



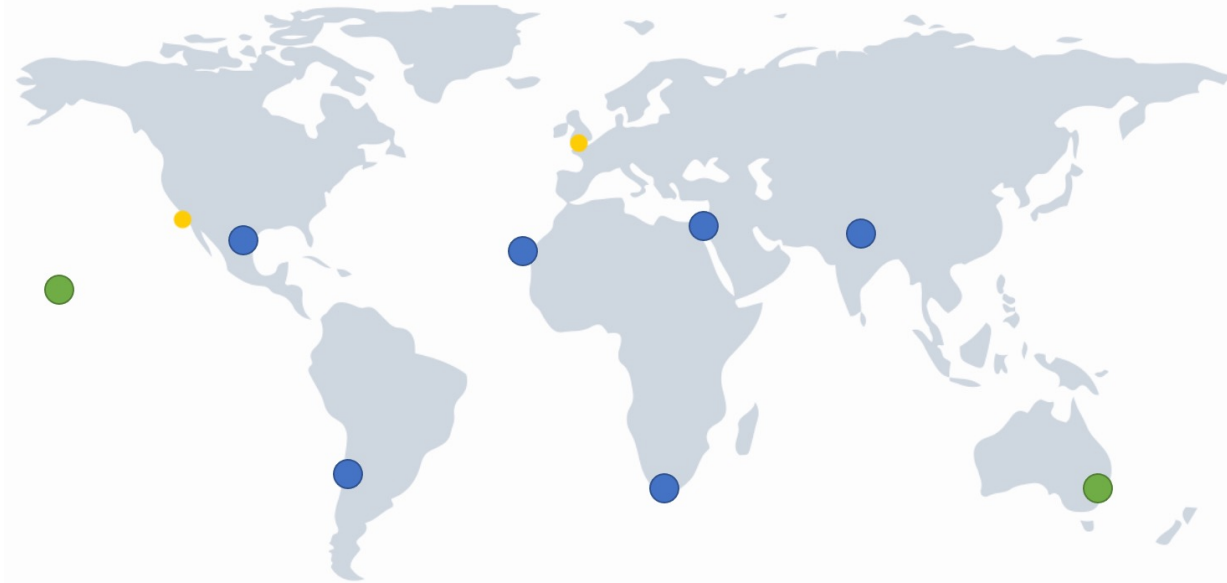
# FAULKES TELESCOPE PROJECT

*Dr Anna Hourihane and the Faulkes Telescope Project Team*

The Faulkes Telescope Project Ltd provides access to a global network of robotic telescopes via the Las Cumbres Observatory (LCO). Here we outline how to apply for observing time on the telescopes through the Europlanet Telescope Network, whether you are an amateur observer or a researcher, and we give guidance on the selection of an aperture size (2m, 1m and 0.4m) suitable for your targets.

The Faulkes Telescope Project (FTP) was conceived to inspire school children with the wonders of space and continues to have education as its main focus. We present examples of FTP educational projects and of how you can get involved in education with your own observational programme.

LCO global network of robotic telescopes available via the Faulkes Telescope Project  
(25 telescopes; 2m, 1m and 0.4m apertures)



- Sites of the **2-m Faulkes Telescope North** (Hawaii) and **Faulkes Telescope South** (Australia)
- 1-m and 0.4-m sites
- Data centres

<https://lco.global/observatory/sites/>

## Observing Modes

[There are two observing modes available on the telescopes.](#)

*Queue-scheduled mode:* where you set up your observations in the portal for automatic scheduling. Your observations will be scheduled to optimise use of the LCO telescopes, taking into account other requests. You can check back on your requests to see where and when the observations have been scheduled.

*RTI mode:* where you control the telescope yourself for thirty minutes in real time. RTI mode is free to use for educational projects and the interactivity is good for projects with schools.

For **moving objects**, the queue system allows tracking at non-sidereal rate. It will automatically calculate where an object is at the time the observation is scheduled and will then track the comet or asteroid. Further guidance on observing moving objects in RTI mode is available on our educational resources website, in the Solar System section at <http://resources.faulkes-telescope.com/course/>

## Telescope Apertures and Instruments

The following guidance may help you to select a suitable aperture size for your target:

- 2-m for faint targets
- 1-m and 0.4-m for targets that require a wider field of view, including extended objects and moving objects
- 0.4-m for longer sets of exposures, such as deep exoplanet transits of bright stars, comets with long tails or variable star monitoring

The 2-m Faulkes Telescope North (FTN) offers simultaneous multi-filter (SDSS  $g'r'i'zs'$ ) capabilities with the MuSCAT3 camera. Read more about the instruments available on the other telescopes on the [aperture-specific telescope pages on the LCO website](#).

See [Hsieh et al. \(2021\)](#) for details of a comet-monitoring project utilising FTP facilities (2-m/MuSCAT3 images with FTN, and imaging with the Sinistro cameras on the LCOGT 1-m telescopes).

### Data Archive

Data (raw and reduced) becomes publicly available via the LCO archive after observing without any proprietary period:

<https://lco.global/documentation/data/archive/>

# Education

Faulkes Telescope Project has a focus on education and working with schools.

