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SONG manager

Instruments, observations and public outreach



STELLAR ASTROPHYSICS CENTRE



AARHUS UNIVERSITET

Inauguration 25th of October 2014

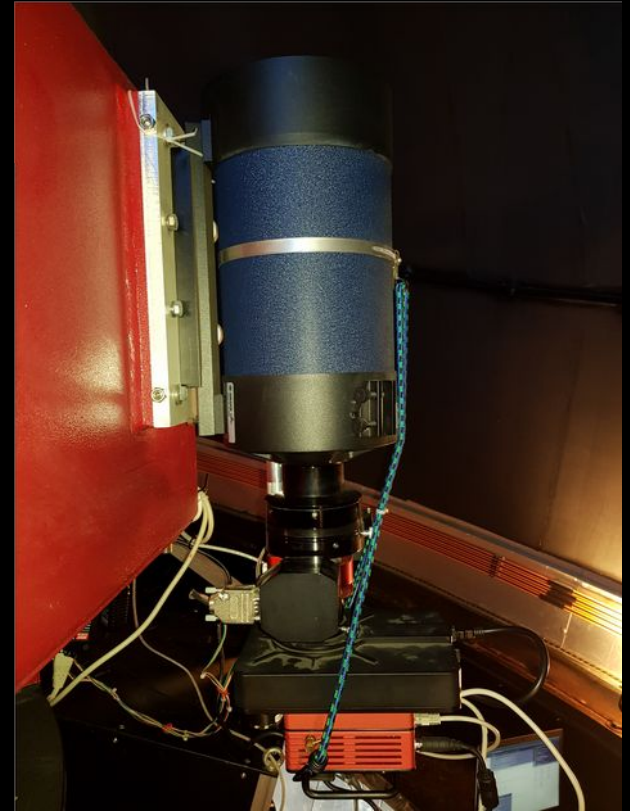




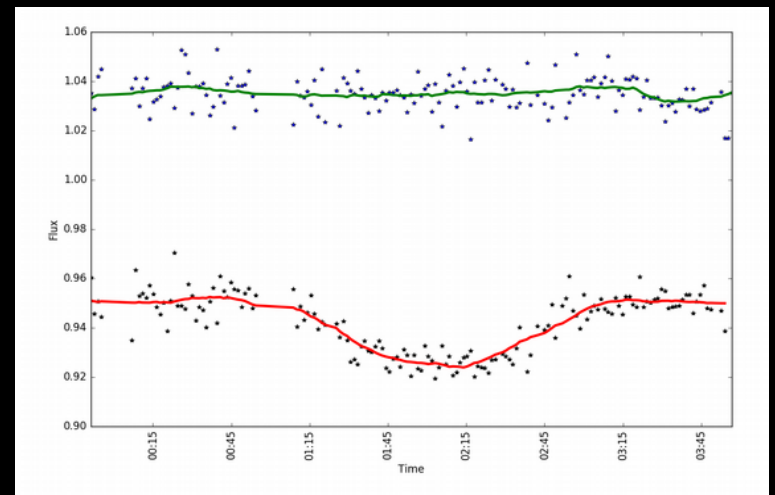
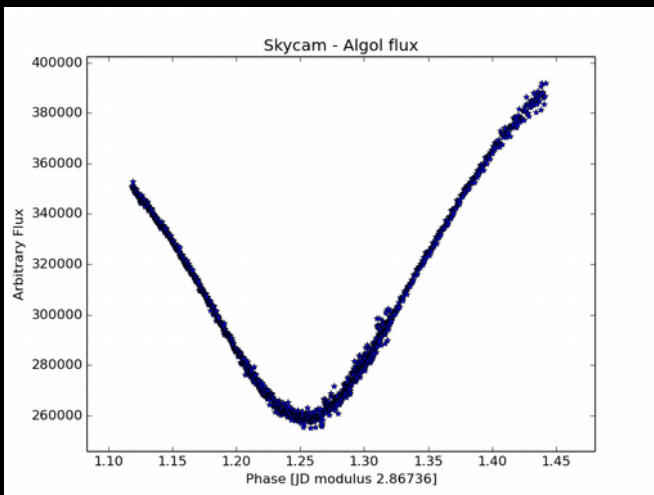
Telescopes at the SONG site



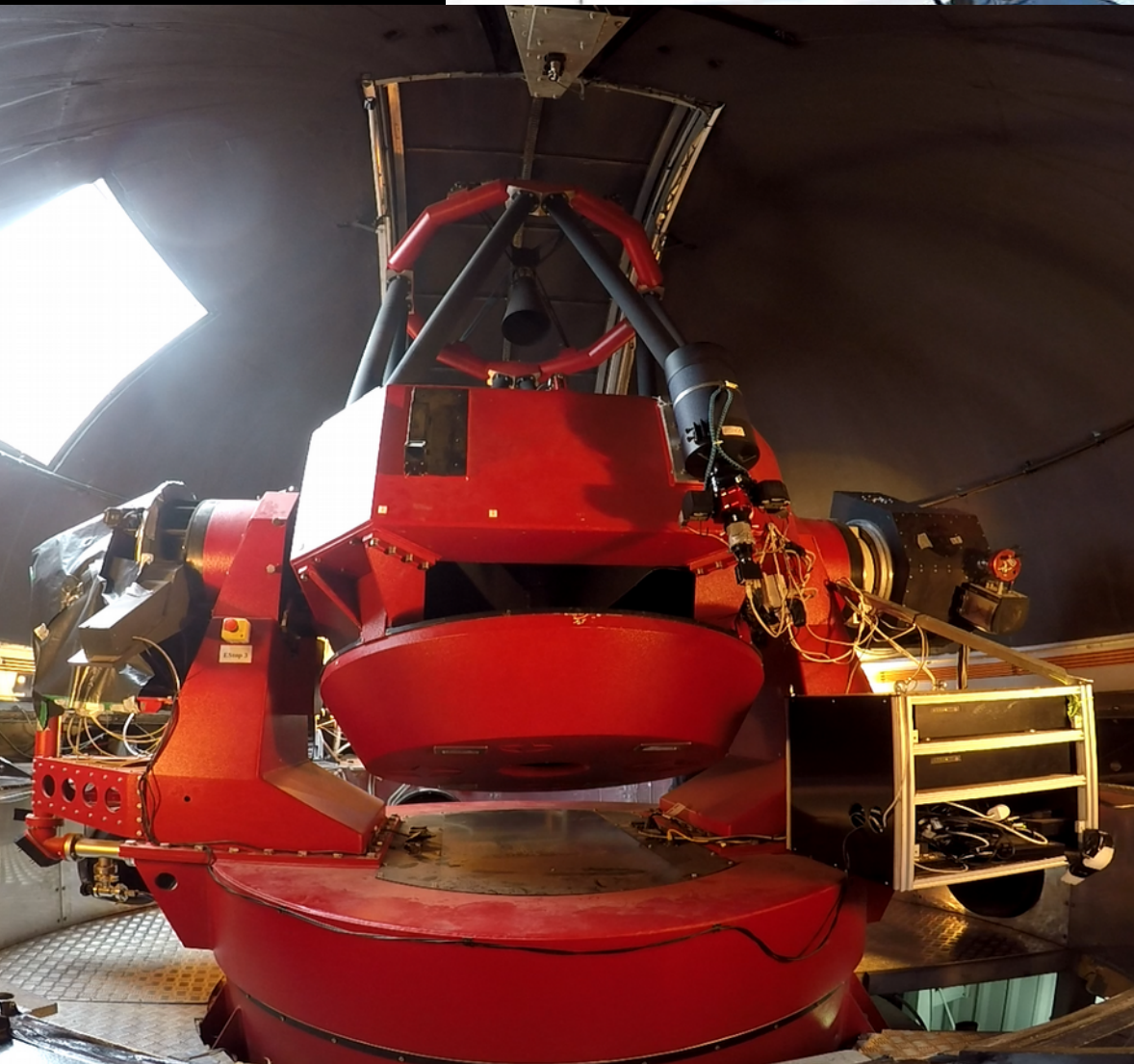
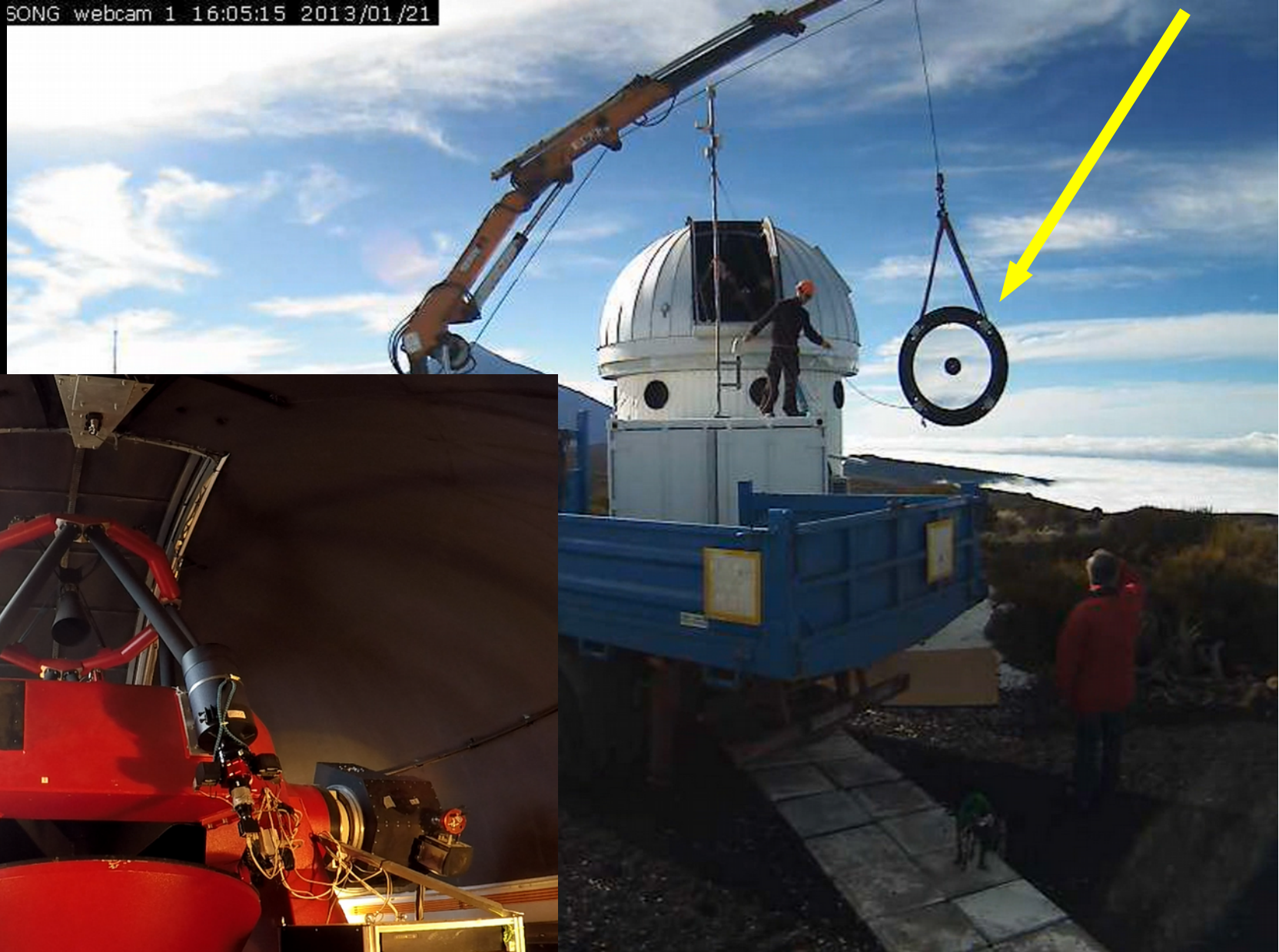
SkyCam 1

