UCAC2 42913552, a Double Star Discovered During an Asteroidal Occultation

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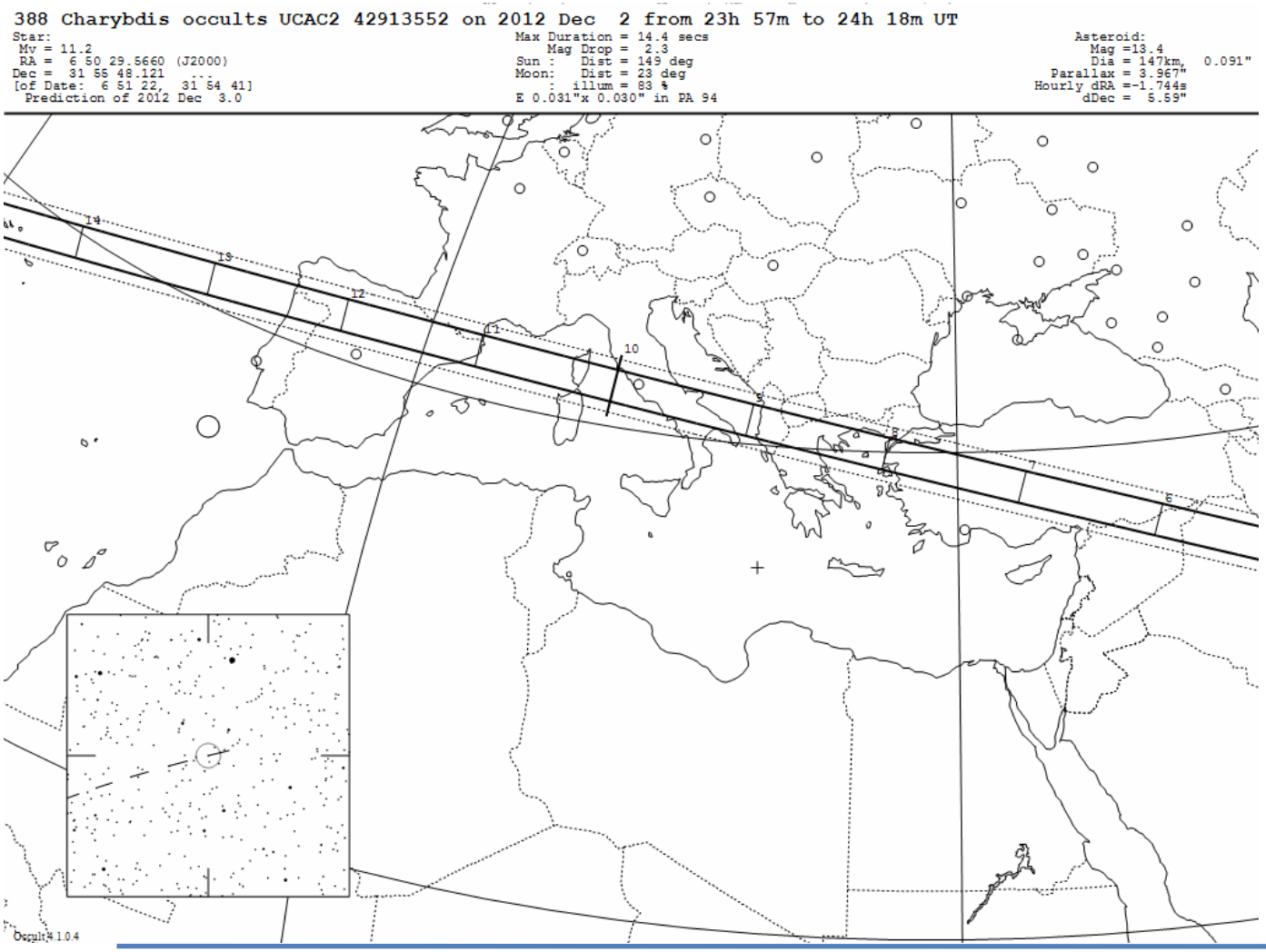
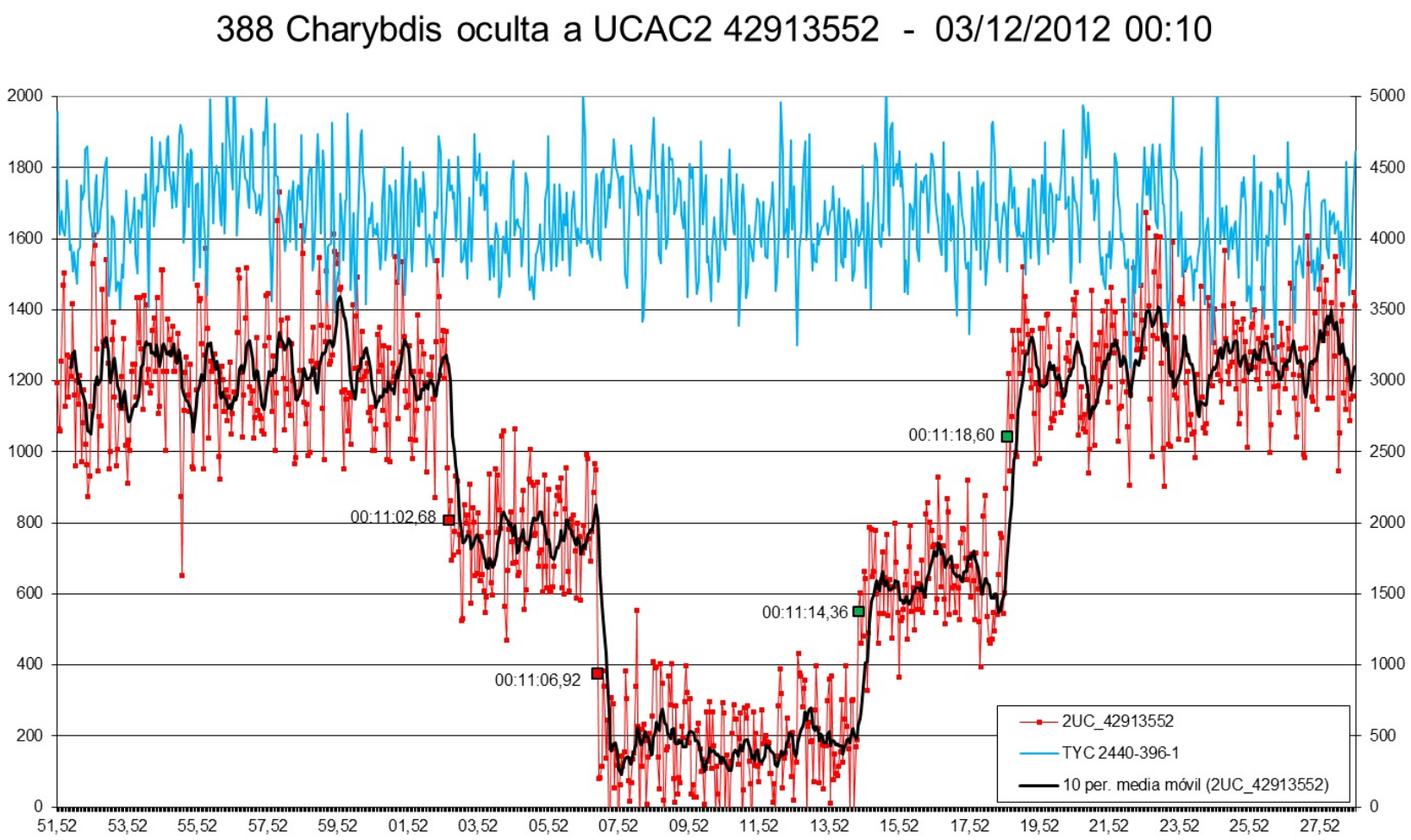
Ramon Naves
Carles Perelló
Joan Rovira
Carles Schnabel
Antoni Selva


