

**WYKAZ ZJAWISK ZAKRYĆ ASTEROIDALNYCH
NA ROK 2006 DO OBSERWACJI Z TERENU POLSKI**

**REVIEW OF ASTEROIDAL OCCULTATIONS
FOR OBSERVERS IN POLAND IN 2006**

Drodzy Obserwatorzy !!!

Oddajemy w ręce Polskich obserwatorów wybór zakryć asteroidalnych wyselekcjonowanych dla terenu Europy – potencjalnie obserwowalnych z Polski.

Poszczególne, graficzne, wyselekcjonowane dla Polski efemerydy będą dostępne (nie później niż 3 dni przed jego wystąpieniem) na witrynie internetowej www.astromax.astroww (mirror - www.astromax.prv.pl).

W efemerydach użyto katalogów gwiazd - FK6 I (Wielen 1999) i III (Wielen 2000), HIP (ESA 1997), TYC 2 (Hog 2000) - bez gwiazd Hipparcosa, USAC2 (USAC - Zacharias 2004) - tylko gwiazdy $<$ lub $=$ 12 mag. W sumie 3380063 gwiazd.

Efemerydy wyliczono dla 1455 obiektów większych niż 40 km w tym obiekty Pasa Kuipera, Centaury itp. Średnice obiektów zostały pobrane z tzw. Baza danych asteroid II (Binzel 1989) oraz bazy wyliczonej zakryciami (D. Dunham 1997). Gdy średnica kątowa nie była znana wyliczano ją wzorem:

$$\log D = 3.52 - 0.20M$$

, gdzie:

D to rozmiary kątowe, M to absolutne magnitudo.

Mamy nadzieję, że przyszłe zjawiska owocne i zostanie wykonanych wiele pozytywnych obserwacji.

P. Maksym (SOPiZ PTMA, PiOA w Łodzi / Polska) i E. Goffin (EAON, IAU MPC/ Belgia)

Dear Observers !!!

We want to present the review of asteroidal occultations selected for Europe area – potentially observable from Poland

Selected, graphical predictions for Poland will be accessible (not later than 3 days before event) on website www.astromax.astrowww.pl (mirror => www.astromax.prv.pl).

Star catalogs used for ephemeris - FK6 I (Wielen 1999) & III (Wielen 2000), HIP (ESA 1997), TYC 2 (Hog 2000) - without Hipparcosa, UCAC2 (UCAC - Zacharias 2004) – only stars brighter than or equal 12 mag.

Predictions obtained for 1455 objects bigger than 40 km, some Kuiper Belt, Centaurs ect. are also included. Source for objects diameter were Data base asteroid II (Binzel 1989) and base counted with the use of the occultations (D. Dunham 1997). For unknown arc diameter presented equation was used:

$$\log D = 3.52 - 0.20M$$

D – arc size, M – absolute mag

We hope that, that the future event will be fruitful and many positive observation will be done.

P. Maksym (SOPiZ PTMA, PiOA in Lodz/ Poland) and E. Goffin (EAON, IAU MPC/ Belgium)

Zjawiska z gwiazdami jaśniejszymi niż 11 mag.

Events with the stars brighter than 11 mag.

year	month	day	hours	minutes	minor planet number	planet name of provisional designation	maximum duration in seconds	star designation	visual magnitude of the star
2006	1	30	16	51.9	3	Juno	30.3	TYC 0093-00670-1	10.07
2006	2	18	20	48.7	3	Juno	18.9	TYC 0111-01787-1	9.91
2006	2	16	4	1.4	71	Niobe	6	TYC 0240-00025-1	10.50
2006	3	15	4	25.1	105	Artemis	11.3	TYC 5528-00069-1	9.96
2006	3	29	22	4	125	Liberatrix	3.7	TYC 1352-00734-1	10.28
2006	4	1	19	22.2	552	Sigelinde	3.6	TYC 1310-01687-1	10.19
2006	4	10	21	34.3	712	Boliviana	4.2	TYC 0726-00746-1	10.40
2006	5	7	19	32.8	497	Iva	3.9	TYC 4955-00808-1	10.26
2006	8	13	21	35.8	1258	Sicilia	4.9	TYC 0576-00710-1	10.01
2006	9	19	1	35	144	Vibilia	7.9	TYC 1879-02151-1	9.89
2006	9	21	20	12.1	77	Frigga	11.8	TYC 0625-00150-1	10.18
2006	9	18	5	10.2	705	Erminia	4	TYC 2985-01477-1	10.40
2006	10	28	4	34.5	488	Kreusa	57.5	UCAC2 38754612	10.24
2006	10	12	6	16.8	680	Genoveva	10.4	UCAC2 42715620	10.29
2006	10	22	0	40.3	389	Industria	14.6	TYC 2372-01066-1	10.37
2006	12	18	19	1.5	87	Sylvia	24.3	TYC 1947-00293-1	10.01
2006	12	26	15	57.8	98	Ianthe	3.5	TYC 5809-01003-1	10.03
2006	12	19	5	52.4	116	Sirona	14.3	TYC 1419-00555-1	10.45
2006	12	14	2	10.1	498	Tokio	7	TYC 1896-00440-1	10.46

