

## Occultations table

Observation point: VladimirNebotov  
EMail: nebotov@ukr.net  
Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')  
Maximal Distance = 250.0  
Maximal  $M_v = 14.00$   
Minimal Duration = 0.5s  
Maximal Sun Elevation = 0.0  
Minimal drop: 0.5  
Minimal probability: 0.0  
Minimal probability in nearest point: 0.5  
Minimal star elevation: 0.0  
Program: LinOccult 2.2.0 BETA  
Author: Plekhanov Andrey andyplekhanov@gmail.com  
Events number: 183

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 1		LinOccult 2.2.0 BETA				
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2016/11/30 23:46:13	22306 SF4	5.0	19.61	7.73	21	0.5	36°04'56" 49°54'52"	225	1.0	TYC 23501697	11.88	9 <sup>h</sup> 37 <sup>m</sup> 20.271 <sup>s</sup> 1°41'46.765"	30.5	130	102.7	-50.3	119.5	-55.5	2.2	206
2016/12/01 16:18:59	4461 Sayama	18.2	16.25	2.84	31	2.8	35°59'02" 49°50'55"	224	3.9	UCAC2 27593450	13.49	1 <sup>h</sup> 47 <sup>m</sup> 21.781 <sup>s</sup> −11°34'34.168"	21.4	143	127.5	-25.4	107.5	-7.1	4.4	182
2016/12/01 18:49:49	46959 SW129	5.5	17.18	5.76	19	0.6	36°19'43" 49°52'40"	171	1.6	TYC 291902040	11.42	5 <sup>h</sup> 43 <sup>m</sup> 27.550 <sup>s</sup> 42°19'24.657"	51.4	79	154.7	-49.0	155.3	-30.2	4.8	132
2016/12/02 00:46:13	12393 YC1	6.6	18.50	7.01	151	0.8	35°50'28" 48°43'20"	192	1.0	TYC 82701605	11.50	9 <sup>h</sup> 36 <sup>m</sup> 46.830 <sup>s</sup> 14°38'59.018"	49.4	141	108.4	-41.6	135.9	-54.8	5.9	181
2016/12/02 01:05:23	1139 Atami	10.4	13.08	1.67	255	1.8	33°19'44" 51°21'40"	305	0.0	UCAC2 30957860	11.68	6 <sup>h</sup> 13 <sup>m</sup> 14.194 <sup>s</sup> −2°21'07.720"	31.5	217	145.6	-38.6	158.1	-52.9	6.0	49
2016/12/02 01:26:14	1205 Ebella	6.6	15.80	4.55	174	0.8	34°50'24" 48°47'43"	217	0.6	TYC 239500315	11.27	4 <sup>h</sup> 53 <sup>m</sup> 10.385 <sup>s</sup> 35°32'50.041"	47.7	272	165.7	-35.3	152.1	-50.6	6.1	98
2016/12/02 03:56:22	7346 Boulanger	9.1	17.26	4.81	66	1.3	36°45'52" 50°33'11"	31	2.1	TYC 135400935	12.46	7 <sup>h</sup> 12 <sup>m</sup> 50.586 <sup>s</sup> 20°30'40.070"	35.7	259	143.1	-11.5	172.1	-29.1	6.5	157
2016/12/02 13:40:21	751 Faina	110.5	13.25	0.63	242	4.6	32°57'12" 49°43'53"	262	8.9	UCAC2 21672871	13.52	22 <sup>h</sup> 45 <sup>m</sup> 11.926 <sup>s</sup> −25°19'53.808"	10.7	154	82.7	-1.5	52.1	17.1	8.6	157
2016/12/02 17:45:23	2984 Chaucer	27.2	16.09	2.60	170	4.8	35°13'07" 51°24'55"	333	3.6	UCAC2 40165980	13.60	6 <sup>h</sup> 38 <sup>m</sup> 59.661 <sup>s</sup> 23°35'14.801"	20.9	78	151.8	-39.3	171.4	-12.4	9.5	130
2016/12/02 20:52:45	36238 VX19	6.3	19.37	7.22	45	0.6	36°18'52" 49°38'51"	177	1.1	TYC 189601554	12.15	7 <sup>h</sup> 15 <sup>m</sup> 11.511 <sup>s</sup> 22°57'13.288"	44.6	109	143.6	-61.6	175.4	-41.0	10.3	226
2016/12/02 21:35:44	22805 RR2	10.5	17.10	3.94	52	1.2	35°39'28" 50°16'60"	300	2.4	UCAC2 39603317	13.19	0 <sup>h</sup> 40 <sup>m</sup> 18.244 <sup>s</sup> 22°16'57.972"	34.6	264	125.5	-62.1	88.7	-46.9	10.5	168
2016/12/02 22:38:07	1602 Indiana	12.2	16.26	4.22	92	1.0	36°38'16" 49°15'14"	164	3.0	UCAC2 37363555	12.06	10 <sup>h</sup> 06 <sup>m</sup> 00.360 <sup>s</sup> 15°43'48.952"	29.0	100	103.0	-58.6	140.3	-54.0	10.7	121
2016/12/03 00:40:02	275 Sapiientia	121.0	13.48	2.17	106	8.0	36°02'19" 49°06'36"	190	24.1	TYC 83700873	11.46	10 <sup>h</sup> 22 <sup>m</sup> 01.341 <sup>s</sup> 9°45'05.435"	39.6	130	97.3	-42.7	136.2	-57.9	11.2	158
2016/12/03 01:53:29	1093 Freda	116.7	14.59	1.44	279	7.0	39°44'32" 51°15'22"	61	9.5	UCAC2 46687885	13.49	6 <sup>h</sup> 44 <sup>m</sup> 02.376 <sup>s</sup> 43°13'14.751"	64.7	268	146.4	-31.1	153.4	-52.5	11.5	218
2016/12/03 19:14:49	10135 LZ1	6.0	16.19	4.85	192	0.6	37°49'15" 48°38'26"	145	0.5	TYC 183300113	11.35	4 <sup>h</sup> 29 <sup>m</sup> 17.807 <sup>s</sup> 26°09'48.854"	57.4	126	175.1	-52.5	129.7	-17.6	16.5	110
2016/12/04 16:06:06	1556 Wingolfia	28.6	15.19	3.76	80	2.0	35°59'10" 50°44'12"	344	5.7	UCAC2 36410923	11.47	4 <sup>h</sup> 33 <sup>m</sup> 13.414 <sup>s</sup> 13°19'50.718"	18.8	92	170.6	-23.5	118.4	16.0	23.3	183
2016/12/04 20:52:21	19911 Rigaux	11.0	17.26	4.80	159	0.7	36°19'41" 51°28'36"	1	1.6	UCAC2 41490722	12.47	3 <sup>h</sup> 48 <sup>m</sup> 10.702 <sup>s</sup> 27°34'46.123"	67.3	195	165.9	-61.8	107.6	-23.4	25.1	192
2016/12/04 21:51:59	12389 WU	9.5	17.38	5.83	232	0.7	34°53'59" 51°56'31"	335	0.9	TYC 130700763	11.55	5 <sup>h</sup> 51 <sup>m</sup> 41.459 <sup>s</sup> 20°10'38.423"	59.4	162	164.6	-62.0	134.7	-32.5	25.5	181
2016/12/04 21:58:25	6594 Tasman	10.0	16.66	2.85	211	0.8	35°41'01" 51°54'28"	348	1.0	UCAC2 35696330	13.90	4 <sup>h</sup> 42 <sup>m</sup> 36.893 <sup>s</sup> 11°02'35.271"	50.5	194	168.7	-61.7	117.0	-33.4	25.5	154
2016/12/04 22:06:48	32414 RT29	7.6	17.07	6.33	129	0.7	36°52'14" 48°57'04"	161	1.4	TYC 125701045	10.74	3 <sup>h</sup> 53 <sup>m</sup> 39.935 <sup>s</sup> 19°31'50.743"	54.3	220	167.4	-61.3	106.9	-34.6	25.6	158

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 2		LinOccult 2.2.0 BETA				
Date Time (UTC)	Asteroid			Nearest point			Star				Sun		Moon								
	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$	
2016/12/05 18:34:41	17515 UT1	1992	6.0	17.90	6.15	183	1.9	35°05'19" 48°36'13"	208	0.8	TYC	11.75	1 <sup>h</sup> 48 <sup>m</sup> 07.382 <sup>s</sup> 6°40'15.327"	46.8	184	133.5	-47.0	63.3	6.7	33.4	147
