Astronomical instruments...

...for Astrophysics

An advanced technology center

Every night of the year the main telescopes at Haute-Provence Observatory (1.93, 1.52, 1.20 et 0.80-m) are used by visiting astronomers, french or foreign, to conduct astrophysical research programs selected for their excellence:

Extra-solar planets

51 Peg b, the first planet discovered around a star other than the Sun, was found by Mayor and Queloz in 1995 with the ELODIE spectrograph at the 1.93-m telescope. More than thirty other extra-solar planets have now been found in the course of a long-term program which is being continued with the new SOPHIE spectrograph.

Solar System objects

Comets, such as Hale-Bopp which was visible to the naked eye in April 1997, and asteroids, "giant boulders" which may one day enter a collision course with the Earth, are being studied at OHP.

Stellar astrophysics

Giant balls of hot gas, stars are living laboratories where scientists can study physical laws by unraveling the sometimes extreme phenomena taking place in them. Stars constitute one of the most frequent topics being investigated at OHP.

Our Galaxy and the Interstellar Medium

The motions of stars around our Galaxy's center, and the large numbers of interstellar clouds where future stars are slowly being born are some of the various subjects under intensive study at OHP.

Extra-galactic research

The origin and evolution of galaxies, the nature of quasars and active galactic nuclei, surveys of galaxy clusters and the large-scale structure of the Universe are also amongst the basic research programs conducted using observations made with OHP telescopes.







The AURELIE spectrograph (1.52-m)



The SOPHIE spectrograph (1.93-r



The CCD camera (1m20)

The observatory technical staff (optical, mechanical, electronic and software groups) design, construct and maintain the instruments used at OHP telescopes, and also collaborate with other institutes on large projects for ground-based or space observatories.





A site for hands-on learning

Many students, from France and abroad, come to OHP for technical or scientific training or to gain practical experience in astronomical and geophysical observations.

OHP also hosts national and international summer schools, topical workshops and scientific colloquia.

A geophysical research station

The Earth's atmosphere is studied both in daytime and at night using pyranometers, laser radars (lidars), and sounding balloons. OHP participates in the NDSC (Network for Detection of Stratospheric Changes) and is active in monitoring the ozone layer.



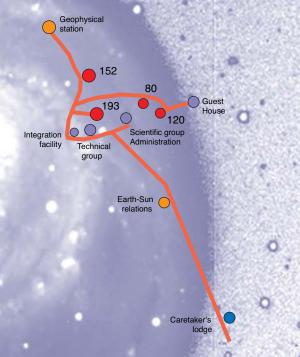
In the foreground are visible two pyranometers which measure sunlight continuously, both in the entire spectrum and in the UV, for the study of the Earth's atmosphere.

The LIDARS

OHP in numbers

- · 50 engineering, technical and administrative staff
- 5 resident scientists
- A hundred visiting astronomers per year
- 90 publications per year in refereed journals
- 75% of the nights useful for observing

OHP is funded through the National Center for Scientific Research (CNRS/INSU). Additional funding comes from the Provence-Alpes-Côted'Azur Regional Council. OHP is also part of the Marseille-Provence Astronomical Observatory (University of Provence at Marseille)



The site is normally open to the public on Wednesday afternoons.

HAUTE-PROVENCE OBSERVATORY

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Haute-Provence Observatory