Wszystkie przewidywane zjawiska

All predicted events

year	mont h	day	hours	minutes	minor planet number	planet name of provisional designation	maximum duration in seconds	star designation	visual magnitude of the star
2006	1	1	15	33.2	569	Misa	5.7	TYC 0613-01092-1	11.11
2006	1	3	20	15.7	113	Amalthea	4.2	UCAC2 38769908	11.51
2006	1	3	21	28	466	Tisiphone	8.3	UCAC2 38787544	11.3
2006	1	4	21	5.3	33	Polyhymnia	4.6	TYC 1897-00304-1	10.75
2006	1	6	4	10.5	348	May	7.1	TYC 1902-00306-1	11.84
2006	1	8	2	16.2	190	Ismene	7.9	TYC 0776-00984-1	12.37
2006	1	8	4	33.4	485	Genua	8.3	TYC 4835-02172-1	11.6
2006	1	8	18	28.6	405	Thia	10.4	TYC 0770-00941-1	12.18
2006	1	10	0	35.3	173	Ino	13.2	UCAC2 34070481	10.81
2006	1	10	1	7.2	279	Thule	8.6	UCAC2 40175433	11.71
2006	1	11	2	41.3	65	Cybele	15.4	TYC 1381-00187-1	10.52
2006	1	11	20	40.1	160	Una	16.6	TYC 1838-01164-1	10.82
2006	1	13	20	9.2		2000CO105	10.7	UCAC2 38611452	13.9
2006	1	13	23	10.9	626	Notburga	9.5	TYC 2510-00147-1	12.07
2006	1	14	22	22	134	Sophrosyne	11.7	TYC 2931-01433-1	12.19
2006	1	16	22	33.4	113	Amalthea	4.9	TYC 1323-00101-1	12.92
2006	1	17	1	44.7	3	Juno	43.1	TYC 0085-00308-1	11.37
2006	1	19	1	41.7	4	Vesta	43.4	TYC 1894-00583-1	10.96
2006	1	19	4	29	111	Ate	13.9	UCAC2 39840666	11.99
2006	1	21	23	52.6	79	Eurynome	6.9	UCAC2 34839363	11.81
2006	1	23	3	52.5	914	Palisana	5.1	TYC 4819-03814-1	11.85
2006	1	23	18	44.8		2001XR254	10.3	TYC 1357-00971-1	9.62
2006	1	25	20	25.7		Saturn	5956.6	HIP 42705	7.96
2006	1	29	17	16	419	Aurelia	6.6	UCAC2 35867159	11.9
2006	1	29	21	30.5		2001XS254	4	UCAC2 39839638	13.01
2006	1	30	16	51.9	3	Juno	30.3	TYC 0093-00670-1	10.07
2006	1	31	20	21.6	61	Danaë	5.5	TYC 2845-01900-1	11.58
2006	2	10	22	39.9	190	Ismene	13	UCAC2 37163284	11.53

2006	2	12	20	29	174	Phaedra	5.5	TYC 0838-01155-1	12.3
2006	2	13	2	42.3	280	Philia	4.5	UCAC2 41366450	11.8
2006	2	15	19	16.7	914	Palisana	8.7	UCAC2 31295723	11.69
2006	2	16	4	1.4	71	Niobe	6	TYC 0240-00025-1	10.5
2006	2	18	20	48.7	3	Juno	18.9	TYC 0111-01787-1	9.91
2006	2	19	18	30	93	Minerva	13	UCAC2 42188860	12
2006	2	20	23	44.1	751	Fad'na	9	TYC 2514-00517-1	12.14
2006	2	22	20	37.1	306	Unitas	3.8	TYC 1267-00187-1	10.69
2006	2	22	20	43.4	609	Fulvia	10.9	UCAC2 38421240	11.63
2006	2	25	17	27.9	313	Chaldaea	3.6	TYC 0061-00027-1	11.74
2006	2	28	17	59.3	328	Gudrun	7.8	TYC 2899-01844-1	10.61
2006	3	2	20	32.7	324	Bamberg	20.6	UCAC2 38612940	11.6
2006	3	15	4	25.1	105	Artemis	11.3	TYC 5528-00069-1	9.96
2006	3	17	17	9.2		Mars	272	TYC 1831-00055-1	11.48
2006	3	18	3	43.1	15	Eunomia	8.6	TYC 6891-01997-1	10.9
2006	3	20	9	16.5	598	Octavia	7	TYC 2437-00912-1	10.95
2006	3	20	20	42	4	Vesta	46.7	UCAC2 40836920	11.64
2006	3	22	1	35.6	325	Heidelberg	11	TYC 1403-01053-1	10.79
2006	3	23	20	57.2	245	Vera	5.8	UCAC2 30705932	11.91
2006	3	26	2	13.2	760	Massinga	13.7	UCAC2 38970912	11.36
2006	3	26	4	46.8	2920	Automedon	6.2	UCAC2 28782303	11.44
2006	3	29	4	34.6	245	Vera	5.5	TYC 4961-00006-1	10.99
2006	3	29	22	4	125	Liberatrix	3.7	TYC 1352-00734-1	10.28
2006	4	1	18	49.3	541	Deborah	10.7	TYC 0793-01595-1	11.54
2006	4	1	19	22.2	552	Sigeline	3.6	TYC 1310-01687-1	10.19
2006	4	1	20	54.7	73	Klytia	7.1	TYC 6177-01082-1	12.16
2006	4	2	23	2.2	373	Melusina	8.6	TYC 1428-01254-1	11.5
2006	4	5	3	24.7	532	Herculina	22.9	UCAC2 28230066	10.93
2006	4	9	1	2.6	517	Edith	9.3	TYC 0262-01130-1	12.05
2006	4	9	17	1.8	33	Polyhymnia	3.2	TYC 1884-01417-1	11.58
2006	4	10	21	34.3	712	Boliviana	4.2	TYC 0726-00746-1	10.4
2006	4	12	19	40.5		Mars	222.5	TYC 1867-00168-1	11.02
2006	4	13	18	4.7	134	Sophrosyne	4.5	UCAC2 42223992	11.63

