

## 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 Mv = 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 2.3.0 BETA  
Author: Plekhanov Andrey andyplekhanov@gmail.com  
Events number: 477

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')

Sorted by date/time.

Table 1

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LinOccult 2.3.0 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	Phase (%)	$\sigma_{km}$	
2017/01/01 03:55:34	3181 Ahnert	10.0	15.08	1.60	187	1.1	37°18'04" 51°36'08"	23	0.1	UCAC4 538-23295	13.77	6 <sup>h</sup> 07 <sup>m</sup> 35.923 <sup>s</sup> 17°33'36.782"	4.6	292	169.4	-14.6	138.0	-30.3	67
2017/01/01 04:55:50	702 Alanda	194.7	13.26	0.93	160	7.8	38°31'24" 50°06'23"	88	29.5	UCAC4 314-69507	12.93	12 <sup>h</sup> 57 <sup>m</sup> 04.125 <sup>s</sup> -27°23'12.888"	11.2	195	77.5	-5.7	109.6	-20.9	155
2017/01/01 04:58:09	73528 NU8	6.9	19.33	6.55	141	0.5	36°18'56" 48°46'58"	179	1.1	UCAC4 351-60303	12.79	10 <sup>h</sup> 22 <sup>m</sup> 16.548 <sup>s</sup> -19°59'16.776"	4.2	232	112.1	-5.4	140.3	-20.5	198
2017/01/01 13:59:08	19686 RL197	10.0	16.76	3.75	176	0.9	37°53'39" 48°51'32"	139	1.1	UCAC4 549-17154	13.04	5 <sup>h</sup> 38 <sup>m</sup> 13.219 <sup>s</sup> 19°41'03.954"	10.6	72	163.4	-2.9	125.9	22.2	119
2017/01/01 14:31:17	13249 Mar- callen	14.5	16.18	3.10	167	0.8	36°26'29" 48°33'04"	176	1.9	UCAC4 546-1066	13.15	0 <sup>h</sup> 32 <sup>m</sup> 07.651 <sup>s</sup> 19°11'48.394"	57.8	158	93.8	-7.4	56.6	19.6	129
2017/01/01 15:11:03	91943 1999 VA64	5.8	19.94	9.75	26	0.5	36°36'59" 49°57'18"	114	1.3	UCAC4 476-1747	10.19	1 <sup>h</sup> 07 <sup>m</sup> 22.477 <sup>s</sup> 5°02'08.285"	44.2	164	96.3	-13.3	57.9	15.7	178
2017/01/01 18:14:53	13146 Yuriko	8.3	17.65	3.98	31	0.6	36°24'49" 49°46'45"	163	2.4	UCAC4 595-37431	13.70	6 <sup>h</sup> 59 <sup>m</sup> 23.990 <sup>s</sup> 28°53'59.947"	45.1	97	173.5	-42.4	141.1	-9.0	137
2017/01/01 19:02:11	5323 Fogh	6.3	15.66	2.29	8	0.8	36°14'52" 50°07'02"	340	3.7	UCAC4 586-27043	13.51	6 <sup>h</sup> 14 <sup>m</sup> 13.071 <sup>s</sup> 27°05'42.885"	57.7	124	171.0	-49.5	131.3	-16.3	68
2017/01/01 19:14:48	35175 1993 TJ21	9.1	18.04	4.46	85	0.7	35°55'06" 50°46'14"	342	2.1	UCAC4 674-34214	13.60	5 <sup>h</sup> 10 <sup>m</sup> 52.538 <sup>s</sup> 44°37'32.776"	80.9	122	150.4	-51.3	116.1	-18.2	151
2017/01/01 20:41:26	4756 Asara- mas	12.6	16.71	2.84	234	0.9	36°46'14" 47°57'56"	172	0.6	UCAC4 530-21544	13.96	6 <sup>h</sup> 00 <sup>m</sup> 34.955 <sup>s</sup> 15°57'30.867"	56.1	177	166.5	-60.9	127.3	-31.4	122
2017/01/01 21:19:05	20492 1999 OC5	6.9	17.52	3.60	63	0.6	36°55'24" 50°26'08"	47	1.8	UCAC4 478-8900	13.96	4 <sup>h</sup> 56 <sup>m</sup> 13.100 <sup>s</sup> 5°35'08.090"	41.5	212	147.6	-62.8	109.8	-36.7	141
2017/01/01 22:42:43	23693 1997 KU2	5.8	16.92	3.86	29	0.5	36°28'31" 50°16'35"	28	2.4	UCAC4 513-39706	13.10	7 <sup>h</sup> 17 <sup>m</sup> 53.343 <sup>s</sup> 12°29'26.132"	51.9	195	167.7	-60.2	144.7	-46.8	92
2017/01/01 23:06:51	6779 Perrine	5.2	16.60	5.19	218	1.0	36°44'03" 51°59'17"	8	0.0	UCAC4 545-47250	11.42	8 <sup>h</sup> 49 <sup>m</sup> 23.288 <sup>s</sup> 18°49'04.814"	58.4	166	151.9	-57.9	165.6	-49.0	67
2017/01/01 23:27:33	742 Edisona	45.6	13.98	0.81	147	3.4	35°19'21" 48°53'21"	208	6.7	UCAC4 611-30364	13.86	6 <sup>h</sup> 13 <sup>m</sup> 52.181 <sup>s</sup> 32°03'02.788"	57.7	250	167.8	-55.6	128.1	-50.5	108
2017/01/02 00:43:42	7487 Toshi- tanaka	10.5	15.41	2.74	180	0.9	38°19'53" 51°00'57"	54	0.6	UCAC4 556-27369	12.77	6 <sup>h</sup> 23 <sup>m</sup> 09.524 <sup>s</sup> 21°06'38.569"	39.5	255	173.5	-45.0	130.6	-52.6	87
2017/01/02 01:19:35	8860 Rohloff	10.0	16.64	4.26	176	0.8	34°44'08" 48°49'35"	219	0.9	UCAC4 671-49535	12.40	7 <sup>h</sup> 08 <sup>m</sup> 19.550 <sup>s</sup> 44°08'12.445"	55.5	280	158.4	-39.4	133.2	-51.5	104
2017/01/02 01:23:42	5930 Zhiganov	6.3	16.94	3.96	248	0.6	34°37'53" 48°06'18"	209	0.0	UCAC4 537-15808	13.01	5 <sup>h</sup> 33 <sup>m</sup> 56.571 <sup>s</sup> 17°12'58.331"	22.3	270	161.2	-38.7	118.5	-51.2	82
2017/01/02 01:37:53	47334 1999 XX32	7.9	17.24	4.17	129	0.7	36°14'18" 51°12'05"	358	1.4	UCAC4 520-48225	13.10	8 <sup>h</sup> 45 <sup>m</sup> 26.039 <sup>s</sup> 13°58'42.043"	46.0	226	151.4	-36.5	164.4	-50.4	101
2017/01/02 02:21:01	1440 Rostia	11.0	16.45	6.16	6	0.9	36°17'00" 49°59'28"	182	4.1	UCAC4 573-41611	10.29	7 <sup>h</sup> 42 <sup>m</sup> 24.244 <sup>s</sup> 24°27'33.928"	39.0	262	168.1	-29.5	147.3	-46.8	106
2017/01/02 03:15:55	65683 1990 QW5	5.5	17.62	4.51	58	0.5	35°40'09" 49°42'39"	230	1.7	UCAC4 666-36203	13.13	5 <sup>h</sup> 19 <sup>m</sup> 10.513 <sup>s</sup> 43°08'18.390"	22.5	311	152.2	-20.8	113.9	-40.5	111

