

Remote Observing with the LCO Telescope Network

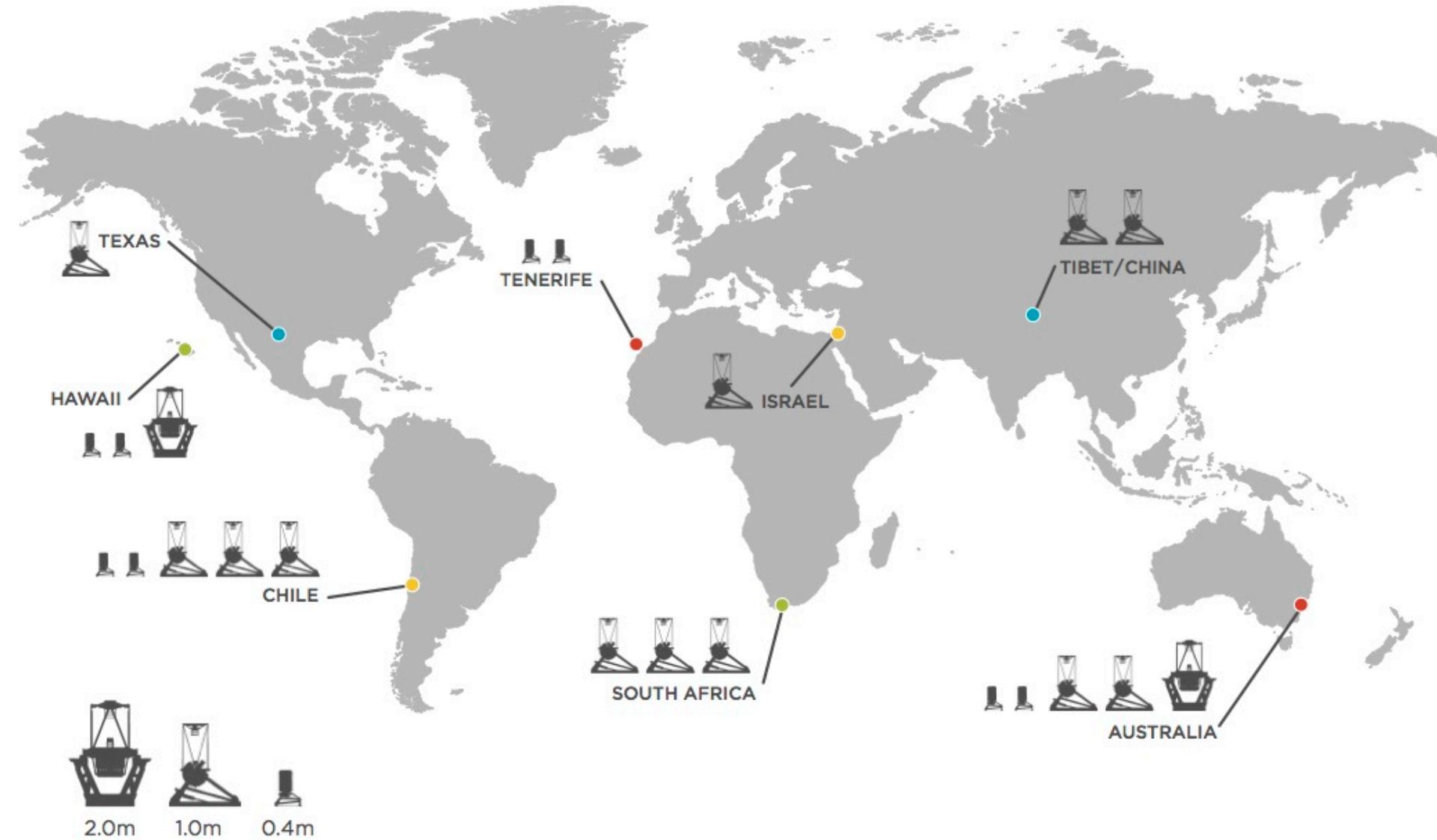
Heidi White (U of T)
WAISSYA 2019
Post-Graduate Stream



**Las Cumbres
Observatory**

What is
the LCO?