2016/12/05 18:43:47	51770 LH19	2001	5.2	18.03	6.36	14	0.7	36°23'26" 49°56'34"	147	1.4	TYC	11.67	7 <sup>h</sup> 22 <sup>m</sup> 59.220 <sup>s</sup> 21°03'13.217"	23.3	84	144.5	-48.3	144.9	5.4	33.5	150
2016/12/05 20:26:13	6123 Aristote- les	1998	6.9	16.60	5.11	174	0.7	36°58'33" 48°32'55"	164	0.7	TYC	11.50	6 <sup>h</sup> 12 <sup>m</sup> 45.787 <sup>s</sup> 7°24'55.344"	38.4	133	155.1	-60.3	126.5	-9.6	34.2	113
2016/12/05 22:44:15	18701 HB57	1998	6.6	18.03	6.17	127	0.7	36°31'16" 48°54'59"	172	1.2	UCAC2	11.86	3 <sup>h</sup> 14 <sup>m</sup> 37.263 <sup>s</sup> 12°06'41.440"	38.0	239	154.9	-58.5	83.0	-30.6	35.2	175
2016/12/06 00:23:48	12908 Yagud- ina	1994	8.7	16.73	4.86	150	0.7	37°30'09" 51°08'55"	35	1.4	UCAC2	11.88	5 <sup>h</sup> 26 <sup>m</sup> 05.728 <sup>s</sup> 35°07'39.676"	60.1	254	165.1	-45.7	114.6	-43.5	35.9	142
2016/12/06 05:00:27	17580 VV	1994	7.2	17.60	6.68	199	0.6	37°50'45" 48°34'37"	146	0.8	TYC	10.93	8 <sup>h</sup> 25 <sup>m</sup> 39.379 <sup>s</sup> -2°25'01.855"	16.6	245	122.2	-3.0	151.3	-41.6	37.9	151
2016/12/06 14:45:20	22141 VH36	2000	5.0	16.35	4.59	216	1.5	37°41'58" 51°46'02"	28	0.1	TYC	11.77	2 <sup>h</sup> 10 <sup>m</sup> 50.482 <sup>s</sup> 12°31'33.993"	29.2	106	140.1	-11.0	59.2	30.6	42.2	88
2016/12/07 00:16:59	7712 TB1	1995	6.3	16.22	7.41	232	0.8	35°27'31" 48°01'52"	195	0.0	TYC	8.81	6 <sup>h</sup> 14 <sup>m</sup> 50.241 <sup>s</sup> 16°42'44.594"	52.1	217	160.4	-46.9	112.8	-33.6	46.2	81
2016/12/07 01:41:06	10037 BQ	1984	8.3	16.52	5.83	254	1.1	39°14'10" 51°21'15"	55	0.3	TYC	10.69	7 <sup>h</sup> 19 <sup>m</sup> 44.832 <sup>s</sup> 30°34'45.427"	61.6	237	146.9	-33.7	125.5	-42.9	46.8	121
2016/12/07 01:54:03	23304 AN17	2001	8.3	15.99	4.48	153	0.9	37°12'38" 51°17'16"	26	1.3	TYC	11.53	3 <sup>h</sup> 53 <sup>m</sup> 19.228 <sup>s</sup> 35°57'56.313"	31.0	290	160.9	-31.6	82.7	-43.9	47.0	136
2016/12/07 02:26:58	7305 Oosaka- justo	1994	12.6	17.94	4.10	168	0.6	34°35'47" 49°01'02"	226	1.7	UCAC2	13.87	11 <sup>h</sup> 23 <sup>m</sup> 11.883 <sup>s</sup> -1°13'34.863"	35.7	153	83.2	-26.4	168.5	-46.1	47.2	236
2016/12/07 03:07:43	10969 Perry- man	1999	7.2	16.65	5.44	236	0.9	36°01'06" 47°56'12"	185	0.4	UCAC2	11.22	6 <sup>h</sup> 25 <sup>m</sup> 29.216 <sup>s</sup> 9°06'10.404"	24.1	255	154.6	-19.9	113.3	-47.4	47.5	128
2016/12/07 18:09:19	1605 Mi- lankovitch	1999	32.5	16.14	3.60	252	1.2	35°44'18" 52°17'09"	351	3.1	UCAC2	12.58	21 <sup>h</sup> 42 <sup>m</sup> 33.622 <sup>s</sup> -11°29'46.044"	9.4	239	68.2	-43.2	26.7	28.0	54.2	253
2016/12/07 20:16:31	9920 Bagnulo	1999	15.4	17.33	3.93	26	1.2	36°24'40" 49°49'45"	160	3.9	UCAC2	13.43	4 <sup>h</sup> 46 <sup>m</sup> 51.927 <sup>s</sup> 23°17'08.982"	61.2	152	177.1	-59.6	81.5	12.6	55.2	155
2016/12/07 20:22:54	25906 YV139	2000	6.9	17.23	7.28	192	0.7	38°37'01" 49°12'24"	119	0.9	TYC	9.95	5 <sup>h</sup> 47 <sup>m</sup> 08.895 <sup>s</sup> -14°56'59.295"	20.7	151	140.5	-60.2	92.5	11.7	55.3	177
2016/12/07 23:08:41	4119 Miles	1999	15.1	15.99	2.47	138	1.1	36°46'54" 51°14'46"	15	2.6	UCAC2	13.64	5 <sup>h</sup> 41 <sup>m</sup> 13.123 <sup>s</sup> 12°41'55.332"	50.8	204	165.9	-56.2	91.6	-13.3	56.5	161
2016/12/08 01:20:17	1789 Dobro- volsky	1999	12.0	15.61	1.88	5	1.1	36°20'53" 50°01'17"	123	4.2	UCAC2	13.95	6 <sup>h</sup> 33 <sup>m</sup> 58.404 <sup>s</sup> 22°29'42.741"	51.3	238	158.3	-37.2	103.1	-31.6	57.5	115
2016/12/08 14:04:15	20525 RU43	1999	8.7	17.40	5.69	249	0.6	39°18'55" 48°59'12"	119	0.7	UCAC2	11.71	5 <sup>h</sup> 46 <sup>m</sup> 00.827 <sup>s</sup> 47°16'31.562"	19.6	38	153.9	-5.1	86.8	29.7	63.2	167
2016/12/08 17:23:53	2984 Chaucer	1999	27.2	15.91	5.86	117	3.8	35°29'35" 50°57'59"	331	5.6	TYC	10.06	6 <sup>h</sup> 34 <sup>m</sup> 33.821 <sup>s</sup> 23°50'25.177"	22.1	79	158.9	-36.0	94.1	38.8	64.7	127
2016/12/08 18:46:25	10245 Insels- berg	1999	7.6	18.24	7.07	124	5.6	34°51'53" 50°41'35"	305	1.3	TYC	11.17	1 <sup>h</sup> 22 <sup>m</sup> 52.529 <sup>s</sup> 4°24'19.311"	42.8	201	123.8	-48.8	15.7	33.4	65.8	180

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		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2016/12/08 23:07:11	63002 WH22	5.5	17.70	7.09	68	0.5	36°06'47'' 50°38'44''	349	1.2	TYC 71400241	10.61	5 <sup>h</sup> 42 <sup>m</sup> 21.511 <sup>s</sup> 8°55'28.446''	47.1	203	163.3	-56.5	78.0	-1.9	67.4	175
2016/12/09 00:39:02	33298 KY44	5.8	18.30	7.05	132	0.6	37°24'25'' 50°59'50''	37	1.0	TYC 189601743	11.25	7 <sup>h</sup> 07 <sup>m</sup> 32.375 <sup>s</sup> 23°23'40.134''	60.3	213	151.7	-43.8	97.4	-15.6	68.0	170
2016/12/09 03:27:53	5317 Verolac-qua	12.0	16.00	2.39	72	1.0	36°03'36'' 49°24'48''	193	3.0	UCAC2 35348190	13.73	5 <sup>h</sup> 59 <sup>m</sup> 54.313 <sup>s</sup> 10°10'22.867''	16.4	266	161.7	-17.0	79.8	-35.0	69.3	138
2016/12/09 05:13:55	23933 TD3	8.3	18.65	6.55	80	0.5	37°23'16'' 50°09'30''	81	1.3	TYC 375400895	12.11	5 <sup>h</sup> 50 <sup>m</sup> 05.241 <sup>s</sup> 54°28'56.879''	31.5	319	147.2	-1.6	80.8	-38.4	70.1	244
2016/12/09 16:21:14	3899 Wichterle	23.7	16.39	4.32	150	1.9	34°43'12'' 50°57'20''	312	3.7	UCAC2 30784082	12.09	23 <sup>h</sup> 58 <sup>m</sup> 38.697 <sup>s</sup> -3°17'50.000''	36.8	181	100.6	-26.0	19.0	41.8	74.8	183