Whether you already have an educational project linked to your observations, or you are interested in exploring ideas for one, ***we strongly encourage you to include an educational component in your project!***

Maybe you are working with local schools, or perhaps you have an idea for an educational resource you could develop from your data - please mention it in your initial inquiry email to us as part of the Europlanet Telescope Network proposal process. <https://www.europlanet-society.org/europlanet-2024-ri/telescope-network/>

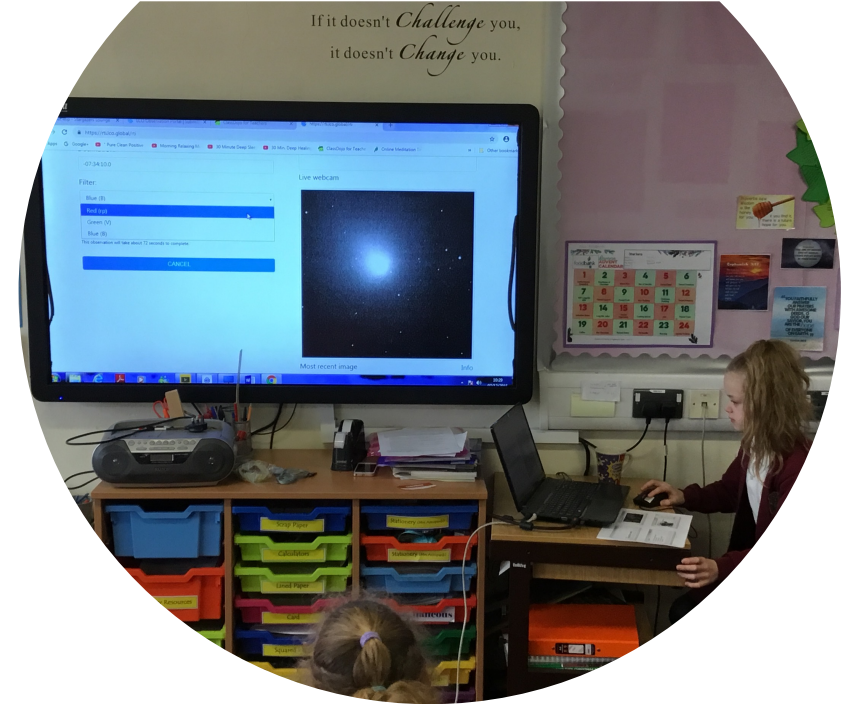
You can see examples of current and previous educational projects and resources linked to our facilities on our website.

Showcase of Schools' projects:

<http://www.faulkes-telescope.com/showcase/schoolsshowcase/>

Comet Chasers project: <https://www.cometchasers.org>

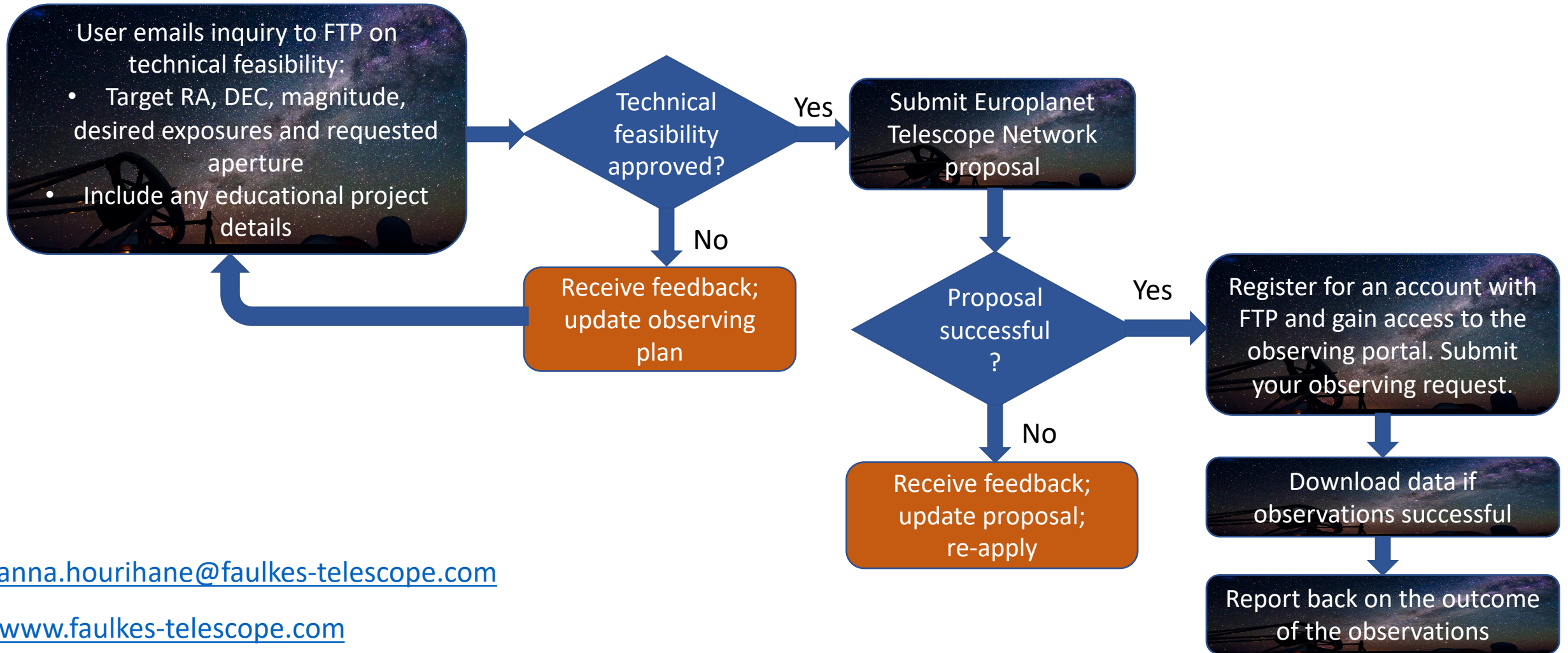
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A live RTI observing session where students imaged Comet 46P using Faulkes Telescope South from the classroom.

*"The Faulkes Telescope observations collected by the Comet Chasers students really helped our study thanks to some of the unique capabilities of the telescope, and the speed of response to requests for observations" - Henry Hsieh*

# Applying for observing time on Faulkes Telescope facilities via Europlanet Telescope Network



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