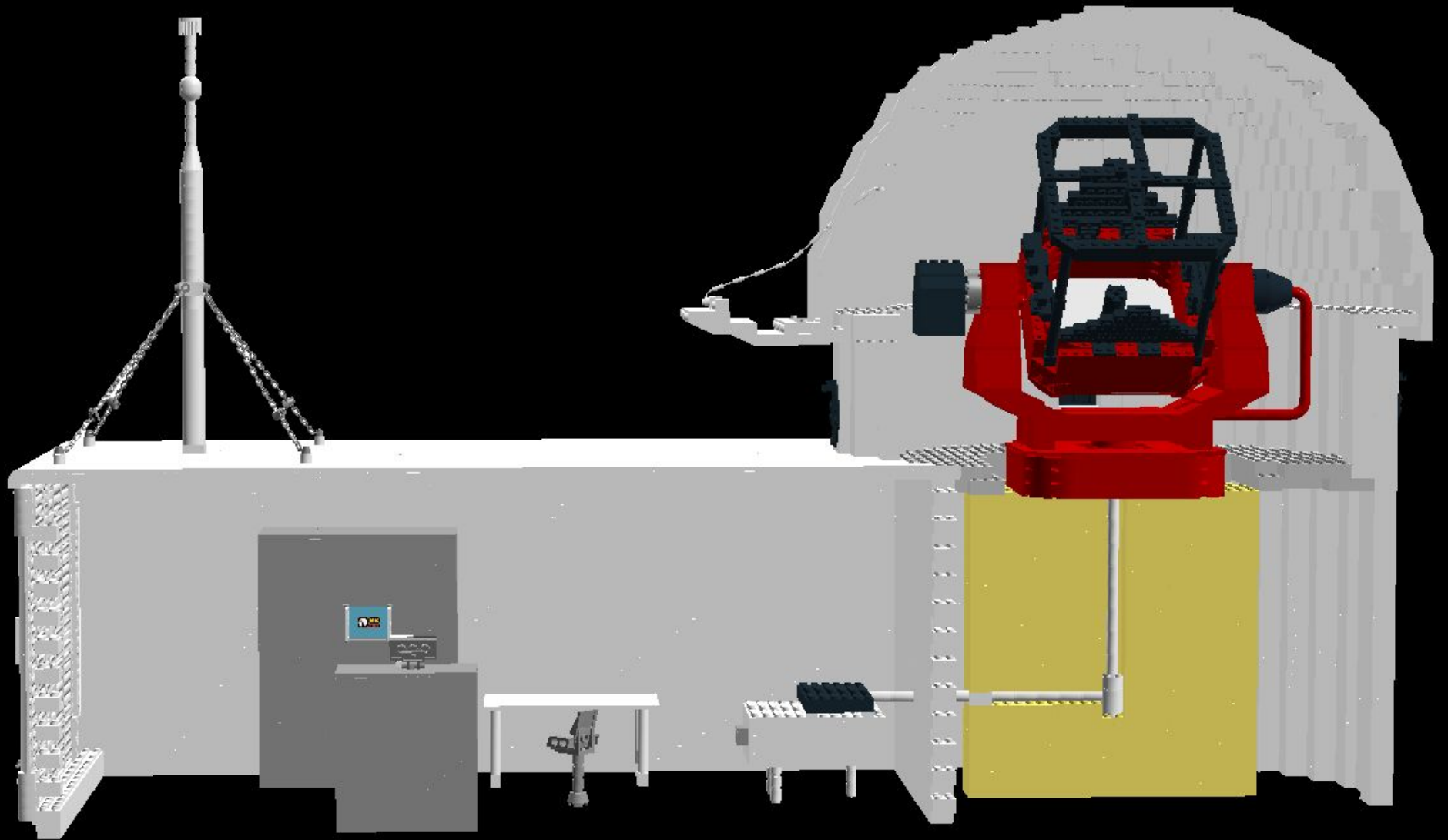


SkyCam 2



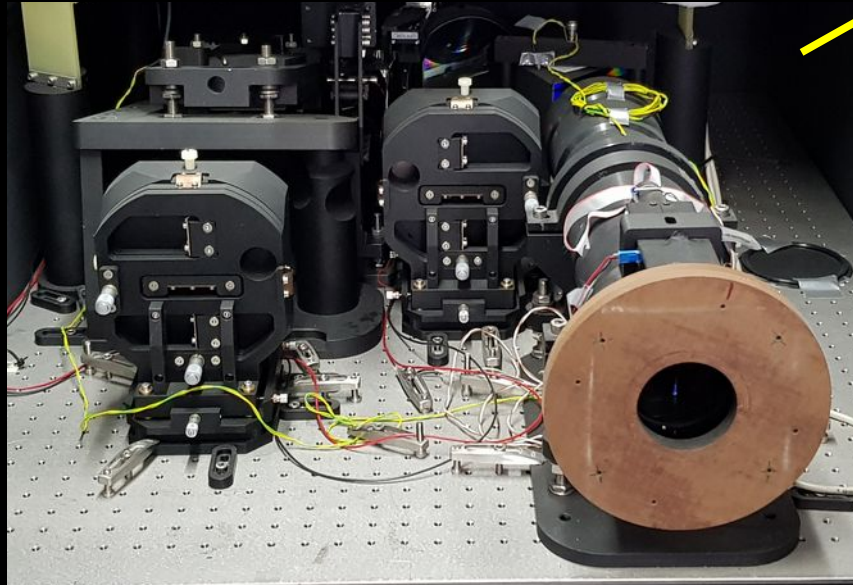
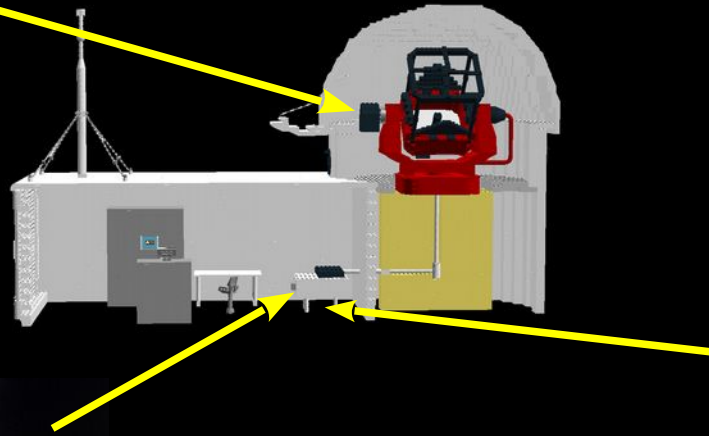
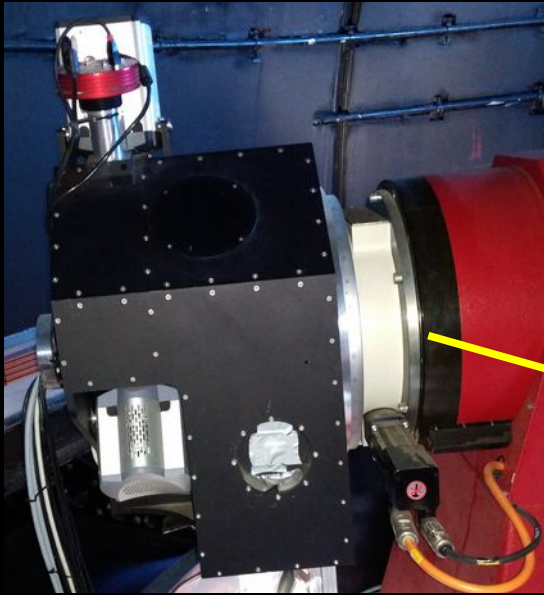
SONG webcam 1 16:05:15 2013/01/21



