

Beobachtungen mit mobilen Teleskopen

Falera, 29 Oktober 2022

Persönliche Statistik in 22.75 Jahren (Jan 2000 – September 2022)

TOTAL **1415 Beob 146+ (10.3 %)**

GNO 1371 Beob 120+ (8.7 %)

LOC 15 Beob 7+ (46.7 %)

BEL 9 Beob 6+ (66.7%)

PIO 3 Beob 2+ (66.7 %)

BIG, CON, IRA, LUM, ARB,

FLU, MEN, MCE, BIA, BER,

SEM, ACQ, DOZ, SAL, MOT,

CUG, GIO 17 Beob 11+ (64.7 %)

dh.

GNO 1371 Beob 120+ (8.7 %)

Mobile stations 44 Beob 26+ (59.1 %)

Frage: sind in der Statistik die 26 +ve Beobachtungen von MB verursacht?

Antwort: 25 ja, 1 nein (82P)

Frage: lohnt es sich mobile zu gehen?

Antwort: Ja

Frage: welche sind die Entscheidungsfaktoren?

Antwort: -Hohe Wahrscheinlichkeit

-Meteo Prognosen

-Leuchtkraft, Dauer, Drop

-Wichtigkeit

Frage: warum machst du mobile Beobachtungen?

Antwort: verschiedene Gründe:

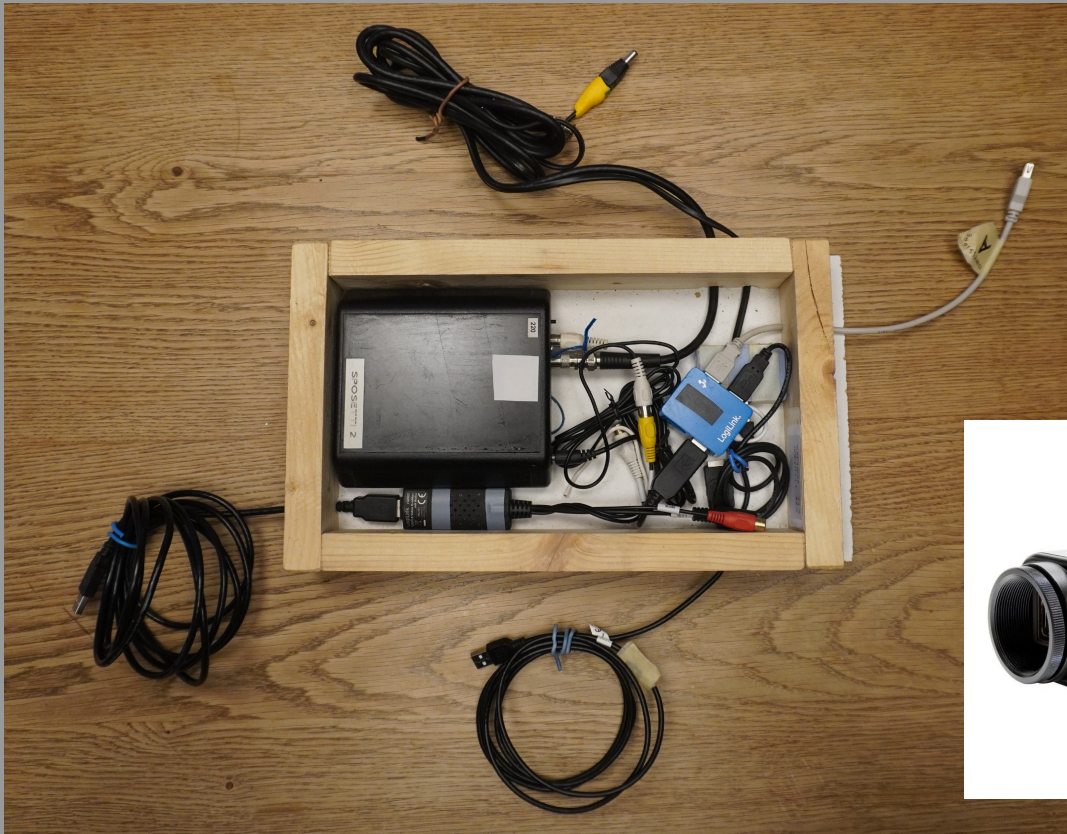
-um ein chord (nach meiner Statistik, zwei chords) zu messen