2006	4	15	0	59.2	185	Eunike	15.6	TYC 0976-00823-1	9.59
2006	4	16	21	6.9	952	Caia	17.1	TYC 1418-00474-1	11.82
2006	4	17	4	28.6	35	Leukothea	13.1	TYC 7397-02488-1	11.31
2006	4	19	22	42.4	779	Nina	9.8	TYC 5490-00807-1	8.67
2006	4	21	2	57.4	505	Cava	5.9	TYC 0877-00634-1	11.53
2006	4	22	21	53.7		Saturn	14093.3	TYC 1387-00322-1	11.06
2006	4	23	20	19.6	47	Aglaja	7.5	TYC 1929-00185-1	11.83
2006	4	24	4	50.2	232	Russia	21.6	TYC 5671-01221-1	9.83
2006	4	24	20	14.6	814	Tauris	4.1	TYC 2440-00622-1	10.56
2006	4	25	19	0.8	195	Eurykleia	7.7	TYC 5547-01157-1	12.55
2006	4	27	21	43.6	4	Vesta	19.9	UCAC2 40678052	11.4
2006	4	28	18	9.5	111	Ate	6.2	TYC 1380-00248-1	11.28
2006	4	29	3	33.4	45802	2000PV29	10.7	UCAC2 26127493	12.4
2006	4	29	18	52.5	134	Sophrosyne	3.7	TYC 1918-00922-1	9.87
2006	5	7	19	32.8	497	Iva	3.9	TYC 4955-00808-1	10.26
2006	5	8	2	45.4	560	Delila	3.2	TYC 5013-01139-1	11.12
2006	5	12	0	30.1	377	Campania	11.1	TYC 4963-01117-1	11.27
2006	5	14	3	33.3	207	Hedda	9	TYC 6909-01192-1	12.53
2006	5	23	21	6.2	530	Turandot	3.5	TYC 1398-00050-1	9.03
2006	5	26	1	29.9		2001FU172	3.4	UCAC2 25772962	13.77
2006	5	30	0	56.5	35	Leukothea	14.3	TYC 7405-03503-1	11.68
2006	5	30	20	53.3		Saturn	4700	UCAC2 38611750	11.33
2006	6	1	23	47.8	704	Interamnia	19.8	UCAC2 31789391	11.31
2006	6	9	3	13.2	566	Stereoskopia	14.4	TYC 5818-00011-1	12.36
2006	6	18	3	44.4	444	Gyptis	16.4	UCAC2 29495949	11.91
2006	6	19	23	50.7	509	Iolanda	7.4	UCAC2 32623833	11.76
2006	6	23	20	35.8	2	Pallas	35.8	UCAC2 40217259	11.57
2006	6	25	1	15.9	1015	Christa	8.1	UCAC2 27122147	11.81
2006	6	26	19	18.5	256	Walpurga	20.3	UCAC2 31345344	11.19
2006	7	6	22	57	925	Alphonsina	4.4	TYC 6334-01720-1	8.92
2006	7	12	2	49	444	Gyptis	17.1	TYC 5109-00140-1	11.5
2006	7	18	20	20.2	570	Kythera	9.3	UCAC2 23450285	11.61
2006	7	19	1	0.9	203	Pompeja	5.6	TYC 0636-00750-1	11.51

2006	7	22	23	4.5	2	Pallas	32.9	TYC 1579-01760-1	11.04
2006	7	24	1	15.2	24	Themis	7.3	TYC 0636-01097-1	11.98
2006	7	24	23	9.8	7	Iris	11.3	TYC 1210-01269-1	12.19
2006	7	25	4	2.9	538	Friederike	5.6	TYC 0031-01018-1	11.3
2006	7	27	4	21.7	739	Mandeville	5.7	UCAC2 30299835	11.79
2006	7	27	23	56.7	334	Chicago	18.7	UCAC2 23939152	11.67
2006	7	31	3	44.6	6	Hebe	18.4	UCAC2 27210546	11.93
2006	8	13	21	22.9	713	Luscinia	9.7	TYC 5605-01092-1	11.57
2006	8	13	21	35.8	1258	Sicilia	4.9	TYC 0576-00710-1	10.01
2006	8	24	3	3	37	Fides	3.2	UCAC2 40827535	10.82
2006	8	28	23	21.4	6	Hebe	22.7	UCAC2 24489008	11.93
2006	8	29	2	41.8	1390	Abastumani	4.4	TYC 2393-01361-1	11.28
2006	9	2	21	0.6		2001QS322	11.5	TYC 5252-00533-1	11.36
2006	9	7	2	56.6	494	Virtus	4	TYC 1871-00287-1	10.81
2006	9	16	18	25.5	209	Dido	9.9	UCAC2 18982305	11.87
2006	9	18	5	10.2	705	Erminia	4	TYC 2985-01477-1	10.4
2006	9	18	20	3	83	Beatrix	25.3	UCAC2 20981742	11.8
2006	9	19	1	35	144	Vibilia	7.9	TYC 1879-02151-1	9.89
2006	9	21	4	19.1		1999RK215	4.1	TYC 4682-00120-1	11.58
2006	9	21	20	12.1	77	Frigga	11.8	TYC 0625-00150-1	10.18
2006	9	22	1	1.1	519	Sylvania	3	UCAC2 41685659	11.24
2006	9	23	0	12.7	25	Phocaea	7.1	TYC 2250-01826-1	12.5
2006	9	23	5	7.2	25	Phocaea	7	TYC 2250-01193-1	10.71
2006	9	24	4	16.8	132	Aethra	6.8	UCAC2 46227552	11.87
2006	9	25	0	59.9		2001YJ140	29.4	UCAC2 41676794	12.52
2006	9	25	2	48.1	697	Galilea	5.8	UCAC2 44280391	11.77
2006	10	2	2	11.8	547	Praxedis	3.4	UCAC2 34077154	11.32
2006	10	5	20	16.1	337	Devosa	6.1	TYC 0004-00537-1	12.07
2006	10	6	22	57.7	44	Nysa	4.7	UCAC2 38587427	11.25
2006	10	7	0	16	140	Siwa	6.2	TYC 1373-00022-1	10.9
2006	10	7	23	19.8	1390	Abastumani	9.2	TYC 2910-00619-1	11.58
2006	10	9	1	3.9	200	Dynamene	39	TYC 5230-01513-1	11.34
2006	10	12	4	45.6	356	Liguria	25.5	TYC 1791-00047-1	11.8