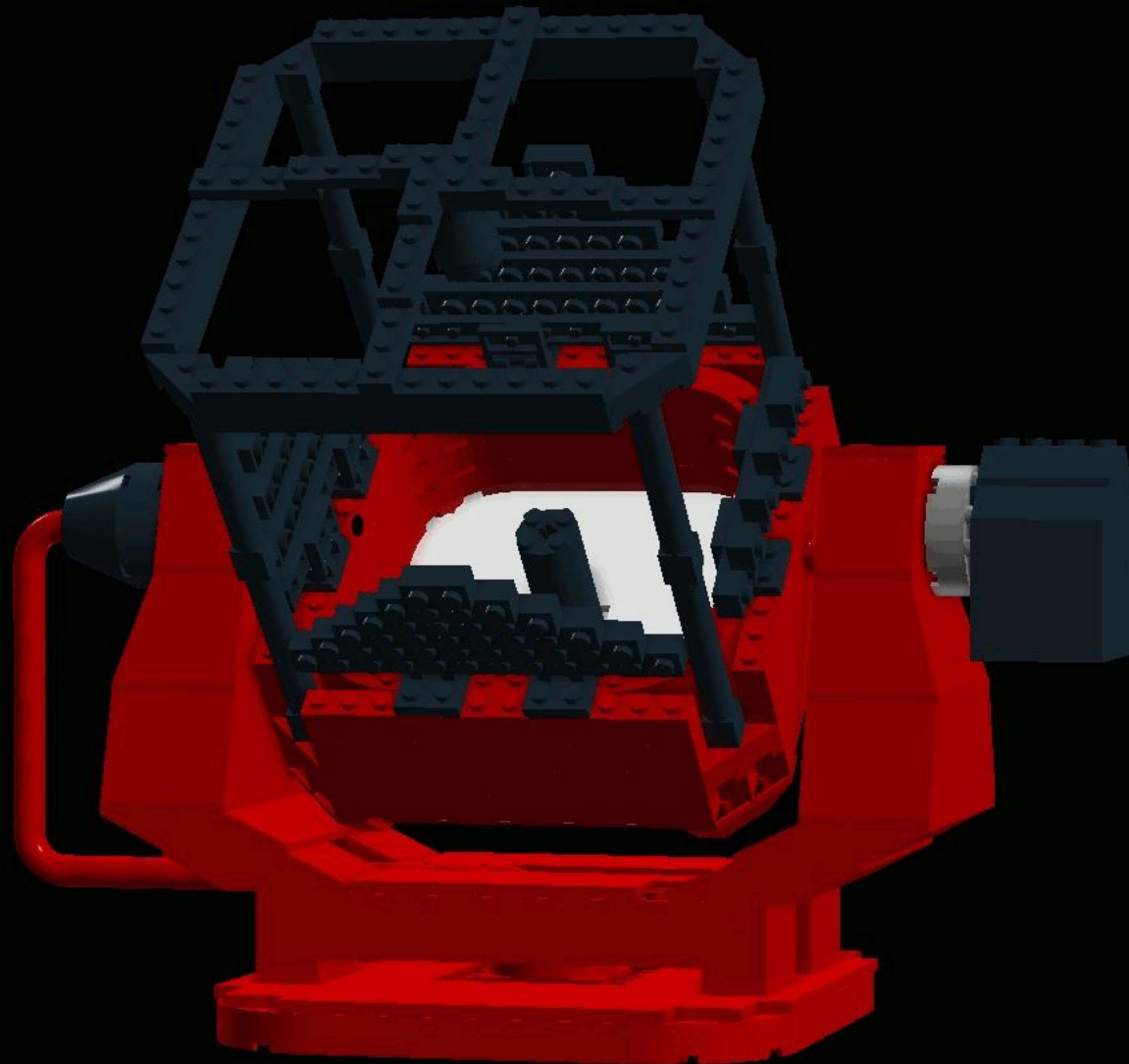


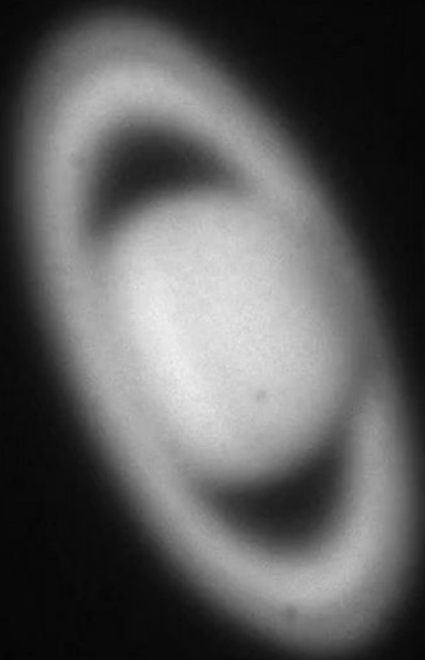
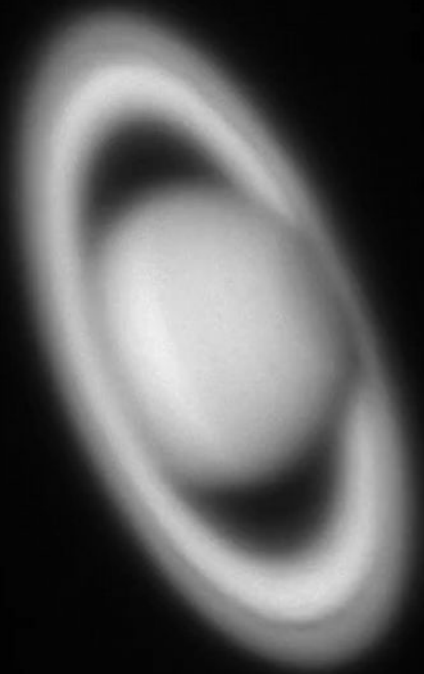
Instruments at the SONG site

Instruments at the SONG site



Lucky imaging photometry...