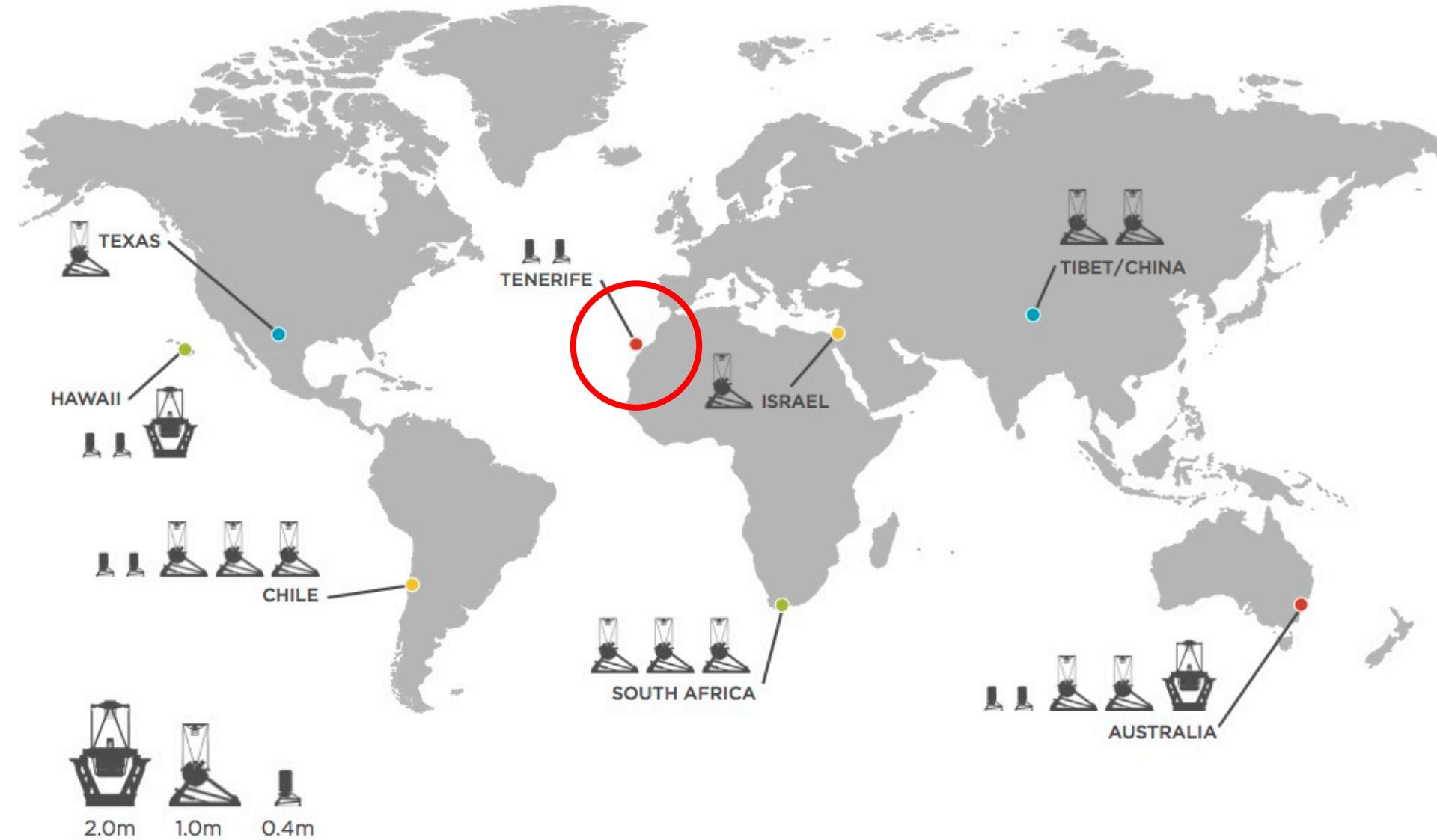
Las Cumbres Observatory (LCO) is a **GLOBAL TELESCOPE NETWORK**