-um eine "sichere" +ve SB die sonst von GNO nicht sehbar war

-um eine "wichtige" SB zu messen (TNO, Centaur, Komet, PHA, Trojan, DoppelKP, mission bedingt eg. LUCY)

Material:

- Teleskop C8 mit focal reducer
- Montierung Synscan EQ6
- Altes laptop
- Camera WAT-910HX-RC
- Elektronik



Beispiele

29 Dez 2011: (198) Ampella (MB)

BIG+



06 JAN 2013: (87) Sylvia #1 (binary)

CON+

87 Sylvia** occults TYC 1856-00745-1 on 2013 Jan 6 from 1h 35m to 1h 49m UT

Star:
Mr = 10.7 Mp = 11.3 Mr = 10.4
RA = 5 31 27.2576 (J2000)
Dec = 27 29 19.153
[of Date: 5 32 19, 27 29 47]
Prediction of 2012 Dec 23.0

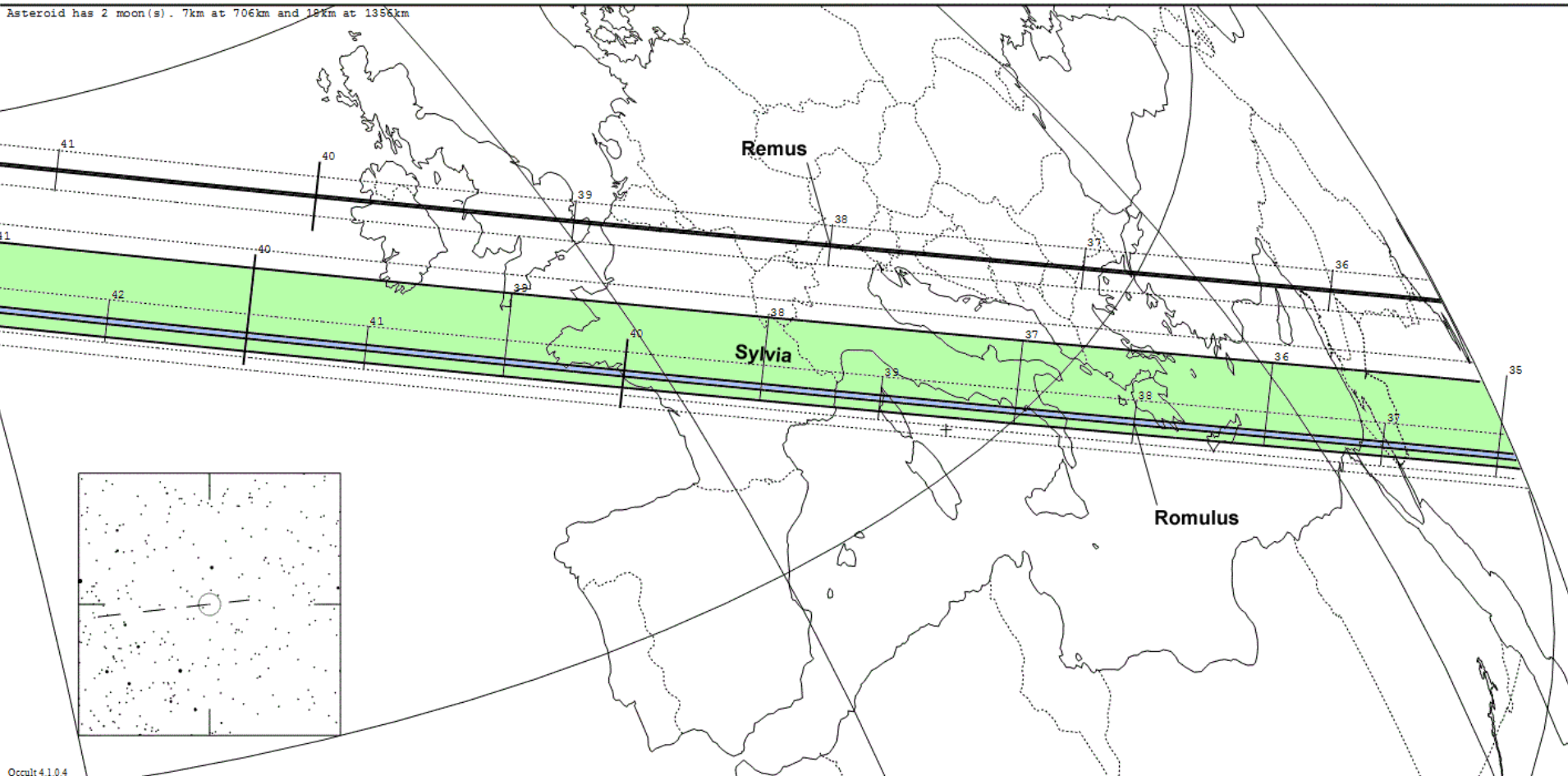
UCAC4 position

Max Duration = 19.6 secs
Mag Drop = 1.7 (1.6r)
Sun : Dist = 157 deg
Moon: Dist = 124 deg
: illum = 40 %
E 0.029"x 0.033" in PA 90

Romulus = 1.4 secs Remus = 0.5 secs
18km 7km

Asteroid: (in ISAM)
Mag = 12.1
Dia = 264km, 0.132"
Parallax = 3.312"
Hourly dRA = -1.814s
dDec = 2.66"

Asteroid has 2 moon(s). 7km at 706km and 12km at 1386km



Occult 4.1.0.4

05 Sep 2021: (22) Kalliope #1 (binary)

FLU+

22 Kalliope #1 occults 2UCAC 40488211 on 2021 Sep 5 from 2h 30m to 2h 37m UT

Star: (Dia < 0.1 mas)

Mv 12.1
RA = 6 9 20.8958 (astrometric)

Dec = 24 33 5.014

[of Date: 6 10 39, 24 32 50]

Prediction of 2021 Sep 2.0

Reliable not available

Max Duration = 6.4 secs

Mag Drop = 0.6 (0.0r)

Sun : Dist = 71°

Moon: Dist = 46°

: illum = 5 %

Error 22.7x9.4 mas in PA 76°

Asteroid: (in DAMIT, ISAM)