2016/12/09 18:04:32	23823 QJ70	10.5	16.62	4.53	161	0.8	37°59'01'' 49°06'34''	131	1.6	UCAC2 43766952	12.10	5 <sup>h</sup> 55 <sup>m</sup> 09.226 <sup>s</sup> 34°07'46.628''	42.6	85	164.6	-42.5	71.6	43.8	75.5	162
2016/12/09 19:09:52	4149 Harrison	11.0	17.73	4.49	5	1.4	36°20'48'' 50°04'40''	52	2.0	UCAC2 28476393	13.26	0 <sup>h</sup> 29 <sup>m</sup> 16.800 <sup>s</sup> -9°00'43.700''	23.5	219	104.9	-52.1	17.6	40.3	75.9	216
2016/12/09 20:39:38	1901 Moravia	27.0	17.50	4.62	241	1.7	38°03'51'' 48°13'35''	148	2.7	UCAC2 21676291	12.89	0 <sup>h</sup> 36 <sup>m</sup> 38.241 <sup>s</sup> -24°35'04.919''	0.5	229	98.9	-61.5	31.0	30.9	76.5	248
2016/12/09 20:53:15	49496 CC2	5.2	17.94	6.15	104	0.5	36°17'11'' 50°59'08''	360	1.1	TYC 190100398	11.79	6 <sup>h</sup> 45 <sup>m</sup> 04.101 <sup>s</sup> 26°17'15.006''	55.7	121	157.7	-62.3	80.2	29.1	76.6	149
2016/12/09 21:54:03	1089 Tama	12.9	13.67	1.78	40	2.1	36°22'49'' 50°24'10''	10	5.9	UCAC2 38739911	12.13	3 <sup>h</sup> 52 <sup>m</sup> 32.704 <sup>s</sup> 19°54'44.427''	53.8	223	162.2	-62.5	39.5	20.7	77.1	76
2016/12/09 22:22:45	3523 Arina	12.0	15.94	3.50	181	1.5	35°11'30'' 48°35'20''	206	1.4	UCAC2 42919752	12.49	7 <sup>h</sup> 37 <sup>m</sup> 10.656 <sup>s</sup> 31°55'55.630''	65.2	128	145.9	-60.9	90.4	16.4	77.2	128
2016/12/09 23:32:50	27545 JX16	7.2	17.52	5.33	186	0.7	36°32'34'' 51°42'34''	6	0.9	TYC 75100300	12.20	6 <sup>h</sup> 51 <sup>m</sup> 50.763 <sup>s</sup> 10°14'33.422''	50.1	189	152.2	-53.5	80.7	5.8	77.8	152
2016/12/10 15:25:55	9054 Hip-pocastanum	7.6	16.85	6.17	60	0.9	35°44'48'' 49°38'25''	220	2.0	TYC 469500436	10.69	2 <sup>h</sup> 07 <sup>m</sup> 58.059 <sup>s</sup> -6°02'38.230''	22.1	131	126.7	-17.2	14.2	35.0	83.8	140
2016/12/10 19:12:48	341870 GS31	8.7	20.71	8.74	221	0.7	35°15'21'' 51°55'21''	341	0.6	TYC 299200853	11.97	9 <sup>h</sup> 37 <sup>m</sup> 49.059 <sup>s</sup> 39°43'29.729''	23.8	56	122.1	-52.5	100.4	47.9	85.2	488
2016/12/10 19:42:39	5541 Seimei	11.5	16.37	2.89	172	1.1	37°03'22'' 48°35'19''	161	1.6	UCAC2 33515501	13.56	4 <sup>h</sup> 42 <sup>m</sup> 03.518 <sup>s</sup> 5°02'53.063''	42.5	155	160.7	-56.3	37.1	46.2	85.4	154
2016/12/10 22:53:58	8021 Walter	7.2	17.15	5.24	173	0.6	38°21'46'' 50°52'13''	58	0.9	UCAC2 26880542	11.92	9 <sup>h</sup> 05 <sup>m</sup> 41.252 <sup>s</sup> -13°54'46.372''	18.6	142	112.1	-58.2	103.0	23.4	86.5	131
2016/12/10 23:25:56	4666 Dietz	9.1	17.26	5.60	72	0.6	36°46'23'' 49°28'59''	151	2.1	UCAC2 31120027	11.66	6 <sup>h</sup> 31 <sup>m</sup> 28.901 <sup>s</sup> -1°31'13.929''	37.9	193	148.9	-54.5	63.0	18.6	86.7	159
2016/12/10 23:47:33	2238 Stesh-enko	18.1	17.60	4.97	161	1.5	35°46'17'' 48°38'41''	193	2.7	UCAC2 40337617	12.64	7 <sup>h</sup> 06 <sup>m</sup> 35.549 <sup>s</sup> 24°11'31.386''	63.9	194	153.9	-51.6	68.7	15.3	86.8	191
2016/12/11 16:56:05	117188 RN136	5.0	18.70	8.43	170	0.6	33°55'51'' 50°15'17''	278	0.7	TYC 231000193	10.27	2 <sup>h</sup> 20 <sup>m</sup> 57.809 <sup>s</sup> 30°02'41.412''	63.2	129	140.5	-31.5	20.4	42.8	92.0	213
2016/12/11 19:05:42	328 Gudrun	122.9	12.97	0.56	207	11.0	37°32'46'' 48°22'50''	154	12.5	UCAC2 47726180	13.39	5 <sup>h</sup> 31 <sup>m</sup> 19.213 <sup>s</sup> 47°49'58.512''	64.5	80	154.9	-51.5	45.8	52.8	92.6	144

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.				Table 1		Page 4		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon							
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$	
2016/12/11 23:07:09	33670 1999 JB98	5.0	16.30	4.46	71	0.6	35°41'52'' 49°32'07''	216	1.5	UCAC2 35528476	11.86	5 <sup>h</sup> 52 <sup>m</sup> 50.326 <sup>s</sup> 10°31'56.190''	48.5	204	164.9	-56.9	37.4	33.0	93.6	105	
2016/12/11 23:54:54	8271 Imai	6.9	17.08	5.87	243	0.7	35°26'24'' 47°56'10''	194	0.3	TYC 75301724	11.21	7 <sup>h</sup> 03 <sup>m</sup> 39.846 <sup>s</sup> 10°58'36.041''	50.2	196	151.9	-50.7	54.0	26.0	93.8	126	
2016/12/12 00:08:52	21044 1990 SE1	5.0	19.46	8.09	21	0.5	36°17'41'' 49°51'22''	178	1.0	TYC 85300775	11.37	10 <sup>h</sup> 57 <sup>m</sup> 30.097 <sup>s</sup> 13°39'12.938''	38.7	119	99.8	-48.7	108.8	23.8	93.9	201	
2016/12/12 04:25:50	498 Tokio	82.8	15.05	2.30	167	3.1	37°08'55'' 51°26'59''	22	10.3	UCAC2 32544519	12.89	13 <sup>h</sup> 05 <sup>m</sup> 57.947 <sup>s</sup> 2°19'53.957''	41.3	163	66.3	-8.7	139.9	-12.7	94.9	259	
2016/12/12 14:07:48	2176 Donar	12.0	16.51	2.64	104	0.9	35°30'17'' 50°50'21''	328	2.4	UCAC2 39266034	13.97	4 <sup>h</sup> 51 <sup>m</sup> 55.302 <sup>s</sup> 21°27'14.548''	8.3	66	173.4	-5.6	14.1	11.9	96.8	167	
2016/12/12 21:26:45	2717 Tellervo	12.0	15.09	2.09	204	1.0	36°07'42'' 51°52'46''	357	0.8	UCAC2 38035602	13.17	5 <sup>h</sup> 55 <sup>m</sup> 17.275 <sup>s</sup> 17°53'34.853''	57.3	164	170.5	-63.3	23.5	54.1	97.9	110	
2016/12/13 16:27:07	20624 Dari-ozanetti	5.8	17.43	5.75	235	0.7	38°15'44'' 48°22'23''	143	0.4	TYC 297500527	11.68	8 <sup>h</sup> 28 <sup>m</sup> 35.425 <sup>s</sup> 38°06'49.866''	12.1	43	138.2	-26.8	48.3	25.9	99.7	134	
2016/12/13 17:46:15	17111 1999 JH52	11.0	17.46	4.94	166	0.8	36°22'00'' 48°33'16''	178	1.6	UCAC2 34764417	12.53	23 <sup>h</sup> 49 <sup>m</sup> 05.832 <sup>s</sup> 8°24'23.475''	42.3	219	98.8	-39.5	78.3	37.9	99.7	193	
