

2010 thru 2012 SJEE (Stellar Jovian Extinction Events)

Predictions of stellar JEE by John Talbot (john.talbot@xtra.co.nz) using [Occult 4](#) (D. Herald, 2010)

The following predictions are for stars being occulted or in conjunction with Jovian moons. Based on modeling of anomalous lightcurve trends found in the [IAEP study](#) it is expected that no dimming will be detected in the wing data outside the Ganymede occultations or conjunctions while Io and Europa SJEEs should have dimming trends out to at least 6 Io radii and 25 Europa radii respectively.

[Click here](#) to download a PDF of predictions for printing

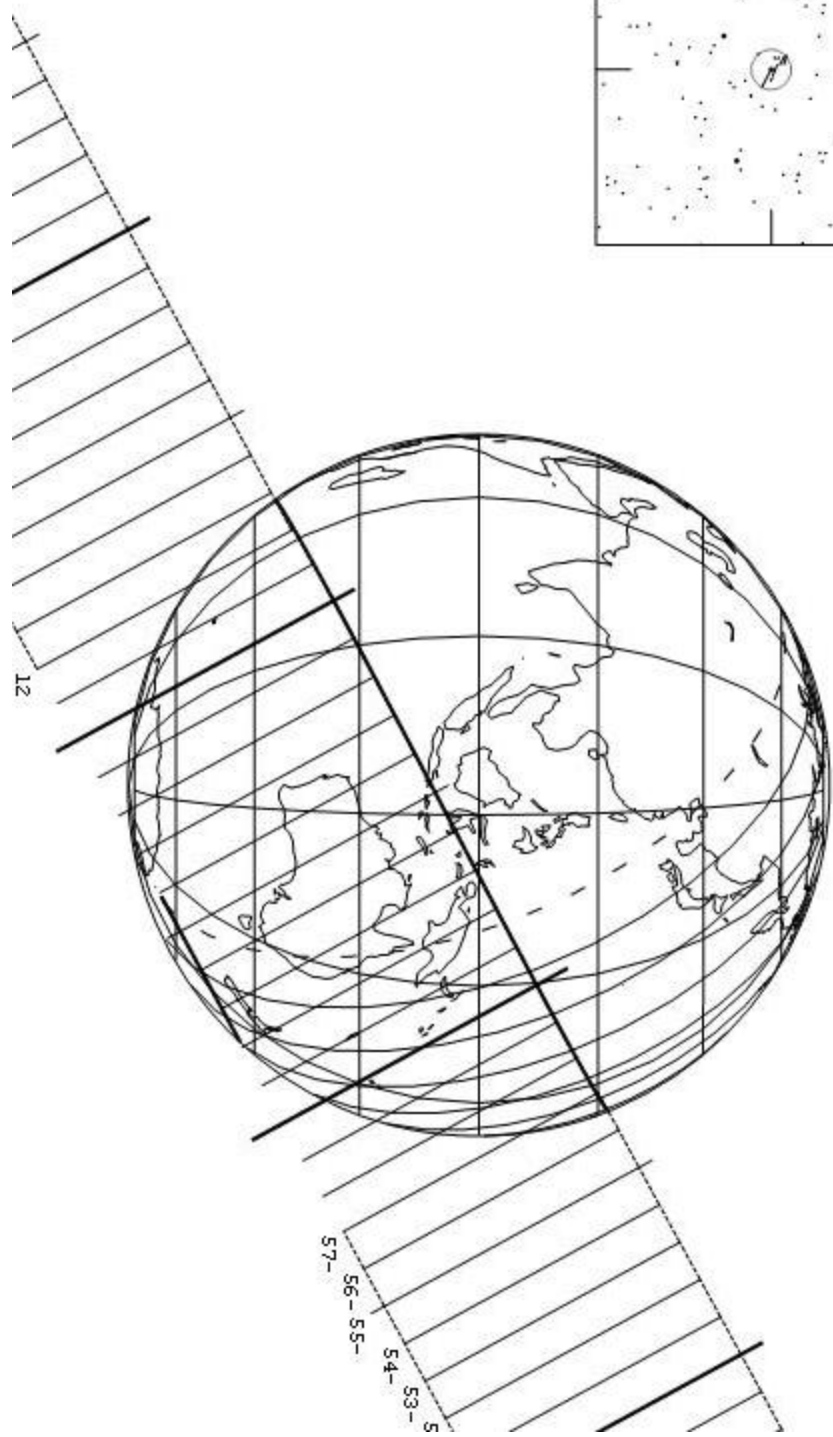
Ganymede (III) occults HIP

1127 on 2010 Jul 29 from 19h 54m to 20h 15m UT

Star: $M_V = 8.6$ $M_p = 9.0$ $M_r = 8.4$
 $RA = 0\ 14\ 4.084$ (J2000)
 $Dec = -0\ 2\ 0.21$