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 2		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/02 03:29:25	20059 OY9	7.2	18.44	5.62	75	1.3	37°18'54" 49°54'49"	101	1.8	UCAC4	12.83	11 <sup>h</sup> 02 <sup>m</sup> 44.891 <sup>s</sup> 0°03'54.653"	35.8	211	114.8	-18.6	159.1	-38.8	14.5	136
2017/01/02 03:42:43	3904 Honda	15.8	16.75	3.30	54	0.7	36°53'50" 50°19'47"	54	4.2	UCAC4	13.50	12 <sup>h</sup> 58 <sup>m</sup> 27.451 <sup>s</sup> -18°11'07.491"	21.9	179	81.3	-16.6	125.3	-37.0	14.5	140
2017/01/02 14:22:19	63002 WH22	5.5	17.88	3.98	179	0.6	36°50'59" 48°28'50"	167	0.7	UCAC4	13.93	5 <sup>h</sup> 22 <sup>m</sup> 07.552 <sup>s</sup> 8°14'05.235"	8.7	88	153.8	-6.0	107.6	27.1	17.9	152
2017/01/02 14:48:06	1513 Matra	7.1	17.75	4.88	235	0.5	38°38'13" 48°36'02"	134	0.2	UCAC4	12.88	1 <sup>h</sup> 13 <sup>m</sup> 50.755 <sup>s</sup> 2°49'20.268"	40.6	156	95.9	-9.7	45.9	25.4	18.1	98
2017/01/02 16:35:13	13027 Geert-aerts	6.0	16.59	2.89	194	0.6	37°22'26" 48°27'23"	156	0.2	UCAC4	13.78	7 <sup>h</sup> 02 <sup>m</sup> 38.366 <sup>s</sup> 17°58'49.244"	21.3	87	174.7	-26.3	131.5	14.6	18.7	87
2017/01/02 16:42:41	55897 AH6	6.6	17.56	6.98	123	0.5	35°37'55" 51°04'33"	338	1.3	UCAC4	10.58	7 <sup>h</sup> 07 <sup>m</sup> 14.869 <sup>s</sup> 24°23'40.733"	26.4	83	176.4	-27.5	131.9	13.7	18.7	123
2017/01/02 17:25:56	2588 Flavia	7.2	16.88	4.70	194	0.7	37°19'14" 48°26'14"	158	0.4	UCAC4	12.20	5 <sup>h</sup> 32 <sup>m</sup> 54.561 <sup>s</sup> 21°35'55.809"	46.1	114	161.4	-34.5	109.9	8.0	19.0	94
2017/01/02 17:38:24	18385 EG31	5.8	18.80	4.82	71	1.4	35°21'20" 49°49'32"	250	1.4	UCAC4	13.99	3 <sup>h</sup> 16 <sup>m</sup> 24.303 <sup>s</sup> 4°14'33.779"	44.1	172	124.5	-36.5	74.5	6.2	18.9	143
2017/01/02 18:09:29	40724 SY8	6.3	18.26	5.66	248	0.9	36°11'20" 47°49'07"	182	0.2	UCAC4	12.60	1 <sup>h</sup> 31 <sup>m</sup> 06.045 <sup>s</sup> 22°32'57.323"	54.8	229	106.8	-41.4	56.2	1.8	19.2	109
2017/01/02 18:14:01	1599 Gionus	39.5	16.75	8.37	90	1.2	36°37'10" 49°16'08"	165	9.2	UCAC4	8.38	22 <sup>h</sup> 48 <sup>m</sup> 01.165 <sup>s</sup> -11°50'21.844"	3.1	247	56.7	-42.1	6.1	1.1	19.2	139
2017/01/02 18:36:49	5536 Honey-cutt	8.7	16.83	3.61	146	0.6	36°19'20" 51°21'47"	1	0.9	UCAC4	13.26	1 <sup>h</sup> 15 <sup>m</sup> 35.644 <sup>s</sup> 11°15'12.285"	39.8	234	99.4	-45.6	47.4	-2.3	19.4	86
2017/01/02 20:12:07	28973 KN42	5.8	16.87	5.32	242	0.6	35°18'36" 52°08'07"	343	0.1	UCAC4	11.56	6 <sup>h</sup> 41 <sup>m</sup> 50.446 <sup>s</sup> 6°24'14.009"	43.9	154	163.3	-58.2	123.8	-16.9	19.9	100
2017/01/02 20:19:56	12042 Laques	7.9	17.45	5.48	149	0.6	35°44'23" 48°45'13"	195	1.2	UCAC4	11.98	6 <sup>h</sup> 52 <sup>m</sup> 01.377 <sup>s</sup> 15°05'11.790"	52.0	149	172.3	-59.0	126.9	-18.1	20.0	120
2017/01/02 22:09:29	26260 RA2	6.9	17.63	4.67	108	2.0	36°36'24" 49°06'05"	168	1.5	UCAC4	12.97	3 <sup>h</sup> 32 <sup>m</sup> 14.602 <sup>s</sup> 14°29'41.766"	31.3	254	131.6	-62.3	77.7	-34.0	20.8	99
2017/01/02 23:17:01	6236 Mallard	7.2	17.04	3.45	127	0.6	36°54'43" 51°07'04"	21	1.3	UCAC4	13.64	6 <sup>h</sup> 33 <sup>m</sup> 01.149 <sup>s</sup> 23°41'28.581"	55.0	233	175.0	-56.8	120.5	-42.1	21.0	108
2017/01/02 23:46:54	681 Gorgo	22.9	15.89	2.72	244	1.6	37°13'08" 52°09'47"	16	1.3	UCAC4	13.27	7 <sup>h</sup> 31 <sup>m</sup> 50.639 <sup>s</sup> 5°23'22.904"	41.6	211	160.4	-53.1	134.1	-44.9	21.2	134
2017/01/03 01:46:20	13326 Ferri	8.7	18.11	4.43	115	0.5	35°34'42" 49°07'15"	206	1.8	UCAC4	13.70	6 <sup>h</sup> 31 <sup>m</sup> 07.708 <sup>s</sup> 17°51'02.510"	27.7	265	172.6	-35.1	118.9	-48.7	22.0	143
2017/01/03 02:41:23	26476 AK185	5.5	17.56	5.82	122	0.9	34°44'06" 50°30'59"	295	1.0	UCAC4	11.74	10 <sup>h</sup> 18 <sup>m</sup> 29.649 <sup>s</sup> -1°47'29.858"	34.1	211	124.7	-26.3	167.9	-45.9	22.4	101
2017/01/03 02:44:06	6333 Helene-jacq	5.2	16.53	4.30	247	0.6	38°40'45" 51°40'02"	43	0.0	UCAC4	12.25	7 <sup>h</sup> 54 <sup>m</sup> 04.089 <sup>s</sup> 20°56'25.802"	34.0	262	166.2	-25.8	137.5	-45.7	22.3	66
2017/01/03 03:32:31	9021 Fagus	11.5	17.23	4.49	16	1.6	36°18'13" 49°54'31"	175	4.0	UCAC4	12.76	10 <sup>h</sup> 02 <sup>m</sup> 09.953 <sup>s</sup> 13°43'20.557"	40.4	238	134.9	-18.2	168.3	-41.1	22.6	115

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 3		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/03 05:16:07	509 Iolanda	53.0	14.26	2.63	51	1.1	35°58'44" 50°27'48"	335	10.6 10.9	UCAC4 389-104072	11.73	18 <sup>h</sup> 50 <sup>m</sup> 10.944 <sup>s</sup> −12°17'48.931"	6.4	118	10.6	-2.9	58.5	-27.6	23.2	193
2017/01/03 15:40:27	53225 1999 CG94	7.2	17.01	4.18	218	0.8	36°00'24" 48°05'48"	185	0.4 2.5	UCAC4 521-9536	12.86	4 <sup>h</sup> 54 <sup>m</sup> 37.781 <sup>s</sup> 14°08'25.812"	30.7	105	149.7	-17.5	87.9	28.9	27.2	117
2017/01/03 16:08:39	49965 1999 XA231	8.7	16.46	3.82	83	0.8	37°04'53" 49°30'42"	136	2.5 3.4	UCAC4 668-49328	12.67	6 <sup>h</sup> 42 <sup>m</sup> 48.498 <sup>s</sup> 43°25'09.463"	38.1	65	159.0	-22.0	111.0	26.4	27.4	101
