Scheduling Statistics 2018-2019

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03/18/2019

2018B Scheduling Statistics

- 2018B Nights available: 144 nights
  - 25 Nights Allotted for NOAO (119 for internal)
  - Optimum Requested: 306.0
  - Minimum Requested: 243.0
  - Assigned: 150.5
- Instrument Breakdown(including NOAO):
  - Classic: 5 programs (46/42/38 nights) - ENG
  - CLIMB: 6 programs (24/17/16 nights)
  - JouFLU: 2 programs (14/8/5 nights)
  - MIRC: 18 programs (147/110/54 nights)
  - PAVO: 10 programs (34/25/16 nights)
  - VEGA: 13 programs (42/42/22 nights)

- NOAO Statistics
  - 17 programs applied + 2 Ongoing (64 nights)
    - 4C/2CL/5M/1P/2V/1MP/1CLV/1PC
  - 7 Accepted +1 TOO and 1 Ongoing (27+3)
    - 3 CLIMB
    - 3 MIRC
    - 1 PAVO/Classic
    - 1 VEGA
    - 1 MIRC/CLIMB (TOO)

2019A Scheduling Statistics

- 2019A Nights available: 181 nights
  - 25 Nights Allotted for NOAO (156 for internal)
  - Optimum Requested: 213.0
  - Minimum Requested: 181.0
  - Assigned: 185.0
- Instrument Breakdown(including NOAO):
  - Classic: 4 programs (13/10/13 nights)
  - CLIMB: 5 programs (26/21/23 nights)
  - JouFLU: 1 program (3/3/3 nights)
  - MIRC: 19 programs (112/97/92 nights)
  - PAVO: 6 programs (25/18/22 nights)
  - VEGA: 8 programs (34/34/33 nights)

- NOAO Statistics
  - 17 programs applied + 2 Long term + 1TOO
    - 59 Nights (5M/2P/3C/2CL/1V/1VM/1PC/1CLP/1MP)
  - 7 Accepted (+2LT+1TOO) (22 nights +3TOO)
    - 3 Classic
    - 1 CLIMB
    - 4 MIRC
    - 1 PAVO/Classic
    - 1 MIRC/CLIMB (TOO)

Scheduling Statistics

2016 Observations

- Classic: 1118 (37.5n)– 29.8
- CLIMB: 300 (14n) – 21.4
- JouFLU: 205 (13n) – 15.7
- MIRC: 497 (66n) – 7.5
- PAVO: 1047 (41n) – 25.5
- VEGA: 609 (56n) – 10.8

- Unique Objects:
  - 602
- Total Observations:
  - 3777

2017 Observations

- Classic: 1187 (51n) – 23.27
- CLIMB: 924 (40n) – 23.10
- JouFLU: 361 (14.5n) – 24.9
- MIRC: 326 (93n) – 3.50
- PAVO: 1471 (59n) – 24.93
- VEGA: 1080 (76n) – 14.21

- Unique Objects:
  - 910
- Total Observations:
  - 5349

2018 Observations

- Classic: 657 (18n) – 36.5
- CLIMB: 559 (40n) – 13.97
- JouFLU: 71 (7.5n) – 9.47
- MIRC: 1016 (140n) – 7.25
- PAVO: 1464 (49n) – 29.87
- VEGA: 538 (51.5n) – 10.45

- Unique Objects:
  - 896
- Total Observations:
  - 4358

Scheduling!

Don’t forget, Internal and NOAO 2019B deadline is in 14 days.

(I forgot twice already).