Mag = 11.9

Dia = 177 ±10km, 87 mas

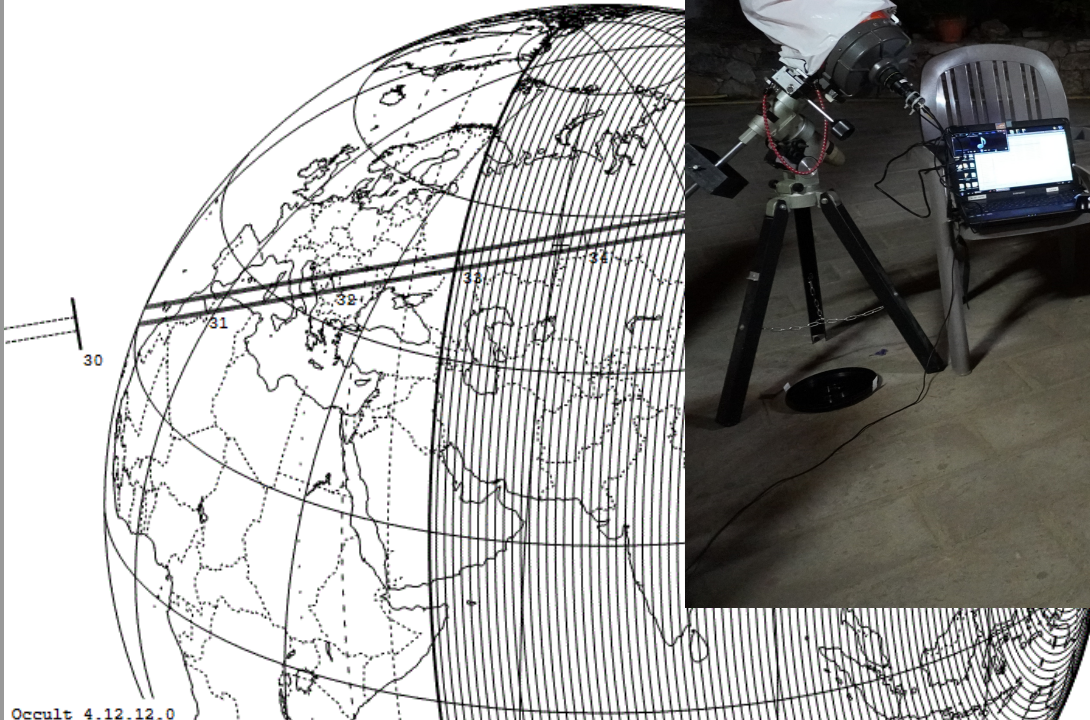
Parallax = 3.155"

Hourly dRA = 3.628s

dDec = 7.95"