2017/01/03 16:22:23	461 Saskia	45.7	14.30	2.56	234	4.8	37°27'44" 48°05'23"	159	0.8 19.8	UCAC4 557-18952	11.85	5 <sup>h</sup> 44 <sup>m</sup> 29.536 <sup>s</sup> 21°20'23.608"	34.9	98	163.0	-24.1	100.0	25.1	27.5	91
2017/01/03 16:47:34	16725 Toudono	8.7	16.99	3.08	52	1.0	35°34'45" 50°10'26"	286	2.9 3.3	UCAC4 721-32236	13.97	4 <sup>h</sup> 02 <sup>m</sup> 16.946 <sup>s</sup> 54°08'55.550"	71.8	66	134.6	-28.2	85.1	22.4	27.7	105
2017/01/03 17:13:01	12393 1994 YC1	6.6	17.87	4.21	137	1.4	37°00'12" 48°54'14"	158	1.1 2.4	UCAC4 523-51355	13.69	9 <sup>h</sup> 39 <sup>m</sup> 19.383 <sup>s</sup> 14°33'42.289"	0.7	68	141.0	-32.3	155.6	19.4	27.7	109
2017/01/03 17:21:54	11584 Fer- enczi	6.3	18.56	5.39	211	1.0	34°55'02" 48°22'29"	208	0.5 1.9	UCAC4 575-4483	13.18	2 <sup>h</sup> 06 <sup>m</sup> 24.568 <sup>s</sup> 24°52'08.973"	64.2	198	114.2	-33.7	52.3	18.3	27.9	129
2017/01/03 19:24:48	5274 Degewij	10.0	18.16	4.31	171	1.0	36°00'20" 48°31'24"	187	1.3 1.6	UCAC4 533-2073	13.87	1 <sup>h</sup> 08 <sup>m</sup> 45.525 <sup>s</sup> 16°35'14.520"	35.6	252	98.7	-52.4	35.5	0.9	28.7	250
2017/01/03 20:36:34	8096 Emile- zola	5.8	17.44	4.45	188	0.5	36°03'39" 48°21'53"	185	0.3 2.5	UCAC4 553-18207	13.00	5 <sup>h</sup> 43 <sup>m</sup> 54.532 <sup>s</sup> 20°28'55.485"	60.6	186	162.6	-60.3	97.4	-10.1	29.2	92
2017/01/03 21:47:03	12234 Shkura- tov	7.6	17.01	3.67	52	0.6	36°30'55" 50°29'44"	18	2.7 3.1	UCAC4 503-42623	13.38	7 <sup>h</sup> 26 <sup>m</sup> 32.262 <sup>s</sup> 10°29'49.939"	50.5	172	166.1	-62.8	121.3	-20.7	29.7	98
2017/01/03 22:00:40	3031 Houston	8.7	15.81	2.33	91	0.8	36°20'02" 50°51'58"	2	2.2 4.8	UCAC4 593-25834	13.61	5 <sup>h</sup> 59 <sup>m</sup> 51.367 <sup>s</sup> 28°27'58.164"	63.7	223	165.6	-62.6	100.5	-22.7	29.8	72
2017/01/03 22:10:05	12168 Polko	9.5	17.21	5.76	25	0.7	36°17'58" 50°16'18"	2	3.0 3.0	UCAC4 583-36491	11.46	7 <sup>h</sup> 05 <sup>m</sup> 15.225 <sup>s</sup> 26°35'34.875"	66.3	194	175.8	-62.2	115.0	-24.0	29.9	126
2017/01/03 22:38:39	38567 1999 VZ161	6.0	19.17	5.36	66	0.8	36°27'53" 50°37'48"	11	1.4 1.6	UCAC4 582-9346	13.82	3 <sup>h</sup> 48 <sup>m</sup> 24.359 <sup>s</sup> 26°12'17.437"	37.2	268	136.8	-60.4	71.0	-28.0	30.1	151
2017/01/03 23:14:19	9053 Hamamelis	7.9	17.56	5.42	187	0.6	35°03'26" 48°34'13"	208	0.8 2.6	UCAC4 553-17577	12.15	5 <sup>h</sup> 39 <sup>m</sup> 18.276 <sup>s</sup> 20°32'21.393"	44.8	246	161.4	-57.0	94.9	-32.6	30.3	122
2017/01/04 00:26:01	20525 1999 RU43	8.3	17.69	4.43	64	0.7	36°52'40" 50°28'60"	41	2.3 2.7	UCAC4 691-34001	13.28	5 <sup>h</sup> 08 <sup>m</sup> 57.737 <sup>s</sup> 48°02'03.766"	46.1	295	146.5	-47.6	90.4	-40.2	30.8	124
2017/01/04 00:37:56	15634 2000 JD15	6.0	16.83	3.26	54	0.6	35°46'10" 49°41'47"	223	2.4 2.9	UCAC4 601-30382	13.63	6 <sup>h</sup> 11 <sup>m</sup> 24.827 <sup>s</sup> 30°08'27.733"	43.7	267	167.0	-45.8	101.6	-41.2	30.9	82
2017/01/04 02:01:02	17236 2000 EK45	5.5	15.66	4.00	101	0.8	36°47'16" 50°53'45"	21	1.0 3.4	UCAC4 510-28409	11.69	6 <sup>h</sup> 39 <sup>m</sup> 49.982 <sup>s</sup> 11°48'51.980"	21.6	263	168.2	-32.8	107.4	-44.8	31.5	65
2017/01/04 02:31:59	16582 1992 JS3	5.0	17.70	3.87	72	0.5	35°41'13" 49°31'28"	216	1.6 2.1	UCAC4 607-17156	13.86	5 <sup>h</sup> 09 <sup>m</sup> 48.128 <sup>s</sup> 31°12'07.535"	17.1	298	154.2	-27.8	87.3	-44.6	31.7	95
2017/01/04 04:43:26	497 Iva	45.3	15.98	2.67	49	1.0	36°56'35" 50°11'04"	72	8.9 9.2	UCAC4 319-105451	13.40	17 <sup>h</sup> 10 <sup>m</sup> 02.525 <sup>s</sup> −26°20'51.208"	3.3	139	25.2	-7.5	94.3	-34.9	32.6	197
2017/01/04 04:56:05	11446 Be- tankur	7.9	17.02	5.76	241	0.6	34°08'43" 48°23'54"	220	0.3 2.9	UCAC4 560-32246	11.26	6 <sup>h</sup> 37 <sup>m</sup> 01.316 <sup>s</sup> 21°56'29.062"	1.9	303	174.7	-5.7	105.1	-33.4	32.7	109

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 4		LinOccult 2.3.0 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 (%)	$\sigma_{km}$	
2017/01/04 14:38:58	6088 Hoshi-gakubo	9.5	16.97	4.71	169	0.8	35°09'33" 51°23'01"	332	1.2 3.2	UCAC4 541-23961	12.28	6 <sup>h</sup> 14 <sup>m</sup> 56.904 <sup>s</sup> 18°02'12.160"	11.7	76	168.1	-8.1	94.6	37.7	36.8	118	
2017/01/04 14:53:21	630 Euphemia	17.2	14.74	1.35	42	1.8	36°18'58" 50°25'31"	3	7.1 8.1	UCAC4 526-9928	13.77	4 <sup>h</sup> 54 <sup>m</sup> 02.954 <sup>s</sup> 15°00'12.902"	24.6	96	148.9	-10.2	74.9	37.6	36.9	85	
2017/01/04 15:17:49	11863 1989 EX	7.2	16.76	2.86	9	0.6	36°13'13" 49°58'50"	212	2.9 2.9	UCAC4 512-25646	13.98	6 <sup>h</sup> 35 <sup>m</sup> 18.984 <sup>s</sup> 12°19'42.995"	10.3	83	167.9	-13.9	99.1	37.1	37.1	100	
2017/01/04 17:29:13	25675 2000 AX101	6.3	16.72	3.76	249	0.6	35°21'31" 52°12'37"	345	0.1 2.8	UCAC4 634-36070	13.00	6 <sup>h</sup> 40 <sup>m</sup> 43.947 <sup>s</sup> 36°37'35.840"	47.6	86	165.2	-34.7	98.3	27.0	38.1	91	