2006	10	12	6	16.8	680	Genoveva	10.4	UCAC2 42715620	10.29
2006	10	14	1	48.7	435	Ella	3.2	TYC 1895-01532-1	11.36
2006	10	14	20	11.1	1258	Sicilia	9.2	TYC 5226-00152-1	11.64
2006	10	19	2	36	478	Tergeste	6.2	TYC 1208-00717-1	12.18
2006	10	22	0	40.3	389	Industria	14.6	TYC 2372-01066-1	10.37
2006	10	23	21	17.7	177	Irma	11.8	TYC 0605-01171-1	12.47
2006	10	27	21	5.7	488	Kreusa	59.3	TYC 1307-01356-1	11.46
2006	10	28	4	34.5	488	Kreusa	57.5	UCAC2 38754612	10.24
2006	10	29	18	48.9	83	Beatrix	4.6	TYC 6908-00664-1	11.95
2006	10	31	4	35.1	51	Nemausa	6.5	TYC 0233-00548-1	10.68
2006	11	1	4	14.2	795	Fini	5.8	TYC 2368-00435-1	11.94
2006	11	2	5	34.3	986	Amelia	9.1	TYC 1297-01073-1	8.91
2006	11	6	2	10	849	Ara	6.9	TYC 0184-00560-1	10.59
2006	11	6	20	40	275	Sapientia	9.6	TYC 0680-00300-1	11.59
2006	11	8	4	6.2	895	Helio	16	TYC 2407-01813-1	11.97
2006	11	9	5	9.7	695	Bella	5	UCAC2 44085026	11.71
2006	11	10	23	58.9	48	Doris	18.2	UCAC2 34956026	11.21
2006	11	11	23	1.8		1998WW31	7.9	UCAC2 38920295	12.92
2006	11	12	19	15.2	7	Iris	42.5	TYC 1784-00074-1	11.11
2006	11	12	20	56.8	154	Bertha	12.3	TYC 2361-00836-1	10.64
2006	11	13	1	15.2	926	Imhilde	4.7	TYC 2427-00490-1	11.43
2006	11	13	5	10.8	637	Chrysothemis	3.2	UCAC2 38738940	11.75
2006	11	15	1	21.4	356	Liguria	17.5	UCAC2 41657910	11.67
2006	11	15	22	45.1	275	Sapientia	8.3	TYC 0679-00545-1	11.5
2006	11	17	4	7.9	124	Alkeste	4.3	UCAC2 35213073	11.76
2006	11	18	17	42.2	907	Rhoda	3.7	TYC 6968-00853-1	11.17
2006	11	21	17	52.5	1242	Zambesia	8.7	UCAC2 40799496	11.22
2006	11	21	21	26.9	300	Geraldina	7.9	UCAC2 40315935	11.49
2006	11	22	15	35.3	240	Vanadis	22.5	TYC 4666-00203-1	12.11
2006	11	27	2	4.6		2003UZ291	6.4	UCAC2 38380870	12.48
2006	11	29	0	12.9	578	Happelia	7.6	TYC 1908-00844-1	11.35
2006	11	29	2	31.4	426	Hippo	9.9	UCAC2 47387425	11.96
2006	11	30	16	13.9	6	Hebe	7.1	TYC 6382-01315-1	12.03

2006	12	2	1	44.9	407	Arachne	9.6	UCAC2 42381731	9.67
2006	12	2	22	21.5	986	Amelia	4	TYC 1283-00810-1	11.51
2006	12	4	6	30.2	22	Kalliope	16.5	UCAC2 42210161	11.74
2006	12	5	5	57.4	419	Aurelia	12.2	TYC 1350-00083-1	11.12
2006	12	5	23	44.3	89	Julia	15.1	TYC 0838-00135-1	11.27
2006	12	10	1	35.8	44	Nysa	12.3	TYC 1335-00472-1	12.07
2006	12	10	23	29.4	44	Nysa	11.9	TYC 1335-01453-1	11.57
2006	12	14	2	10.1	498	Tokio	7	TYC 1896-00440-1	10.46
2006	12	15	19	48.4	494	Virtus	6.4	UCAC2 42729305	11.85
2006	12	15	20	51.7	498	Tokio	6.8	TYC 1896-01511-1	11.99
2006	12	16	18	22.6	972	Cohnia	4.7	UCAC2 35135503	11.89
2006	12	17	19	52.4	253	Mathilde	4.6	TYC 0740-00562-1	11.1
2006	12	18	19	1.5	87	Sylvia	24.3	TYC 1947-00293-1	10.01
2006	12	19	5	52.4	116	Sirona	14.3	TYC 1419-00555-1	10.45
2006	12	19	18	49.2	258	Tyche	6.2	TYC 0105-02453-1	12.03
2006	12	20	6	5.5	393	Lampetia	6.7	TYC 0168-02120-1	11.38
2006	12	21	3	34.3	72	Feronia	8.2	TYC 0775-01427-1	11.47
2006	12	24	2	44.6	623	Chimaera	4.5	UCAC2 45640288	11.96
2006	12	24	17	4.4	414	Liriope	5.7	TYC 1300-00438-1	11.12
2006	12	24	23	24.7	693	Zerbinetta	5.3	UCAC2 46554764	11.86
2006	12	25	3	9.7	1113	Katja	4.2	TYC 2898-02915-1	10.52
2006	12	25	23	29.4	926	Imhilde	3.3	TYC 2415-00421-1	11.86
2006	12	26	15	57.8	98	Ianthe	3.5	TYC 5809-01003-1	10.03
2006	12	27	23	23.6	1574	Meyer	8.2	TYC 1240-00440-1	10.67
2006	12	29	0	57.8	494	Virtus	6.6	TYC 2404-00369-1	11.97
2006	12	30	0	46.1	235	Carolina	4.5	TYC 2453-01686-1	12.57
2006	12	30	1	12.1	403	Cyane	5.7	TYC 0794-00744-1	11.46
2006	12	31	4	26.3	1282	Utopia	4.3	TYC 2951-00501-1	10.89