JPL#1082021Aug25 Binary solution 1 : Kepler, Known errors + binary orbit

1 moon. {Linus} 28km at 1095km, Period 3.596days



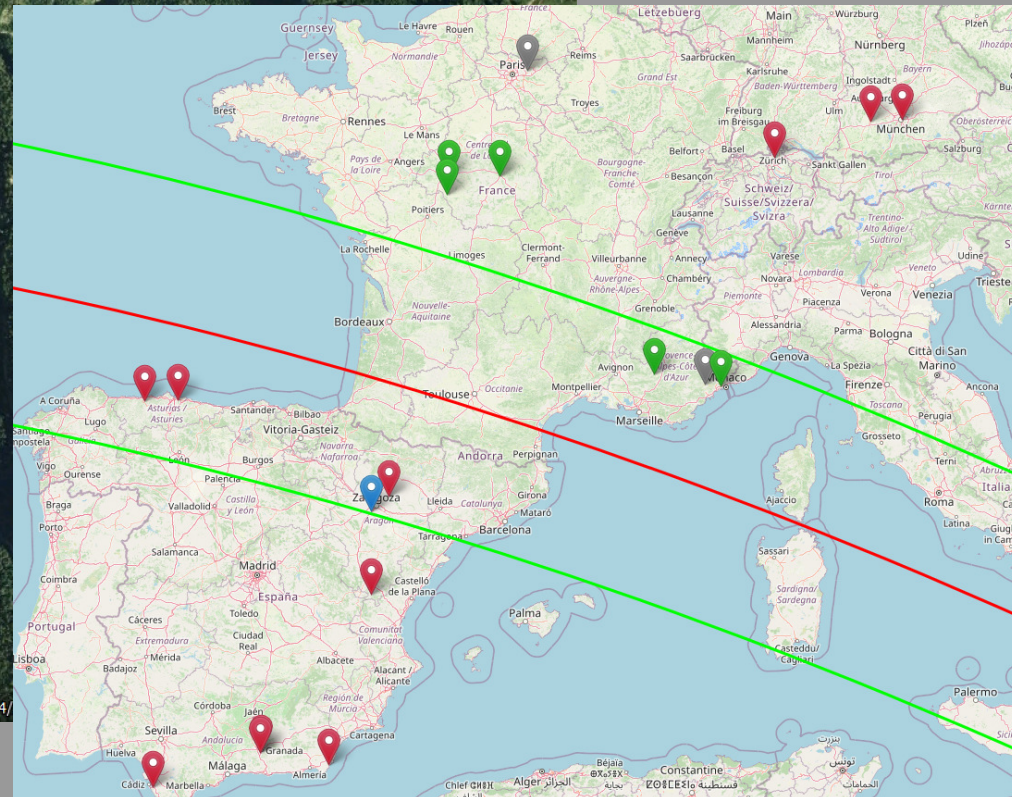