ALSO: Engineering time proposals

Request for Engineering Time at the CHARA Array

For the Period

August 1 – Dec 22, 2019

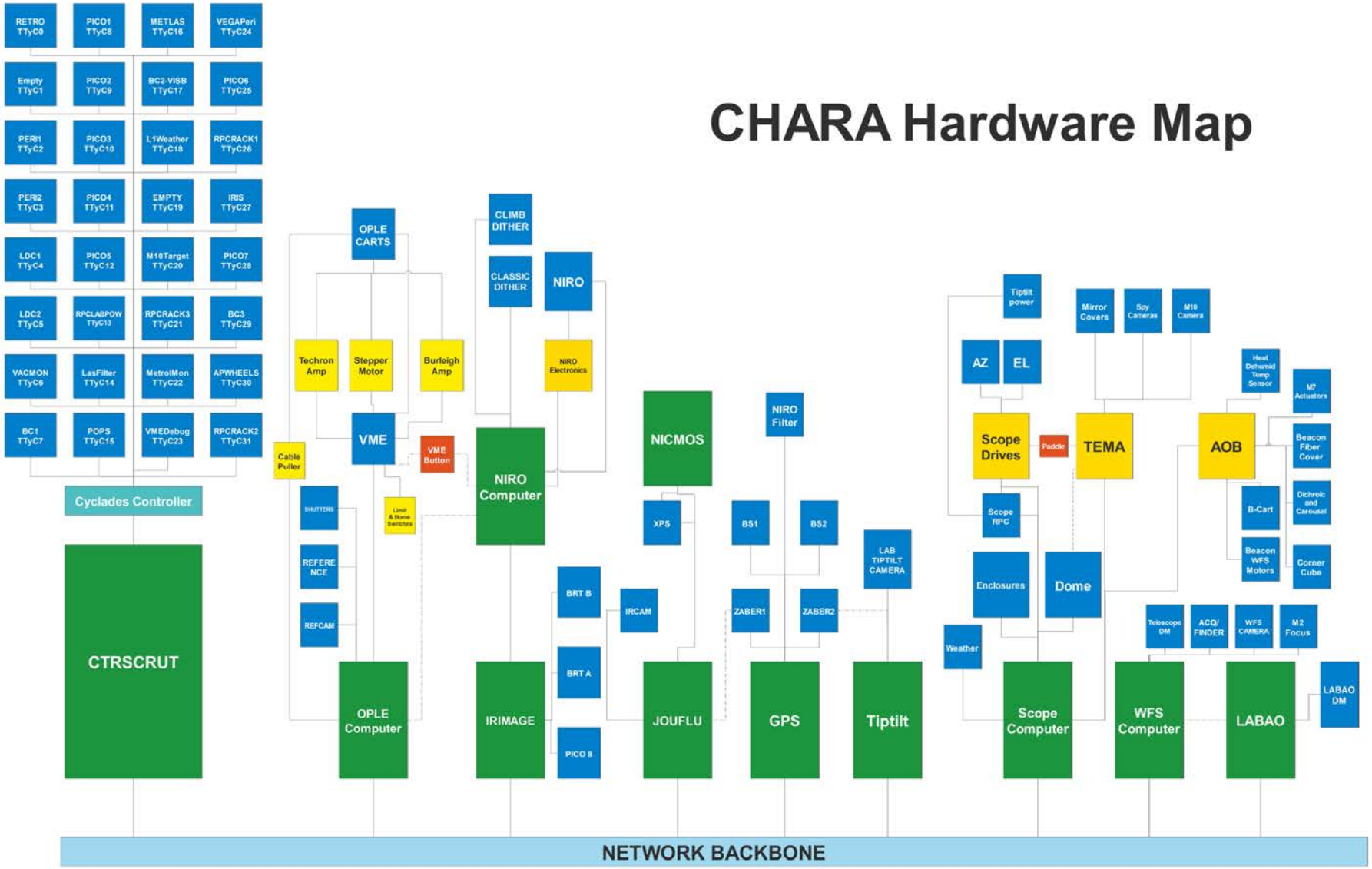
Type only within boxed areas immediately after hyphens

P.I. Name/e-mail -	**With Observing?** – (yes/no) circle one
Co-P.I. Names -	
Engineering Participants -	
Engineering Abstract -	