2017/01/04 17:31:35	24381 2000 AA166	7.6	17.94	6.01	194	0.6	35°57'14" 51°46'36"	353	0.8 2.3	UCAC4 459-40221	11.93	8 <sup>h</sup> 06 <sup>m</sup> 18.971 <sup>s</sup> 1°40'03.526"	9.1	98	153.9	-35.1	120.3	26.8	38.1	131	
2017/01/04 17:37:08	6452 Johnneuller	6.3	16.80	5.37	64	0.6	36°36'32" 49°30'30"	159	2.2 2.9	UCAC4 546-41131	11.44	7 <sup>h</sup> 27 <sup>m</sup> 06.616 <sup>s</sup> 19°08'40.164"	29.5	95	173.2	-36.0	109.9	26.1	38.1	86	
2017/01/04 18:26:47	35175 1993 TJ21	9.1	18.08	4.21	221	0.7	37°31'17" 48°13'52"	156	0.8 2.4	UCAC4 673-34641	13.89	5 <sup>h</sup> 08 <sup>m</sup> 01.024 <sup>s</sup> 44°31'45.864"	75.8	105	147.9	-43.8	80.8	19.9	38.5	152	
2017/01/04 19:07:46	7716 Ube	5.2	16.69	5.27	115	0.5	36°16'25" 49°00'52"	180	0.9 2.7	UCAC4 508-30950	11.43	6 <sup>h</sup> 45 <sup>m</sup> 41.767 <sup>s</sup> 11°32'23.812"	42.8	132	168.2	-49.9	99.4	14.1	38.8	79	
2017/01/04 21:12:51	9558 1986 QB3	8.7	17.88	6.69	55	0.7	36°11'09" 49°33'15"	187	2.5 2.7	UCAC4 559-45292	11.19	8 <sup>h</sup> 18 <sup>m</sup> 04.170 <sup>s</sup> 21°43'48.923"	55.6	136	162.6	-62.3	119.3	-4.7	39.7	129	
2017/01/04 22:10:16	13800 1998 VR36	9.1	15.92	5.04	243	1.0	35°38'38" 52°11'43"	349	0.1 4.0	UCAC4 511-15308	10.89	5 <sup>h</sup> 50 <sup>m</sup> 53.023 <sup>s</sup> 12°10'55.315"	46.8	218	159.9	-62.1	84.2	-13.4	40.2	90	
2017/01/04 22:29:28	22718 1998 SY15	7.2	17.56	3.65	108	0.7	36°33'53" 50°59'52"	11	1.6 2.4	UCAC4 571-19452	13.94	5 <sup>h</sup> 44 <sup>m</sup> 38.459 <sup>s</sup> 24°05'31.872"	54.2	236	161.9	-61.0	83.3	-16.2	40.4	118	
2017/01/04 22:45:23	273 Atropos	29.3	14.54	1.35	115	2.1	37°15'46" 50°52'12"	37	6.0 12.2	UCAC4 428-11496	13.56	5 <sup>h</sup> 52 <sup>m</sup> 26.986 <sup>s</sup> -4°33'12.594"	28.1	219	147.8	-59.8	83.9	-18.5	40.5	96	
2017/01/04 22:57:39	4899 Candace	8.7	17.43	3.94	150	1.3	37°43'32" 51°02'05"	43	1.2 3.3	UCAC4 378-62467	13.52	11 <sup>h</sup> 12 <sup>m</sup> 15.739 <sup>s</sup> -14°29'56.633"	15.5	137	108.6	-58.7	157.7	-20.3	40.7	106	
2017/01/04 23:43:15	20380 1998 KW47	7.2	17.02	6.18	191	0.6	37°05'06" 51°41'05"	17	0.4 3.0	UCAC4 539-40594	10.84	7 <sup>h</sup> 27 <sup>m</sup> 47.513 <sup>s</sup> 17°37'43.015"	52.1	221	172.4	-53.5	106.7	-26.3	40.9	97	
2017/01/04 23:48:12	2467 Kollon-tai	10.5	15.64	3.08	185	0.9	36°54'07" 51°39'33"	14	0.3 5.5	UCAC4 593-28902	12.62	6 <sup>h</sup> 10 <sup>m</sup> 32.467 <sup>s</sup> 28°34'04.966"	49.8	255	166.7	-52.9	88.5	-27.0	41.0	76	
2017/01/05 00:07:07	92200 1999 XK241	7.2	18.97	5.97	109	0.7	35°27'31" 50°52'21"	327	1.4 1.8	UCAC4 541-52523	13.01	12 <sup>h</sup> 45 <sup>m</sup> 34.816 <sup>s</sup> 18°05'09.004"	40.1	112	100.8	-50.3	161.4	-29.2	41.1	165	
2017/01/05 00:20:00	200 Dy-name	128.4	11.49	1.10	28	11.9	36°12'41" 49°47'60"	191	55.5 58.3	UCAC4 596-41079	10.88	7 <sup>h</sup> 23 <sup>m</sup> 39.477 <sup>s</sup> 29°03'53.213"	56.4	245	172.1	-48.5	104.2	-30.7	41.2	79	
2017/01/05 00:20:04	19647 1999 RZ103	7.9	17.49	3.85	127	0.6	36°40'19" 51°09'58"	12	1.5 2.5	UCAC4 546-38169	13.67	7 <sup>h</sup> 05 <sup>m</sup> 32.677 <sup>s</sup> 19°10'22.723"	46.1	240	176.6	-48.5	101.0	-30.7	41.2	125	
2017/01/05 00:42:12	18571 1997 WQ21	6.6	18.18	4.25	136	1.1	36°53'03" 51°12'30"	18	1.1 2.3	UCAC4 578-7344	13.95	3 <sup>h</sup> 13 <sup>m</sup> 02.593 <sup>s</sup> 25°31'22.818"	11.3	296	127.7	-45.2	49.0	-33.0	41.5	114	
2017/01/05 02:26:31	16554 1991 UE2	6.3	16.40	2.66	42	0.6	36°36'46" 50°21'23"	34	2.6 3.0	UCAC4 591-36578	13.83	6 <sup>h</sup> 48 <sup>m</sup> 56.100 <sup>s</sup> 28°10'46.942"	30.2	279	173.4	-28.7	95.5	-39.9	42.2	85	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 5		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/05 02:57:12	477 Italia	22.5	15.60	2.27	248	0.6	34°49'45" 48°01'47"	205	1.6	UCAC4 345-75960	13.48	15 <sup>h</sup> 29 <sup>m</sup> 37.532 <sup>s</sup> -21°02'28.962"	7.8	137	49.5	-23.7	130.3	-40.3	42.4	157
2017/01/05 03:48:27	55103 QE138	6.6	16.94	4.22	239	0.7	33°51'48" 48°35'39"	227	0.1	UCAC4 607-20697	12.74	5 <sup>h</sup> 30 <sup>m</sup> 52.833 <sup>s</sup> 31°21'27.016"	9.3	309	157.5	-15.7	77.9	-39.2	42.8	91
2017/01/05 04:45:21	18884 YE9	7.9	18.27	4.89	133	1.2	37°02'09" 48°57'34"	156	1.4	UCAC4 448-51365	13.39	10 <sup>h</sup> 22 <sup>m</sup> 53.124 <sup>s</sup> 0° - 32'48.082"	20.2	243	126.4	-7.2	148.2	-35.5	43.3	127
2017/01/05 15:40:50	66062 RG1	6.9	17.06	7.84	95	0.7	36°13'02" 49°11'34"	183	1.7	UCAC4 490-18489	9.22	6 <sup>h</sup> 05 <sup>m</sup> 22.047 <sup>s</sup> 7°59'39.729"	16.1	97	159.4	-17.3	78.0	42.2	48.1	116
2017/01/05 16:24:13	41987 YW29	6.0	16.98	3.70	34	0.5	36°15'08" 50°20'54"	356	2.6	UCAC4 540-45492	13.32	8 <sup>h</sup> 06 <sup>m</sup> 29.926 <sup>s</sup> 17°51'02.331"	11.2	76	165.2	-24.1	106.4	41.0	48.5	87
2017/01/05 17:08:54	11189 Rabeaton	5.0	16.96	3.11	22	0.6	36°31'11" 49°55'03"	131	2.3	UCAC4 632-28920	13.91	5 <sup>h</sup> 50 <sup>m</sup> 33.925 <sup>s</sup> 36°22'01.980"	52.8	93	158.5	-31.3	75.4	38.1	48.9	85