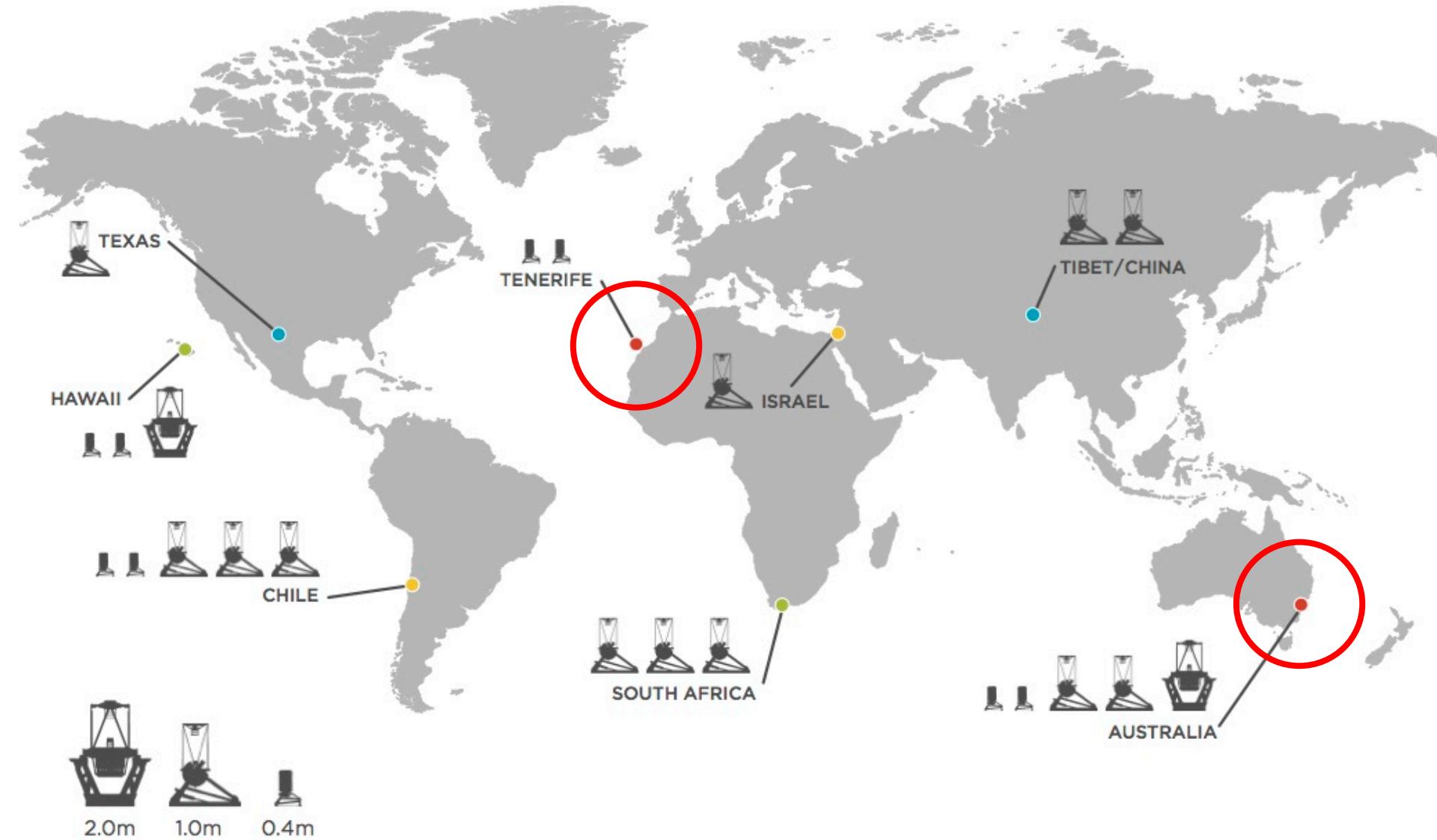
WAISSYA 2019 has received
~10 hours of telescope time with LCO!



