

Paris Observatory (OPAR) Data Center

Christophe Barache, Sebastien Lambert, Teddy Carlucci

Abstract This report summarizes the OPAR Data Center activities in 2014. Included is information about functions, architecture, status, future plans, and staff members of the OPAR Data Center.

1 General Information

The Paris Observatory (OPAR) has provided a Data Center for the International VLBI Service for Geodesy and Astrometry (IVS) since 1999. The OPAR, as well as CDDIS and BKG, is one of the three IVS primary Data Centers. Their activities are done in close collaboration for collecting files (data and analysis files) and making them available to the community as soon as they are submitted. The three Data Centers have a common protocol and each of them:

- has the same directory structure (with the same control file),
- has the same script,
- is able to receive all IVS files (auxiliary, database, products, and documents),
- mirrors the other ones every three hours, and
- gives free FTP access to the files.

This protocol gives the IVS community a transparent access to a Data Center through the same directory, and a permanent access to files in case of a Data Center breakdown.

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IVS 2014 Annual Report

2 Architecture

To be able to put a file in a Data Center, Operational and Analysis Centers have to be registered by the IVS Coordinating Center. The file names have to conform to the name conventions. A script checks the file and puts it in the right directory. The script undergoes permanent improvement and takes into account the IVS components' requests. The structure of the IVS Data Centers is detailed in Table 1.

3 Current Status

The OPAR Data Center is operated on a PC server (PowerEdge 2800 - Xeron 3.0 GHz) located at the Paris Observatory and running the Fedora Linux operating system. To make all IVS products available online, the disk storage capacity was significantly increased, and the server is equipped now with a RAID 3 TB disk extensible up to 4.7 TB.

The OPAR server is accessible 24 hours a day, seven days per week through Internet connection with 2 Mbit/s rate. Users can get the IVS products by using the FTP protocol. Access to this server is free for users.

FTP access: ftp ivsopar.obspm.fr
username : anonymous
password : your e-mail
cd vlbi (IVS directory)

The OPAR Web statistics increased in 2014 — more than 5,000 different visitors reached the server.

Table 1 Directories of the IVS Data Center.

RECENT		used for the new mirroring method
ivscontrol		control files needed by the Data Center (session code, station code, solution code...)
ivsdocuments		documents about IVS products
ivsdata		files related to the observations
	aux	auxiliary files (schedule, log...)
	db	observation files in database CALC format
	ngs	observation files in NGS format
	sinex	observation files in SINEX format
ivsproducts		results from Analysis Centers
	eopi	Earth orientation parameters, Intensive sessions
	eops	Earth orientation parameters, 24-h sessions
	crf	celestial reference frames
	trf	terrestrial reference frames
	daily_sinex	24-hour time series solutions of Earth orientation and site positions in SINEX FORMAT
	int_sinex	daily Intensive solution in SINEX format, mainly designed for combination
	trop	tropospheric time series (starting July 2003)

They viewed approximately 50,000 pages and downloaded five Go. The OPAR staff will continue to work with the IVS community and in close collaboration with the two other primary Data Centers in order to provide public access to all VLBI related data. To obtain information about the OPAR Data Center please e-mail ivs.opa@obspm.fr.