

Announcement of NSF/MSIP-funded open-access to Las Cumbres Observatory global telescope network

Starting in 2017, U.S. community open-access time will be available on the LCO global telescope network through an NOAO time allocation process. Specific goals for the use of this open-access time are (a) to effectively follow up on current time domain surveys, especially those with public distribution of data and alerts, and (b) to help the community prepare for time domain research in the LSST era by developing relevant programs, methods, and technologies.

The LCO network comprises nine 1-m and two 2-m optical telescopes, optimized for time-domain studies, and operated as a single observatory.

There are 2-m telescopes in Australia and Hawaii, and 1-m telescopes in Texas, Chile, Australia, and South Africa. Additional 1-m telescopes are planned for China and Canary Islands.

The 2-m telescopes are instrumented with 10 arcmin field-of-view imagers and R=500 spectrographs. The 1-m telescopes are instrumented with 26 arcmin field-of-view imagers. A set of fiber-coupled, R=50,000 spectrographs is nearing completion, and deployment to the 1-m sites will begin by the end of 2016. Telescopes and instruments run robotically.

Observation requests are submitted at any time through a web form or a programmatic API. Requests may be single observations, sequences with a given cadence, or rapid-response (<15 minutes from now). A scheduler dynamically assigns observations to telescopes.

Data are pipeline processed to remove instrumental signature and may be downloaded from an archive, through a web form or a programmatic API in as little as 15 minutes after the shutter closes. After 12 months, proprietary data becomes public.

Additional, detailed information about sites, telescopes, and instrument capabilities and performance is available on the LCO website (lcogt.net). The website also has links to tools for planning or requesting observations.

Approximately 1300 hours of 1-m time and 220 hours of 2-m time will be available to the U.S. community per semester. Time is charged as it is used, including observation overhead, but not weather or technical downtime. The first “semester” will entail a special call for proposals, and will run April – November, as the schedule is adjusted to align better with the NOAO TAC process. Subsequent semesters will run December-May (for the September 30 deadline) and June-November (for the March 31 deadline).

In addition, U.S. community members will be invited to participate in the next round of key project proposals to LCO. These are large-scale projects provided with time from the LCO share and aimed at highlighting the unique characteristics and capabilities of the LCO network. A call for these proposals will be issued by LCO later in 2016.