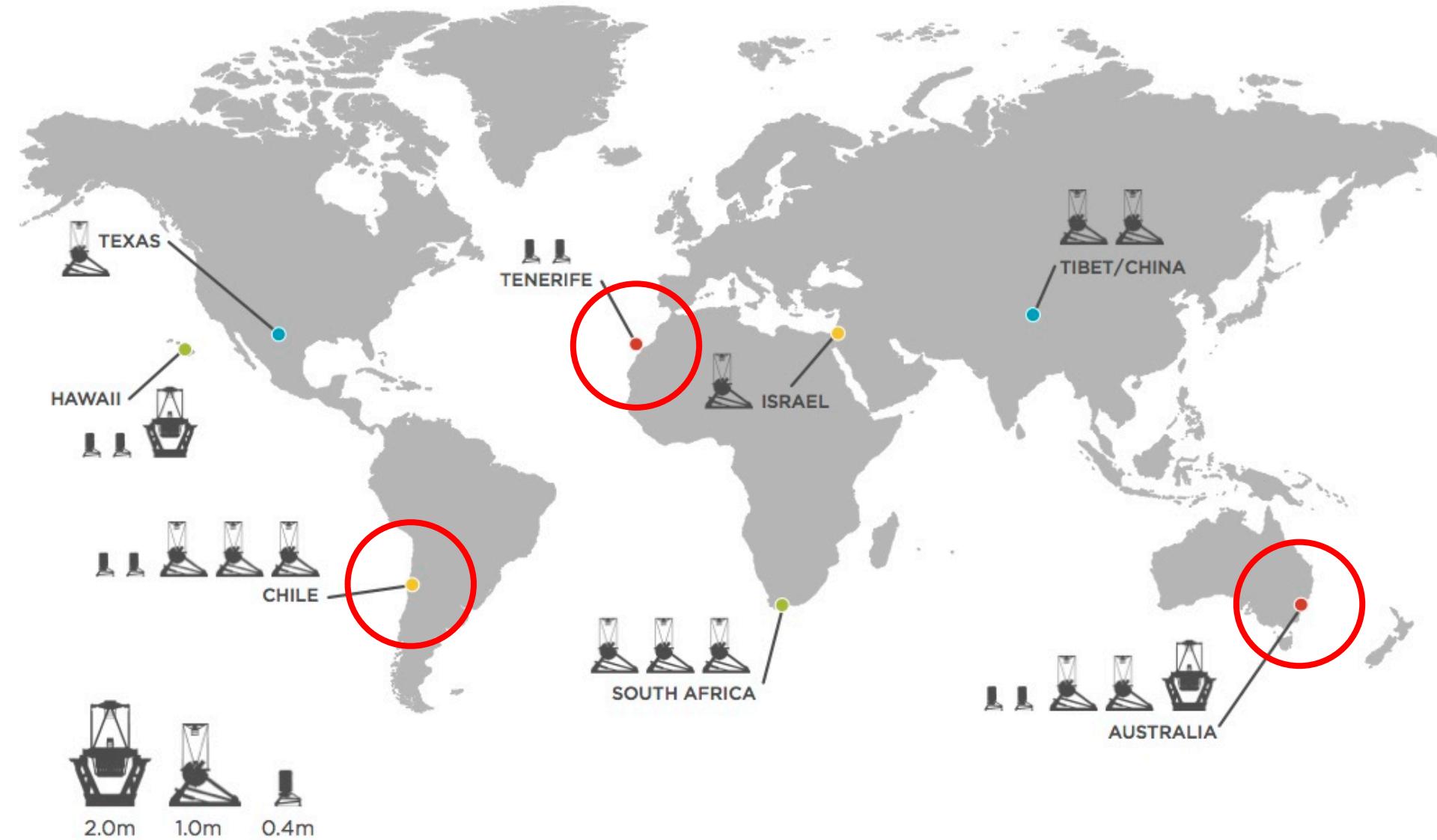
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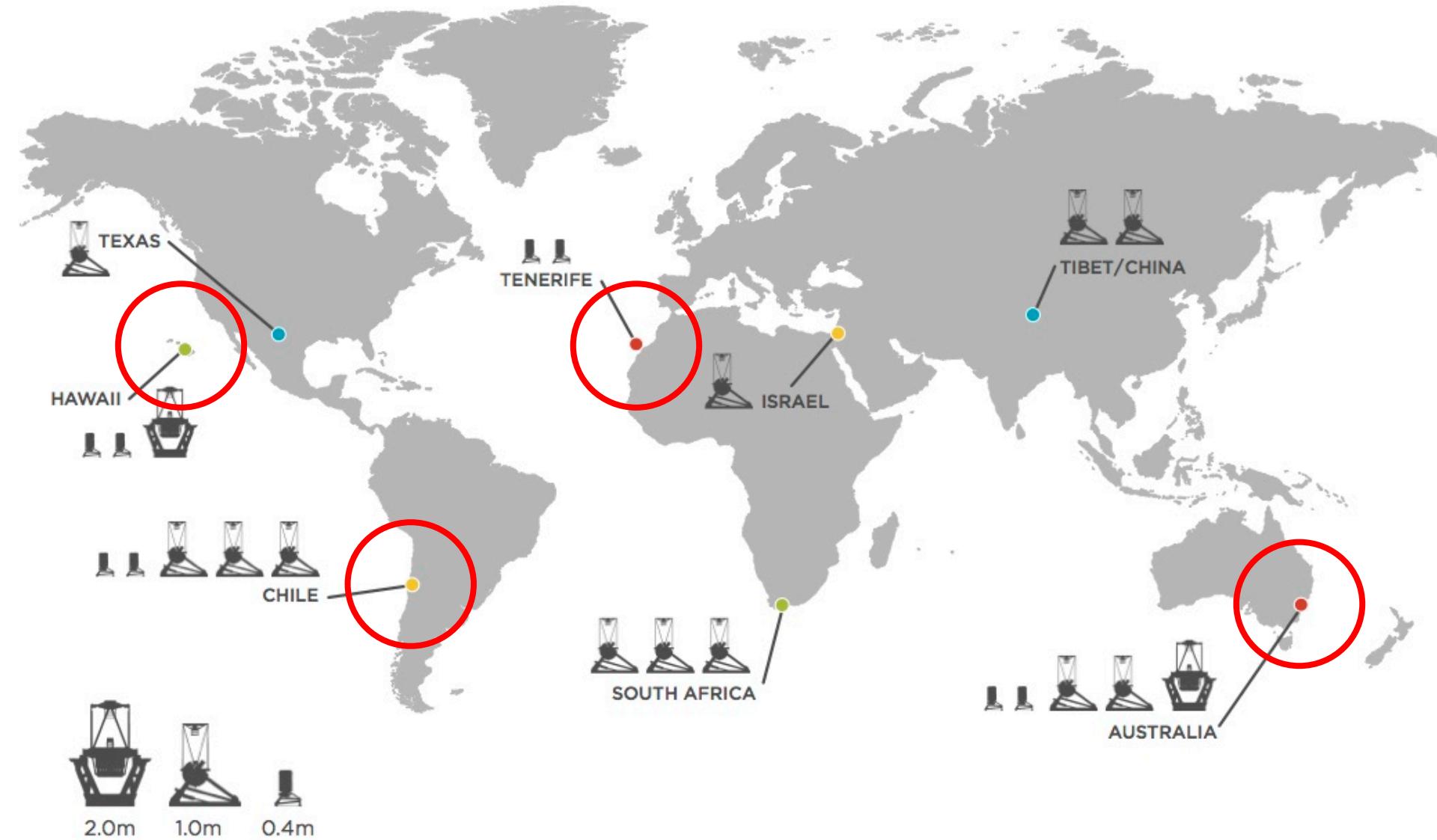