Graficzne efemerydy najciekawszych zjawisk dla obserwatorów z Polski

Graphical predictions of the most interesting events for observers from Poland

Saturn occults HIP 42705 on 2006 Jan 25 at 19h 52m to 21h 1m UT

Star (2000):

Mv = 7.9 Mp = 8.1
RA = 8 42 10.791
Dec = 18 56 3.66

Max Duration = 5956.0 secs

Mag Drop = 0.00

Sun : Dist = 178 deg

Moon: Dist = 127 deg

illum = 19%

Asteroid:

Mag = -0.2

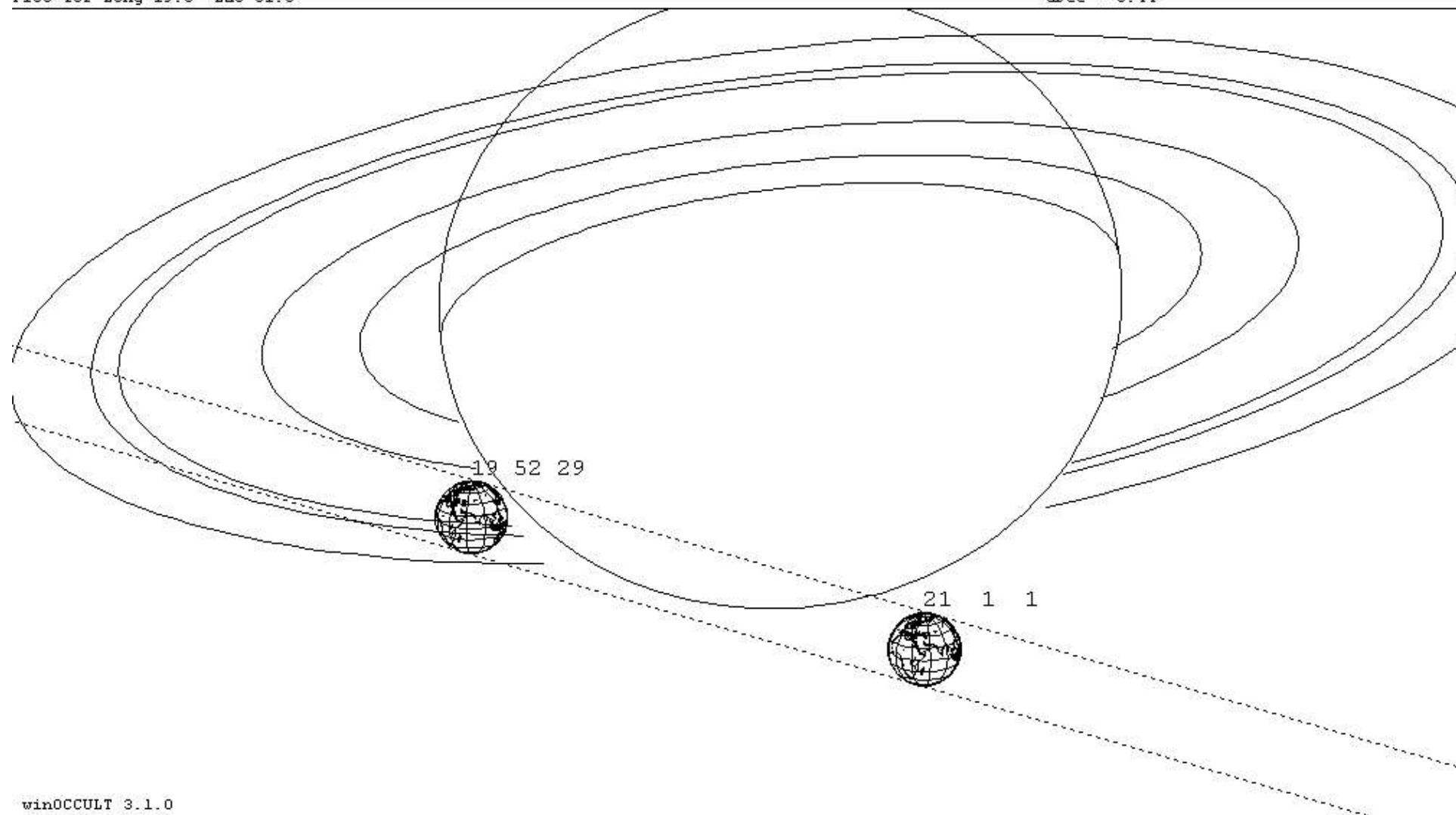
Dia = 119997km, 20.357"

Parallax = 1.082"

Hourly dRA = -.833s

dDec = 3.44"

Plot for Long 19.0 Lat 51.0



530 Turandot occults TYC 1398-00050-1 on 2006 May 23 at 21h 4m to 21h 9m UT

Star (2000):

Mv = 9.0 Mp = 9.3
RA = 8 39 59.062
Dec = 20 1 52.98

Max Duration = 3.3 secs

Mag Drop = 7.1

Sun : Dist = 65 deg

Moon: Dist = 108 deg

illum = 14%

Asteroid:

Mag = 16.1

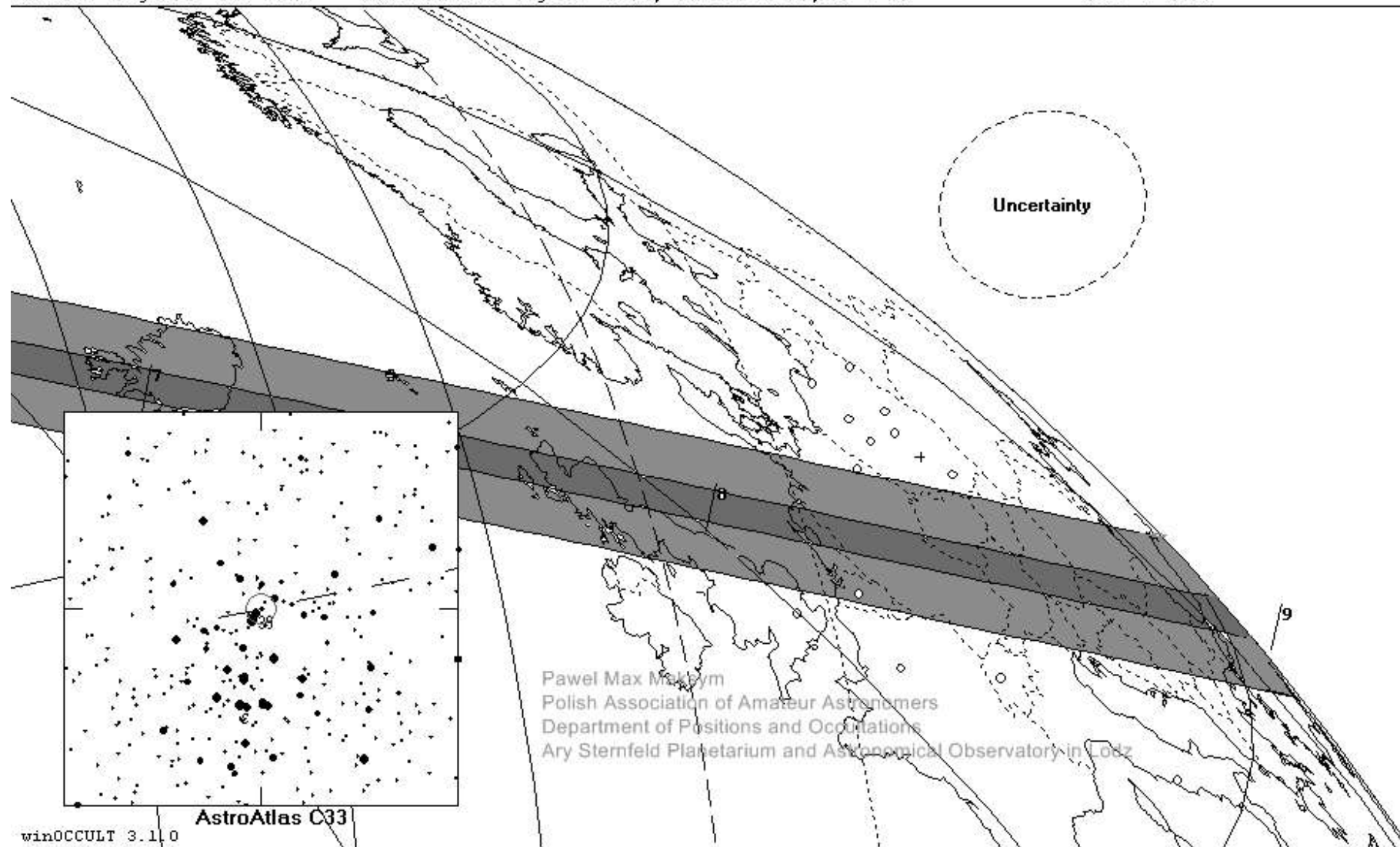
Dia = 84km, 0.028"

Parallax = 2.096"

Hourly dRA = 2.080s

dDec = -6.17"

Plot for Long 19.0 Lat 51.0 Uncertainties: Major = .090", Minor = .080", PA = 73



552 Sigelinde occults TYC 1310-01687-1u on 2006 Apr 01 at 19h 19m to 19h 26m UT

Star (2000):

Mv = 10.2 Mp = 10.4
RA = 5 40 7.584
Dec = 21 29 22.44

Max Duration = 3.4 secs

Mag Drop = 5.5

Sun : Dist = 73 deg

Moon: Dist = 28 deg

illum = 15%

Asteroid:

Mag = 15.7

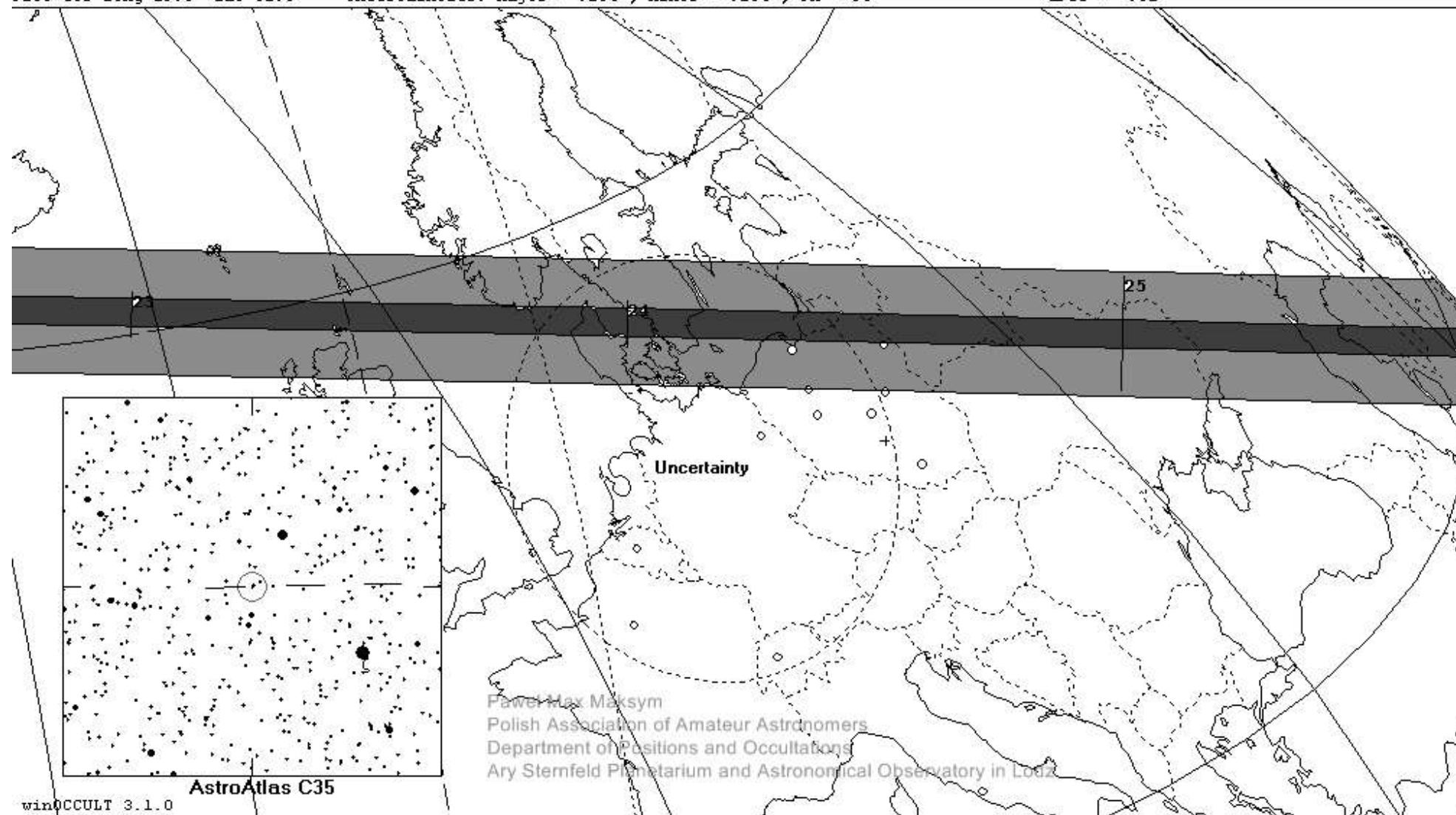
Dia = 77km, 0.030"