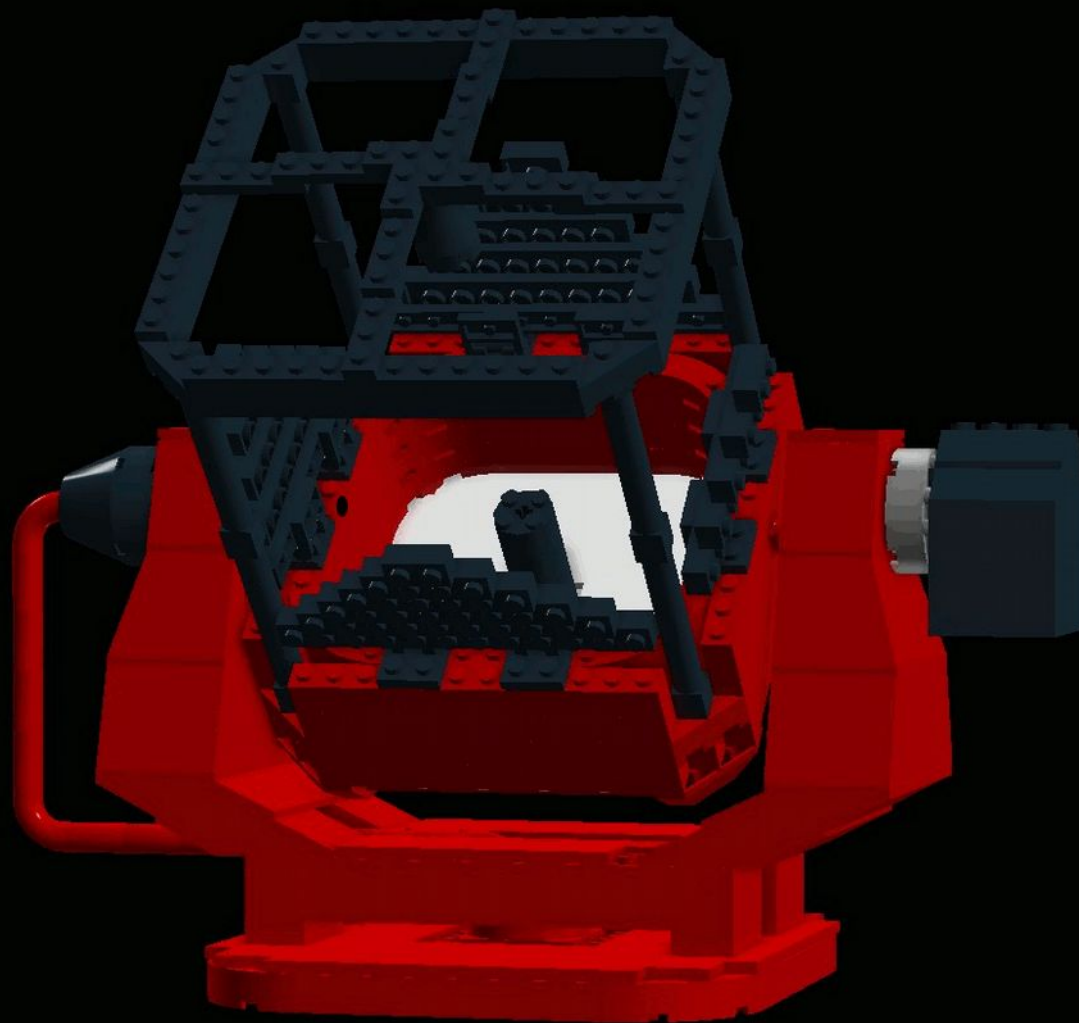


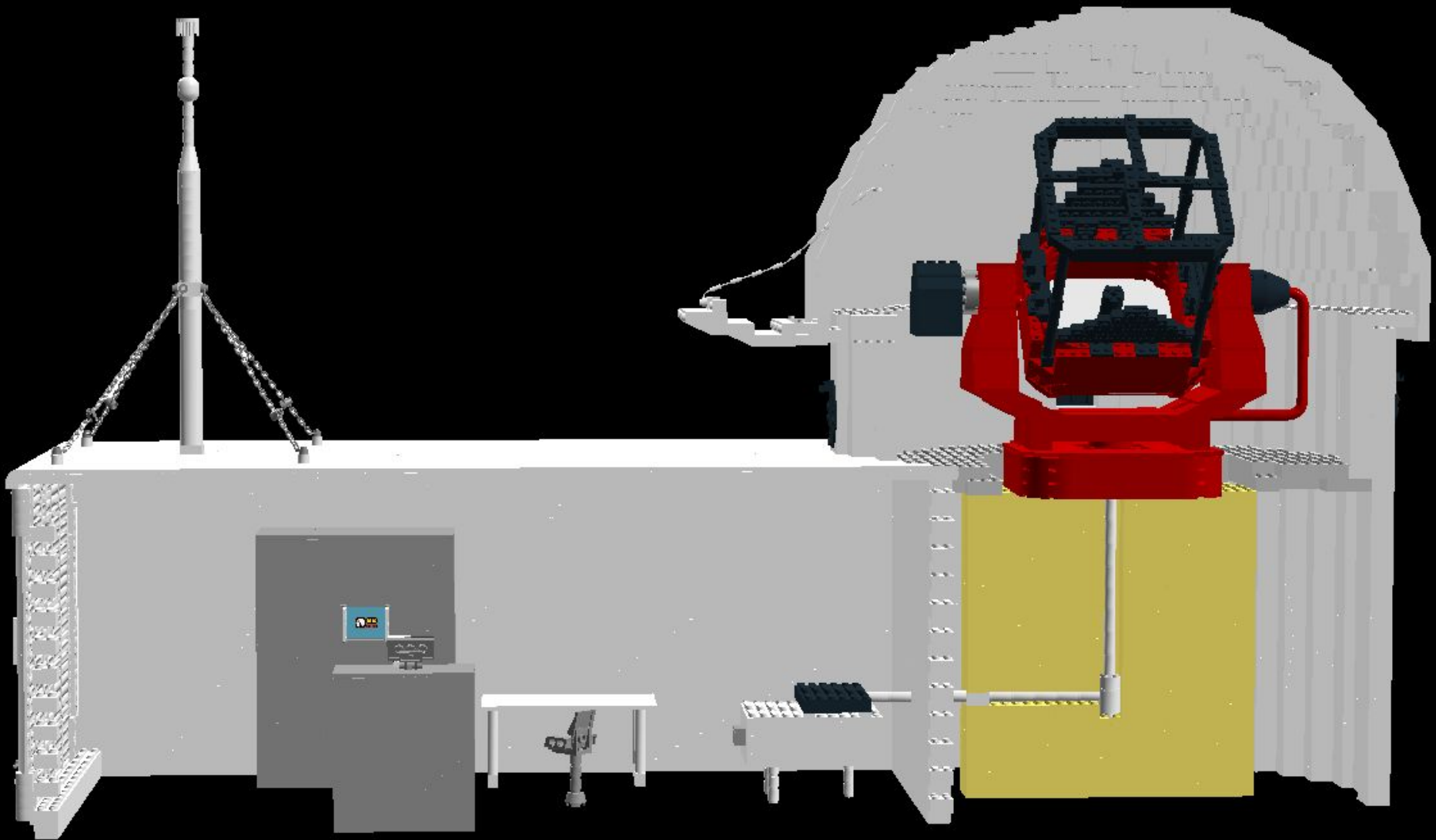


Not so lucky!