2017/01/05 17:54:16	36936 SP227	7.2	17.42	3.66	98	0.6	36°20'50" 50°55'49"	3	1.7	UCAC4 492-43274	13.80	7 <sup>h</sup> 30 <sup>m</sup> 47.244 <sup>s</sup> 8°14'42.629"	24.0	107	164.6	-38.6	97.8	33.8	49.2	121
2017/01/05 18:11:14	5745 1991 AN	5.8	16.23	8.02	8	0.9	36°10'27" 50°02'32"	266	5.5	UCAC4 582-43042	8.22	9 <sup>h</sup> 01 <sup>m</sup> 42.172 <sup>s</sup> 26°23'25.789"	25.7	79	153.6	-41.2	116.0	31.9	49.3	41
2017/01/05 19:27:16	8635 Yū-riosipov	5.2	16.54	2.76	23	0.6	36°15'24" 50°14'60"	355	2.6	UCAC4 588-29361	13.87	6 <sup>h</sup> 20 <sup>m</sup> 50.878 <sup>s</sup> 27°32'49.935"	62.4	136	168.4	-52.4	79.7	22.1	49.9	77
2017/01/05 19:46:55	2583 Fatyvanov	18.8	16.76	3.20	130	2.1	36°13'16" 51°12'36"	358	2.8	UCAC4 576-46061	13.62	9 <sup>h</sup> 38 <sup>m</sup> 06.797 <sup>s</sup> 25°11'12.594"	34.3	91	145.5	-54.9	123.2	19.3	50.0	87
2017/01/05 20:20:21	29147 GG	5.5	17.51	6.51	169	0.5	36°11'48" 51°33'52"	358	0.5	UCAC4 763-34893	11.00	5 <sup>h</sup> 40 <sup>m</sup> 24.185 <sup>s</sup> 62°28'37.763"	77.3	356	137.4	-58.6	77.9	14.4	50.4	101
2017/01/05 20:28:07	7575 Kimura-seiji	6.0	16.99	4.71	66	0.6	36°14'19" 49°27'23"	183	2.2	UCAC4 512-3502	12.30	2 <sup>h</sup> 22 <sup>m</sup> 54.473 <sup>s</sup> 12°13'08.735"	32.7	248	112.0	-59.3	21.7	13.2	50.4	71
2017/01/05 20:48:46	47532 AF97	6.6	17.56	8.04	237	0.5	35°33'50" 52°07'39"	347	0.3	UCAC4 658-42813	9.52	6 <sup>h</sup> 12 <sup>m</sup> 53.669 <sup>s</sup> 41°31'08.199"	81.7	184	157.8	-60.9	78.3	10.1	50.6	114
2017/01/05 21:59:51	1158 Luda	19.1	14.17	1.57	139	1.9	35°59'52" 51°16'49"	351	2.2	UCAC4 681-42774	12.89	6 <sup>h</sup> 14 <sup>m</sup> 32.037 <sup>s</sup> 46°05'44.608"	77.3	259	154.0	-62.4	78.5	-0.8	51.2	82
2017/01/05 22:10:35	18550 Maoy-isheng	5.8	18.62	4.93	164	1.8	36°46'13" 48°36'18"	168	0.8	UCAC4 550-7036	13.70	3 <sup>h</sup> 32 <sup>m</sup> 51.545 <sup>s</sup> 19°58'13.065"	33.5	261	130.2	-62.0	38.9	-2.4	51.4	139
2017/01/06 00:24:45	6649 Yoko-tatakao	7.9	17.38	4.00	135	0.6	36°55'24" 51°11'43"	20	1.4	UCAC4 606-32008	13.41	6 <sup>h</sup> 25 <sup>m</sup> 52.287 <sup>s</sup> 31°04'12.331"	47.5	264	167.3	-47.8	78.1	-21.4	52.3	125
2017/01/06 01:14:03	12557 Caracol	9.1	17.31	3.39	193	0.7	35°15'31" 48°27'12"	202	0.9	UCAC4 540-27287	13.97	6 <sup>h</sup> 26 <sup>m</sup> 09.623 <sup>s</sup> 17°50'32.769"	30.2	262	169.1	-40.2	77.3	-27.0	52.7	121
2017/01/06 01:52:33	68133 AQ18	6.6	17.35	3.87	91	0.7	35°36'22" 49°21'40"	212	1.7	UCAC4 667-37363	13.51	5 <sup>h</sup> 24 <sup>m</sup> 24.067 <sup>s</sup> 43°19'25.732"	32.2	301	150.1	-34.1	67.2	-30.7	53.0	107
2017/01/06 02:25:21	122726 SB43	2000	17.14	3.91	89	0.8	35°15'08" 49°36'15"	236	1.5	UCAC4 665-29555	13.26	4 <sup>h</sup> 50 <sup>m</sup> 23.325 <sup>s</sup> 42°54'39.916"	23.1	310	144.9	-28.8	60.9	-33.1	53.3	99
2017/01/06 03:44:05	21645 Chent-saiwei	5.0	17.72	4.97	230	0.5	33°52'36" 48°41'50"	229	0.4	UCAC4 597-17323	12.76	5 <sup>h</sup> 17 <sup>m</sup> 35.213 <sup>s</sup> 29°20'28.731"	6.0	310	154.2	-16.3	61.3	-35.7	53.9	146

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 6		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/06 05:21:30	132 Aethra	42.7	14.78	2.04	19	1.0	36°08'56'' 50°11'50''	329	8.4	UCAC4 357-137035	12.92	18 <sup>h</sup> 24 <sup>m</sup> 17.903 <sup>s</sup> −18°38'07.676''	6.8	130	11.1	-2.1	105.5	-32.2	54.6	202
2017/01/06 14:07:22	1071 Brita	50.3	13.99	1.04	81	6.2	35°36'60'' 50°38'17''	324	15.0	UCAC4 594-18698	13.47	5 <sup>h</sup> 26 <sup>m</sup> 51.124 <sup>s</sup> 28°38'45.748''	23.2	73	155.9	-3.3	57.4	39.2	58.6	83
2017/01/06 15:51:03	62348 SB142	5.5	18.17	5.00	14	0.8	36°27'48'' 49°59'20''	117	1.5	UCAC4 567-11114	13.18	4 <sup>h</sup> 37 <sup>m</sup> 43.331 <sup>s</sup> 23°17'18.860''	43.8	107	144.9	-18.7	44.3	46.5	59.5	144
2017/01/06 18:17:28	32869 FW26	6.6	18.59	7.84	121	2.0	37°47'07'' 50°33'11''	62	1.3	UCAC4 589-6481	10.75	2 <sup>h</sup> 43 <sup>m</sup> 25.355 <sup>s</sup> 27°38'31.406''	64.6	215	119.9	-42.1	23.9	40.8	60.7	149
2017/01/06 19:19:07	31816 RZ117	8.7	17.77	3.98	11	0.7	36°09'50'' 50°06'47''	310	2.5	UCAC4 586-16698	13.82	5 <sup>h</sup> 23 <sup>m</sup> 19.257 <sup>s</sup> 27°04'24.586''	66.4	162	155.1	-51.1	53.2	33.8	61.1	140
2017/01/06 19:23:00	57356 QG293	7.2	16.77	5.16	83	0.7	37°23'31'' 49°50'21''	106	2.1	UCAC4 596-11411	11.62	4 <sup>h</sup> 06 <sup>m</sup> 04.924 <sup>s</sup> 29°04'44.713''	67.4	208	138.0	-51.7	37.8	33.3	61.2	95
2017/01/06 19:30:08	146 Lucina	132.2	12.25	0.78	294	10.2	35°53'37'' 47°25'13''	185	0.7	UCAC4 592-28952	12.19	6 <sup>h</sup> 16 <sup>m</sup> 09.698 <sup>s</sup> 28°17'30.575''	64.3	140	166.2	-52.6	64.9	32.4	61.2	92
2017/01/06 19:40:35	17071 GK21	5.0	18.59	5.13	219	2.1	34°55'47'' 48°17'22''	206	0.2	UCAC4 516-5808	13.47	3 <sup>h</sup> 27 <sup>m</sup> 13.608 <sup>s</sup> 13°05'01.569''	47.5	219	126.1	-54.0	23.3	31.0	61.3	107