Parallax = 2.489"

Hourly dRA = 2.277s

dDec = -.62"

Plot for Long 19.0 Lat 51.0 Uncertainties: Major = .204", Minor = .234", PA = 64



144 Vibilia occults TYC 1879-02151-1u on 2006 Sep 19 at 1h 32m to 1h 39m UT

Star (2000):

Mv = 9.8 Mp = 10.3
RA = 6 31 17.540
Dec = 22 47 50.72

Max Duration = 6.3 secs

Mag Drop = 2.9

Sun : Dist = 79 deg

Moon: Dist = 42 deg

illum = 10%

Asteroid:

Mag = 12.6

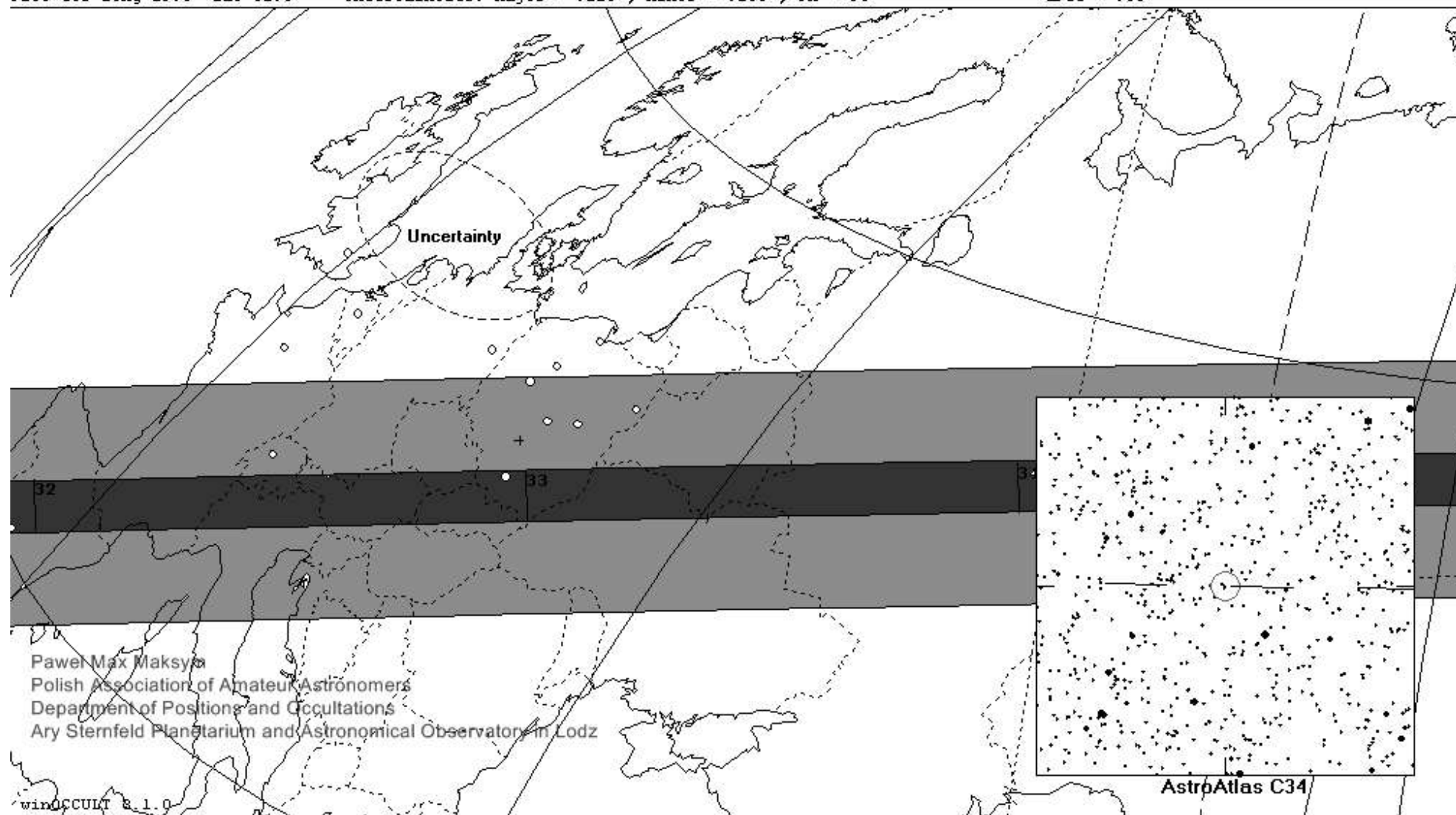
Dia = 141km, 0.088"