 Epoch: 0 14 38.0 1 431
 Prediction of 2010 Apr 1.0

Max Duration = 407.4 secs
 Mag Drop = 0.03 (0.02x)
 Sun : Dist = 123 deg
 Moon : Dist = 17 deg
 : Illum = 88 %
 $R\ 0.000'' \times 0.000''$ in PA 90

Asteroid: $M_V = 4.6$
 Dia = 5268m
 Paralax = 2.029"
 Hourly dPA = -0.873s
 dDec = -7.12"



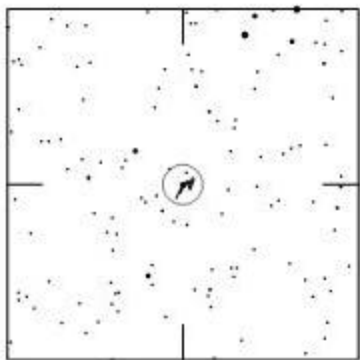
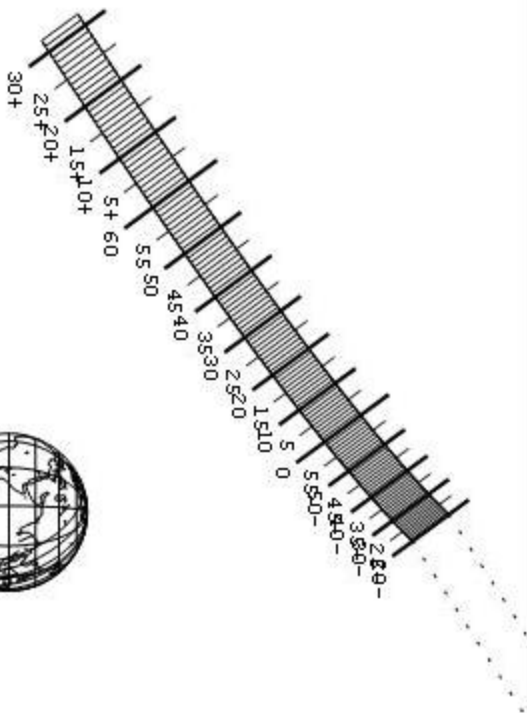
Occult 4.08.17

IO (I) occults HIP 1127 on 2010 Jul 29 at 23h 27m UT

Star: $M_V = 8.6$ $M_p = 9.0$ $M_r = 8.4$
 $RA = 0\ 14\ 4.084$ (J2000)
 $Dec = -0\ 2\ 0.21$
 Epoch: 0 14 38' 0 1.431
 Prediction of 2010 Apr 1.0

Max Duration = 567.6 secs
 Mag Drop = 0.04 (0.03 \times)
 Sun : Dist = 124 deg
 Moon: Dist = 15 deg
 Illum = 87 %
 E 0.000" x 0.000" in PA 90

Asteroid:
 Mag = 5.0
 Dia = 3643m,
 Paralax = 2.030"
 Hourly dPA = -0.482s
 dDec = -4.98"