Coudé → Spectrograph





HERTZSPRUNG-SONG
...
Telescope Power Cycle



Astelco - Cabinet



EStop 1

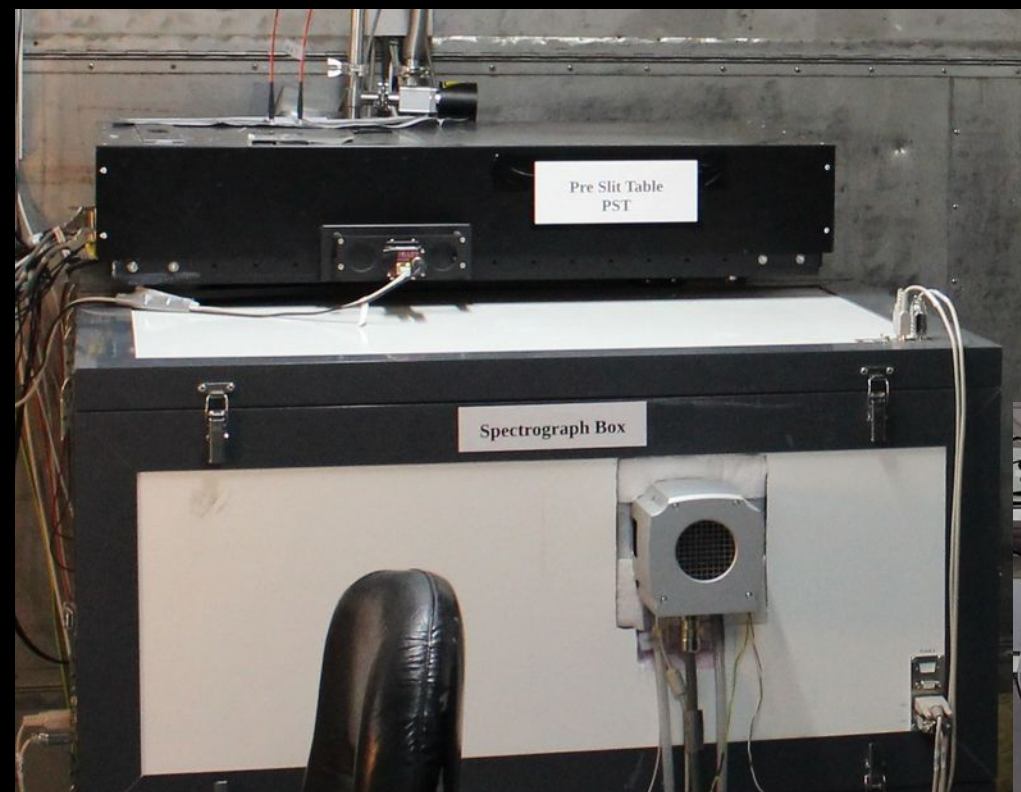


AirCoo 1



Upgrades/changes during the last 4 years

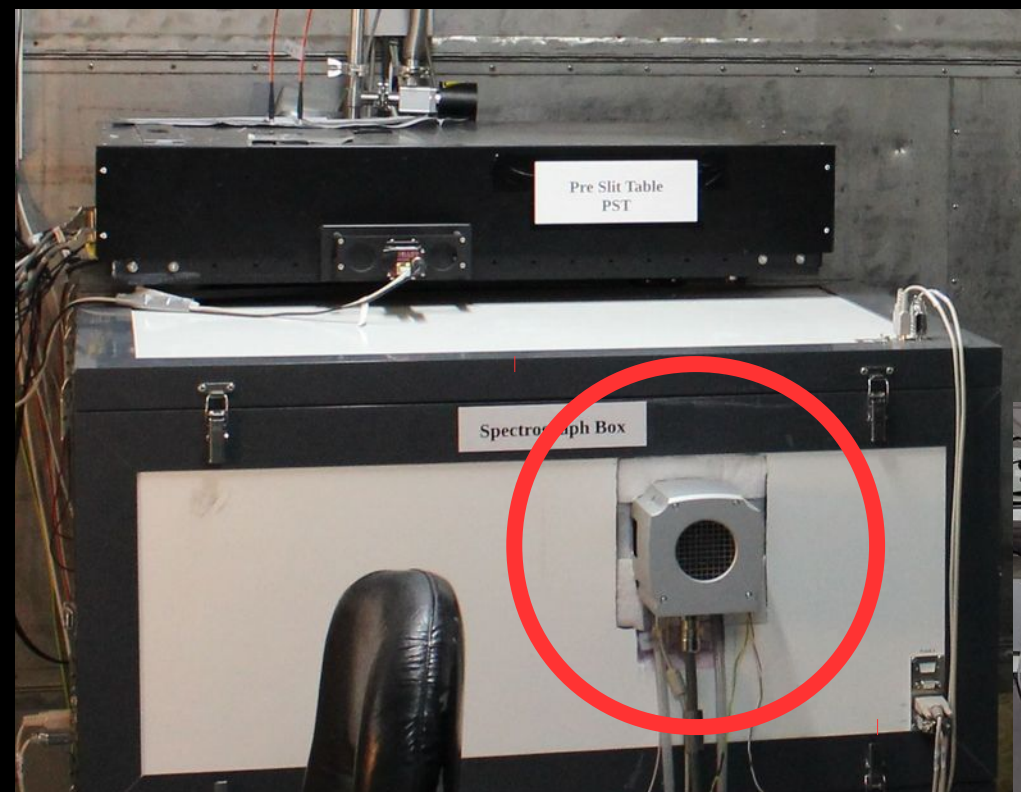
2014



2018



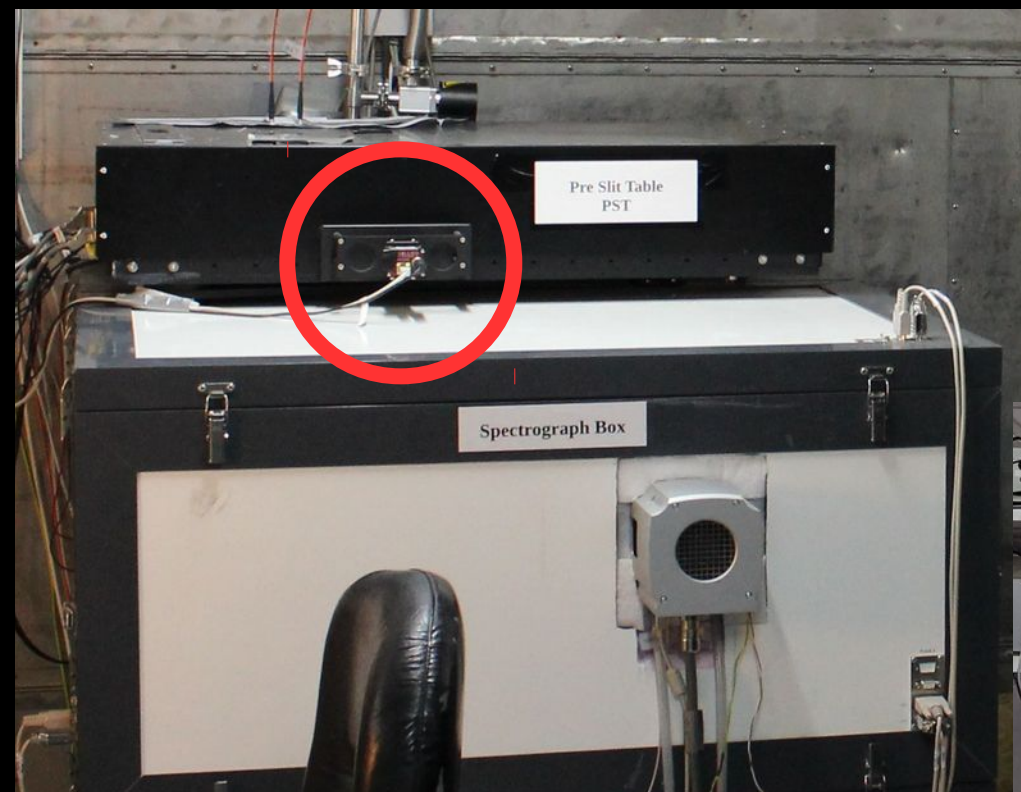
“Simple” ones



Rotation of CCD - 2018



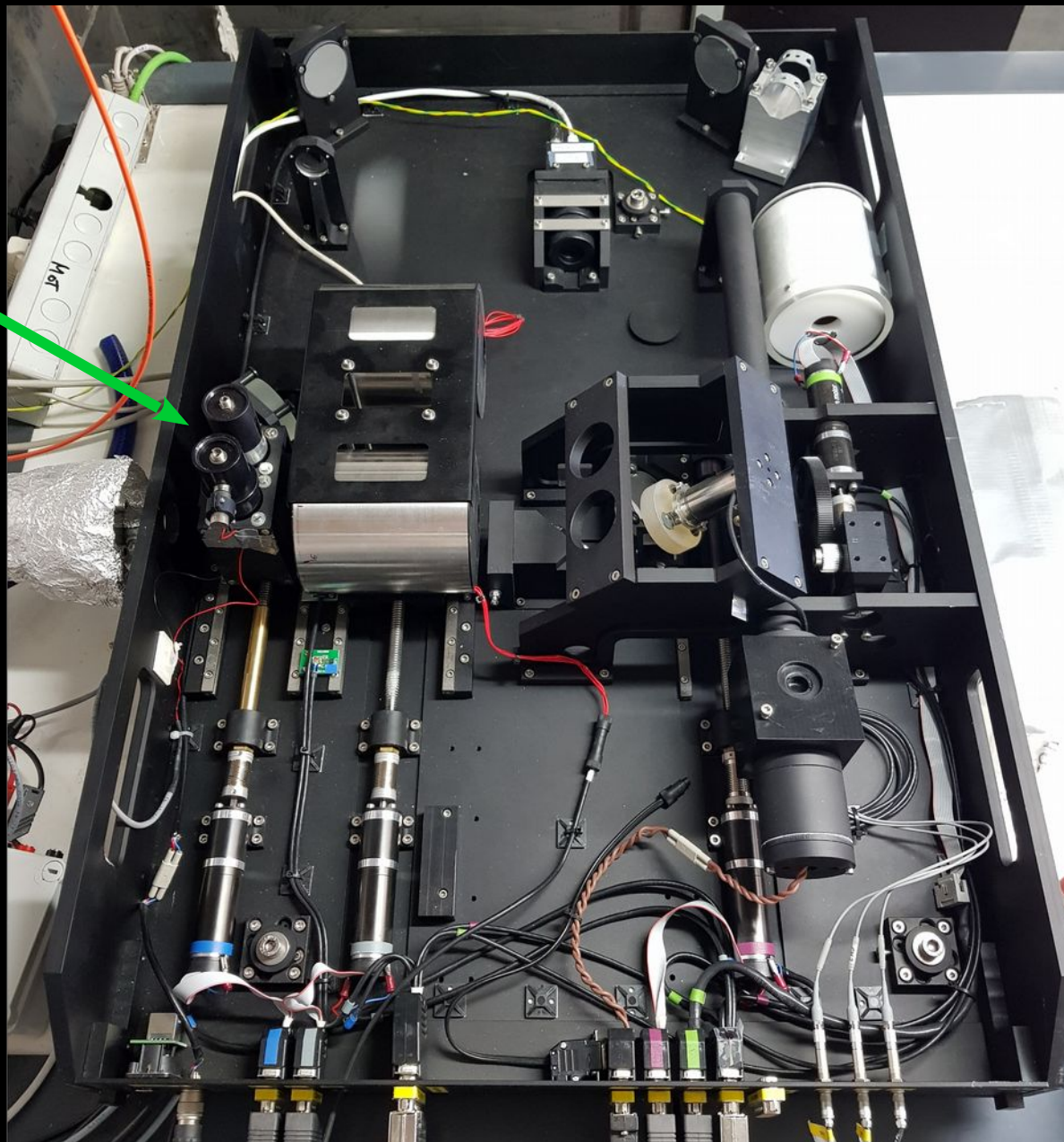
Some with more impact...



Guider upgrade:

$$V_{\text{mag}} \sim 6 \rightarrow V_{\text{mag}} \sim 9.5$$

Planned future upgrades



The robotic observations

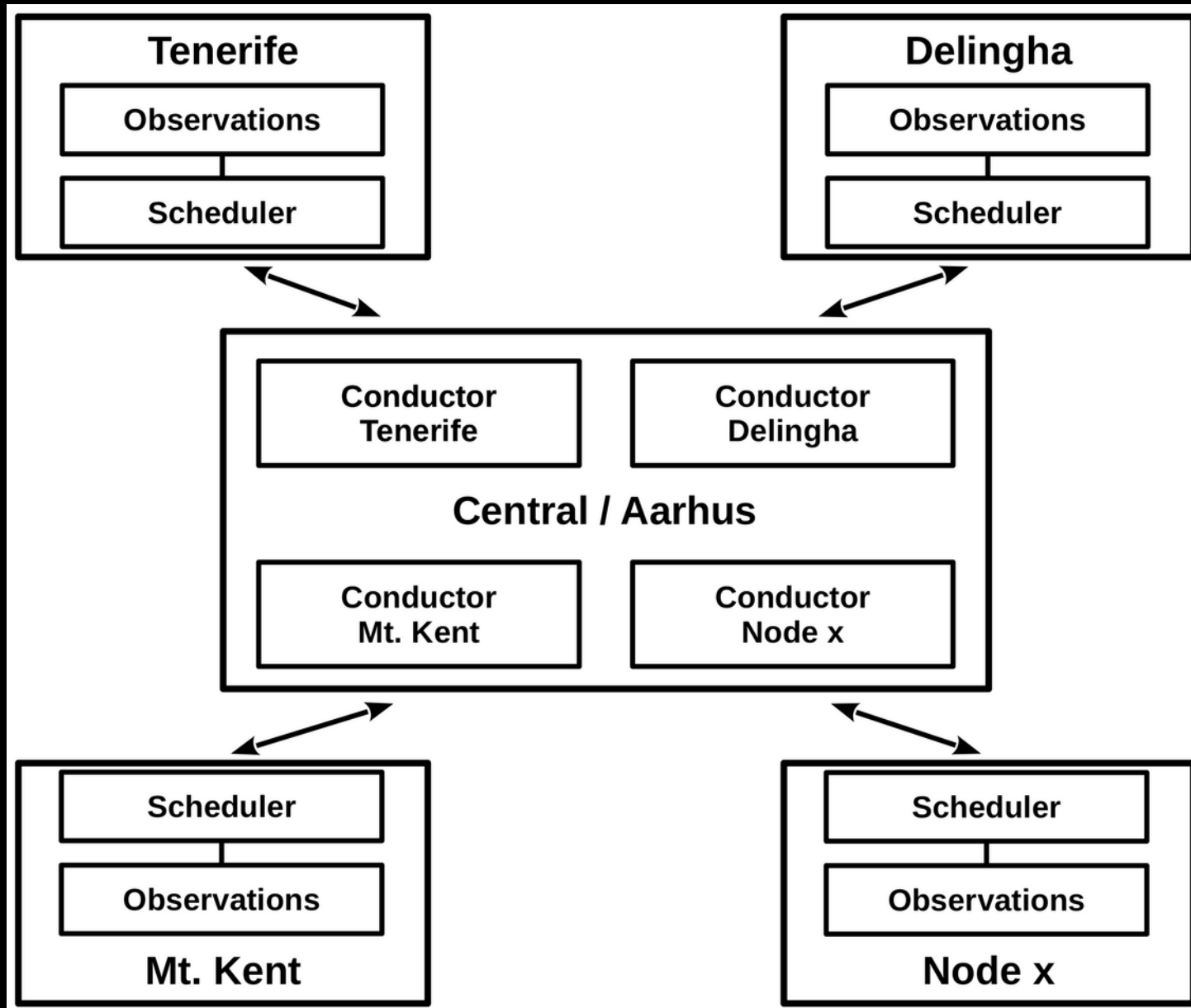
SONG CAM 1 2018/05/24 19:37:34

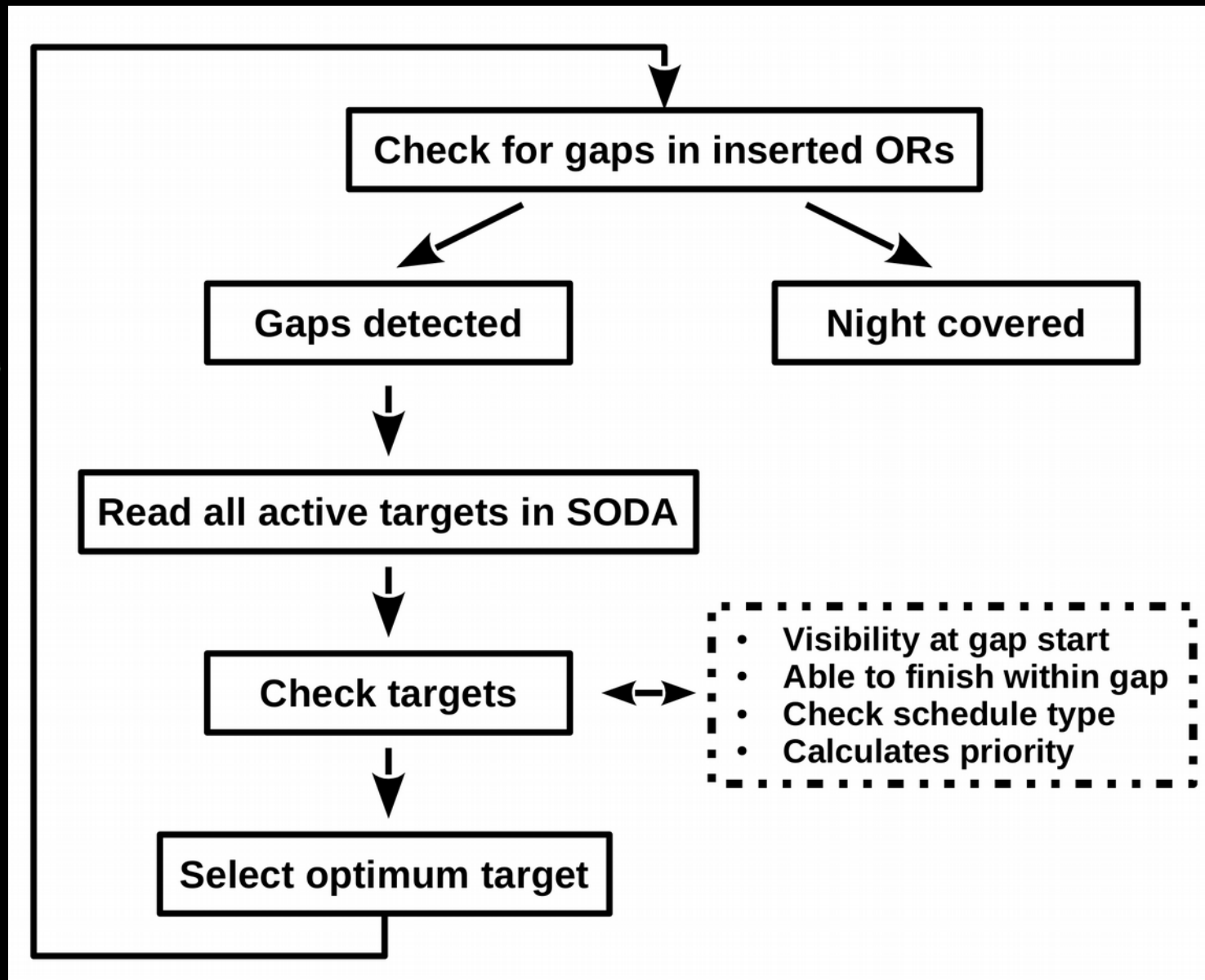


Created by Mads Fredslund Andersen

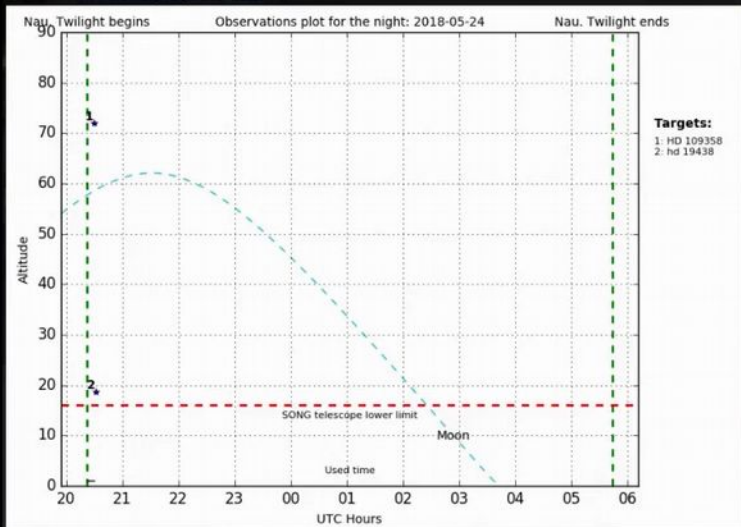
The Conductor







SONG CAM 1 2018/05/24 20:37:21

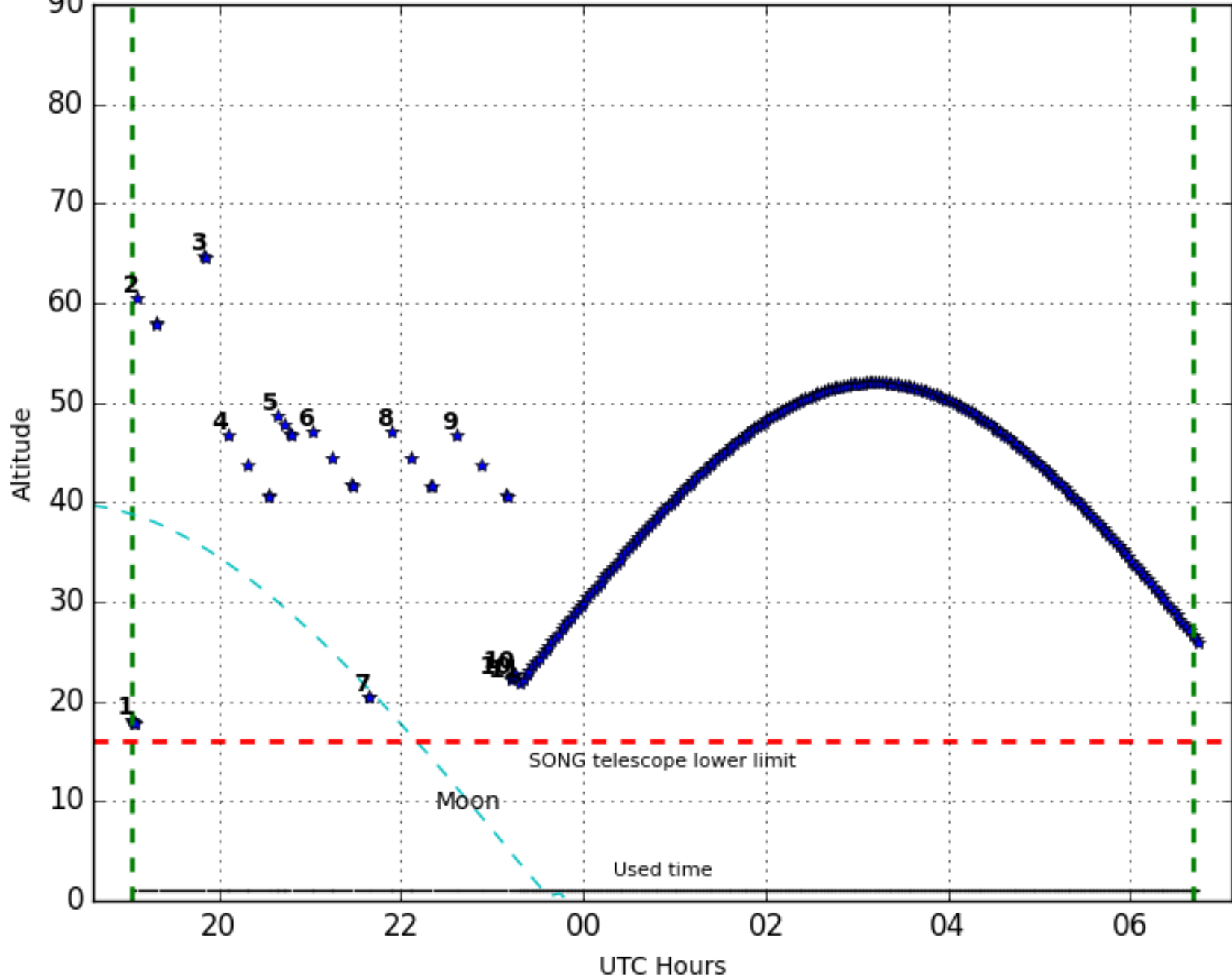


Created by: Mads Fredslund Andersen

Nau. Twilight begins

Observations plot for the night: 2018-10-15

Nau. Twilight ends



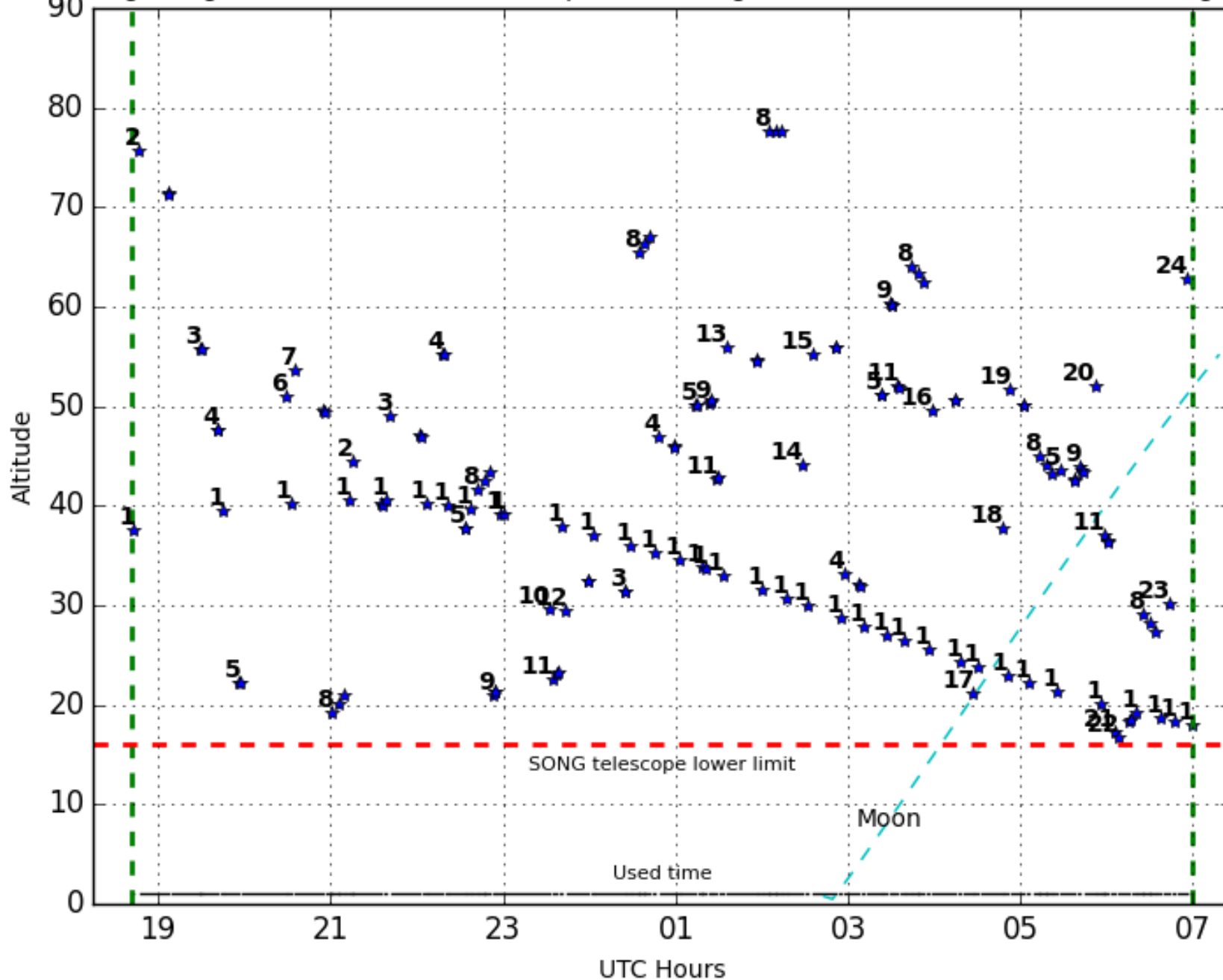
Length of night:
11:39:36
Integration time:
11:00:48
Read out time:
00:08:45

- Targets:**
- 1: Arcturus
 - 2: V624 Her
 - 3: HD 181853
 - 4: HIP 85157
 - 5: HIP 87998
 - 6: HIP 89008
 - 7: HD 22951
 - 8: HIP 93718
 - 9: HIP 97081
 - 10: alf Tau