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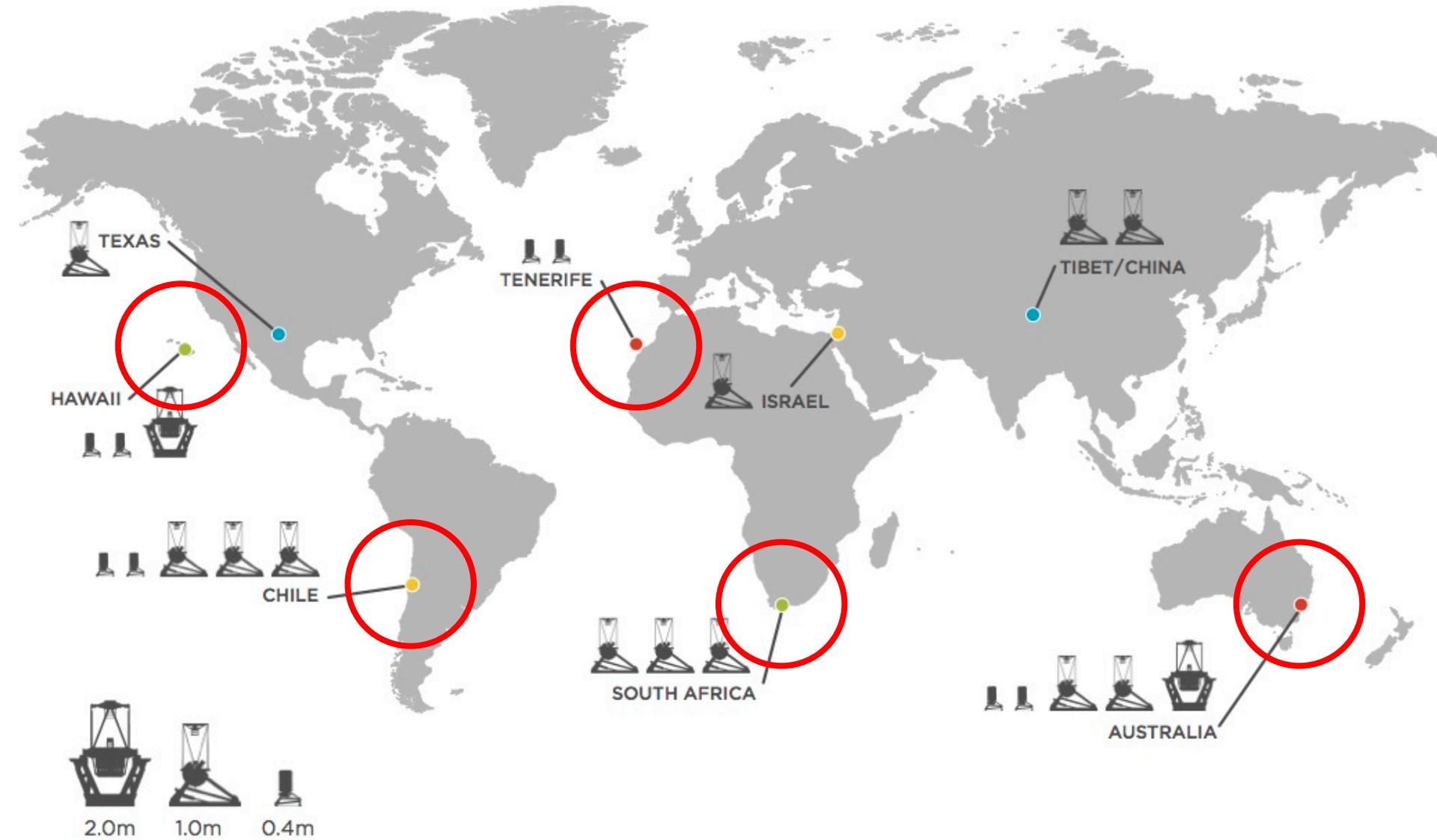
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Project Goal: Determine what type of variable star your target is using observations with the LCO!