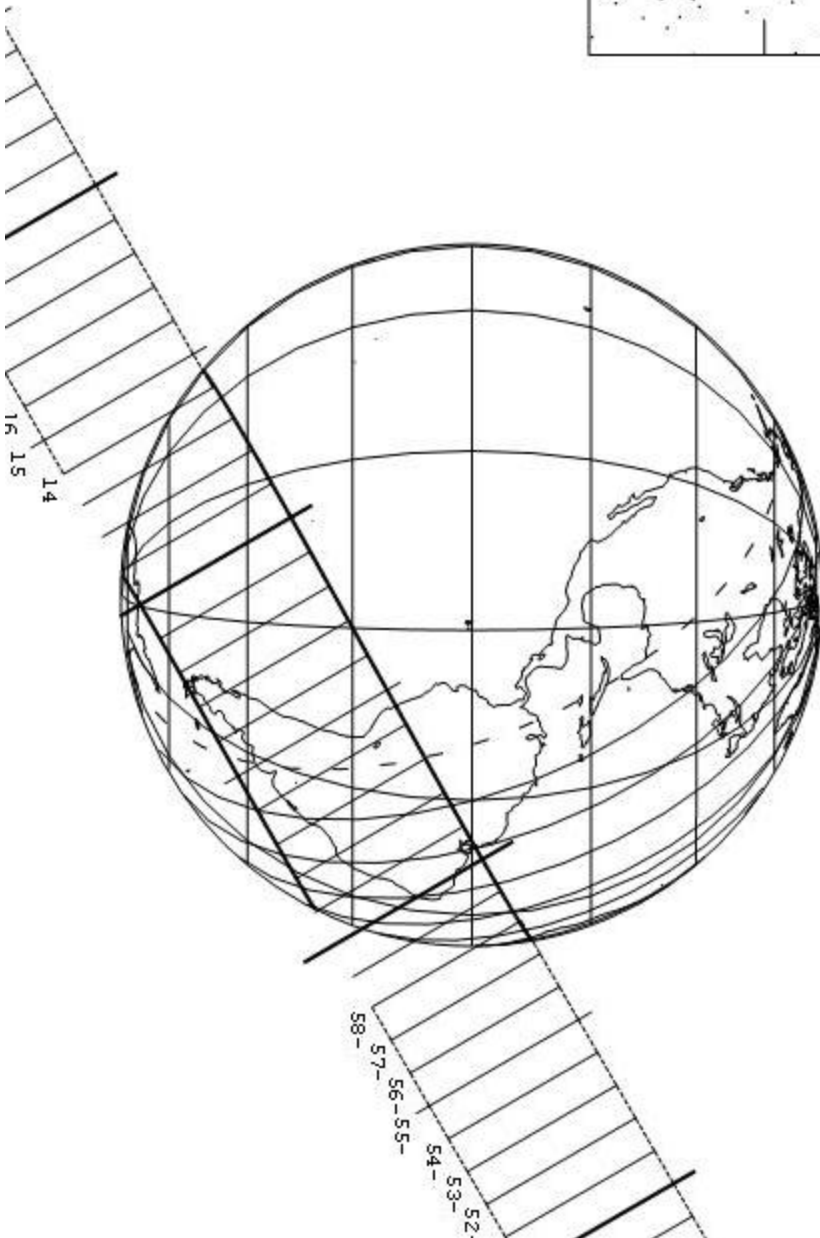
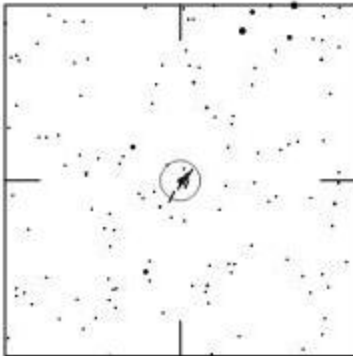
Europa (II) occults HIP

1127 on 2010 Jul 30 from 9h 56m to 10h 16m UT

Star: $M_V = 8.6$ $M_p = 9.0$ $M_r = 8.4$
 $RA = 0\ 14\ 4.084$ (J2000)
 $Dec = -0\ 2\ 0.21$
 Epoch: 0 14 38, 0 1 43
 Prediction of 2010 Apr 1.0

Max Duration = 268.5 secs
 Mag Drop = 0.05 (0.04 \times)
 Sun : Dist = 124 deg
 Moon: Dist = 11 deg
 Illum = 84 %
 E 0.000" x 0.000" in PA 90

Asteroid: $M_V = 5.3$
 Dia = 3130m
 Parallax = 2.032"
 Hourly dPA = -0.800s
 dDec = -6.88"