2016/12/13 20:46:48	3045 Alois	15.8	16.11	2.44	193	1.3	36°04'55'' 51°46'39''	356	2.0	UCAC2 41348864	13.79	6 <sup>h</sup> 39 <sup>m</sup> 57.622 <sup>s</sup> 27°13'08.471''	58.4	125	162.7	-62.1	20.9	57.6	99.8	179	
2016/12/13 22:41:53	1504 Lappeen-ranta	12.7	15.92	3.70	77	0.6	36°08'58'' 50°43'48''	353	3.2	UCAC2 35939269	12.25	11 <sup>h</sup> 45 <sup>m</sup> 44.541 <sup>s</sup> 11°49'07.727''	17.6	93	90.2	-59.7	91.4	55.0	99.8	136	
2016/12/14 03:56:40	1229 Tilia	27.6	17.80	5.25	91	0.7	37°21'33'' 50°29'43''	57	3.2	UCAC2 24610222	12.56	15 <sup>h</sup> 33 <sup>m</sup> 28.599 <sup>s</sup> -18°44'18.556''	6.1	129	26.8	-13.2	150.7	11.4	99.8	331	
2016/12/14 15:16:57	20201 1997 EK6	5.2	17.47	5.90	160	0.6	36°58'04'' 51°25'10''	18	0.8	TYC 6100183	11.57	3 <sup>h</sup> 07 <sup>m</sup> 59.751 <sup>s</sup> 6°47'57.219''	25.6	111	142.4	-15.7	45.1	6.6	99.3	143	
2016/12/14 15:57:22	3291 Dunlap	10.0	17.32	3.59	245	0.7	37°50'20'' 48°05'32''	153	0.9	UCAC2 39109146	13.78	5 <sup>h</sup> 55 <sup>m</sup> 16.810 <sup>s</sup> 20°52'53.997''	16.2	77	173.5	-22.0	3.8	12.5	99.2	202	
2016/12/14 16:35:16	1986 Plaut	49.5	17.48	6.20	129	1.3	36°04'12'' 48°54'06''	187	7.0	UCAC2 25221080	11.28	20 <sup>h</sup> 52 <sup>m</sup> 07.363 <sup>s</sup> -17°35'19.674''	6.5	233	47.7	-28.1	141.7	18.3	99.1	245	
2016/12/14 16:43:03	5317 Verolac-qua	12.0	15.90	2.15	214	1.0	35°36'06'' 51°55'13''	347	1.0	UCAC2 35346479	13.91	5 <sup>h</sup> 54 <sup>m</sup> 36.983 <sup>s</sup> 10°26'27.134''	15.8	93	165.8	-29.4	9.3	19.5	99.1	137	
2016/12/14 18:04:49	17370 1980 CJ	9.1	18.66	8.51	137	0.6	36°30'29'' 48°49'26''	173	1.3	TYC 116201409	10.15	23 <sup>h</sup> 21 <sup>m</sup> 47.980 <sup>s</sup> 9°06'25.359''	37.1	234	91.9	-42.4	99.3	32.1	99.0	248	
2016/12/14 22:44:29	7921 Huebner	5.2	16.38	5.36	174	0.6	36°04'49'' 48°29'24''	185	0.4	TYC 128600493	11.03	5 <sup>h</sup> 09 <sup>m</sup> 07.981 <sup>s</sup> 18°43'10.593''	53.4	220	173.3	-59.6	18.4	58.9	98.5	98	
2016/12/14 23:24:53	1241 Dysona	83.0	15.51	4.18	219	5.0	37°34'07'' 51°50'41''	25	9.1	UCAC2 30858487	11.35	11 <sup>h</sup> 24 <sup>m</sup> 30.251 <sup>s</sup> -2°47'14.318''	16.8	116	90.2	-55.1	75.7	57.0	98.5	243	
2016/12/14 23:35:51	72897 2001 KM55	6.0	18.85	7.57	36	0.7	35°47'33'' 50°00'28''	263	1.2	TYC 196700772	11.28	9 <sup>h</sup> 56 <sup>m</sup> 08.728 <sup>s</sup> 27°39'39.310''	55.6	117	120.6	-53.7	48.0	56.2	98.4	201	
2016/12/14 23:47:10	5399 Awa	20.3	15.66	2.50	191	3.2	36°25'14'' 48°19'47''	177	2.3	UCAC2 39303894	13.28	7 <sup>h</sup> 21 <sup>m</sup> 59.935 <sup>s</sup> 21°17'24.860''	61.0	193	154.2	-52.2	12.5	55.3	98.4	141	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 5		LinOccult 2.2.0 BETA				
		Asteroid			Nearest point			Star			Sun			Moon							
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$	
2016/12/15 03:14:20	23971 YU9	5.8	17.58	7.92	50	0.5	35°55'17" 49°40'08"	212	1.6	TYC 75600834	9.66	6 <sup>h</sup> 57 <sup>m</sup> 36.512 <sup>s</sup> 11°50'02.869"	25.3	258	156.5	-19.9	8.4	27.5	98.0	133	
2016/12/15 14:32:18	229 Adelinda	93.2	14.32	1.29	116	6.6	34°50'15" 50°31'29"	297	15.7	UCAC2 40834245	13.43	6 <sup>h</sup> 34 <sup>m</sup> 03.010 <sup>s</sup> 25°48'45.184"	2.8	52	165.9	-9.0	10.6	-7.5	96.2	198	
2016/12/15 15:40:22	38593 XF166	6.6	18.32	7.15	186	0.6	33°41'54" 50°14'11"	276	0.8	TYC 178700419	11.17	3 <sup>h</sup> 07 <sup>m</sup> 16.525 <sup>s</sup> 25°49'00.701"	44.5	103	146.8	-19.3	56.4	1.1	96.0	224	
2016/12/15 16:21:54	19726 XL	10.0	17.72	4.50	124	0.9	34°50'15" 50°40'32"	304	1.7	UCAC2 46695733	13.24	8 <sup>h</sup> 22 <sup>m</sup> 47.793 <sup>s</sup> 43°05'43.631"	17.1	42	140.0	-25.9	28.8	6.9	95.9	190	
2016/12/15 20:01:38	10358 Kirch- hoff	5.5	18.15	6.17	78	0.5	36°07'16" 50°44'28"	351	1.3	UCAC2 38605679	11.98	7 <sup>h</sup> 36 <sup>m</sup> 57.201 <sup>s</sup> 19°01'39.546"	38.3	107	151.1	-58.4	3.7	40.1	95.1	147	
2016/12/15 21:15:06	244 Sita	10.9	15.59	1.86	90	7.5	35°41'45" 49°20'07"	208	2.8	UCAC2 35395153	13.94	9 <sup>h</sup> 29 <sup>m</sup> 55.697 <sup>s</sup> 10°25'33.208"	25.6	105	122.6	-63.3	30.6	49.8	94.6	117	
2016/12/15 22:55:48	69970 WV	5.2	18.84	8.92	100	0.6	35°29'37" 49°18'45"	215	0.9	TYC 248300922	9.92	8 <sup>h</sup> 32 <sup>m</sup> 41.239 <sup>s</sup> 30°39'32.045"	64.3	130	139.9	-58.5	19.1	57.9	94.5	196	
2016/12/16 01:16:21	13178 Cata- lan	5.5	17.88	6.00	15	0.7	36°21'51" 50°10'39"	21	1.5	UCAC2 38061075	11.88	7 <sup>h</sup> 22 <sup>m</sup> 32.094 <sup>s</sup> 17°40'54.786"	49.9	227	154.3	-38.9	3.1	51.8	93.9	147	
2016/12/16 14:01:07	5464 Weller	10.5	15.85	2.82	167	1.0	38°26'15" 49°28'47"	112	1.3	UCAC2 46553771	13.11	6 <sup>h</sup> 49 <sup>m</sup> 04.545 <sup>s</sup> 42°46'00.716"	12.5	35	155.5	-4.6	30.5	-17.7	90.8	120	
2016/12/16 14:21:52	1408 Tru- sanda	32.5	17.13	9.62	171	0.7	34°15'52" 49°14'32"	238	4.6	HIP 88504	7.51	18 <sup>h</sup> 04 <sup>m</sup> 21.397 <sup>s</sup> -17°21'12.472"	1.1	241	8.6	-7.5	150.6	-16.0	90.7	179	
2016/12/16 16:34:20	328 Gudrun	122.9	12.97	0.59	181	10.8	34°11'32" 50°58'29"	305	15.8	UCAC2 47725186	13.31	5 <sup>h</sup> 25 <sup>m</sup> 22.811 <sup>s</sup> 47°47'14.081"	45.2	64	155.3	-27.9	46.0	-0.8	90.1	144	
