# Call for proposals for observations on the French telescopes at OHP and TBL: second semester 2025 (25B)

## Telescopes Time allocations from 1st September 2025 to 28th February 2026.

## Deadline for proposal upload: Friday April 18th, 2025, noon (Paris - CET time)

There is an ON-LINE procedure to prepare AND submit the proposals for OHP and TBL. See the description of this procedure below or directly at https://northstar.omp.eu/. The server will open on Monday March 17th, 2024.

## News

- T193: SOPHIE RED installation is scheduled end of 2025. Instrument should be available on 2026A semester.
- There is no call for Large Programmes with SOPHIE (T193) and at the TBL this semester (2025B).
- Proposals for SOPHIE must indicate in the application whether all or part of the observations requested are time-critical.
- Proposals for Neo-Narval should specify in the application if the Fabry-Perot lamp should be used or not during exposures.
- The TBL is offering the Neo-Narval instrument. See latest news on the site: https://tbl.omp.eu/instruments/neo-narval/. The tests and installation of the SPIP and VISION instruments imply that the time offered is reduced by 30% compared to the nominal offer. The installation of the SPIP instrument at the summit will take place in the summer 2025, followed by tests in fall & winter, in principle allowing SPIP to be available from 2026A. Neo-Narval observations will be conducted with VISION.
- The application presentation document is limited to 3 pages, figures and references included (minimum font 11 for the body of the text).

## General principles and proposal selection

Information on the telescopes and their instrumentation can be found on the respective observatory home pages:

- Observatoire de Haute-Provence
- Observatoire du Pic du Midi

Proposals from PIs working in a French institution are evaluated and selected by a French Time Allocation Committee (TAC), which covers different scientific topics (corresponding to the “Programmes Nationaux” thematic structures).

- Action thématique de Physique Stellaire (ATPS)
  Contact : mailto:dir-pnps@services.cnrs.fr

- Action thématique de Physique et chimie du milieu interstellaire (ATPCMI)
  Contact : mailto:pcmi-dir@groupes.renater.fr

- Programme National de Planétologie (PNP)
  Contact: mailto:Tristan.Guillot@oca.eu

- Action thématique des Phénomènes Extrêmes et Multi-Messagers (ATPEM)
  Contact: mailto:dir-atpem@services.cnrs.fr

- Action thématique de Cosmologie et Galaxies (ATCG)
  Contact : mailto:atcg@services.cnrs.fr

Primary criteria to rate the proposals on the 2-m telescopes are: scientific value, urgency, previous experience from and results obtained by the team. Combining different proposals, proposing key-programs, and observations made in support of large-size ground-based telescopes or of space borne observations are greatly encouraged. Proposals requiring a large number of nights but fulfilling those conditions may be supported.

The proponent must check that the targets he/she requests are not already present in the OHP (http://atlas.obs-hp.fr/sophie/) and TBL (http://polarbase.irap.omp.eu) databases.

A telescope fee for each night is requested. For the successful French teams, this fee, as well as lodging and meals (but not the travel expenses), are granted.

## 193-cm telescope at OHP

The mean number of hours of observations per night is 7 hours in winter and 5.5 hours in summer (including weather conditions). These numbers are to be used in the calculation of the number of requested nights.

For 2025B, there is no more ORP time available. The relevant teams should contact the OHP management at ohp.direction@osupytheas.fr.

### *SOPHIE Spectrograph*

The SOPHIE spectrograph is available to the community since the end of October 2006. This instrument, covering the 3872-6943 Å spectral range with 39 orders, has two observing modes: high efficiency (HE, R~35000) and high spectral resolution (HR,

R~75000).
For each mode two fibres of 100-micron diameter each (star and sky, or star and calibration) pipe the light from the Cassegrain adaptor to the spectrograph. Each fibre sees 3 arcsec of the sky. The switch between modes is obtained by moving the fibre head in the adaptor and takes about 3 minutes. In order to achieve a higher spectral resolution, the HR mode has optical scramblers and a 40-micron exit slit. The efficiency ratio between the two channels is about 2.5 (1 magnitude).
Since optimization of the thermal regulation of the spectrograph, the intrinsic drifts of the instrument are now less than 1 m/s per hour. The accuracy on the long term is about 2 m/s and 4 m/s respectively for the HR and HE modes. In addition, a stabilized Fabry-Pérot etalon is now installed in the calibration unit, which allows an optimal measurement of the drifts, simultaneously with the HR_fpsimult.

For the high-resolution HR mode, HR_fpsimult (Fabry-Pérot on fibre B) template is only recommended for observing programs that need to achieve high accuracy radial velocities (< 5 m/s).

For observing programs not requiring radial velocities more accurate than 10 m/s, it is recommended to use templates HE_AB and HR_AB (sky on fibre B) rather than templates HE_A et HR_A so that sky spectra can be recorded, which, under the presence of moonlight, can contaminate the spectra and the radial velocity (and thus the cross-correlation profile) of stars fainter than visual magnitude 10-12. Channel B also allows a posteriori correction of the sky background of S1D spectra.

The slow mode is only useful for objects with expected S/B < 30. If the expected S/N ratio is greater than 30, the fast reading mode should be used.