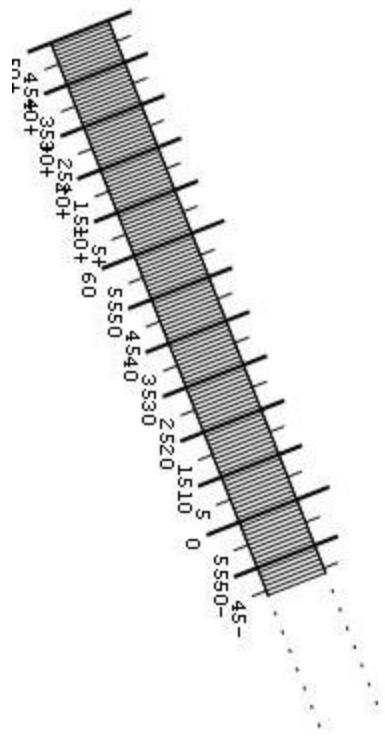
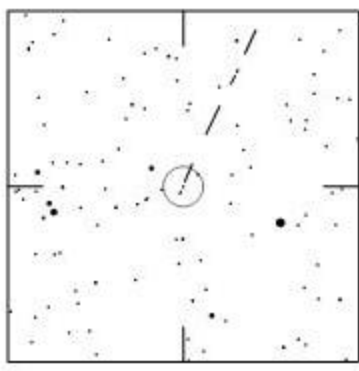
Occult 4.08.17

Ganymede (III) occults 2UCAC 31260552 on 2010 Aug 30 at 8h 48m UT

Star:
 Mr = 11.6
 RA = 0 5 53.353 (12000)
 Dec = -1 3 27.28
 I of Date: 0 6 28 - 0 59 391
 Prediction of 2010 Apr 1.0

Max Duration = 786.2 secs
 Mag Drop = 0.00
 Sun : Dist = 156 deg
 Moon: Dist = 39 deg
 : Illum = 73 %
 E 0.000" x 0.000" in PA 90

Asteroid:
 Mag = 4.4
 Dia = 5268m
 Parallelax = 2.186"
 Hourly dPA = -0.502s
 dDec = -2.95"

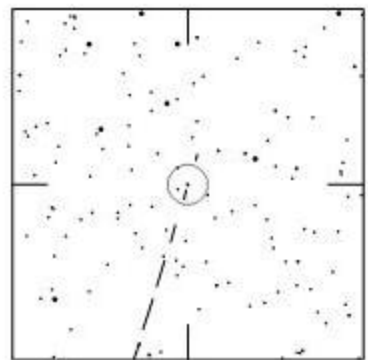
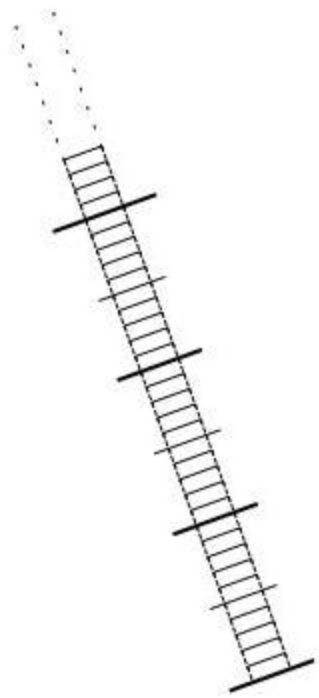


IO (I) occults TYC 0638-00126-1u on 2011 Jul 25 at 6h 13m UT

Star:
 My = 9.1 Mp = 9.5 Mr = 8.9
 RA = 2 24 33.051 (J2000)
 Dec = 13 1 1.76
 Jof Date: 2 25 12, 13 4 131
 Prediction of 2010 Apr 1.0

Max Duration = 146.6 secs
 Mag Drop = 0.03 (0.03x)
 Sun : Dist = 84 deg
 Moon : Dist = 17 deg
 : Illum = 31 %
 E 0.000" x 0.000" in PA 90

Asteroid:
 Mag = 5.3
 Dia = 3643km
 Parallax = 1.772"
 Hourly dPA = 1.671s
 dDec = 8.80"