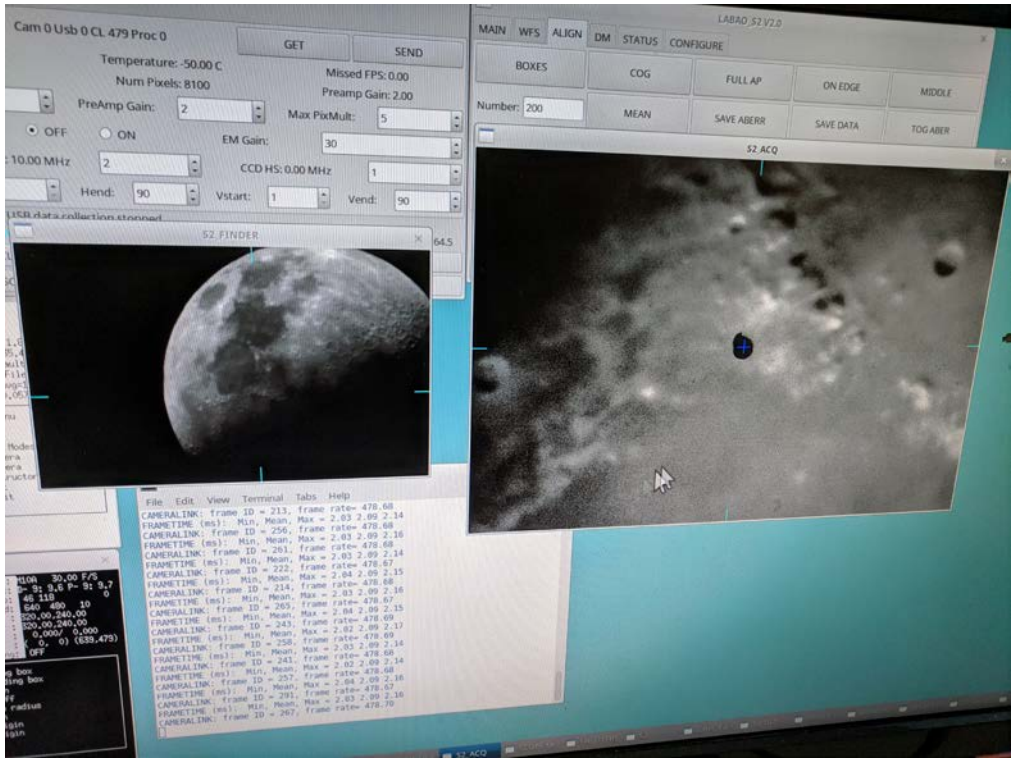
Night Operations?

Notice I did not mention much about Night Operations?

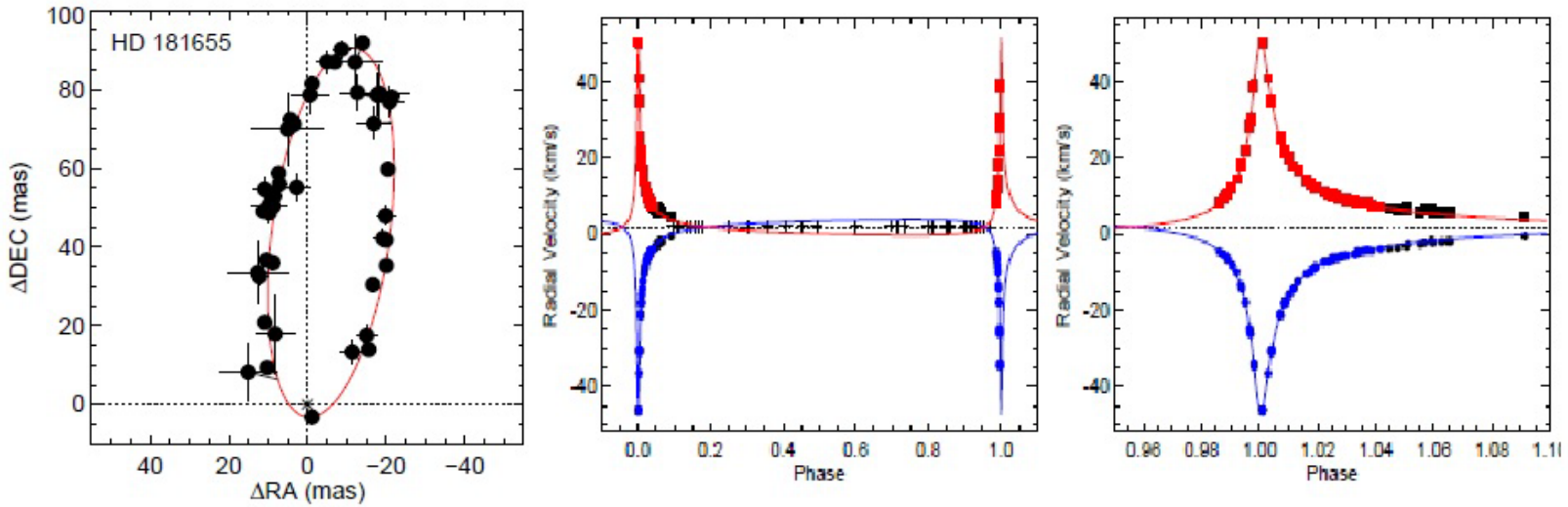
- Telescope tiptilt/AO observer practice was scheduled:
  - All of Jan, Feb….
  - Decided that before permanent switch to telescope tiptilt, we must take some classic data with the old and new system on the same object on the same night within a small time period.
  - Quantitatively say that the new system is better than or the same as the old in terms of data quality.