2016/12/16 16:49:15	98 Ianthe	104.5	12.91	0.64	217	12.8	38°43'48" 48°54'35"	126	8.6	UCAC2 45453867	13.15	2 <sup>h</sup> 46 <sup>m</sup> 44.535 <sup>s</sup> 39°12'59.930"	68.0	109	140.6	-30.3	73.1	1.2	90.0	134	
2016/12/16 17:31:59	3509 Sanshui	13.2	15.57	1.82	119	1.1	35°37'09" 51°01'59"	337	2.6	UCAC2 34241779	13.97	6 <sup>h</sup> 15 <sup>m</sup> 31.832 <sup>s</sup> 7°20'28.546"	19.2	102	161.7	-37.1	30.8	7.3	89.8	132	
2016/12/16 18:22:57	3181 Ahnert	10.0	15.16	1.75	79	1.1	35°53'27" 50°42'32"	339	3.0	UCAC2 38042764	13.65	6 <sup>h</sup> 25 <sup>m</sup> 05.738 <sup>s</sup> 17°50'30.652"	33.8	103	167.8	-45.1	26.8	15.0	89.5	96	
2016/12/16 20:36:27	47639 2000 CT29	5.5	19.20	7.07	224	0.6	36°18'06" 48°02'19"	180	0.6	TYC 83901498	12.13	10 <sup>h</sup> 37 <sup>m</sup> 44.014 <sup>s</sup> 7°57'17.396"	7.3	86	107.1	-61.5	33.8	35.3	88.8	198	
2016/12/16 21:32:08	8143 Nezval	5.8	17.13	6.80	85	0.9	36°27'46" 49°17'38"	171	1.5	TYC 61300822	10.33	1 <sup>h</sup> 18 <sup>m</sup> 04.651 <sup>s</sup> 7°48'00.109"	21.5	256	115.8	-63.5	103.5	43.1	88.7	126	
2016/12/17 02:30:08	72379 2001 CR9	6.9	17.00	5.05	81	0.6	37°19'01" 50°21'45"	65	1.7	UCAC2 45813498	11.97	6 <sup>h</sup> 56 <sup>m</sup> 16.863 <sup>s</sup> 40°22'17.384"	50.4	278	156.5	-27.1	32.8	48.1	87.1	136	
2016/12/17 13:35:07	435 Ella	41.5	15.01	2.58	230	0.8	39°21'05" 49°26'50"	107	4.3	UCAC2 21853324	12.54	18 <sup>h</sup> 30 <sup>m</sup> 05.609 <sup>s</sup> -24°31'00.514"	3.7	224	11.1	-1.1	142.8	-24.6	83.4	244	
2016/12/17 15:51:41	7916 1981 EN	12.1	16.83	4.09	184	1.4	36°41'35" 48°24'44"	171	0.9	UCAC2 34065262	12.77	6 <sup>h</sup> 17 <sup>m</sup> 38.630 <sup>s</sup> 6°39'38.921"	2.9	83	161.3	-21.0	42.6	-15.0	82.7	100	
2016/12/17 18:31:03	1139 Atami	10.4	13.06	0.95	66	2.4	37°09'42" 49°52'18"	107	3.5	UCAC2 29403639	12.69	6 <sup>h</sup> 01 <sup>m</sup> 36.807 <sup>s</sup> -6°30'22.579"	19.2	127	149.7	-46.3	52.2	5.9	81.7	50	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.				Table 1		Page 6		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon							
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$	
2016/12/17 19:16:08	66050 1998 QB87	7.6	17.46	9.26	106	0.6	37°06'03" 49°15'15"	147	1.7	TYC 244400311	8.20	6 <sup>h</sup> 52 <sup>m</sup> 14.327 <sup>s</sup> 33°47'37.527"	49.8	94	161.5	-52.8	38.1	12.7	81.5	116	
2016/12/17 22:04:20	1771 Makover	56.7	14.48	1.32	11	8.5	36°10'50" 49°58'36"	224	15.3	UCAC2 35328705	13.54	3 <sup>h</sup> 09 <sup>m</sup> 26.422 <sup>s</sup> 10°20'19.418"	34.8	241	141.1	-62.7	90.7	37.9	80.5	147	
2016/12/18 05:08:05	15149 Loufaix	6.6	17.63	6.40	253	1.9	37°43'02" 47°58'31"	156	0.4	TYC 82301015	11.23	9 <sup>h</sup> 24 <sup>m</sup> 16.298 <sup>s</sup> 11°33'58.731"	28.3	253	126.6	-3.4	3.6	31.5	78.0	141	
2016/12/18 15:49:15	3093 Bergholz	15.8	15.88	2.85	248	1.2	38°34'42" 48°23'44"	138	1.1	UCAC2 39133961	13.11	7 <sup>h</sup> 22 <sup>m</sup> 48.210 <sup>s</sup> 20°56'44.200"	4.2	62	157.6	-20.6	39.3	-23.1	73.8	153	
2016/12/18 18:05:55	3970 Herran	13.2	16.72	3.82	19	1.4	36°08'18" 50°11'29"	327	3.4	UCAC2 35506211	12.93	0 <sup>h</sup> 46 <sup>m</sup> 07.592 <sup>s</sup> 10°46'13.740"	46.2	215	107.7	-42.4	134.8	-7.7	73.0	153	
2016/12/19 00:35:00	39499 1981 EJ29	5.2	18.56	7.43	233	0.6	35°43'44" 52°06'43"	350	0.5	TYC 19300709	11.13	7 <sup>h</sup> 58 <sup>m</sup> 43.908 <sup>s</sup> 6°31'04.336"	45.2	199	144.4	-45.6	35.4	46.2	70.3	170	
2016/12/19 17:11:43	25263 1998 VM16	9.1	16.71	4.62	68	0.7	36°34'55" 49°28'14"	162	2.1	TYC 241001658	12.11	5 <sup>h</sup> 58 <sup>m</sup> 16.273 <sup>s</sup> 32°10'16.047"	38.6	84	171.0	-33.7	72.8	-23.4	63.7	159	
2016/12/19 22:31:17	42732 1998 RD1	7.2	18.15	7.52	12	0.6	36°23'10" 50°07'52"	37	1.5	TYC 245500073	10.63	7 <sup>h</sup> 20 <sup>m</sup> 38.098 <sup>s</sup> 33°30'07.567"	72.9	160	158.2	-61.1	58.6	21.9	61.4	190	
2016/12/20 00:17:33	4043 Perolof	11.0	17.38	4.51	243	1.2	35°26'12" 47°56'09"	194	1.0	UCAC2 40972201	12.89	3 <sup>h</sup> 22 <sup>m</sup> 25.206 <sup>s</sup> 26°28'32.547"	26.8	280	145.9	-48.3	110.8	36.2	60.6	192	
2016/12/20 02:40:47	11189 Rabeaton	5.0	16.70	5.45	174	0.5	38°01'02" 51°09'41"	45	0.5	UCAC2 44642217	11.26	6 <sup>h</sup> 11 <sup>m</sup> 30.098 <sup>s</sup> 36°35'36.902"	37.6	285	166.2	-25.7	75.2	46.0	59.7	105	
2016/12/20 04:48:33	6194 Denali	8.7	15.61	3.00	90	1.0	37°08'32" 50°38'55"	42	2.3	TYC 237700166	12.68	4 <sup>h</sup> 32 <sup>m</sup> 04.866 <sup>s</sup> 33°09'42.520"	4.3	320	159.6	-6.2	96.8	40.0	58.8	106	
2016/12/20 15:42:55	21346 Marieladislav	7.9	17.02	7.23	67	0.6	35°48'23" 50°33'52"	329	1.9	TYC 241700132	9.79	5 <sup>h</sup> 46 <sup>m</sup> 37.241 <sup>s</sup> 36°28'23.700"	30.0	68	166.7	-19.4	86.6	-36.1	54.4	152	
2016/12/20 16:59:22	13981 1992 OT9	7.6	18.12	5.71	22	0.7	35°59'58" 50°06'32"	288	1.6	TYC 468100993	12.41	1 <sup>h</sup> 06 <sup>m</sup> 20.619 <sup>s</sup> -2°09'21.050"	37.9	185	105.3	-31.6	159.2	-32.4	53.9	189	
2016/12/20 17:29:03	3945 Gerasi- menko	23.2	16.70	4.25	61	1.7	36°47'11" 49°36'20"	144	5.0	UCAC2 40991012	12.47	6 <sup>h</sup> 00 <sup>m</sup> 09.894 <sup>s</sup> 26°04'20.787"	37.6	93	177.1	-36.4	84.9	-29.9	53.6	174	