388 Charybdis occults UCAC2 42913552 on 2012 Dec 2 from 23h 57m to 24h 18m UT
Star:
Mv = 11.2
RA = 6 50 29.5660 (J2000)
Dec = 31 55 48.121 ...
[of Date: 6 51 22, 31 54 41]
Prediction of 2012 Dec 3.0
Max Duration = 14.4 secs
Mag Drop = 2.3
Sun : Dist = 149 deg
Moon: Dist = 23 deg
: illum = 83 %
E 0.031"x 0.030" in PA 94
Asteroid:
Mag =13.4
Dia = 147km, 0.091"
Parallax = 3.967"
Hourly dRA =-1.744s
dDec = 5.59"
14
13
12
11
10
9
8
7
6
Occult 4.1.0.4

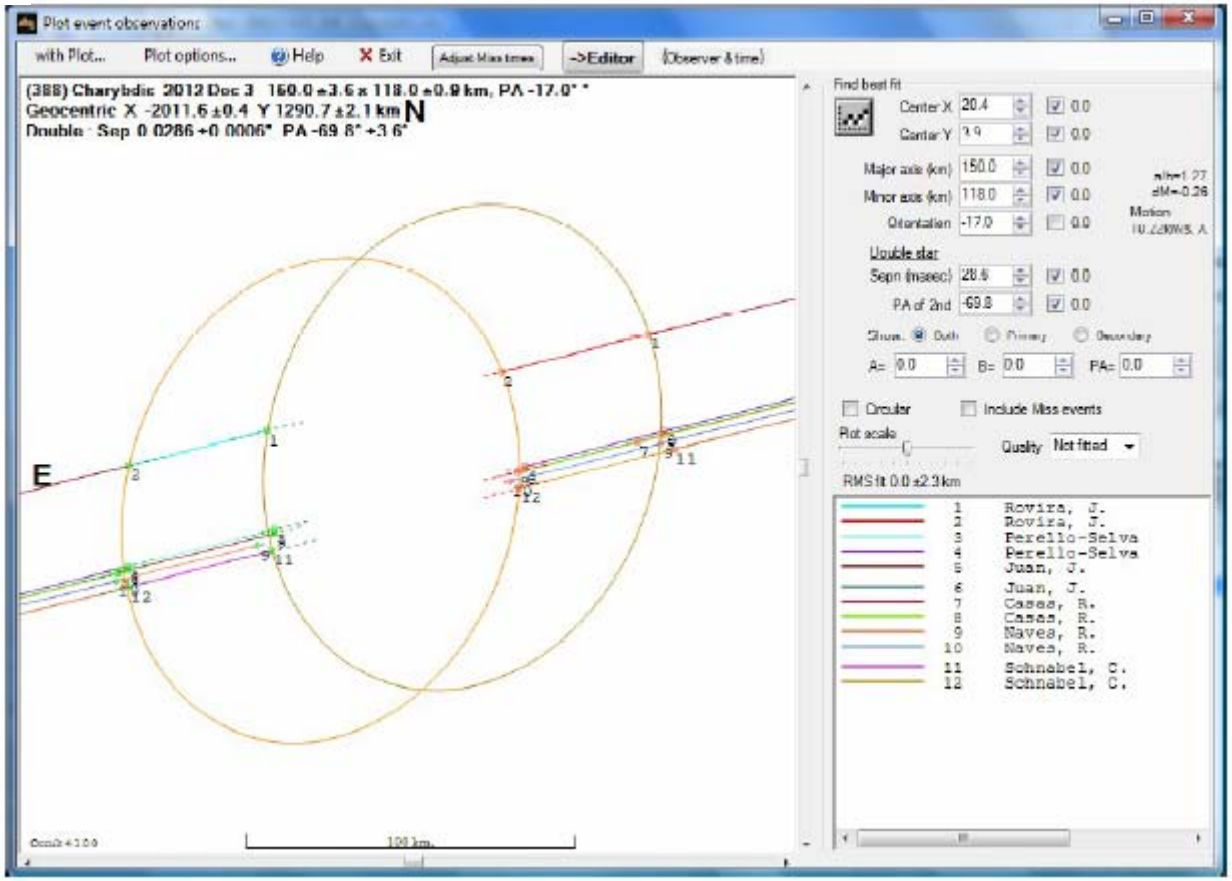
#	Station Team	Longitude, Latitude & Altitude	Telescope	Equipment	Integration used
1	R. Casas	2º 07' 14.7'' E 41º 32' 22.1'' N 165 m	Schmidt-Cassegrain 20 cm f/10	TV Camera Mintron 12V6H-EX + Kiwi inserter time	0.24 s
2	J. Juan	1º 45' 55'' E 41º 32' 21'' N 423 m	Newton 40.6 cm	TV Camera Watec 120N+ + Kiwi inserter time	0.04 s
3	R. Naves	2º 23' 07.6'' E 41º 31' 11.3'' N 114 m	Schmidt-Cassegrain 30 cm f/10	CCD Camera ST8-MXE + NTP + Driftscan method	N/A
4	C. Perelló A. Selva	2º 05' 24.8'' E 41º 33' 00.2'' N 224 m	Newton 50 cm f/4	TV Camera Mintron 12V6H-EX + Kiwi inserter time	0.04 s
5	J. Rovira	2º 05' 45.1'' E 41º 49' 05.4'' N 827 m	Newton 20 cm f/5	TV Camera Mintron 12V6H-EX + Kiwi inserter time	0.16 s
6	C. Schnabel	1º 52' 25.7'' E 41º 29' 41.5'' N 180	Newton 40 cm f/4	TV Camera Mintron 12V6H-EX + Kiwi inserter time	0.18 s

Geographical coordinates and equipment


388 Charybdis oculta a UCAC2 42913552 - 03/12/2012 00:10
00:11:02,68
00:11:06,92
00:11:14,36
00:11:18,60
2UC_42913552
TYC 2440-396-1
10 per. media móvil (2UC_42913552)

#	D2	D1	R2	R1
1	00:11:02.34 +/- 0.82	00:11:05.91 +/- 0.51	00:11:13.10 +/- 0.83	00:11:17.79 +/- 0.55
2	00:11:04.20 +/- 0.53	00:11:08.35 +/- 0.28	00:11:15.77 +/- 0.40	00:11:20.12 +/- 0.38
3	00:10:59.75 +/- 0.10	00:11:04.25 +/- 0.10	00:11:11.75 +/- 0.10	00:11:15.95 +/- 0.10
4	00:11:01.74 +/- 0.45	00:11:05.87 +/- 0.28	00:11:13.34 +/- 0.49	00:11:17.70 +/- 0.39
5	00:11:01.35 +/- 0.43	00:11:05.71 +/- 0.26	00:11:12.69 +/- 0.54	00:11:16.81 +/- 0.55
6	00:11:03.21 +/- 0.59	00:11:07.82 +/- 0.55	00:11:15.19 +/- 0.66	00:11:19.42 +/- 0.52

Timings of the occultation for each station



Distance (mas): 28.6 +/- 0.6
PA (degrees): 110.2 +/- 3.6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