





Optical interferometry DataBase (OiDB): Update and development perspectives

Gaspard Duchêne (IPAG) on behalf of the JMMC team

























Quick Overview











































Quick Overview

Why share your data on OiDB?











12353 **OIFITS**

13613 **GRANULES**

501803 **OBS. LOGS**



























Quick Overview



Why share your data on OiDB?







Capitalize on the data reduction





Increase

your citation rate



Interoperability VO protocols and tools







collaborations

Create









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2023 Updates



No major upgrades (user interface, underlying database)

























2023 Updates



- No major upgrades (user interface, underlying database)
- Ingestion of new data (more on this later!)
 - PIONIER, MATISSE, GRAVITY, CHARA





















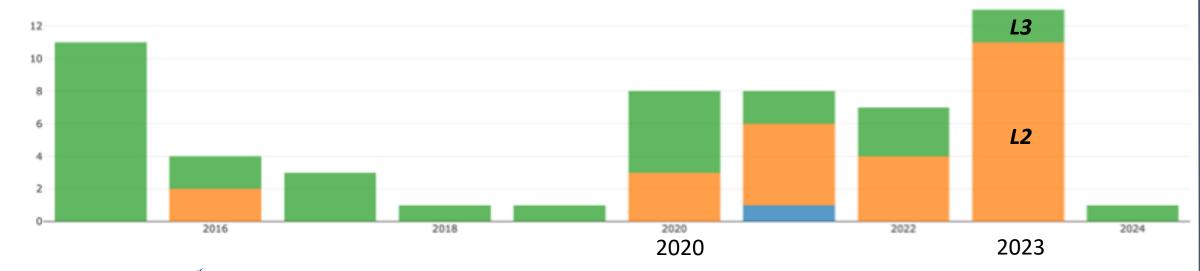




2023 Updates



- No major upgrades (user interface, underlying database)
- Ingestion of new data (more on this later!)
 - PIONIER, MATISSE, GRAVITY, CHARA
 - 3 new collections with L3 data (out of 25+ new science papers)
 - Clement+2022 (MIRC, MIRC-X, MYSTIC), Cannon+2023, Varga+2023 (MATISSE)



























Perspective for 2024 and beyond

Overarching goal: better support the scientific needs of the community

























Perspective for 2024 and beyond

- Overarching goal: better support the scientific needs of the community
- Identified needs from scientists' point of view:
 - Access as much data as possible in one database
 - Conduct scientific analysis (post-observing, incl. archival data)
 - Optimize collaborative work (large surveys, scattered collaborations)
 - Enable long-term preservation and stewardship of results























O DB

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 - Optimize collaborative work (large surveys, scattered collaborations)
 - Enable long-term preservation and stewardship of results
- Actions for the JMMC team:
 - Translate these science goals into technical elements/needs
 - Define requirements and priority levels
 - Importance of community input!

























O DB

Ingest more data in OiDB

- Actively track data based on availability statements in paper
 - Incite authors/groups to submit their L3 data
 - Identify authors/groups who are willing to submit data but don't have time/resources

bibcode	title	creator	date	Instruments	OIDB?	Data availability	Comment
2024AJ16764B	VLTI/GRAVITY Provides Evide	Balmer, William O.	2/1/2024	GRAVITY	-		
2024MNRAS.527L88D	Images of Betelgeuse with VI	Drevon, J.; Millour,	1/1/2024	MATISSE	L2+L3	OIDB direct link	Some data from 2023
2024MNRAS.527.8907T	Orbits and dynamical masses	Torres, Guillermo;	1/1/2024	MIRC-X, MYSTIC	-	Calibrated data will be avai	lable on OIDB and CH/
2024A&A681A47V	Mid-infrared evidence for iro	Varga, J.; Waters, L	1/1/2024	PIONIER, MATISSE	L2, L3	OIDB link	
2023AJ166268B	33 New Stellar Angular Diam	Baines, Ellyn K.; Cla	12/1/2023	NPOI	-	Data freely available upon i	request
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- User interface improvements:
 - Handle "duplicate" entries in database
 - Download, quicklook multiple granules at once (=> download basket ?)
 - Improve data upload interface























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 - Improve Quality Flags (#, terminology, optional/mandatory)
- Handle ambiguous object names and imprecise coordinates

























Optimize collaborative work

- Help facilitate execution of surveys (illustrated with SPICA example)
 - Handling of science catalogs
 - Catalog-to-OB pathway























Optimize collaborative work

- Help facilitate execution of surveys (illustrated with SPICA example)
 - Handling of science catalogs
 - Catalog-to-OB pathway
- Enable "private" collections for active collaborations
 - Tag appropriate datasets within OiDB
 - Allow "temporary" data for internal exchanges
 - Allow comparison between different reductions pipelines
 - Enable private exchanges of notes/comments between team members

























Long-term preservation of data

- Enable version-tracking of data products
 - Depending on DRP version
 - Depending on custom-tailored uses of a given DRP

























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- Provide DOIs
 - Increasing demand from journals and institutions
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- Provide direct links from journals/ADS
 - **OIFITS** files
 - Other dataproducts

























Let's open the conversation!