2016/12/20 18:35:15	3617 Eicher	11.0	16.50	2.65	158	0.9	36°05'00" 51°27'32"	355	1.7	UCAC2 32157721	13.95	6 <sup>h</sup> 14 <sup>m</sup> 46.826 <sup>s</sup> 1°14'56.394"	26.2	123	157.4	-46.8	82.9	-22.6	53.2	145	
2016/12/20 18:44:06	5199 Dort- mund	13.2	16.35	6.86	203	0.9	37°45'01" 48°29'24"	149	1.5	TYC 242000639	9.50	6 <sup>h</sup> 14 <sup>m</sup> 11.284 <sup>s</sup> 30°46'01.455"	50.7	101	171.6	-48.1	82.4	-21.5	53.1	165	
2016/12/20 20:18:44	10752 1989 WJ1	5.2	16.64	4.72	43	0.6	36°25'05" 49°39'60"	167	1.8	UCAC2 36968295	11.94	6 <sup>h</sup> 25 <sup>m</sup> 04.601 <sup>s</sup> 14°38'21.150"	49.2	141	168.9	-60.0	80.7	-8.3	52.5	108	
2016/12/21 01:05:31	5633 1978 UL7	7.2	17.18	4.90	33	3.4	35°59'36" 49°49'16"	220	2.2	TYC 121500433	12.29	2 <sup>h</sup> 28 <sup>m</sup> 20.351 <sup>s</sup> 15°55'53.265"	2.5	292	130.5	-41.0	139.3	32.9	50.2	129	
2016/12/21 01:15:59	4021 Dancey	6.6	16.00	4.95	118	0.7	35°28'27" 49°07'36"	210	1.3	TYC 190201233	11.06	6 <sup>h</sup> 52 <sup>m</sup> 39.236 <sup>s</sup> 27°35'43.727"	51.1	251	166.8	-39.4	77.3	34.1	50.4	95	
2016/12/21 01:42:23	12122 1999 NV55	10.0	16.78	2.91	230	0.7	36°56'56" 52°04'25"	12	0.9	UCAC2 37676782	13.95	5 <sup>h</sup> 56 <sup>m</sup> 18.437 <sup>s</sup> 16°32'39.163"	30.0	260	173.2	-35.2	90.5	36.6	50.2	168	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 7		LinOccult 2.2.0 BETA				
	Asteroid				Nearest point			Star				Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$	
2016/12/21 18:40:27	6534 Car-riepeterson	10.5	16.58	4.34	42	0.7	36°20'37'' 50°25'16''	6	2.4 2.5	UCAC2 41500262	12.26	5 <sup>h</sup> 18 <sup>m</sup> 04.706 <sup>s</sup> 27°55'10.154''	57.1	120	169.4	-47.5	106.8	-30.7	43.4	166	
2016/12/21 21:06:09	11603 1995 TF	5.0	18.16	6.28	85	0.9	36°06'41'' 50°48'18''	352	1.0 1.2	UCAC2 44611951	11.88	2 <sup>h</sup> 56 <sup>m</sup> 23.507 <sup>s</sup> 36°47'51.593''	58.9	260	138.4	-63.1	132.1	-10.9	42.3	173	
2016/12/22 00:23:08	20754 2000 AD244	6.0	18.09	7.75	93	0.6	36°19'56'' 50°52'49''	2	1.2 1.5	TYC 17301175	10.34	7 <sup>h</sup> 28 <sup>m</sup> 24.241 <sup>s</sup> 3°46'02.712''	40.6	208	151.3	-47.6	79.1	18.7	41.1	164	
2016/12/22 02:08:21	3935 Toaten-mongakkai	11.4	14.07	1.23	169	1.3	35°31'35'' 48°36'49''	199	1.1 4.6	UCAC2 42735341	13.26	6 <sup>h</sup> 20 <sup>m</sup> 53.995 <sup>s</sup> 31°09'22.534''	39.5	273	171.1	-31.1	96.7	31.3	40.3	99	
2016/12/22 02:09:24	2400 Derevskaya	12.6	17.29	3.36	146	1.3	35°51'16'' 48°45'52''	192	2.0 2.7	UCAC2 34458244	13.98	8 <sup>h</sup> 17 <sup>m</sup> 52.075 <sup>s</sup> 7°34'05.139''	38.5	227	143.8	-30.9	67.9	31.4	40.4	188	
2016/12/22 15:37:24	20628 1999 TS40	10.0	17.24	3.68	207	0.9	37°47'16'' 48°28'15''	149	1.2 2.1	UCAC2 37340216	13.60	6 <sup>h</sup> 51 <sup>m</sup> 42.122 <sup>s</sup> 15°55'25.225''	5.5	72	166.6	-18.4	96.2	-42.2	35.2	193	
2016/12/22 16:09:36	5183 Robyn	11.5	16.30	2.68	16	0.8	36°04'37'' 50°00'13''	252	3.0 3.1	UCAC2 38051374	13.72	6 <sup>h</sup> 47 <sup>m</sup> 26.988 <sup>s</sup> 17°35'28.840''	12.4	77	168.4	-23.5	97.6	-43.7	35.0	149	
2016/12/22 23:23:19	6240 Lucretius Carus	5.5	16.26	5.56	165	0.6	35°29'04'' 48°39'33''	200	0.5 2.3	TYC 133600716	10.71	6 <sup>h</sup> 30 <sup>m</sup> 29.065 <sup>s</sup> 19°17'39.504''	55.0	217	173.0	-55.9	105.3	0.5	32.3	95	
2016/12/23 04:25:29	10 Hygiea	407.1	11.06	1.98	402	8.9	34°05'27'' 46°44'34''	203	22.0 54.4	HIP 79462	9.28	16 <sup>h</sup> 12 <sup>m</sup> 55.322 <sup>s</sup> -23°19'46.106''	5.1	136	26.1	-9.8	41.2	33.5	30.4	273	
2016/12/23 14:58:43	1430 Somalia	12.6	16.18	4.68	168	0.9	37°57'45'' 49°00'11''	134	1.8 3.4	UCAC2 41179141	11.51	6 <sup>h</sup> 53 <sup>m</sup> 00.405 <sup>s</sup> 26°37'11.429''	8.6	58	169.4	-12.4	107.7	-38.3	26.7	149	
2016/12/23 16:27:34	4014 Heizman	36.8	18.63	6.86	111	1.0	36°20'44'' 49°03'03''	178	4.6 5.0	UCAC2 27213623	11.78	21 <sup>h</sup> 39 <sup>m</sup> 02.553 <sup>s</sup> -13°07'45.823''	12.7	231	50.6	-26.3	111.9	-46.3	26.2	295	
2016/12/23 18:04:56	1906 Naef	10.5	16.38	4.53	35	0.8	36°29'57'' 49°45'58''	154	3.1 3.2	TYC 60700681	11.86	0 <sup>h</sup> 50 <sup>m</sup> 17.104 <sup>s</sup> 12°12'38.055''	46.1	221	104.1	-41.9	161.6	-47.5	25.7	131	
2016/12/23 19:11:49	25312 Asia-possenti	11.0	17.82	4.66	89	0.9	35°50'23'' 50°47'44''	339	1.9 2.1	UCAC2 35570175	13.18	8 <sup>h</sup> 19 <sup>m</sup> 12.208 <sup>s</sup> 10°54'14.112''	22.6	100	146.7	-51.8	88.2	-43.2	25.3	207	
2016/12/23 22:19:46	6279 1977 UO5	10.0	15.89	4.27	63	1.0	36°25'34'' 50°36'16''	9	2.7 3.0	TYC 188300455	11.64	6 <sup>h</sup> 25 <sup>m</sup> 40.506 <sup>s</sup> 25°00'55.254''	64.5	196	176.1	-62.0	117.6	-18.7	24.2	133	
2016/12/23 22:34:30	2677 Joan	20.6	15.95	3.91	237	1.6	36°18'04'' 52°10'40''	0	1.9 4.5	TYC 71700893	12.07	6 <sup>h</sup> 06 <sup>m</sup> 50.864 <sup>s</sup> 8°59'17.639''	47.0	204	165.6	-61.0	122.0	-16.4	24.1	183	
2016/12/24 05:23:28	2045 Peking	12.6	15.28	3.79	84	1.1	35°20'25'' 49°35'48''	233	3.3 4.3	UCAC2 43938199	11.53	5 <sup>h</sup> 53 <sup>m</sup> 40.106 <sup>s</sup> 34°45'20.250''	9.0	315	167.9	-1.8	126.3	30.3	21.8	116	
2016/12/24 14:29:38	5624 Shirley	11.5	17.12	5.04	133	2.4	36°47'17'' 51°12'07''	16	1.9 2.5	UCAC2 32646995	12.09	3 <sup>h</sup> 06 <sup>m</sup> 26.848 <sup>s</sup> 2°36'52.630''	21.3	113	130.4	-8.1	169.7	-31.5	19.1	180	