Group 1

Target B
Period = 11.12 hrs

Group 2

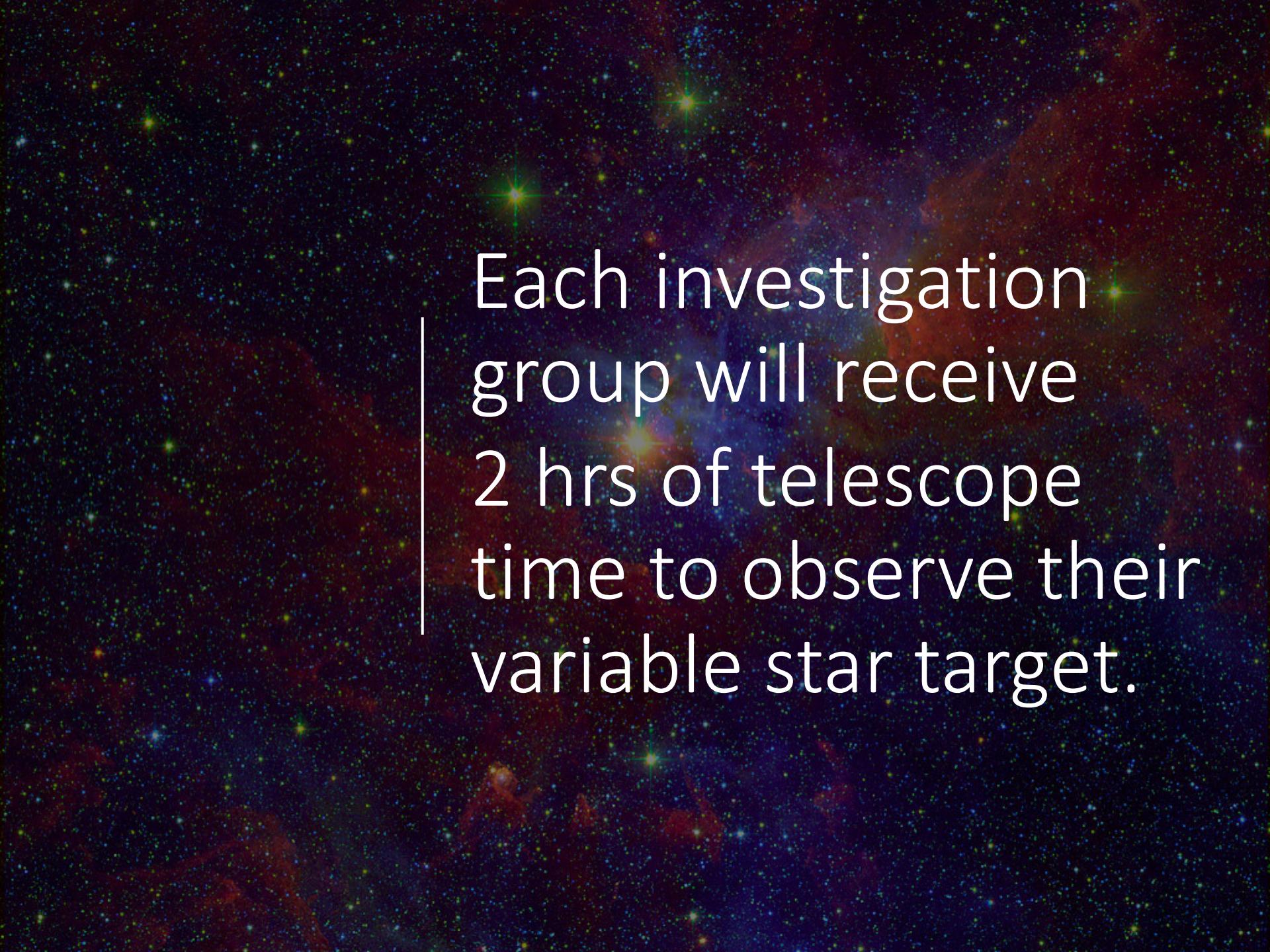
Target C
Period = 24.72 hrs

Group 3

Target E
Period = 7.58 hrs

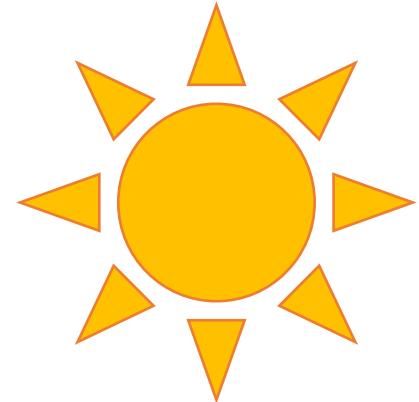
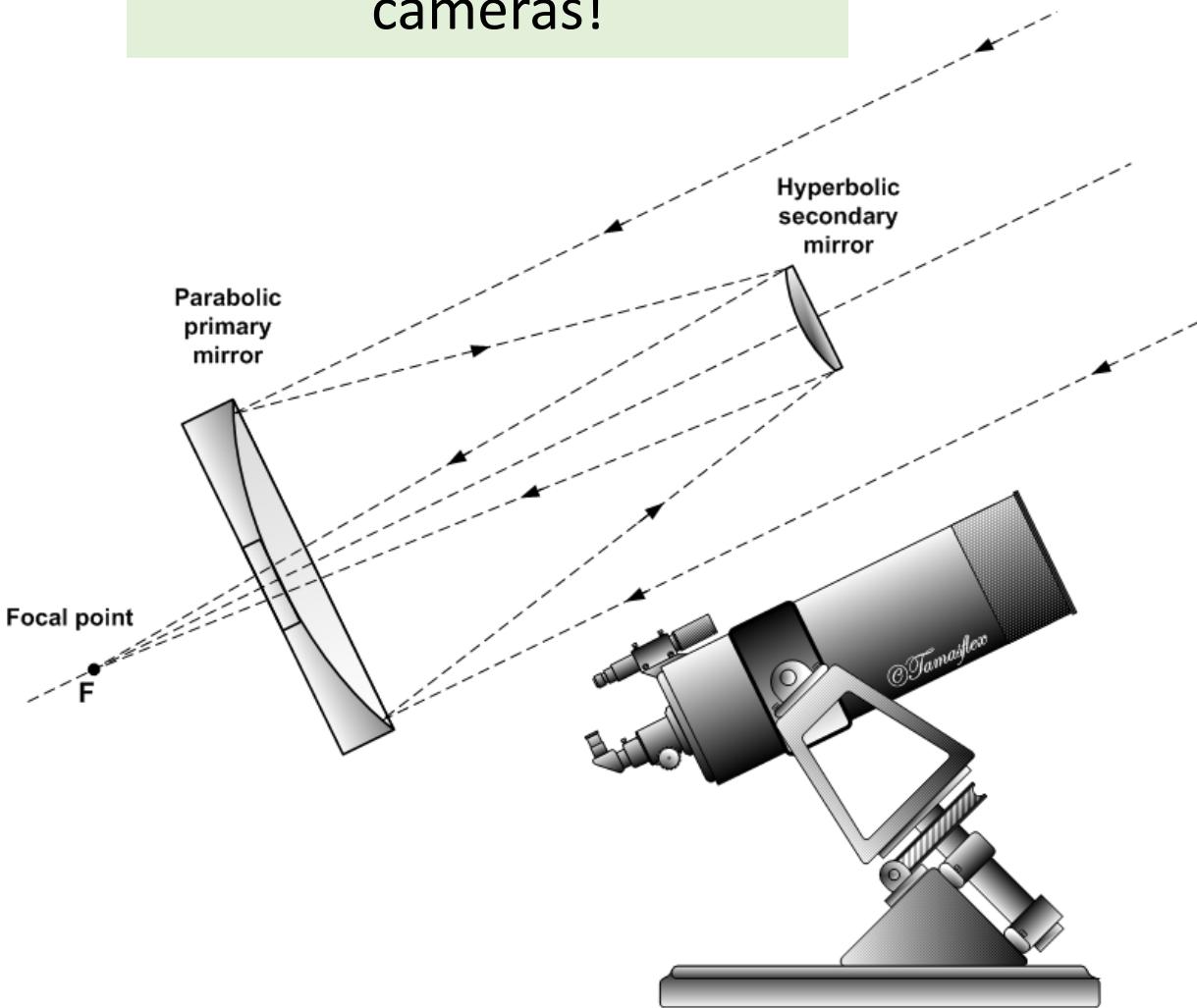
Group 4

Target F
Period = 8.89 hrs



Each investigation group will receive 2 hrs of telescope time to observe their variable star target.

The LCO 0.4m telescopes
are Cassegrain reflectors
fitted with advanced CCD
cameras!



your variable star!

The amount of
starlight received
by your telescope
depends on how
long you observe!



Determining Observation Parameters |

Discuss in groups for ~5-10 minutes!

What information
do you need to
observe your star
with LCO?

Observation Parameters

- **Coordinates:** Where is your target located on the sky?
- **Period:** How long do you want to observe your target for?
- **Start/End Time:** When should observations take place?
When is your target visible?
- **Exposure:** For how long should you observe your source in each image to ensure it is detected?
- **Cadence:** How often do you need to observe your target?
How many images do you need to take each time?

What values are appropriate for your target?
Discuss in groups for ~30 minutes!



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Observation
Portal **basic**
mode

Home
Help

Submit Observation

Manage Proposals

Planning Tools

waissya1 ▾

[Profile](#)
[Logout](#)

Settings

First name

WAISSYA2019

Last name

Student

Username

waissya1

Email address

waissya.lco.1@gmail.com

API Key

The following key may be used to authenticate when using the [API](#). This key should be treated like a password.

[REDACTED]

If you think your API token may have been compromised (by accidentally checking it in to a public source code repository, emailing it out, etc) you may revoke the token to obtain a new one using the button below. **WARNING:** This will cause any applications that use this token to stop working!

[Revoke Token](#)

API Quota

You will need this API key to submit a request for observations!

LCO Observation Portal basic mode

Home Help Submit Observation Manage Proposals Planning Tools waissya1 ▾ Profile Logout

Settings

First name
WAISSYA2019

Last name
Student

Username
waissya1

Email address
waissya.lco.1@gmail.com

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