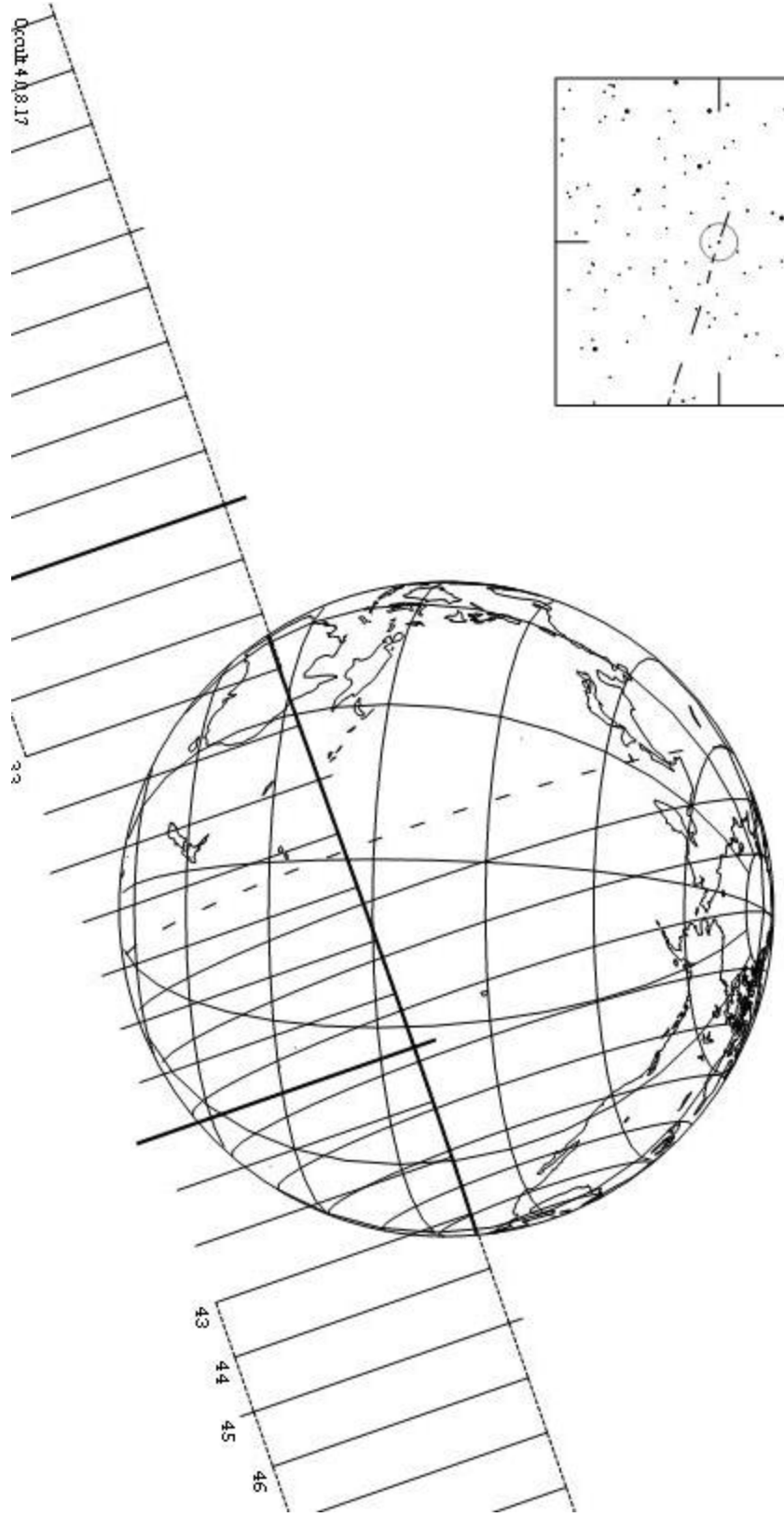
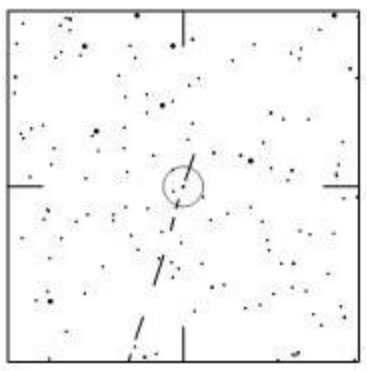