2016/12/24 15:53:58	693 Zerbi-netta	67.7	14.02	5.96	181	5.1	34°06'31'' 50°54'22''	302	3.2 31.9	TYC 292401451	8.07	5 <sup>h</sup> 59 <sup>m</sup> 47.824 <sup>s</sup> 43°59'09.378''	36.9	63	159.1	-20.8	126.8	-42.7	18.6	82	
2016/12/24 17:48:41	234 Barbara	43.8	12.67	1.47	260	5.3	39°55'50'' 50°02'23''	90	1.2 15.2	TYC 470600128	11.52	2 <sup>h</sup> 50 <sup>m</sup> 27.206 <sup>s</sup> -7°20'33.883''	32.6	174	121.6	-39.2	161.3	-51.2	18.0	114	
2016/12/24 21:05:36	4167 Riemann	13.2	16.15	3.40	117	1.0	36°42'16'' 51°03'52''	15	2.5 3.2	UCAC2 32665419	12.80	6 <sup>h</sup> 24 <sup>m</sup> 10.192 <sup>s</sup> 2°32'14.033''	42.0	167	159.0	-63.0	127.4	-38.3	17.0	163	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 8		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2016/12/25 01:06:57	16154 Dabramo	10.5	17.30	3.82	109	0.8	36°51'26'' 50°57'13''	22	1.9	UCAC2 40844000	13.52	7 <sup>h</sup> 14 <sup>m</sup> 38.744 <sup>s</sup> 25°37'23.229''	51.9	245	166.2	-41.1	119.6	-2.3	15.8	186
2016/12/25 02:55:16	5215 Tsurui	15.8	16.02	2.21	104	1.0	37°10'21'' 50°47'25''	37	3.1	UCAC2 36437682	13.96	6 <sup>h</sup> 33 <sup>m</sup> 12.923 <sup>s</sup> 13°10'45.668''	19.2	268	169.0	-23.8	129.7	12.6	15.3	165
2016/12/25 03:17:48	329 Svea	77.8	14.85	1.31	142	2.4	35°31'12'' 48°52'15''	203	11.9	UCAC2 28557384	13.92	14 <sup>h</sup> 05 <sup>m</sup> 59.995 <sup>s</sup> −9°15'02.306''	24.7	145	61.0	-20.2	15.4	15.3	15.2	205
2016/12/25 17:17:34	34003 OU6	5.2	16.85	4.82	147	0.5	36°15'15'' 51°22'16''	359	0.8	TYC 14402341	12.04	6 <sup>h</sup> 17 <sup>m</sup> 15.230 <sup>s</sup> 6°46'45.254''	21.8	106	163.4	-34.1	139.4	-49.5	11.5	107
2016/12/25 18:21:32	6382 1988 EL	5.8	16.73	5.27	47	1.0	36°53'42'' 50°13'06''	66	2.1	TYC 282202192	11.46	1 <sup>h</sup> 33 <sup>m</sup> 11.665 <sup>s</sup> 41°24'42.661''	72.0	250	118.9	-44.3	141.8	-53.8	11.3	100
2016/12/25 19:09:46	375 Ursula	106.2	12.59	1.14	248	8.2	34°34'60'' 51°59'55''	331	9.6	TYC 248101290	11.92	8 <sup>h</sup> 10 <sup>m</sup> 17.334 <sup>s</sup> 36°26'49.236''	42.9	81	152.5	-51.4	116.0	-54.3	11.1	189
2016/12/25 21:31:00	6527 Takashi-ito	6.6	16.00	4.14	8	0.8	36°19'28'' 50°07'11''	19	2.8	UCAC2 39479608	11.89	7 <sup>h</sup> 38 <sup>m</sup> 46.414 <sup>s</sup> 21°46'33.818''	57.5	142	161.5	-63.5	123.9	-43.1	10.5	93
2016/12/25 21:37:03	833 Monica	20.0	15.12	1.87	90	1.7	36°19'50'' 49°14'21''	178	4.5	UCAC2 45148405	13.46	5 <sup>h</sup> 52 <sup>m</sup> 28.522 <sup>s</sup> 38°17'05.678''	77.4	206	164.0	-63.5	142.9	-42.4	10.5	148
2016/12/25 22:19:16	10235 1998 QR37	10.0	18.06	6.39	91	0.9	36°19'38'' 50°52'02''	2	1.8	UCAC2 37891694	11.67	8 <sup>h</sup> 34 <sup>m</sup> 34.695 <sup>s</sup> 17°10'07.546''	52.6	143	147.7	-62.1	110.7	-36.6	10.3	205
2016/12/25 23:00:21	5955 Khromchenko	10.0	16.41	2.77	210	0.9	36°30'33'' 51°55'31''	4	0.9	UCAC2 43235242	13.73	5 <sup>h</sup> 10 <sup>m</sup> 02.830 <sup>s</sup> 32°53'02.603''	56.9	254	162.1	-58.6	153.7	-30.6	10.1	142
2016/12/26 03:12:38	2983 Poltava	30.9	15.74	4.27	214	2.6	35°16'36'' 48°14'18''	200	3.2	TYC 136401102	11.49	7 <sup>h</sup> 35 <sup>m</sup> 20.768 <sup>s</sup> 17°37'16.368''	29.0	263	161.4	-21.1	127.2	6.8	9.1	165
2016/12/26 15:09:42	1825 Klare	15.1	14.69	1.41	216	1.6	34°13'18'' 51°29'14''	317	0.9	UCAC2 40818771	13.63	5 <sup>h</sup> 40 <sup>m</sup> 45.055 <sup>s</sup> 25°36'41.193''	21.9	76	170.3	-13.8	158.6	-28.1	6.7	116
2016/12/26 18:54:33	343993 PW8	6.6	21.68	9.46	15	0.5	36°28'34'' 49°59'54''	112	0.5	TYC 196201548	12.22	9 <sup>h</sup> 32 <sup>m</sup> 52.197 <sup>s</sup> 26°19'46.226''	21.4	74	137.0	-49.1	108.9	-55.6	6.0	526
2016/12/26 21:41:22	45066 1999 XN32	5.8	17.47	5.48	245	0.6	38°11'39'' 51°53'16''	34	0.3	UCAC2 38070546	11.99	8 <sup>h</sup> 33 <sup>m</sup> 57.321 <sup>s</sup> 17°40'40.310''	49.4	131	148.9	-63.4	122.4	-49.3	5.4	130
2016/12/27 00:20:22	697 Galilea	80.1	14.08	0.86	263	6.1	34°25'02'' 48°01'37''	211	5.0	UCAC2 47185493	13.87	6 <sup>h</sup> 54 <sup>m</sup> 44.698 <sup>s</sup> 45°09'49.950''	67.1	271	157.2	-48.3	139.8	-27.1	5.0	155
2016/12/27 03:18:36	890 Waltraut	27.3	15.45	2.02	118	2.0	36°54'57'' 51°02'01''	22	4.9	UCAC2 34791095	13.62	5 <sup>h</sup> 57 <sup>m</sup> 43.884 <sup>s</sup> 8°47'54.568''	5.1	278	164.2	-20.2	160.1	-0.3	4.5	178
2016/12/27 13:36:35	24643 MacCready	5.5	17.40	5.34	211	1.2	36°52'13'' 51°54'27''	11	0.5	TYC 4601233	12.07	2 <sup>h</sup> 38 <sup>m</sup> 24.778 <sup>s</sup> 1°25'23.247''	18.3	111	120.7	-0.5	140.3	-7.8	2.9	142
2016/12/27 15:40:59	226 Weringia	33.8	15.04	1.90	88	1.0	37°23'28'' 49°42'10''	116	5.9	UCAC2 24992216	13.35	22 <sup>h</sup> 43 <sup>m</sup> 02.327 <sup>s</sup> −18°12'54.772''	17.7	207	59.7	-18.5	78.5	-27.0	2.7	211
2016/12/27 22:32:38	35175 1993 TJ21	9.1	17.99	6.27	176	0.6	35°38'42'' 48°31'23''	195	1.2	UCAC2 47047382	11.72	5 <sup>h</sup> 15 <sup>m</sup> 54.551 <sup>s</sup> 44°44'02.995''	67.7	269	153.9	-61.2	153.4	-50.2	1.9	207
2016/12/28 02:00:19	16172 2000 AZ97	5.0	16.33	6.50	227	0.6	38°28'58'' 51°32'44''	43	0.1	TYC 186200485	9.83	5 <sup>h</sup> 50 <sup>m</sup> 33.985 <sup>s</sup> 22°39'32.695''	26.2	275	171.3	-32.7	173.8	-20.0	1.5	96

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 9		LinOccult 2.2.0 BETA				
	Asteroid			Nearest point			Star				Sun		Moon							
