staff Members

- Volkmar Thorandt (coordination, data analysis, data center, volkmar.thorandt@bkg.bund.de)
- Reiner Wojdziak (data center, Web design, reiner.wojdziaak@bkg.bund.de)
- Dieter Ullrich (data analysis, data center, dieter.ullrich@bkg.bund.de)
- Gerald Engelhardt (data analysis, gerald.engelhardt@bkg.bund.de)