2017/01/06 19:59:27	27142 XG61	9.5	16.61	4.59	44	0.7	36°00'36'' 50°24'00''	333	3.4	UCAC4 549-43723	12.03	8 <sup>h</sup> 07 <sup>m</sup> 11.535 <sup>s</sup> 19°45'40.833''	46.9	120	166.7	-56.2	90.1	28.4	61.4	103
2017/01/06 20:02:16	7528 Huskvarna	7.9	17.70	4.68	54	0.6	36°09'09'' 50°31'18''	350	2.3	UCAC4 545-43651	13.04	7 <sup>h</sup> 47 <sup>m</sup> 59.997 <sup>s</sup> 18°49'12.903''	49.1	127	170.7	-56.5	85.7	28.1	61.4	124
2017/01/06 20:12:03	33314 KX60	7.2	17.51	6.00	44	0.7	36°30'25'' 50°24'47''	21	2.2	UCAC4 547-16355	11.51	5 <sup>h</sup> 34 <sup>m</sup> 12.513 <sup>s</sup> 19°21'05.598''	59.5	184	157.1	-57.6	54.1	26.7	61.5	121
2017/01/06 20:23:47	5240 Kwasan	10.0	15.74	3.01	120	1.5	36°32'30'' 48°58'41''	171	1.4	UCAC4 490-50723	12.80	9 <sup>h</sup> 06 <sup>m</sup> 24.604 <sup>s</sup> 7°54'13.398''	32.3	120	148.8	-58.7	106.0	25.0	61.6	74
2017/01/06 23:31:52	20963 Pis-arenko	8.3	17.75	4.28	239	0.7	35°26'26'' 47°58'08''	195	0.4	UCAC4 653-26109	13.49	4 <sup>h</sup> 55 <sup>m</sup> 51.139 <sup>s</sup> 40°29'01.778''	46.6	282	146.1	-54.9	50.1	-3.4	63.1	118
2017/01/07 00:58:50	21527 Horton	7.2	17.71	3.94	89	0.5	36°22'23'' 50°50'45''	4	1.9	UCAC4 517-47760	13.80	8 <sup>h</sup> 39 <sup>m</sup> 07.739 <sup>s</sup> 13°22'58.377''	47.0	222	157.5	-42.6	95.7	-15.4	63.8	111
2017/01/07 01:30:12	48689 GP1	6.0	17.79	4.20	52	0.7	36°40'36'' 50°26'22''	33	1.8	UCAC4 729-34010	13.61	4 <sup>h</sup> 39 <sup>m</sup> 00.361 <sup>s</sup> 55°46'37.898''	36.6	316	136.2	-37.7	55.9	-19.2	64.0	119
2017/01/07 01:33:07	16143 XK142	5.2	17.38	3.52	228	0.5	37°46'23'' 51°52'17''	28	0.1	UCAC4 615-23855	13.90	5 <sup>h</sup> 34 <sup>m</sup> 10.166 <sup>s</sup> 32°48'31.377''	28.9	288	155.9	-37.2	53.2	-19.5	64.1	96
2017/01/07 02:10:25	27545 JX16	7.2	17.37	5.61	147	0.6	35°16'00'' 48°54'06''	210	1.1	UCAC4 507-25502	11.76	6 <sup>h</sup> 26 <sup>m</sup> 50.510 <sup>s</sup> 11°18'36.732''	15.7	269	164.5	-31.2	63.1	-23.5	64.3	112
2017/01/07 05:16:22	13079 Toots	5.0	18.95	5.88	161	2.0	37°30'27'' 48°50'00''	147	0.6	UCAC4 473-46521	13.07	11 <sup>h</sup> 02 <sup>m</sup> 49.245 <sup>s</sup> 4°32'51.207''	24.5	246	121.8	-2.7	130.0	-30.7	65.4	113
2017/01/07 14:07:19	10637 Heimlich	10.5	17.53	4.02	137	1.3	34°35'22'' 50°37'41''	298	1.9	UCAC4 638-17463	13.53	4 <sup>h</sup> 23 <sup>m</sup> 27.507 <sup>s</sup> 37°31'01.626''	39.6	76	140.3	-3.2	36.1	36.5	69.6	140
2017/01/07 14:37:03	68108 YN132	6.3	17.48	3.62	108	0.8	35°31'50'' 49°12'46''	210	1.4	UCAC4 633-11029	13.90	3 <sup>h</sup> 05 <sup>m</sup> 36.590 <sup>s</sup> 36°30'04.092''	56.2	97	124.9	-7.3	26.7	40.3	70.0	97

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 7		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/07 15:03:34	19485 1998 HC122	9.1	17.52	4.22	201	0.7	35°31'22'' 51°47'07''	344	0.8	UCAC4 526-21818	13.32	6 <sup>h</sup> 07 <sup>m</sup> 32.428 <sup>s</sup> 15°00'16.708''	16.4	86	162.5	-11.3	50.7	43.4	70.1	129
2017/01/07 16:29:53	8823 1987 WS3	9.5	15.27	1.89	225	1.3	34°37'59'' 51°46'35''	328	0.1	UNKNOWN UN- KNOWN	13.59	6 <sup>h</sup> 06 <sup>m</sup> 22.524 <sup>s</sup> 8°53'33.582''	25.7	108	158.7	-24.7	50.0	50.2	70.7	85
2017/01/07 16:43:51	22291 Heitifer	8.7	17.12	3.92	192	0.7	35°44'26'' 48°21'34''	192	0.8	UCAC4 482-21727	13.23	6 <sup>h</sup> 30 <sup>m</sup> 57.600 <sup>s</sup> 6°17'21.729''	22.0	107	160.8	-27.0	56.3	50.7	70.8	117
2017/01/07 18:06:29	6699 Igauno	8.3	16.36	3.91	177	0.7	35°30'59'' 51°33'55''	342	0.7	UCAC4 587-38776	12.48	7 <sup>h</sup> 26 <sup>m</sup> 25.501 <sup>s</sup> 27°19'59.729''	42.1	96	174.3	-40.2	67.1	49.7	71.4	100
2017/01/07 18:58:42	8842 1990 KF	7.2	17.87	6.23	28	0.7	36°24'09'' 49°48'37''	163	2.5	UCAC4 505-51086	11.64	9 <sup>h</sup> 34 <sup>m</sup> 11.221 <sup>s</sup> 10°58'55.191''	18.0	94	145.0	-48.1	98.7	45.8	71.8	111
2017/01/07 20:40:57	5930 Zhiganov	6.3	17.10	4.12	172	0.7	36°50'53'' 51°32'54''	14	0.4	UCAC4 537-14899	13.00	5 <sup>h</sup> 28 <sup>m</sup> 30.276 <sup>s</sup> 17°23'32.599''	56.2	201	154.3	-60.1	38.0	33.5	72.6	84
2017/01/07 21:24:07	1131 Porzia	8.7	16.04	4.43	20	0.7	36°19'09'' 49°52'04''	173	4.5	UCAC4 560-44505	11.63	7 <sup>h</sup> 58 <sup>m</sup> 57.589 <sup>s</sup> 21°50'23.117''	59.7	152	170.1	-62.2	72.9	27.3	72.9	75
2017/01/07 21:45:29	31092 1997 CW5	5.2	18.41	6.30	220	0.9	35°19'32'' 51°55'48''	342	0.5	UCAC4 631-15626	12.11	4 <sup>h</sup> 04 <sup>m</sup> 07.953 <sup>s</sup> 36°08'56.479''	52.3	268	136.3	-62.4	28.9	24.1	73.1	156
2017/01/07 22:00:04	91494 1999 RS135	5.0	16.75	3.12	76	0.6	36°09'14'' 50°43'18''	353	1.6	UCAC4 666-52222	13.70	7 <sup>h</sup> 48 <sup>m</sup> 53.003 <sup>s</sup> 43°06'19.544''	83.0	161	158.0	-62.2	69.7	21.9	73.1	79
