Optical Interferometry Data Base DMP

Project Name OIDB

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Description OIDB is a portal to diffuse optical interferometric data. Each data has its own data PI. The data PI is the person in charge of the scientific program that has led the observation and the subsequent production of the calibrated data that will be diffused on the database The 1st version of the data base was set up by its community with its own self-defined policies and procedures.

Data Collection
What data will you collect or create?

- Astronomical observations and calibration
- Data are stored in the **OIFITS format** (calibrated optical interferometric data)
- Volume: 2Go, maximum increase of 1 Go / year

How will the data be collected or created?

- The structure of the data base foresees no folder organisation. One repertory for each collection.
- **Versioning is not yet supported**, but the published data is always the last version.
- The data PIs are responsible for the accuracy and consistency of the data and metadata that will be diffused via the database service . **The possibility of guaranteeing the metadata via a quality flag is not used(less than 1%)**
- **The main part of the data are public data (regular harvesting of CDS, ESO and CHARA bases) or data PIs are voluntarily sharing their data, a consent is underwritten.**

Documentation and Metadata
What documentation and metadata will accompany the data?

- **DOI is not yet used** to identify data
- The **ObsCore data model** developed by the IVOA describes precisely astronomical data and guarantees compatibility with other VO tools. It was extended for the needs of OIDB database. Metadata such as the number of spectral channel, visibilities, squared visibilities, instrument mode, telescope configuration have been added
- OIFITS files are splitted into relevant **granule of information** (1 granule=1 target/1 night / 1 instrument mode / 1 OIFITS. The metadata of a granule often represents a subset of an OIFITS metadata.)
- Several interoperability options are enhanced using the SAMP[7] protocol. For

more tools, the [JMMC/AppLauncher](#) application conveniently allows the user to connect the web portal to many different applications (JMMC apps, TOPCAT, Cassis, Iris, VOPlot...)

Ethics and Legal Compliance
How will you manage any ethical issues?

- Data are partially public data or data PIs are voluntarily sharing their data a consent is underwritten.
- N/A No need to protect the identity of participants.

How will you manage copyright and Intellectual Property Rights (IPR) issues?

- The portal and all its content including all sort of data are protected under the **CC License** // Attribution-non commercial-Share Alike 4.0 International (CC BY NC SA 4.0)

Storage and Backup
How will the data be stored and backed up during the research?

- JMMC is a part of **OSUG Data Center** which provides IT resources for OSUG's Observatory services: storage, backup and recovery.

How will you manage access and security?

- Access to restricted data is **secured** through login and password
- Risks is more mishandling than malicious act
- Web servers respond to the secured "https protocol"

Selection and Preservation
Which data are of long-term value and should be retained, shared, and/or preserved?

- No destruction of data, on the contrary
- Need to capitalise the efforts made to obtain science ready data (calibrated data)
- Archives are extremely valuable to understand the observed objects on a **long temporal baseline**.

What is the long-term preservation plan for the dataset?

- Internal resources

Data Sharing
How will you share the data?

- Data are opened to the interferometry research community (web interfaces and Virtual Observatory protocols). Make them accessible for a larger community is part of the fundamental aims of the database.
- One of the main problem remains sharing one's own data. There are little volunteer data sharing.
- Foreseen: to share quicklook plots and to connect the database to the registry **Virtual Observatory Applications for Astronomers** of the *International Virtual Observatory Alliance* http://ivoa.net/astronomers/applications.html to enlarge visibility.

Are any restrictions on data sharing required?

- Access to some data are restricted. The database automatically releases data access at the end of the embargo period.

Responsibilities and Resources
Who will be responsible for data management?

- Internal project resources, benefit from human and technical resources (librarian colleague, OSUG Data Center)
- External point of view, year basis meeting

What resources will you require to deliver your plan?

- Internal ressources
- Regular meeting of the project team