CHARA Hardware Map
RETRO TTyC0
PICO1 TTyC8
METLAS TTyC16
VEGAPeri TTyC24
Empty TTyC1
PICO2 TTyC9
BC2-VISB TTyC17
PICO6 TTyC25
PERI1 TTyC2
PICO3 TTyC10
L1Weather TTyC18
RPCRACK1 TTyC26
PERI2 TTyC3
PICO4 TTyC11
EMPTY TTyC19
IRIS TTyC27
LDC1 TTyC4
PICO5 TTyC12
M10Target TTyC20
PICO7 TTyC28
LDC2 TTyC5
RPCLABPOW TTyC13
RPCRACK3 TTyC21
BC3 TTyC29
VACMON TTyC6
LasFilter TTyC14
MetrolMon TTyC22
APWHEELS TTyC30
BC1 TTyC7
POPS TTyC15
VMEDebug TTyC23
RPCRACK2 TTyC31
Cyclades Controller
CTRSCRUT
OPLE CARTS
Techron Amp
Stepper Motor
Burleigh Amp
Cable Puller
VME
VME Button
SHUTTERS
REFERENCE
REFCAM
Limit & Home Switches
OPLE Computer
CLIMB DITHER
CLASSIC DITHER
NIRO
NIRO Electronics
NIRO Computer
IRIMAGE
BRT B
BRT A
PICO 8
IRCAM
NICMOS
XPS
JOUFLU
NIRO Filter
BS1
BS2
ZABER1
ZABER2
GPS
LAB TIPTILT CAMERA
Tiptilt
Tiptilt power
Mirror Covers
Spy Cameras
M10 Camera
AZ
EL
Scope Drives
Paddle
TEMA
Scope RPC
Enclosures
Dome
Weather
Scope Computer
Heat Dehumid Temp Sensor
M7 Actuators
AOB
Beacon Fiber Cover
B-Cart
Dichroic and Carousel
Beacon WFS Motors
Corner Cube
Telescope DM
ACQ/ FINDER
WFS CAMERA
M2 Focus
WFS Computer
LABAO
LABAO DM
NETWORK BACKBONE

Also Not Scheduling Related



Still Not Scheduling Related



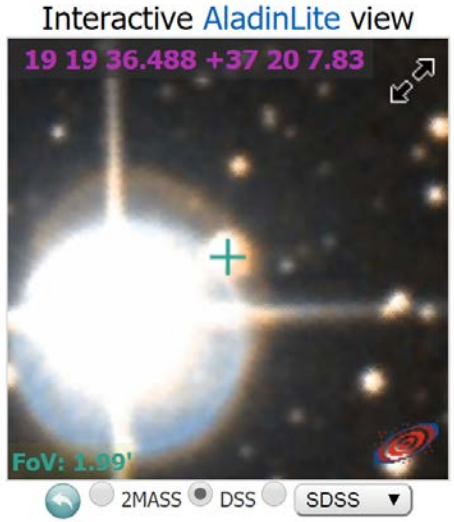


Table 3. Orbital Parameters for HR 7345.

Parameter	SB2 Orbit	VB Orbit	Joint Fit
P (d)	331.607 ± 0.0037	331.601 ± 0.075	331.609 ± 0.0037
T (HJD)	58142.692 ± 0.0029	58142.681 ± 0.012	58142.690 ± 0.0027
e	0.93209 ± 0.00013	0.9324 ± 0.0011	0.9322 ± 0.00013
a (mas)		47.58 ± 0.11	47.432 ± 0.035
i (°)		29.6 ± 1.2	29.48 ± 0.86
Ω (°)		176.2 ± 6.4	181.046 ± 0.092
ω_A (°)	169.934 ± 0.077	175.4 ± 7.3	169.888 ± 0.075
K_A (km s^{-1})	25.535 ± 0.047		25.555 ± 0.047
K_B (km s^{-1})	25.927 ± 0.047		25.947 ± 0.048
γ (km s^{-1})	1.827 ± 0.030		1.827 ± 0.031

NOTE—The angle between the ascending node and periastron, as referenced to HR 7345 B (the typical reference for visual orbits), is given by $\omega_B = \omega_A + 180° = 349.^{\circ}89 \pm 0.^{\circ}08$.

Table 4. Stellar Properties for HR 7345

Parameter	Value
M_A ($M_\odot$)	0.941 ± 0.076
M_B ($M_\odot$)	0.926 ± 0.075
d (pc)	24.34 ± 0.45
π (mas)	41.08 ± 0.77