Occult 4.12.12.0



FLU: 99.8 %

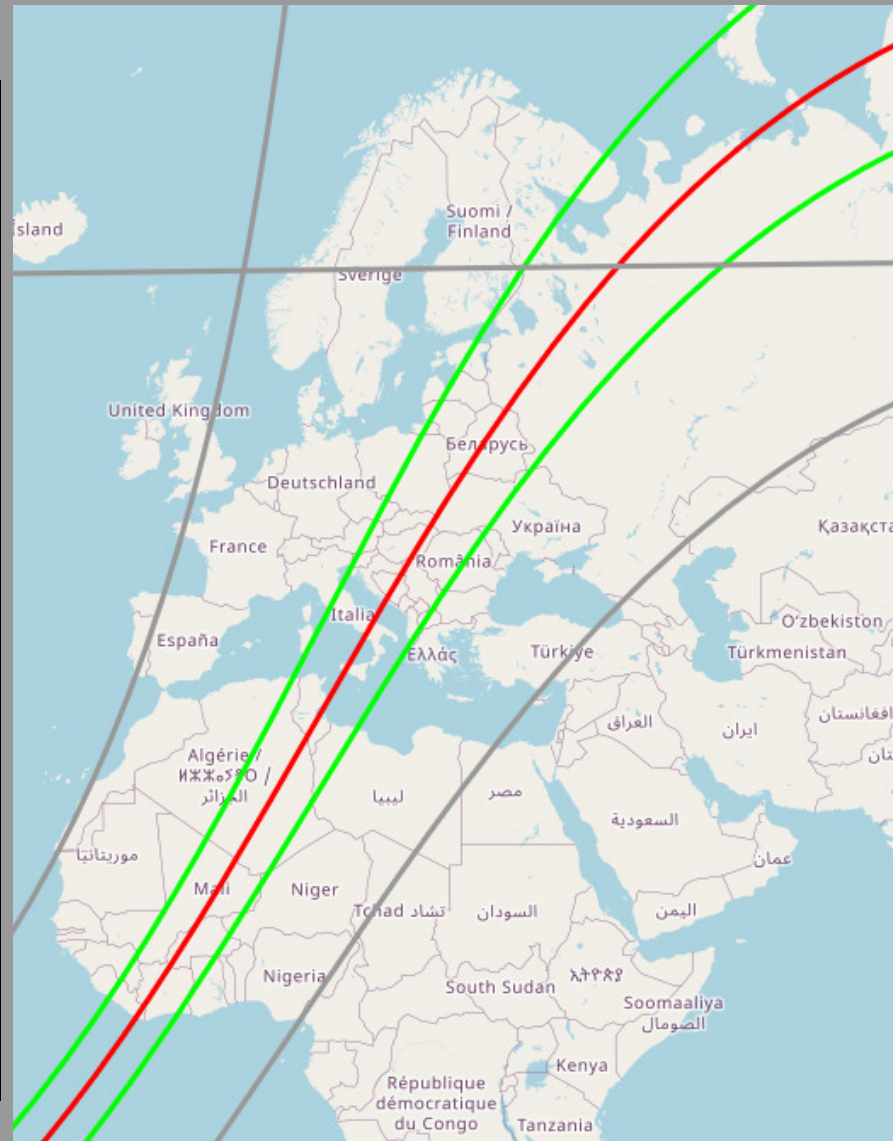
11 Nov 2021: (84522) 2002 TC302 (TNO)

Andeer (bewölkt)