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2016/12/28 02:25:29	3791 Marci	12.6	16.49	3.99	135	1.0	37°13'49" 51°05'51"	30	2.2 3.1	UCAC2 40010365	12.53	7 <sup>h</sup> 31 <sup>m</sup> 28.256 <sup>s</sup> 23°05'03.985"	38.7	260	165.5	-28.7	151.7	-16.1	1.5	161
2016/12/28 03:35:16	6574 Gvishiani	16.6	17.03	3.82	217	1.2	38°47'55" 51°10'22"	55	1.8 3.0	UCAC2 46282628	13.24	8 <sup>h</sup> 02 <sup>m</sup> 52.625 <sup>s</sup> 41°41'14.845"	44.6	286	153.0	-17.6	140.8	-5.7	1.4	218
2016/12/28 19:01:50	340262 2006 BH156	8.3	20.18	8.51	9	0.9	36°20'14" 49°58'33"	156	0.8 0.8	TYC 196200922	11.67	9 <sup>h</sup> 36 <sup>m</sup> 42.952 <sup>s</sup> 25°25'08.823"	22.5	77	138.0	-49.9	131.3	-49.7	0.4	404
2016/12/28 21:11:31	4804 Pasteur	13.2	15.53	2.08	171	1.1	36°53'09" 51°32'08"	15	1.8 3.5	UCAC2 39655088	13.62	7 <sup>h</sup> 07 <sup>m</sup> 34.358 <sup>s</sup> 22°17'08.461"	60.1	152	171.8	-63.0	166.5	-59.1	0.3	149
2016/12/29 13:44:34	5152 Labs	7.9	17.23	7.20	91	0.6	35°48'38" 50°48'10"	338	1.7 2.0	TYC 119401746	10.03	0 <sup>h</sup> 52 <sup>m</sup> 24.272 <sup>s</sup> 21°54'35.392"	52.4	126	102.2	-1.4	98.0	3.8	0.2	161
2016/12/29 17:21:36	33323 1998 QN53	10.5	17.78	4.18	161	0.7	36°47'16" 48°38'11"	167	1.5 2.0	UCAC2 35352745	13.63	6 <sup>h</sup> 12 <sup>m</sup> 36.717 <sup>s</sup> 10°13'34.616"	28.3	109	165.9	-34.3	166.6	-28.0	0.3	211
2016/12/29 18:55:20	12305 1991 TE1	6.3	16.24	4.62	5	0.6	36°17'11" 50°05'26"	360	2.3 2.3	UCAC2 41698147	11.64	6 <sup>h</sup> 58 <sup>m</sup> 42.763 <sup>s</sup> 28°05'31.765"	49.1	105	172.9	-48.9	170.6	-42.1	0.4	109
2016/12/29 19:06:14	7293 Kazuyuki	6.6	16.78	5.53	43	0.5	36°10'22" 50°25'52"	349	2.0 2.2	TYC 187600506	11.26	6 <sup>h</sup> 01 <sup>m</sup> 12.262 <sup>s</sup> 28°42'40.016"	59.7	124	170.4	-50.4	163.4	-43.7	0.4	121
2016/12/29 20:46:33	106791 2000 XF24	5.8	17.90	6.13	62	0.6	36°31'02" 49°30'55"	164	1.2 1.3	UCAC2 45133100	11.78	4 <sup>h</sup> 44 <sup>m</sup> 25.501 <sup>s</sup> 38°17'52.924"	74.1	229	151.7	-61.6	144.1	-55.4	0.4	173
2016/12/29 21:24:51	3039 Yangel	10.5	16.85	3.37	246	0.8	36°35'00" 52°14'60"	5	0.8 2.7	UCAC2 31824736	13.53	6 <sup>h</sup> 40 <sup>m</sup> 17.976 <sup>s</sup> 0°18'18.686"	40.3	175	157.1	-63.2	160.7	-57.9	0.5	156
2016/12/29 22:06:06	5547 Acadiau	11.0	16.26	3.24	207	0.9	35°31'31" 51°50'46"	345	1.0 3.1	UCAC2 34632866	13.08	7 <sup>h</sup> 17 <sup>m</sup> 21.000 <sup>s</sup> 8°01'05.291"	48.1	176	162.0	-62.7	169.0	-58.9	0.5	139
2016/12/29 22:48:44	78692 2002 TA167	7.6	18.13	9.07	28	0.5	36°07'34" 50°16'54"	336	1.4 1.4	TYC 74000730	9.06	6 <sup>h</sup> 23 <sup>m</sup> 07.733 <sup>s</sup> 12°14'52.176"	48.5	213	168.6	-59.8	167.6	-57.7	0.5	211
2016/12/30 00:12:18	129133 2004 YZ31	12.6	19.18	5.51	110	0.7	35°11'01" 49°22'01"	226	1.1 1.1	UCAC2 40511430	13.68	8 <sup>h</sup> 06 <sup>m</sup> 40.049 <sup>s</sup> 24°56'38.042"	62.0	213	159.5	-49.6	165.5	-50.3	0.6	443
2016/12/30 05:30:24	169 Zelia	33.6	14.49	1.14	238	0.7	37°40'44" 51°59'40"	25	3.4 5.6	UCAC2 21127885	13.82	16 <sup>h</sup> 56 <sup>m</sup> 07.313 <sup>s</sup> -26°25'13.241"	7.2	148	23.3	-1.0	34.5	-3.3	1.0	238
2016/12/30 19:53:15	94094 2000 YQ65	5.0	18.83	8.37	91	0.5	35°53'02" 49°16'11"	198	0.9 1.0	TYC 126500016	10.46	4 <sup>h</sup> 27 <sup>m</sup> 37.152 <sup>s</sup> 16°01'47.032"	55.7	193	148.0	-56.5	131.0	-42.4	2.4	197
2016/12/30 20:25:53	3462 Zhongguangzhao	6.6	17.06	4.78	70	0.6	36°14'59" 49°25'15"	182	1.8 2.1	TYC 138600312	12.29	8 <sup>h</sup> 22 <sup>m</sup> 14.521 <sup>s</sup> 19°34'39.167"	44.4	116	156.1	-59.9	173.0	-46.8	2.5	126
2016/12/31 00:46:59	3523 Arina	12.0	15.44	2.51	213	1.0	38°26'11" 51°23'40"	46	0.8 4.0	UCAC2 43780712	13.04	7 <sup>h</sup> 17 <sup>m</sup> 18.566 <sup>s</sup> 34°19'11.018"	58.0	256	166.2	-44.4	160.1	-51.0	3.1	118
2016/12/31 03:04:08	4119 Miles	15.1	16.08	4.42	97	1.2	37°12'25" 50°41'19"	43	3.1 3.7	UCAC2 36592410	11.68	5 <sup>h</sup> 19 <sup>m</sup> 59.342 <sup>s</sup> 13°46'58.547"	2.8	288	158.5	-22.6	139.3	-32.2	3.4	161
2016/12/31 04:28:21	5464 Weller	10.5	15.83	2.48	151	1.0	38°19'12" 50°25'29"	74	1.6 3.4	UCAC2 46813749	13.46	6 <sup>h</sup> 30 <sup>m</sup> 36.355 <sup>s</sup> 43°55'41.092"	23.9	311	158.9	-9.7	145.7	-19.1	3.6	121
2016/12/31 04:41:42	3007 Reaves	10.0	16.24	2.83	242	0.8	39°24'07" 50°57'06"	66	0.5 3.1	UCAC2 42282893	13.50	7 <sup>h</sup> 43 <sup>m</sup> 23.698 <sup>s</sup> 29°45'53.111"	21.8	291	164.8	-7.7	165.7	-17.0	3.6	130

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 10		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2016/12/31 17:44:12	8901 UJ4	15.1	16.60	5.36	201	2.0	35°40'54'' 51°48'55''	348	1.8 3.2	TYC 182101107	11.25	3 <sup>h</sup> 55 <sup>m</sup> 16.606 <sup>s</sup> 27°12'21.557''	64.4	146	141.6	-37.7	113.6	-14.0	5.9	187
	9906 Tin-toretto	7.6	17.45	5.67	136	0.6	36°33'46'' 48°50'05''	172	1.3 2.0	UCAC2 46137409	11.79	7 <sup>h</sup> 51 <sup>m</sup> 39.204 <sup>s</sup> 41°23'18.994''	62.4	93	156.9	-58.3	151.8	-36.3	6.4	151
2016/12/31 21:54:36	1570 Brunonia	16.2	15.92	4.98	236	1.5	36°37'32'' 52°09'16''	6	1.3 4.3	TYC 136700437	10.95	7 <sup>h</sup> 52 <sup>m</sup> 02.169 <sup>s</sup> 18°23'17.563''	57.1	158	163.8	-63.0	166.0	-49.5	6.8	151