Ganymede (III) occults TYC 0638-00126-Iu on 2011 Jul 25 from 17h 31m to 17h 45m U

Star:
 My = 9.1 Mp = 9.5 Mr = 8.9
 RA = 2 24 33.051 (J2000)
 Dec = 13 1 1.76
 Epoch: 2 25 12, 13 4 131
 Prediction of 2010 Apr 1.0

Max Duration = 280.7 secs
 Mag Drop = 0.02 (0.02x)
 Sun : Dist = 84 deg
 Moon : Dist = 23 deg
 : illum = 26 %
 E 0.000" x 0.000" in PA 90

Asteroid:
 Mag = 4.9
 Dia = 5268m, 1.466"
 Parallelax = 1.775"
 Hourly dPA = 1.227s
 dDec = 6.24"

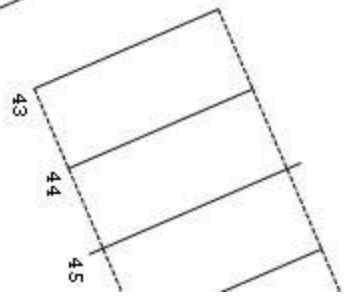
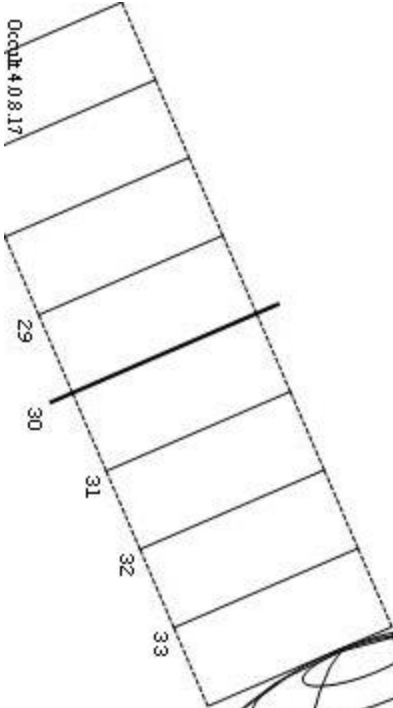
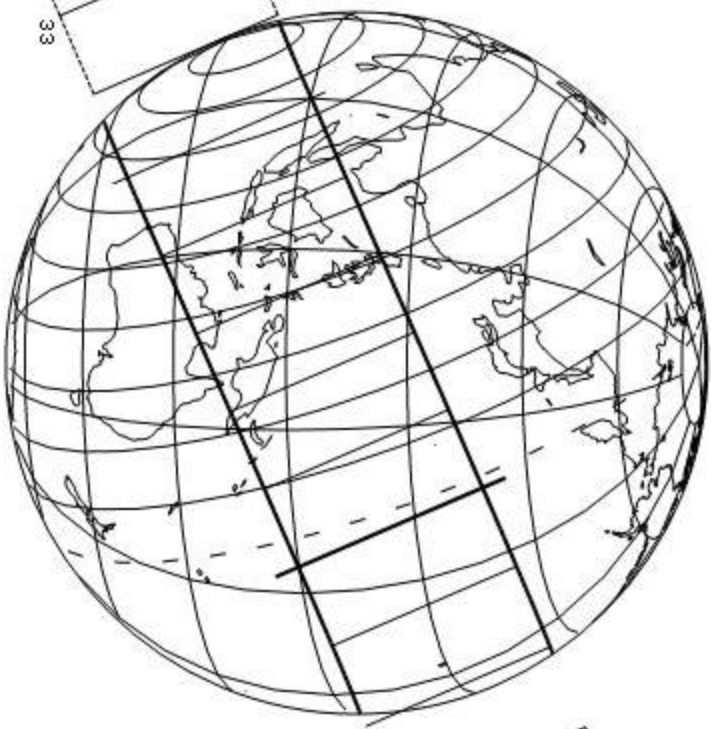
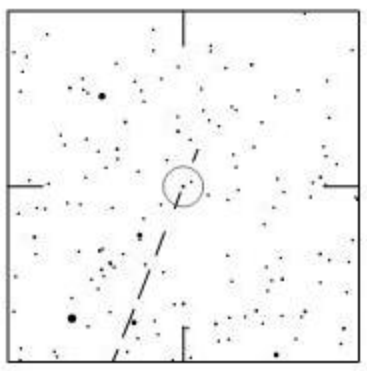