 - 11: HD 23249

Nau. Twilight begins

Observations plot for the night: 2017-11-12

Nau. Twilight ends



Length of night:
12:19:12

Integration time:
09:37:04

Read out time:
00:05:00

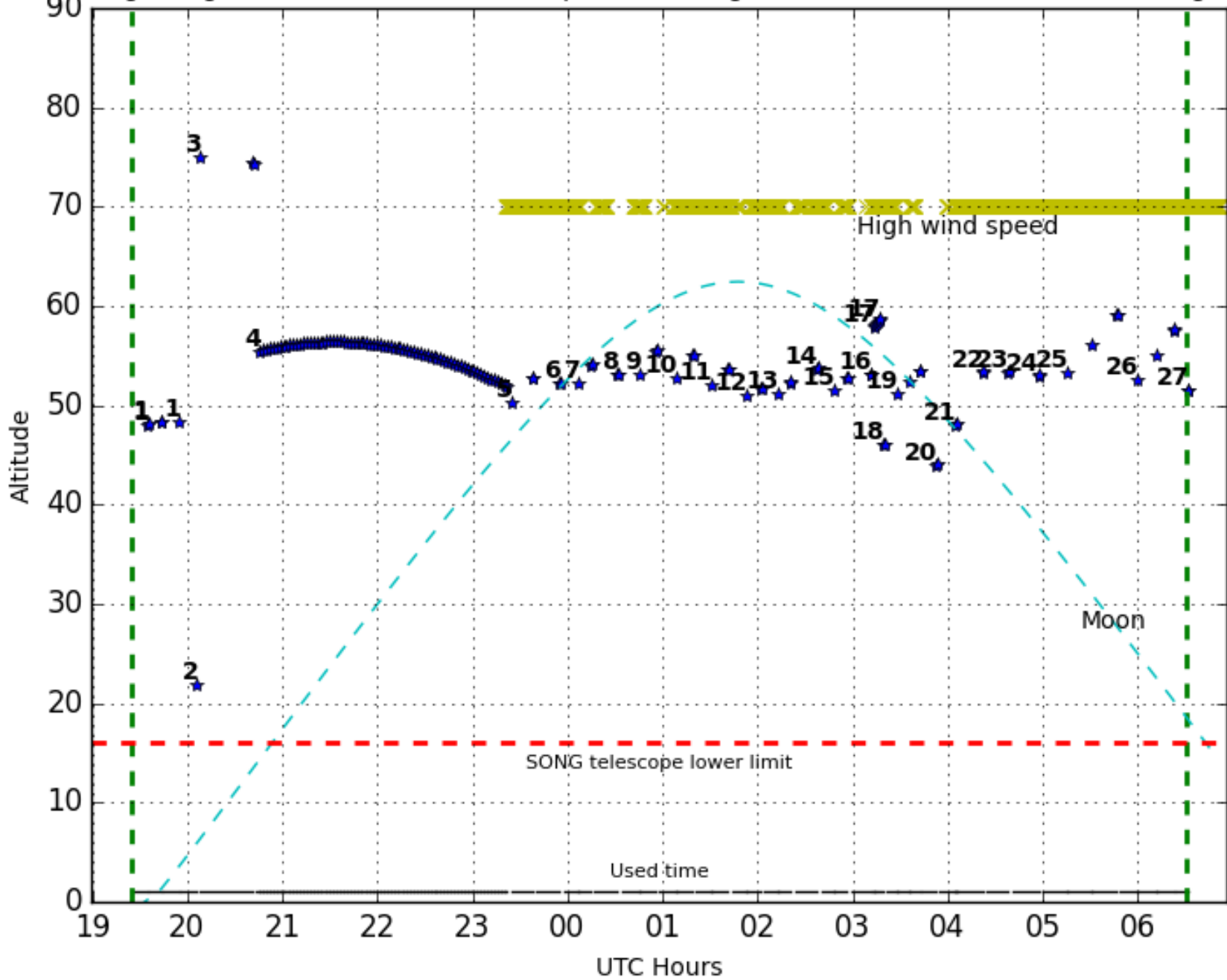
Targets:

- 1: HIP 116727
- 2: HD 190603
- 3: HD 207198
- 4: HD 2905
- 5: HD 30614
- 6: HD 188015
- 7: HD 191201
- 8: 77 Tau
- 9: HD 37128
- 10: HD 203030
- 11: HD 38771
- 12: HD 37041
- 13: HD 17505
- 14: HD 10780
- 15: HD 37022
- 16: HD 54662
- 17: HD 109358
- 18: HD 33564
- 19: VV Ori
- 20: HIP 38253
- 21: HD 137759
- 22: VV CrV
- 23: HIP 31592
- 24: HIP 36616

Nau. Twilight begins

Observations plot for the night: 2018-09-25

Nau. Twilight ends



Length of night:
11:06:35

Integration time:
09:56:48

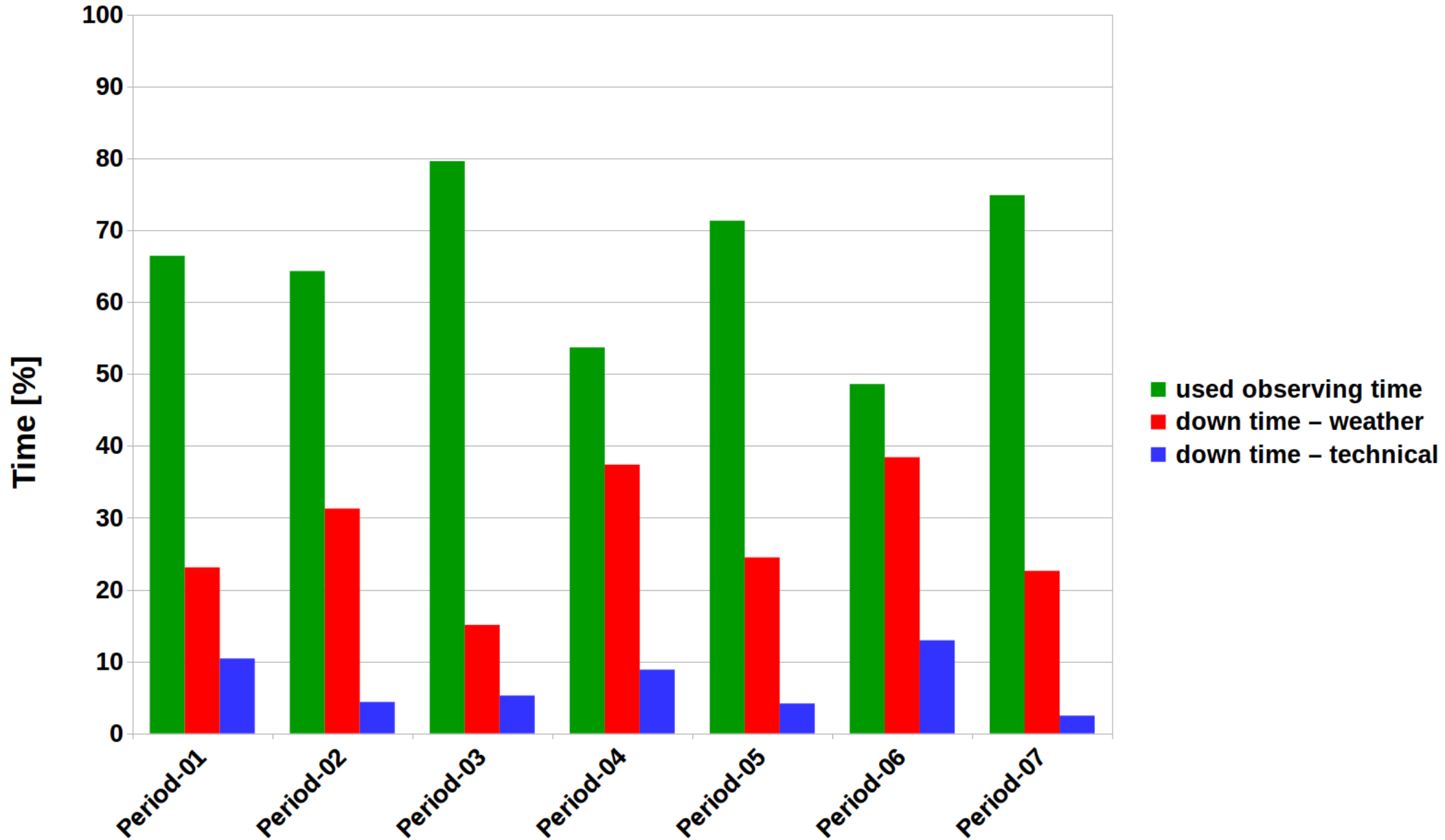
Read out time:
00:05:10

Targets:

- 1: HD 185144
- 2: HD 10780
- 3: KIC 7530366
- 4: eta Cep
- 5: HIP 7825
- 6: HIP 2353
- 7: HIP 9110
- 8: HIP 12072
- 9: HIP 12332
- 10: HIP 13327
- 11: HIP 16470
- 12: HIP 9372
- 13: HIP 13717
- 14: HIP 20842
- 15: HIP 17457
- 16: HIP 23043
- 17: alf Tau
- 18: bet Aur
- 19: HIP 21139
- 20: VV Ori
- 21: WW Aur
- 22: HIP 27549
- 23: HIP 31737
- 24: HIP 28271
- 25: HIP 35341
- 26: HIP 37521
- 27: HIP 34622

Duty cycle

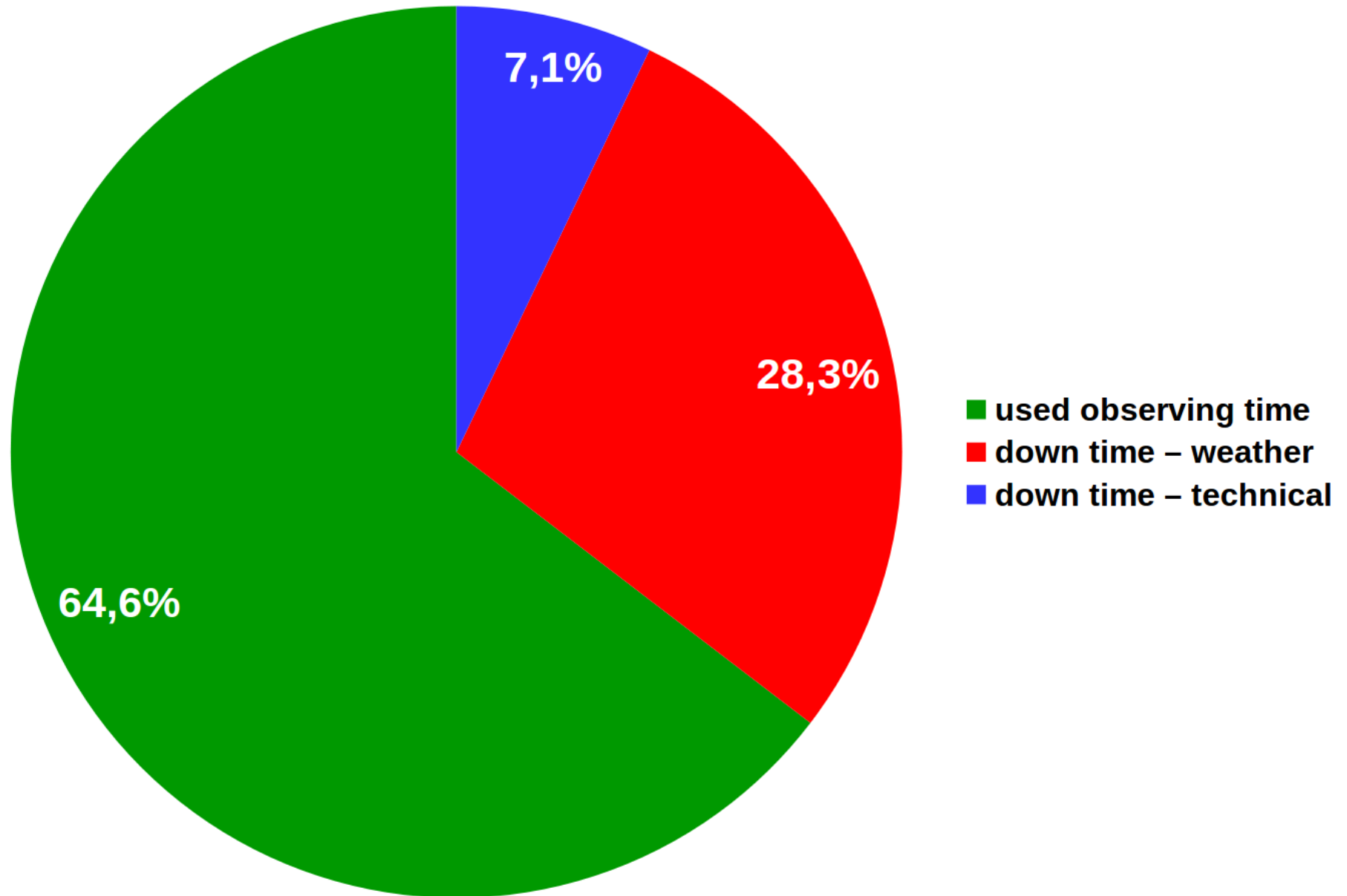
Period 1-7

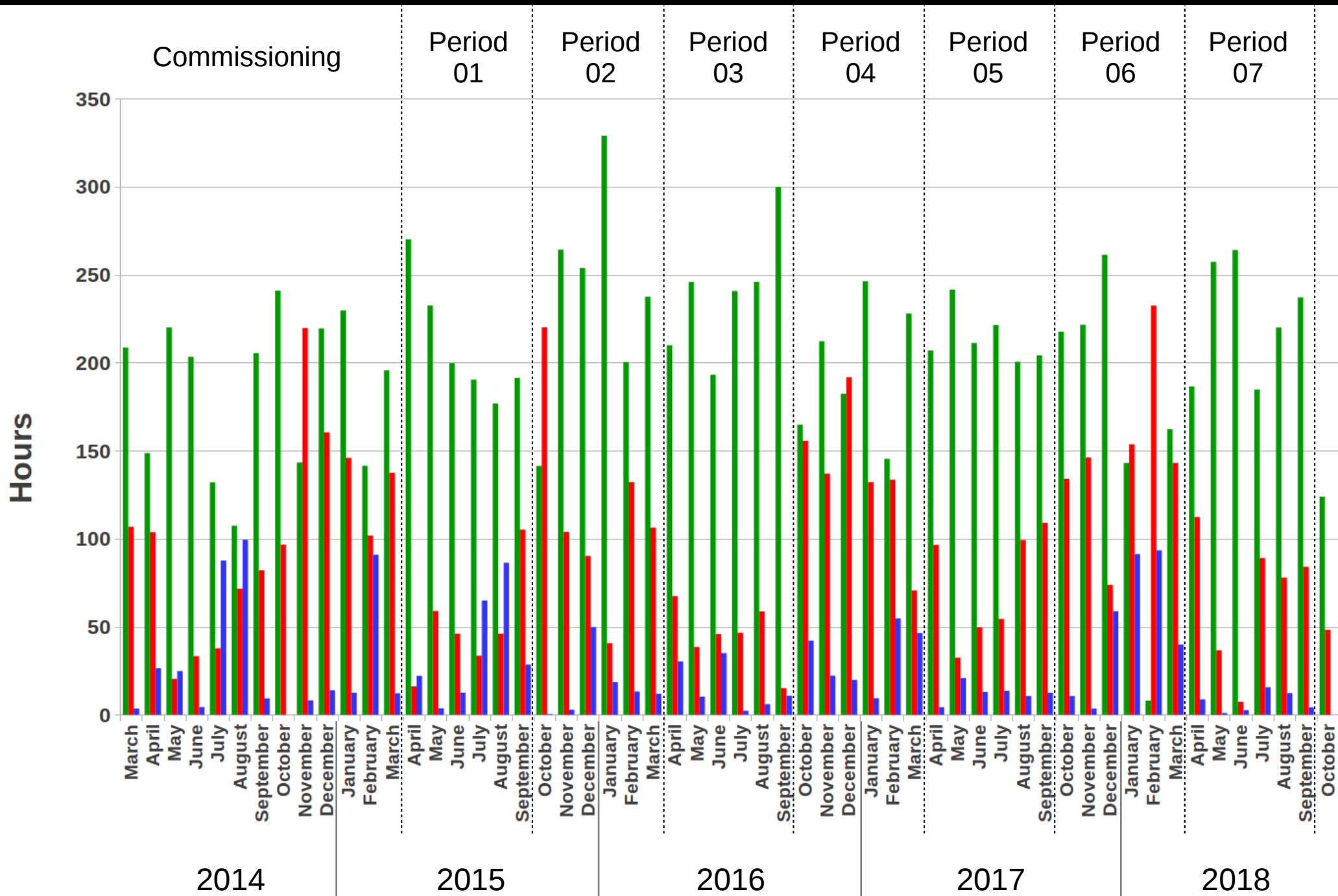


2018



Full duty cycle Period 1-7





Public outreach







Messier 16 - Eagle Nebula

© Mads Fredslund Andersen & Jes Bak Hansen



Messier 42 - Orion Nebula

© Mads Fredslund Andersen & Jes Bak Hansen





Dome Light

Container Light

Altitude 75°
Azimuth 90°N

GoTo

Park

Open Dome

Close Dome

Power Off

Open M1 Cover

STELLAR

GROUP





Thank you!

