

# BKG Data Center

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**Abstract** BKG has been one of the three primary IVS Data Centers since the inception of the IVS. During normal operations, the data sets are regularly mirrored with the Data Centers at CDDIS and OPAR. In 2023–2024 our work on providing public access to official IVS data and products had to be paused involuntarily. In May 2023, we were forced to shut down the external access due to IT requirements. Since that time, the IVS Data Center at BKG has been in the process of being planned and set up as part of a general BKG solution for providing external access to IVS data.

## 1 General Information

The BKG Data Center (BKG DC) hosted by the German Federal Agency for Cartography and Geodesy (BKG) is one of the three primary IVS Data Centers on terms defined by the International VLBI Service for Geodesy and Astrometry (IVS). According to the IVS regulations, we are responsible for accepting the recognized VLBI data from all IVS components: other Data Centers, Operation Centers, Network Stations, Correlators, Analysis Centers, and the Combination Center, and we are responsible for providing the data as open access to the international VLBI and geodetic communities. At this moment (i.e., the beginning of 2025) no external access to the Data Center is available due to IT regulations.

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BKG Data Center

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Currently, BKG DC only provides data internally for the VLBI analysis at BKG. The process of rebuilding a public IVS archive is still in progress.

BKG has set up an internal, BKG-wide quality management process for all operational activities. The VLBI Data Center is included in this quality monitoring process with a key performance indicator showing the consistency and completeness of the data sets provided at BKG with respect to CDDIS.

## 2 Data Center at BKG

The BKG Data Center works together with CDDIS and OPAR representatives to support the proper data ingest among the official IVS DCs [1]. In this report we highlight the current limitations in the operations of the BKG DC.

- **Shut Down of External Access, May 2023**

The BKG DC was shut down, and all external access was terminated. In order to avoid unnecessary delay, BKG’s Data Center team immediately applied for a new productive environment. The concept of how to set up the Data Center underwent several changes over time. It evolved from a single server for all services to distributed services on dedicated individual servers to dedicated servers for each service handling the IVS data using a general BKG exchange server for external access.

- **Change in Priority, summer 2024**

Meanwhile, our BKG-wide quality management system showed red values for the key performance indicator assigned to the VLBI Data Center. This forced BKG’s management to raise the priority of bringing the VLBI Data Center online again. Mile-