2017/01/07 22:24:02	17733 1998 BS1	5.5	16.84	4.80	208	0.9	36°31'40'' 51°54'39''	5	0.2	UCAC4 604-19084	12.05	5 <sup>h</sup> 16 <sup>m</sup> 11.913 <sup>s</sup> 30°36'33.074''	54.0	253	151.9	-61.1	37.2	18.2	73.4	90
2017/01/08 00:13:49	4406 Mahler	8.7	18.00	5.86	187	0.8	35°28'38'' 48°27'02''	198	1.0	UCAC4 452-51217	12.15	12 <sup>h</sup> 17 <sup>m</sup> 12.098 <sup>s</sup> 0°18'10.422''	31.3	136	103.8	-49.3	137.3	1.6	74.1	131
2017/01/08 00:25:42	1089 Tama	12.9	14.54	1.07	46	6.6	36°02'16'' 49°39'53''	203	6.3	UNKNOWN UN- KNOWN	13.98	3 <sup>h</sup> 40 <sup>m</sup> 20.232 <sup>s</sup> 20°34'31.947''	12.3	287	130.0	-47.5	13.0	-0.1	73.8	61
2017/01/08 04:22:25	648 Pippa	68.3	13.11	1.43	284	6.5	34°20'09'' 47°50'39''	210	0.3	UCAC4 578-33066	12.02	6 <sup>h</sup> 41 <sup>m</sup> 41.353 <sup>s</sup> 25°28'51.893''	7.9	301	171.2	-10.4	50.9	-25.5	75.9	90
2017/01/08 04:24:59	22399 1995 CB	5.2	17.86	7.65	2	0.5	36°15'45'' 50°02'18''	239	1.9	UCAC4 527-47898	10.21	8 <sup>h</sup> 45 <sup>m</sup> 00.338 <sup>s</sup> 15°23'21.243''	18.7	272	158.2	-10.0	80.3	-25.6	75.9	113
2017/01/08 05:27:49	3182 Shi-manto	27.5	17.65	3.82	243	0.6	34°29'47'' 48°12'19''	212	2.7	UCAC4 344-116793	13.86	17 <sup>h</sup> 49 <sup>m</sup> 13.199 <sup>s</sup> -21°19'21.744''	10.0	142	20.5	-1.2	142.1	-27.3	76.3	231
2017/01/08 13:47:22	2696 Magion	20.2	17.27	5.43	22	0.7	36°20'55'' 49°51'29''	168	4.6	UCAC4 419-148805	11.85	23 <sup>h</sup> 53 <sup>m</sup> 26.303 <sup>s</sup> -6°21'24.698''	33.4	172	67.8	-0.3	58.5	28.5	79.7	173
2017/01/08 14:03:52	6438 Suarez	5.5	18.75	6.36	141	0.6	37°53'44'' 49°19'17''	125	0.9	UCAC4 483-3037	12.39	2 <sup>h</sup> 05 <sup>m</sup> 21.555 <sup>s</sup> 6°27'29.868''	37.3	133	103.1	-2.5	23.3	31.0	79.8	113
2017/01/08 14:55:08	20937 1005 T-2	5.5	18.41	4.96	66	0.7	35°55'21'' 50°35'35''	337	1.5	UCAC4 551-12506	13.46	5 <sup>h</sup> 07 <sup>m</sup> 46.271 <sup>s</sup> 20°08'12.550''	29.0	93	149.3	-9.8	22.5	38.5	80.1	125
2017/01/08 16:43:37	822 Lalage	12.1	15.33	1.67	222	2.1	34°59'45'' 51°51'55''	335	0.0	UCAC4 530-5063	13.93	2 <sup>h</sup> 54 <sup>m</sup> 26.676 <sup>s</sup> 15°52'42.020''	55.5	166	117.5	-26.8	11.5	51.1	80.8	68
2017/01/08 16:59:24	129133 2004 YZ31	12.6	19.04	7.06	186	0.7	37°01'17'' 48°26'34''	164	1.2	UCAC4 579-40481	11.98	8 <sup>h</sup> 01 <sup>m</sup> 24.497 <sup>s</sup> 25°37'53.938''	25.1	79	169.8	-29.3	61.4	52.3	80.9	365



Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 8		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/08 18:30:34	12334 WD3	5.2	16.02	2.72	144	0.7	36°25'41" 51°20'22"	4	0.3 3.1	UCAC4 529-29829	13.39	6 <sup>h</sup> 39 <sup>m</sup> 15.146 <sup>s</sup> 15°37'01.255"	44.4	125	168.4	-43.7	41.8	54.5	81.5	67
2017/01/08 19:23:37	40724 SY8	6.3	18.34	5.11	72	0.6	36°10'12" 49°24'13"	187	1.8 2.2	UNKNOWN UN- KNOWN	13.24	1 <sup>h</sup> 34 <sup>m</sup> 38.019 <sup>s</sup> 22°42'49.276"	41.4	256	101.6	-51.4	32.5	51.7	81.8	113
2017/01/08 19:36:44	5336 1991 JE1	13.8	17.13	3.64	136	1.0	35°58'49" 48°50'32"	189	2.5 4.0	UCAC4 490-18088	13.53	6 <sup>h</sup> 03 <sup>m</sup> 45.277 <sup>s</sup> 7°59'33.549"	47.0	163	156.8	-53.1	33.8	50.7	81.9	138
2017/01/08 19:50:23	3031 Houston	8.7	15.93	2.58	134	0.9	36°40'44" 48°52'06"	168	0.9 4.8	UCAC4 592-23203	13.46	5 <sup>h</sup> 54 <sup>m</sup> 17.635 <sup>s</sup> 28°16'08.133"	68.0	166	159.7	-54.8	31.9	49.4	82.0	73
2017/01/08 21:35:30	91207 1998 XW27	5.5	19.03	6.14	11	0.8	36°21'20" 50°07'55"	28	1.5 1.5	UCAC4 541-49660	12.90	10 <sup>h</sup> 13 <sup>m</sup> 39.253 <sup>s</sup> 18°03'12.304"	42.4	116	139.3	-62.3	90.1	36.5	82.6	143
2017/01/08 21:52:24	20666 1999 UX8	6.3	18.85	4.89	226	0.9	37°40'46" 51°52'46"	26	0.5 1.8	UCAC4 416-54850	13.97	11 <sup>h</sup> 44 <sup>m</sup> 15.955 <sup>s</sup> -6°51'15.372"	11.5	115	109.3	-62.2	118.1	34.1	82.9	140
2017/01/08 22:19:50	23997 1999 RW27	10.5	14.85	2.50	15	1.8	36°16'52" 50°10'58"	359	5.3 5.4	UCAC4 701-45326	12.46	6 <sup>h</sup> 33 <sup>m</sup> 32.010 <sup>s</sup> 50°07'54.889"	76.2	279	150.4	-61.2	47.4	30.0	83.0	77
2017/01/08 23:26:07	33003 1997 EJ	9.5	17.29	3.49	229	0.9	37°25'21" 51°58'27"	21	0.5 3.2	UCAC4 639-27585	13.84	5 <sup>h</sup> 41 <sup>m</sup> 04.246 <sup>s</sup> 37°46'30.625"	52.0	271	153.4	-55.4	32.0	19.9	83.4	121
2017/01/09 00:37:00	5094 Seryozha	7.9	17.26	3.67	137	0.7	35°30'20" 48°55'39"	204	1.3 2.9	UCAC4 579-27919	13.63	6 <sup>h</sup> 26 <sup>m</sup> 32.764 <sup>s</sup> 25°43'29.898"	40.0	263	167.0	-45.8	35.4	9.2	83.8	110
2017/01/09 00:39:39	71115 1999 XW156	5.2	19.03	5.51	194	1.2	38°53'38" 49°35'01"	105	0.5 1.6	UCAC4 426-54001	13.53	10 <sup>h</sup> 42 <sup>m</sup> 30.327 <sup>s</sup> -4°49'24.527"	35.1	173	123.9	-45.4	101.1	8.8	83.9	132
2017/01/09 00:58:46	36881 2000 SX154	5.0	17.96	4.35	238	0.7	36°06'25" 52°10'52"	357	0.1 2.1	UCAC4 451-48131	13.63	9 <sup>h</sup> 18 <sup>m</sup> 09.803 <sup>s</sup> 0°11'11.594"	37.4	206	144.0	-42.5	79.4	5.9	83.9	95