IO (I) occults TYC 0633-00535-1u on 2012 Feb 8 from 7h 34m to 7h 44m UT

Star:
 Mr = 9.7 Mp = 11.0 Mr = 9.0
 RA = 2 6 1.143 (J2000)
 Dec = 11 39 10.56
 I of Date: 2 6 41, 11 42 40
 Prediction of 2010 Apr 1.0

Max Duration = 139.3 secs
 Mag Drop = 0.02 (0.03 \times)
 Sun : Dist = 74 deg
 Moon : Dist = 111 deg
 : Illum = 100 %
 E 0.000" x 0.000" in PA 90

Asteroid:
 Mag = 5.4
 Dia = 3643m
 Parallel = 1.708"
 Hourly dPA = 1.652s
 dDec = 10.40"

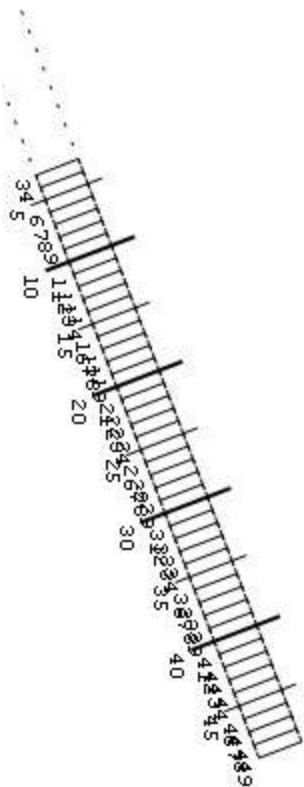
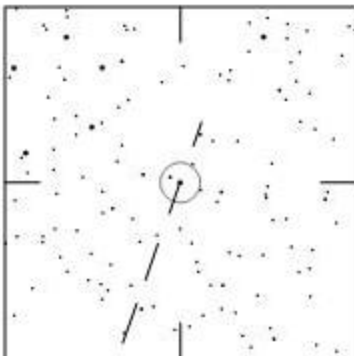


IO (I) occults HIP 11271 on 2012 Mar 9 at 1h 27m UT

Star: $M_V = 8.7$ $M_p = 8.9$ $M_r = 8.6$
 RA = 2 25 9.222 (J2000)
 Dec = 13 24 9.05
 I of Date: 2 25 49, 13 27 251
 Prediction of 2010 Apr 1.0

Max Duration = 200.8 secs
 Mag Drop = 0.06 (0.04 μ)
 Sun : Dist = 49 deg
 Moon : Dist = 139 deg
 : Illum = 99 %
 E 0.000" x 0.000" in PA 90

Asteroid:
 Mag = 5.5
 Dia = 3643m
 Parallelax = 1.579"
 Hourly dPA = 1.074"
 dDec = 6.04"

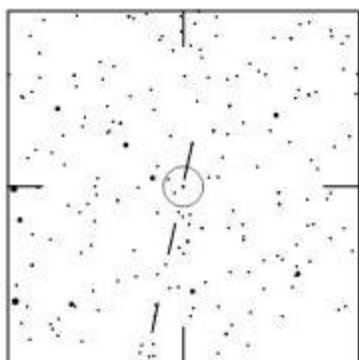


IO (I) occults TYC 1257-00197-1u on 2012 Jun 15 at 18h 0m UT

Star:
 My = 9.9 Mp = 10.7 Mr = 9.5
 RA = 3 55 8.662 (J2000)
 Dec = 19 33 17.76 i: 19 35 221
 I of Date: 3 55 52, 19 35 221
 Prediction of 2010 Apr 1.0

Max Duration = 108.0 secs
 Mag Drop = 0.02 (0.02r)
 Sun : Dist = 24 deg
 Moon: Dist = 18 deg
 : illum = 13 %
 E 0.000" x 0.000" in PA 90

Asteroid:
 Mag = 5.7
 Dia = 3643m
 Parallelax = 1.486"
 Hourly dPA = 1.899s
 dDec = 4.99"



Occult 4.08.17