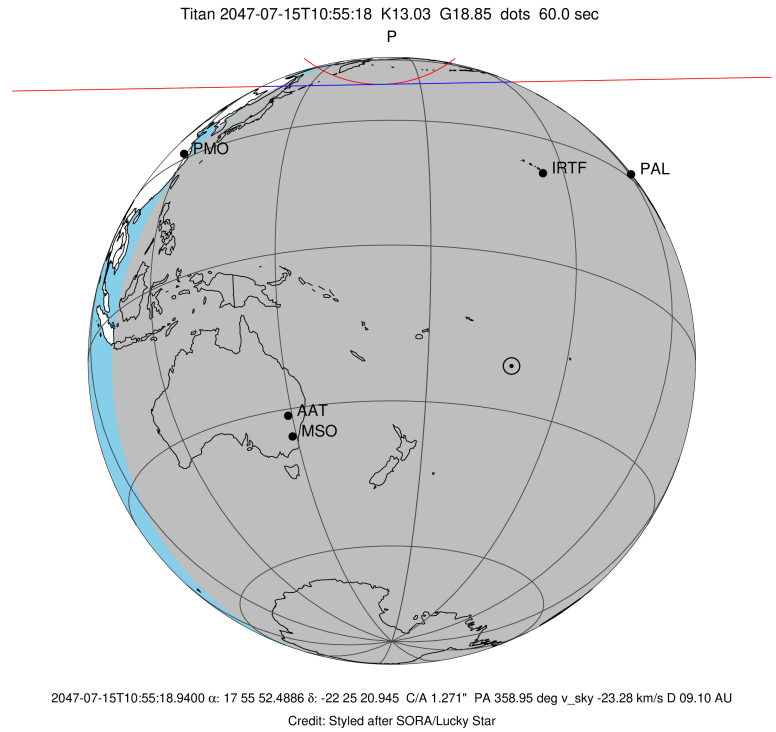
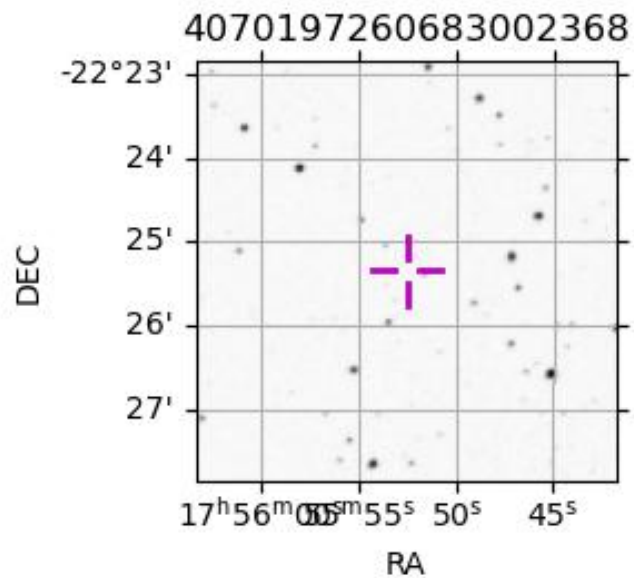
Stellar occultation prediction by rfrench@wellesley.edu Sun Jun 25 12:13:18 2023

```
target                  : Titan
target radius (km)      :   2575.15
C/A epoch               : 2047-07-15T10:55:18.940
Event type              : P
: Titan occs: not geocentric or topocentric
: Not a ringed target
Gaia source ID          : 4070197260683002368
2Mass ID (if available) : 17555249-2225204

ICRS Star Coord at Epoch: 17h 55m 52.48862s -22:25:20.94473s
RUWE (>1.4 is poor)     :   1.08
K magnitude             : 13.030
G magnitude             : 18.854
RP magnitude            : 17.446
BP magnitude            : 20.853
DUPflag                 : 0
Distance (au)           :  9.097
f0 (km)                 :       0.00
g0 (km)                 :       0.00
skyplane vel. (km/s)    : -23.27
Sun-Target sep (deg)    :  156.77
Sun-Moon sep (deg)      :  117.89
B (ring opening deg)    :   26.59
PA of pole (deg)        :    5.58
Pole direction: RA (deg):  39.48270
Dec (deg):  83.42790
C/A sky separation (")  :   1.271
C/A sky separation (km) :   8384.0
NAIF SPICE kernels      : RAJobs_U111+rgf16.spk
URKALLv1.spk
naif0012.tls
nep097.bsp
nep101.bsp
sat440l.bsp
Observable events with sun below -5 deg and altitude above 5 deg
Obs  Location                          lat   Elon   Target     Observed Events Interval   OEcode
-----------------------------------------------------------------------------------------------
PIC  Pic du Midi                       42.9    0.1  |      |                              | Pnn
PAL  Palomar Mt (200")                 33.4  243.1  |      |                              | Pnn
PMO  Purple Mtn Obs. Nanking           32.1  118.8  |      |                              | Pnn
KPNO Kitt Peak Natl Obs                32.0  248.4  |      |                              | Pnn
MCD  McDonald Obs. 2.7m                30.7  256.0  |      |                              | Pnn
TEN  Teide Obs./Tenerife               28.3  343.5  |      |                              | Pnn
IRTF Mauna Kea/IRTF                    19.8  204.5  |      |                              | Pnn
KAV  Kavalur Observatory               12.6   78.8  |      |                              | Pnn
RIO  Rio de Janeiro                   -22.9  316.8  |      |                              | Pnn
ESO  European Southern Obs. (3.6m)    -29.3  289.3  |      |                              | Pnn
AAT  Siding Spring (AAT)              -31.3  149.1  |      |                              | Pnn
SAAO So. Afr. Astro. Obs. (Sutherland) -32.4   20.8  |      |                              | Pnn
MSO  Mt. Stromlo Observatory          -35.3  149.0  |      |                              | Pnn
```