28 Nov 2021: (202421) 2005UQ513 (TNO)

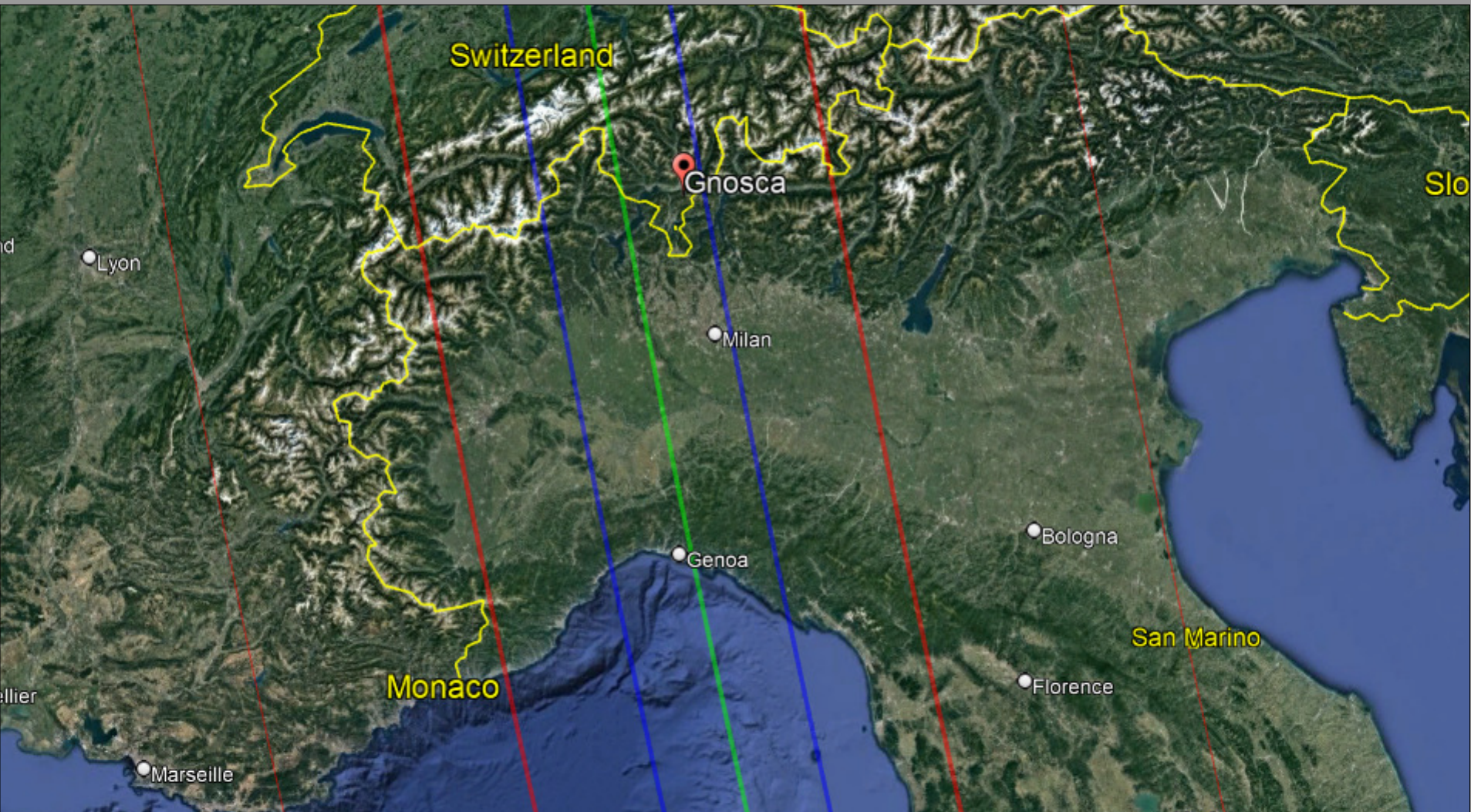
GIO-, GNO-



GIO: ~18 %

30 Dec 2021: (7641) Cteatus (JupTro)

