

JMMC a Service for current & future optical interferometers

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(+) JMMC encompasses two Services Nationaux d'Observation: Méthodes et Outils pour l'Interférométrie Optique (MOIO-ANO5) and Service aux Utilisateurs du VLTI (SUV-ANO3)
The poster is also available at <https://www.jmmc.fr/doc/approved/JMMC-POS-2100-0003.pdf>

Mission

Since 2000, the "Pôle Thématique National" JMMC aims to coordinate the efforts of the French partner Observatories involved in optical interferometry (OI) to offer the best operational environment to all the potential users of OI facilities open to the community, i.e. the VLTI*/ESO and CHARA**/GSU instruments.

Its mission is multiple and consists in:

- developing, producing, documenting and maintaining the software necessary for the exploitation of the current instruments,
- providing a "Face to Face" User support for all the steps, from the preparation of the observations until the data archiving,
- participating actively to the academic formation of non specialists (e.g. by co-organizing VLTI schools or providing video courses and tutorials),
- providing and maintaining an interactive interferometry publication database, named **OLBIN**, gathering all refereed papers related to OI in ADS,
- participating to the prospective around new interferometric instruments or new instrumental configurations (e.g. by providing simulated data).

(*) VLTI: Very Large Telescope Interferometer, see <https://www.eso.org/sci/facilities/paranal/telescopes/vlti.html>

(**) CHARA: Center for High Angular Resolution Astronomy, see <https://www.chara.gsu.edu/>

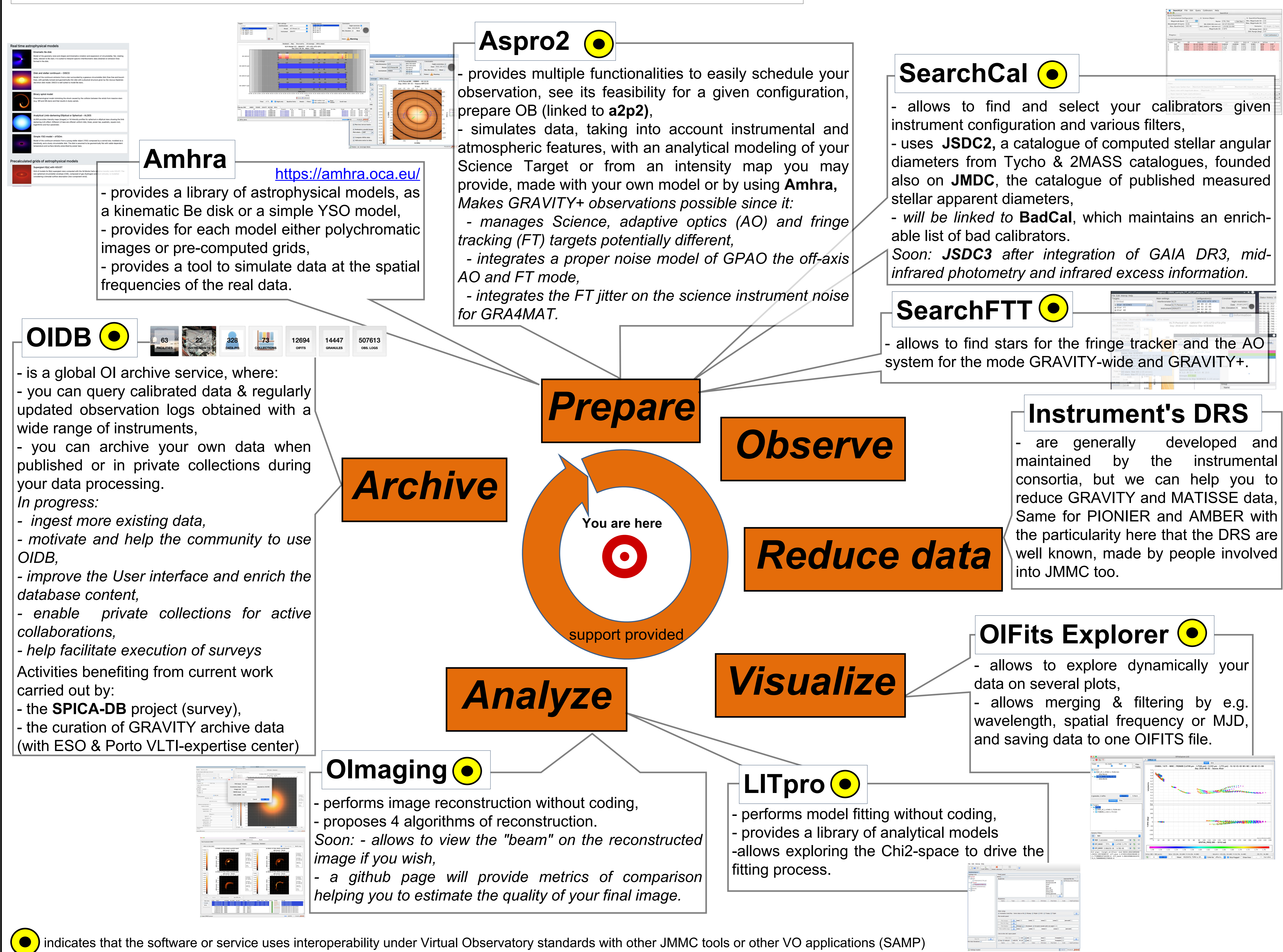
Main Activity

The main activity of JMMC, besides User supporting, training and prospective, is software oriented system analysis and software development, mainly using the Virtual Observatory standards and protocols. The whole range of services before and after acquiring interferometric data is covered.

Main service features are summarized below, *in italics, the most recent or forthcoming functionalities.*

Detailed description of each software is accessible from its web page on the JMMC site, and for most of them available on github (<https://github.com/JMMC-OpenDev/>).

Software suite along the overall data lifetime



Key numbers

- **~3.5 FTE**: the mean human resources per year of the JMMC, including 1.6 FTE engineers, all people working at part-time. Unquantified but valuable: constructive exchanges and collaborations inside the OI community,
- **~70%**: the percentage of the refereed papers in OI with astrophysical results making reference to JMMC tools or services, number relatively constant for the past ten years, as seen in Fig.1, as well as the percentage ~60% of OI publications with astrophysical results,
- **~100**: the minimum number of distinct IP-access to Aspro2 per week, as seen in Fig.2 for the year 2023 (this number almost tripling during a VLTI-school). For other tools, this access number varies from a few units to a few dozen per week.