### *For more information see:*

- SOPHIE spectrograph: https://ohp.osupytheas.fr/sophie-echelle-spectrograph/
- SOPHIE spectrograph data products : https://ohp.osupytheas.fr/sophie-data-products/
- Access to the public data of the SOPHIE spectrograph: http://atlas.obs-hp.fr/sophie/

### *Large Programs*

**There is no call for Large Programmes this semester (2025B)**

### *Service mode observing (SOPHIE)*

Service observing mode is offered on the spectrograph SOPHIE. However, the time devoted to this mode is limited and cannot exceed 5% of the T193+SOPHIE total available

time. Moreover, if the exposure time exceeds one hour per night, an appropriate justification must be given.

- More informations on service observations : https://ohp.osupytheas.fr/observations-de-service-sophie/

### *MISTRAL imaging spectrograph*

MISTRAL is a low-resolution single-slit spectro-imager installed via a focal reducer, at the angled return of the Cassegrain focus on the 1.93-m telescope. A retractable mirror allows very simple and fast switching between SOPHIE and MISTRAL instruments, without mechanical operation.

The MISTRAL imaging spectrograph is offered to the community, both in visitor mode and in ToO (Target of Opportunity) mode for rapid transients. The allocated time cannot exceed 15%, including 2.5% in ToO mode, of the total T193 time offered this semester.

MISTRAL observations in ToO mode triggered by an alert can be authorized during SOPHIE Exoplanets nights, respecting the following rules:

- One ToO every 3 nights at maximum.
- 2 hours / night maximum including overheads (pointing / changing instrument SOPHIE => MISTRAL => SOPHIE).
- Prior approval of OHP management if previous rules are not respected.

Observation can start within 30 minutes of the alert (the current SOPHIE integration can be stopped if necessary).

MISTRAL is equipped with a 2K × 2K deep depletion ANDOR CCD. Two dispersers cover the spectral range 4200A - 9950A at R ~ 700 resolution. Four motorized modules allow the slit, the grisms, the filters and the calibration mirror to be moved or removed. The slit can be oriented via the telescope's field rotator. The FLI filter wheel includes 12 slots for 50-mm filters (available filters: SDSS g ', r', i ', z' + Y, galactic H, OIIIa & b, Hα, SII). A manual filter drawer, installed early 2025, allows the use of visitor filters (50mm or 3 inches). The calibration unit is integrated into the mechanical structure of the instrument. The spectral calibration lamps (Hg Ar Xe) and PLU (tungsten) are injected by four optical fibers via the removable calibration mirror.

The main features are available at :
https://ohp.osupytheas.fr/wp-content/uploads/2025/03/sub1.html

More information is available on the MISTRAL web page:
https://ohp.osupytheas.fr/mistral-spectro-imager/

It is strongly recommended to consult the CookBook available on this page before any

request. In case of doubt, it is also possible to contact the support astronomer: christophe.adami@lam.fr.

Access to MISTRAL public data: https://cesamsi.lam.fr/instance/mistral/

### *Visitor instruments*

In case of using a visitor instrument, it is compulsory to contact the OHP director to check the feasibility.

### *Data rights*

The proprietary period is **one year**. Once the proprietary period expires, the data enter the public domain and are available to anyone.

## Observations at TBL

The spectro-polarimeter Neo-Narval is offered by default for semester 2025B. Observations will be conducted in multi-mission service mode, except on specific argued request. The spectrograph will be mounted in VISION mode.

For 2025B, there is no more ORP time available. The relevant teams should contact the TBL management at directiontbl@obs-mip.fr.

Neo-Narval is a spectro-polarimeter stabilized in pressure and temperature, the long-term objective being a velocimetric stability of $\Delta v \sim 3$ m/s. Neo-Narval is installed since September 2019 and the integration of the Fabry-Pérot occured in October 2020. However, at present, the Fabry-Perot channel is not used for missions (it might pollute weak polarimetric signals), the reduction software module taking into account this channel being still uner development. However, if the PI wishes to use this 3rd channel, **this must be specified in the proposal.**
Transmission and polarimetric separation capability are equivalent to those of Narval in spectropolarimetry, however with a photon deficit (~20%) in the blue (<450nm). Weak polarization signals also sometimes show strong N-signal values. The latest information on Neo-Narval is available at: https://tbl.omp.eu/instruments/neo-narval/. Neo-Narval has been developed, integrated and tested for TBL within the OMP (TBL, IRAP and UAR OMP collaboration).

### *Service observing*

Find last informations concerning queue and service mode here:
https://tbl.omp.eu/observer-au-tbl/observer-avec-le-tbl/

### *Proposal submission*

The proposals (submitted using the on-line procedure) will be gathered by INSU and forwarded to the Time Allocation Committee.
A given proposal should refer to a main thematic field (covered by a so-called *programme national*), although some proposals may concern several fields.

### *Large Programmes (2025B)*

**There is no call for Large Programmes at TBL for 2025B.**

## Submission procedure

All proposers must submit their proposals using the software https://northstar.omp.eu/ developed by the SEDOO OMP. Proposers must register and connect to the site through ORCID (automatic procedure) in order to submit their proposals.

The presentation document, attached to the proposal, is limited to 3 pages, figures and references included (minimum font 11 for the body of the text).

Please send your TECHNICAL (only) questions to François André (francois.andre@obs-mip.fr). Other questions should be directed towards either the contact person for each telescope or towards the INSU representative Philippe Stee Philippe.Stee@oca.eu.

## Deadline for proposal submission: Friday April 18th, 2025, noon (Paris - CET time).

Philippe Stee INSU-AA representative