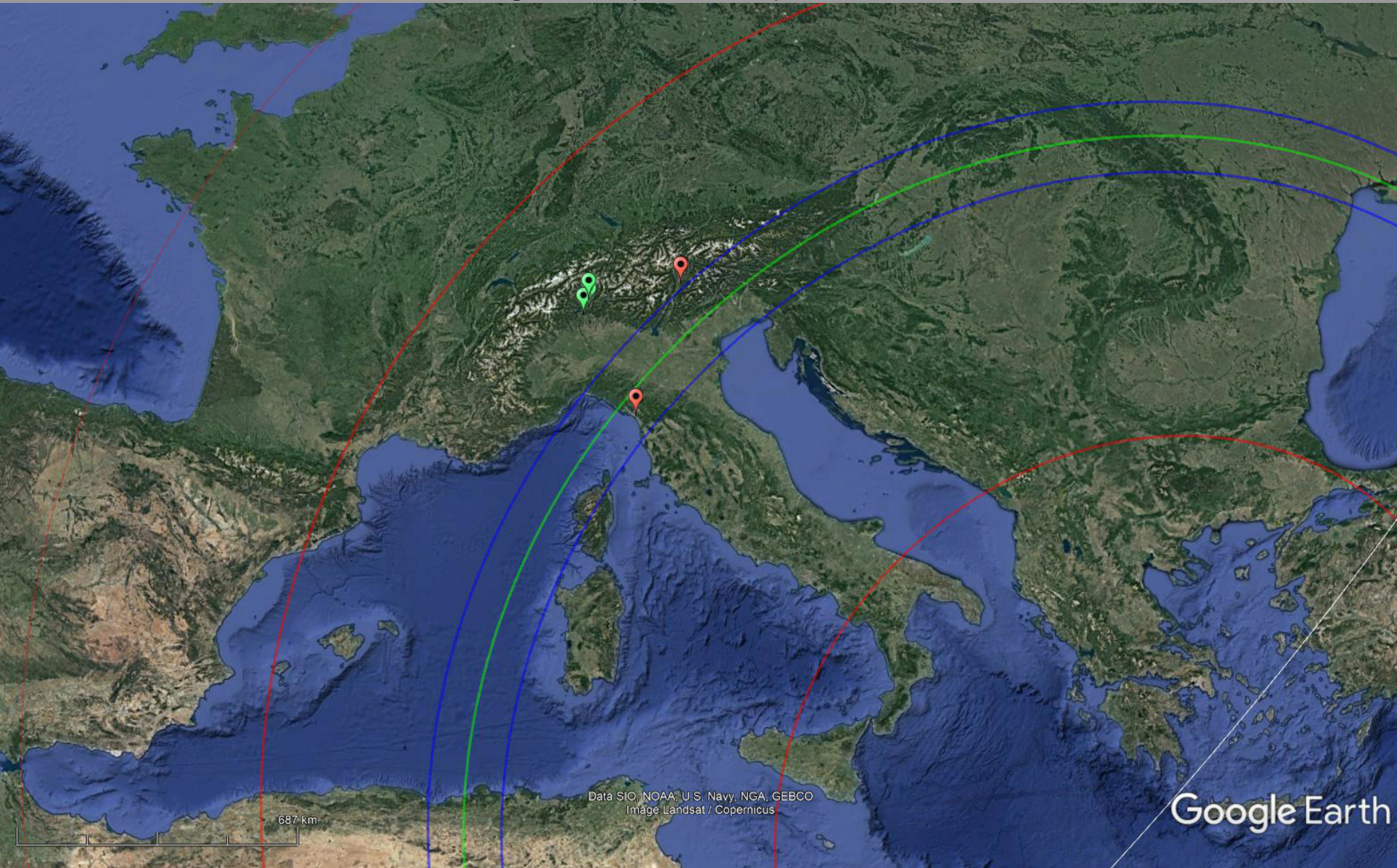
LOC-, GNO+



LOC: 46 %; GNO: 42.8 %

08 Feb 2022: **28P/Neujmin** (Komet)