Parallax = 3.959"

Hourly dRA = 3.632s

dDec = .83"

Plot for Long 19.0 Lat 51.0 Uncertainties: Major = .120", Minor = .185", PA = 34



389 Industria occults TYC 2372-01066-1u on 2006 Oct 22 at 0h 24m to 0h 59m UT

Star (2000):

Mv = 10.3 Mp = 10.7
RA = 4 25 50.211
Dec = 30 22 21.42

Max Duration = 14.1 secs

Mag Drop = 2.1

Sun : Dist = 138 deg

Moon: Dist = 137 deg

illum = 0%

Asteroid:

Mag = 12.2

Dia = 79km, 0.058"

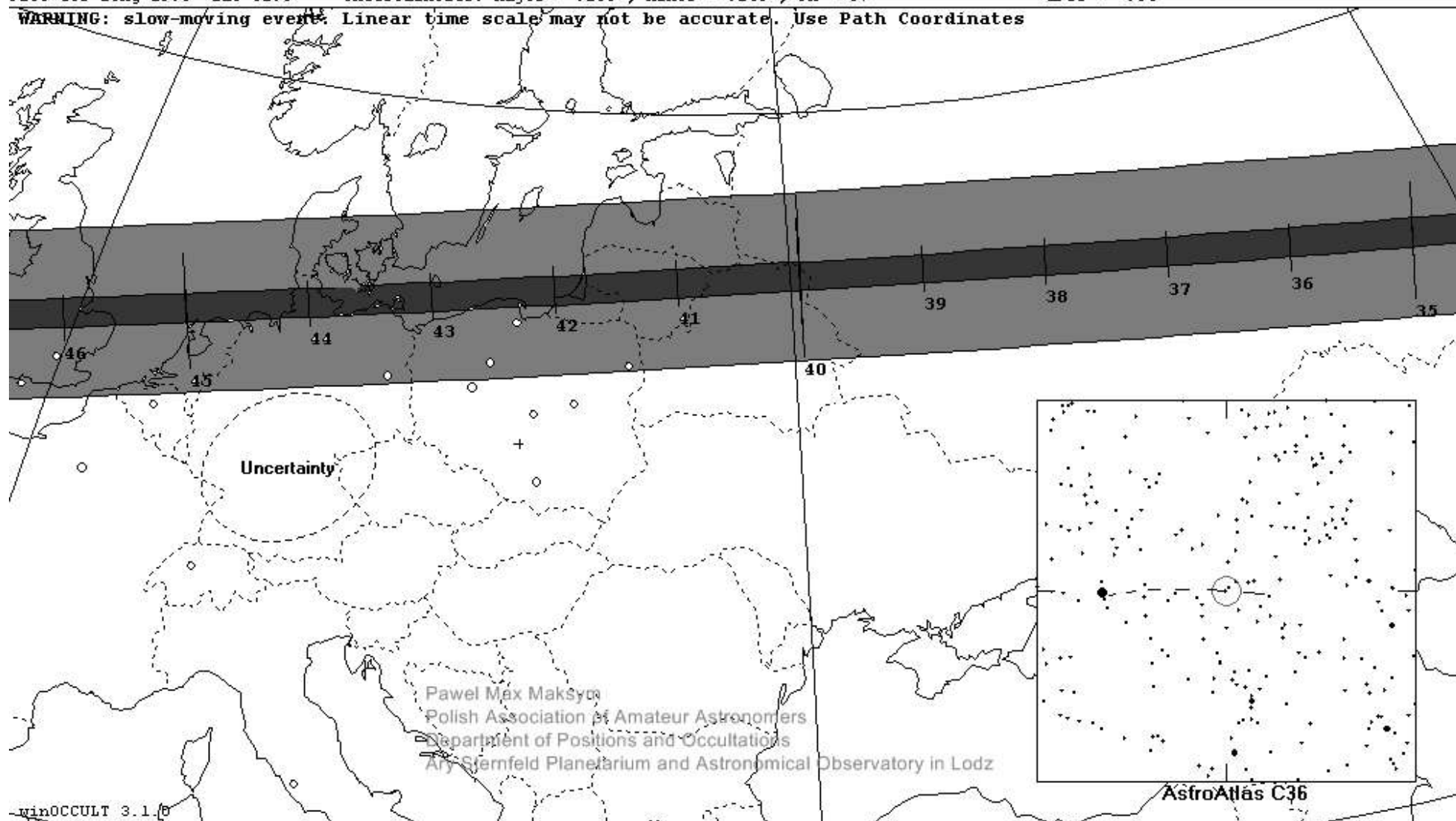
Parallax = 4.650"

Hourly dRA = -1.137s

dDec = -.84"

Plot for Long 19.0 Lat 51.0 Uncertainties: Major = .180", Minor = .140", PA = 67

WARNING: slow-moving event. Linear time scale may not be accurate. Use Path Coordinates



498 Tokio occults TYC 1896-00440-1u on 2006 Dec 14 at 2h 3m to 2h 18m UT

Star (2000):

Mv = 10.3 Mp = 11.7
RA = 7 10 48.179
Dec = 22 34 18.19

Max Duration = 6.7 secs

Mag Drop = 3.0
Sun : Dist = 156 deg
Moon: Dist = 82 deg
illum = 36%

Asteroid:

Mag = 13.2
Dia = 82km, 0.059"
Parallax = 4.624"
Hourly dRA = -2.151s
dDec = 10.94"

Plot for Long 19.0 Lat 51.0 Uncertainties: Major = .400", Minor = .400", PA = 90

WARNING: slow moving event, linear time scale may not be accurate. Use Path Coordinates

