



A global database for Optical Interferometry

X. Haubois ¹, G. Mella ², G. Duvert ², L. Bourgès ², D. Mourard ³, J.-B. Le Bouquin ², M. Benisty ²

¹ European Organisation for Astronomical Research in the Southern Hemisphere, Casilla 19001, Santiago 19, Chile

² UJF-Grenoble 1 / CNRS-INSU, Institut de Planétologie et d'Astrophysique de Grenoble UMR 5274, Grenoble, F-38041, France

³ Laboratoire Lagrange, UMR7293, Université de Nice Sophia-Antipolis, CNRS, Observatoire de la Côte d'Azur, CS 34229 06304 NICE CEDEX 4, France

In this contribution, we report on the characteristics and functionalities of the first global Optical Interferometry (OI) archive and web portal, OiDB. After introducing the demonstration version at the SPIE 2014 (Haubois et al., 2014), we present the first operational version of the service. **The database now makes available thousands of calibrated and published OI data (OIFITS format) as well as regularly-updated observation logs** obtained with a wide range of interferometric instruments and facilities (including VLTI and CHARA). Such a service allows users to search, download, explore, and analyse OI data on a user-friendly web portal. It is also meant to create a starting point for collaborations between users and data providers. In the spirit of strengthening and widening the OI community, OiDB finally represents a central tool for specialists of other disciplines who wish to engage with the interferometric technique.

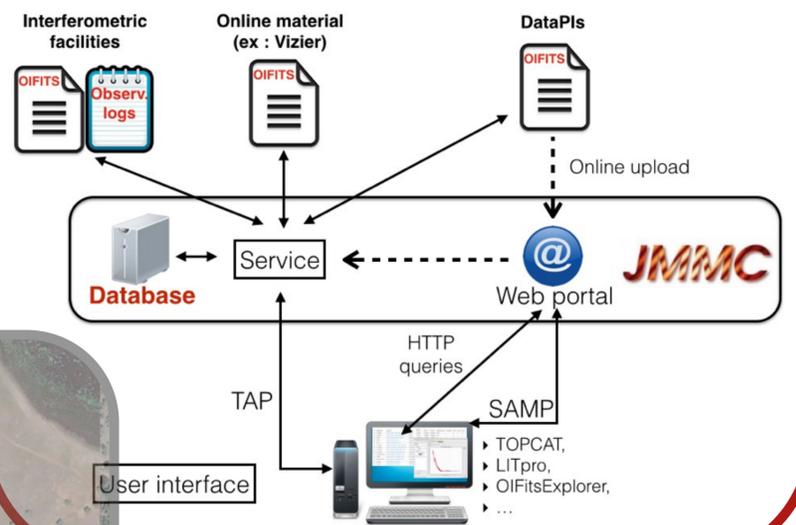
Why a global database in Optical interferometry?

- Use and re-use of reduced data
- Preserve, promote and centralise multi-facility data
- Broaden the OI community

Guidelines

- Link between data users and data providers
- Non-specialist friendly
- Interoperability within the Virtual Observatory

Architecture



The Web Portal

Observation logs, reduced and published OIFITS

Upload your own OIFITS

JMMC · O iDB · Home · Search · Submit new data · Help

Optical interferometry DataBase

Counters of the content

14 FACILITIES	23 INSTRUMENTS	121 DATA-PIs	24 COLLECTIONS	5051 OIFITS	5172 GRANULES	33669 OBS. LOGS
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Search by name or coordinates

Target name or position

Enter target name or visit the advanced form

VO tools in OiDB

- **ObsCore**: data model (Louys et al. 2011)
- **TAP lib**: internal and external communication of data tables (Dowler et al. 2011)
- **SAMP**: communication with interoperability tools for exploring and analysing data (Taylor et al. 2012)

Search Panel

Filters

Position: Delta Scorpis Radius: 2 arcmin Date of observation: after YYYY-MM-DD before YYYY-MM-DD

Instrument: Any Instrument Wavelength range: any value

Collection: Any Collection

DataPI name: Any DataPI

Data reduction level: 0, 1, 2 Availability: Public, Restricted

Result Panel

Direct download

target_name	access_url	L_max	instrument_name	em_min	em_max	nb_channels	datapil
DELTA_SCO	PIONIER.2011-06-08T04p53p35.257_oidataCalibrated.fits	2011-06-08T04:52:19	PIONIER	1.55714250	1.81065090	7	BERGER
DELTA_SCO	PIONIER.2011-06-08T08p21p31.949_oidataCalibrated.fits	2011-06-08T08:21:07	PIONIER	1.55858000	1.80358000	7	BERGER
DELTA_SCO	PIONIER.2011-06-05T00p29p37.300_oidataCalibrated.fits	2011-06-05T00:28:47	PIONIER	1.59000000	1.76800000	3	LE BOUQUIN

List of all metadata

External links

Open OIFITS in analysis and modeling softwares

Spectral coverage information

OiDB 1.0 in summary

- 1) Thousands of science-ready OIFITS data available for download
- 2) Observations logs from VEGA, CLIMB and CLASSIC
- 3) Easy upload of OIFITS data

In the future...

- Observation logs from ESO/VLTI
- More quality checks
- OiDB declared as a VO service
- Quick view plots
- Reduced uncalibrated data

References

- Haubois, X., Bernaud, P., Mella, G., et al. 2014, Proceedings of the SPIE, 9146, 914600
- Louys, M., Bonnarel, F., Schade, D., et al., 2011, arXiv:1111.1758
- Dowler, P., Rixon, G., & Tody, D., 2011, arXiv:1110.0497
- Taylor, M.B., Boch, T., Fay, J. et al., 2012, Astronomical Data Analysis Software and Systems XXI, 461, 279