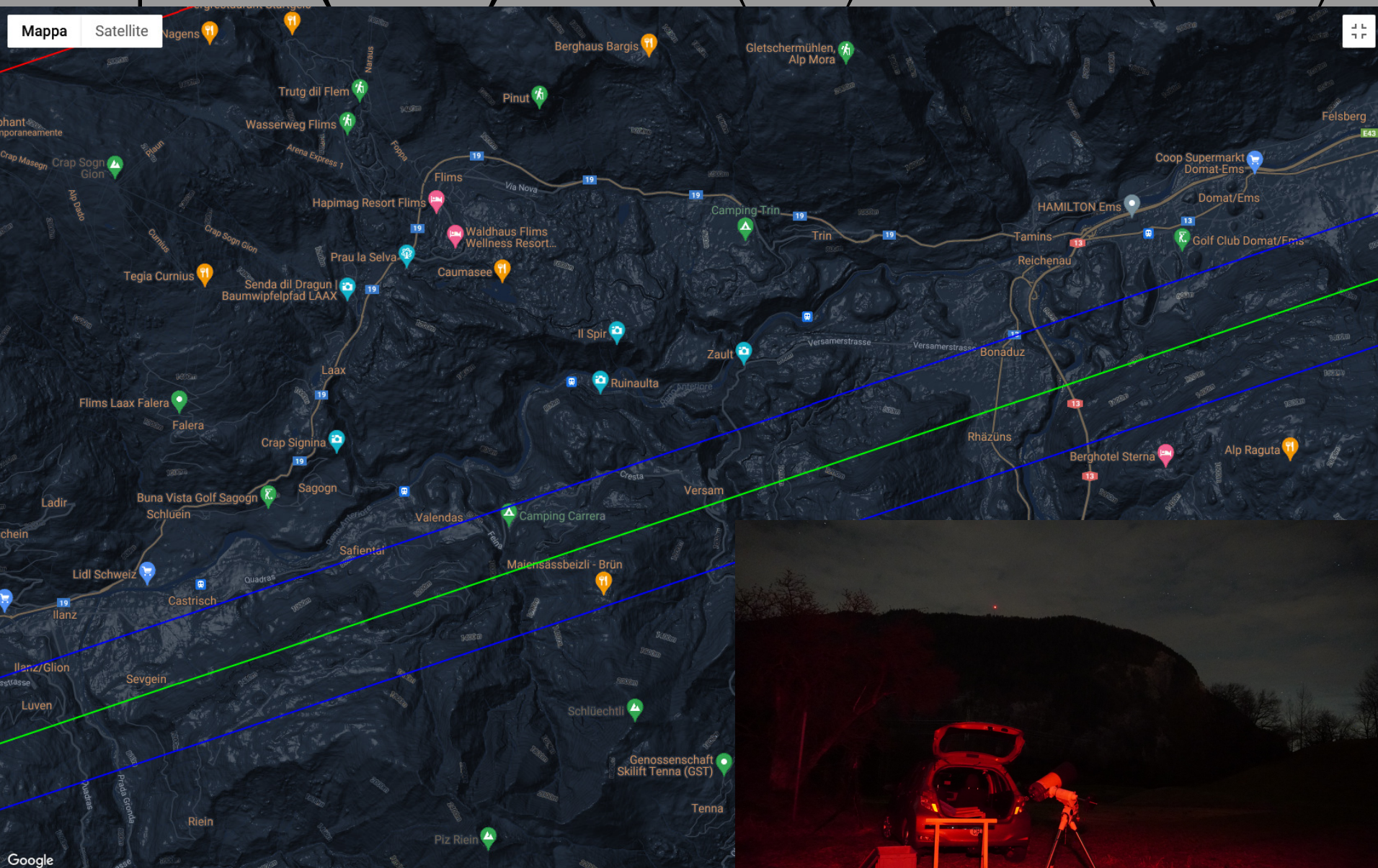
MCE+



MCE: 12.8 %

06 Apr 2022: (175706) 1996 FG3 (PHA)

Bonaduz (bewölkt)



Cteatus
28P