Microlensing Target and Observation Manager (TOM) Primer

`microlensing-tom.lco.global`

The Target and Observation Manager system is a database that tracks all information regarding your targets and observations and provides a portal for requesting observations from the LCO network which has been customized to the needs of a microlensing programs.

Getting Started

Tom User Account and the TOM Dashboard

The TOM needs to handle two user accounts – the first is the log in as a user of the TOM system itself, but in order to submit observation requests, the TOM needs to know your user credentials on the LCO system as well. Accounts on the TOM system have been created for you.

Your TOM user ID is:

- Your first initial concatenated with your family name in lower case, e.g. Rachel Street → rstreet

- Your initial password has been set to G0F!ndPlanets (note the second character is a zero).

When you first log in, you will go to the TOM Dashboard, which offers you an overview of the projects you have access to as well as various user account functions.

Important: As soon as you log in for the first time, please go immediately to reset your account password:

`microlensing-tom.lco.global/change_password/`

LCO User Account

If you haven't already, please visit lco.global/observe and create a user account on the network itself. Then let your project's PI know that you have done so, and ask her/him to add you as a collaborator to the proposal using the LCO observe portal – this will enable you to submit observations for the program.

The PI of a project will find they have a "Co-investigators" link next to their proposal in the LCO observe portal display. The should click on this link, and use the following form to select and add all members of the team as co-investigators using their email addresses. The team should include Rachel Street (using email address: rstreet@lco.global) so she can act as system administrator.

You should then register your LCO account login with the TOM, so that it can submit observations to LCO on your behalf.

To do this:

1) Go to https://observe.lco.global/accounts/profile/

On the right of this page under 'API Key' you will see a long alphanumeric string.

This is YOUR personal token, analogous to a password so please keep it secure.

2) Then go to https://microlensing-tom.lco.global/manage_account/

Confirm your details and cut and paste the token. Then click 'Save Changes'

Targets and Observations

From the TOM Dashboard, select the project you wish to observe for and the TOM will display the functions of the Project Dashboard.

You have to add your target to the database before you can observe it. After you use the Add Target form to provide the target's sky location, you will find that it appears in the pull down menu under the Request Observations form.

All observations are submitted as 'cadenced' series – the scheduler will order the telescopes to return to your target at a given interval (the cadence), allowing some flexibility (or jitter) around this window. Two options are possible: single- or multi-site observations.

Single-site observations

This option allows the user to specify exactly which telescope/instrument should execute your observation, and to describe the parameters of that observation. It is most commonly used to obtain additional data for normalizing purposes, from an instrument that has already produced data for a given target.

Multi-site observations

If you select this option, the TOM will automatically duplicate your observing request to a pre-arranged set of telescopes/instruments. This is the default option, as it saves you a lot of work and ensures that your observations are routinely taken on a consistent set of instruments.   The PI should contact the system administrator (Rachel Street) to arrange for this to be configured before observations begin.

Note that it is currently impossible to programmatically cancel or edit observations once submitted to the LCO network. If you wish to make changes to ongoing observations, you will need to cancel them through the LCO network portal directly, and re-submit if needed.

Please note the required format for the start and end date for observations is strictly:

yyyy-mm-ddThh:mm:ss

LCO Network Resources

The standard interface to the LCO network is lco.global/observe When you log in, you will find useful information including an Exposure Time Calculator under the "Tools & Status" tab at the top.

To access your data, go to archive.lco.global.

You will see that you can filter the observations displayed using the pulldown menus on the left, including by "reduction level". The two reduction levels you will need are "Quicklook (BANZAI)" for the data processed as soon as it is taken and "Reduced (BANZAI)" for the re-processed data.