2017/01/09 01:48:59	24513 2001 BL35	9.1	17.47	7.05	155	0.7	35°45'58" 51°23'49"	346	1.4 2.8	UCAC4 403-17283	10.43	6 <sup>h</sup> 46 <sup>m</sup> 04.333 <sup>s</sup> -9°29'56.028"	4.7	249	147.2	-34.6	47.3	-1.2	84.2	132
2017/01/09 02:44:08	9005 Sidorova	6.9	17.77	4.19	213	0.6	34°38'10" 48°28'04"	214	0.4 2.5	UCAC4 566-16942	13.61	5 <sup>h</sup> 30 <sup>m</sup> 54.577 <sup>s</sup> 23°07'20.977"	9.4	295	154.5	-25.7	21.2	-8.4	84.6	110
2017/01/09 04:50:02	158 Koronis	35.4	13.02	1.07	32	3.0	36°26'49" 50°19'10"	21	14.5 15.4	UCAC4 554-40254	12.46	7 <sup>h</sup> 50 <sup>m</sup> 03.235 <sup>s</sup> 20°37'03.546"	9.4	291	173.3	-6.3	51.8	-20.6	85.3	91
2017/01/09 15:16:44	63197 2000 YP122	5.8	17.56	5.50	139	0.5	36°07'08" 51°17'32"	355	1.0 1.8	UCAC4 526-25721	12.07	6 <sup>h</sup> 22 <sup>m</sup> 01.511 <sup>s</sup> 15°05'41.817"	17.5	87	163.9	-12.9	25.2	35.4	88.7	125
2017/01/09 15:26:59	12362 Mu-muryk	8.3	17.72	4.97	200	0.6	37°12'38" 51°44'38"	19	0.8 2.5	UCAC4 464-23968	12.76	6 <sup>h</sup> 55 <sup>m</sup> 45.906 <sup>s</sup> 2°36'54.165"	4.2	91	159.4	-14.5	36.7	36.9	88.8	135
2017/01/09 18:04:27	4849 Ardenne	5.8	17.04	4.18	96	0.6	36°37'59" 49°13'03"	165	1.4 3.0	UCAC4 517-47951	12.89	8 <sup>h</sup> 42 <sup>m</sup> 47.127 <sup>s</sup> 13°22'02.439"	20.6	94	159.4	-39.5	57.3	55.3	89.6	76
2017/01/09 19:20:02	1338 Duponta	10.0	14.98	1.60	206	1.3	35°25'45" 51°49'06"	343	0.0 6.8	UCAC4 563-46243	13.66	8 <sup>h</sup> 41 <sup>m</sup> 57.118 <sup>s</sup> 22°28'02.798"	39.6	102	162.1	-50.8	54.9	57.3	89.9	59
2017/01/09 20:12:00	47684 2000 CT83	6.0	18.46	6.12	170	1.1	35°54'33" 48°32'38"	189	0.8 1.9	UCAC4 507-50088	12.35	10 <sup>h</sup> 09 <sup>m</sup> 09.097 <sup>s</sup> 11°19'09.063"	25.7	103	139.3	-57.1	77.1	55.0	90.2	129
2017/01/09 22:05:05	27725 1990 QF4	6.6	16.63	4.66	233	1.0	34°09'10" 48°29'17"	221	0.1 3.1	UCAC4 513-10485	11.98	5 <sup>h</sup> 10 <sup>m</sup> 08.761 <sup>s</sup> 12°24'01.873"	40.5	235	146.5	-61.8	6.2	42.6	90.8	84

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 9		LinOccult 2.3.0 BETA			
Date Time (UTC)	Asteroid			Nearest point			Star			Sun			Moon			$\sigma_{km}$				
	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 (%)
2017/01/09 23:54:27	6241 Galante	11.5	16.45	3.26	139	0.9	35°45'33" 48°51'05"	196	1.9 4.1	UCAC4 605-41051	13.25	7 <sup>h</sup> 31 <sup>m</sup> 27.589 <sup>s</sup> 30°59'14.208"	59.8	243	170.8	-51.8	36.8	26.5	91.3	111
2017/01/10 01:16:24	29903 HP9	8.3	16.67	4.56	146	0.9	36°52'59" 51°18'18"	17	1.2 3.2	UCAC4 506-18558	12.13	6 <sup>h</sup> 01 <sup>m</sup> 13.084 <sup>s</sup> 11°02'24.527"	18.2	266	157.1	-39.8	15.4	13.9	91.7	103
2017/01/10 01:36:49	25848 EL104	5.8	17.92	4.38	59	0.6	35°52'13" 49°35'28"	210	1.7 2.0	UCAC4 599-24220	13.56	5 <sup>h</sup> 49 <sup>m</sup> 15.270 <sup>s</sup> 29°44'06.078"	26.7	285	157.0	-36.5	15.8	10.9	91.8	115
2017/01/10 02:21:21	1430 Somalia	12.6	16.26	3.86	63	0.9	35°42'05" 49°37'51"	222	4.0 4.8	UCAC4 584-31040	12.44	6 <sup>h</sup> 34 <sup>m</sup> 08.393 <sup>s</sup> 26°43'33.630"	24.6	283	167.3	-29.4	22.1	4.4	92.0	104
2017/01/10 02:22:30	2606 Odessa	15.1	15.04	1.44	224	2.0	36°02'29" 52°03'27"	356	0.7 5.4	UCAC4 442-46330	13.93	8 <sup>h</sup> 28 <sup>m</sup> 23.134 <sup>s</sup> −1°36'05.394"	20.6	240	151.9	-29.2	53.3	4.2	92.0	112
2017/01/10 02:31:53	25108 Bostrom	5.0	18.11	4.83	102	0.6	35°55'49" 49°09'30"	194	1.2 2.0	UCAC4 473-43333	13.30	9 <sup>h</sup> 17 <sup>m</sup> 02.549 <sup>s</sup> 4°24'04.121"	31.0	235	147.8	-27.7	62.6	2.9	92.0	99
2017/01/10 02:43:29	3067 Akhmatova	8.3	15.12	2.94	176	1.2	34°57'04" 48°43'37"	213	0.1 5.6	UNKNOWN UN- KNOWN	12.26	8 <sup>h</sup> 45 <sup>m</sup> 11.403 <sup>s</sup> 25°14'14.832"	41.0	261	161.5	-25.8	50.9	1.3	92.1	59
2017/01/10 03:06:09	1117 Reginita	15.1	15.37	3.94	209	1.1	38°01'21" 51°34'04"	36	0.4 6.9	UCAC4 535-45604	11.46	8 <sup>h</sup> 02 <sup>m</sup> 30.943 <sup>s</sup> 16°50'22.115"	24.4	267	170.0	-22.2	41.5	-1.8	92.2	87
2017/01/10 04:42:19	393 Lampetia	96.9	14.14	1.14	3	8.7	36°18'39" 50°01'35"	143	27.4 27.4	UCAC4 423-52709	13.47	9 <sup>h</sup> 39 <sup>m</sup> 16.334 <sup>s</sup> −5°25'57.507"	7.3	253	137.4	-7.4	69.8	-13.0	92.6	138
2017/01/10 16:52:45	933 Susi	21.9	17.92	6.00	32	0.8	36°25'22" 49°46'18"	162	5.7 5.8	UCAC4 421-143127	11.92	23 <sup>h</sup> 46 <sup>m</sup> 11.531 <sup>s</sup> −5°50'41.182"	22.9	228	64.2	-27.9	91.2	41.9	95.4	150
2017/01/10 17:43:47	16481 QU7	7.2	16.29	3.38	36	0.8	36°28'31" 49°45'02"	158	3.0 3.3	UCAC4 543-45293	12.96	7 <sup>h</sup> 56 <sup>m</sup> 48.915 <sup>s</sup> 18°29'03.603"	29.1	96	172.6	-36.1	31.1	48.8	95.6	89
2017/01/10 18:01:23	69922 TF20	6.3	19.30	6.82	188	1.0	37°27'46" 48°32'41"	153	0.8 1.4	UCAC4 620-12978	12.48	3 <sup>h</sup> 57 <sup>m</sup> 43.974 <sup>s</sup> 33°58'19.756"	74.1	173	132.4	-38.9	28.7	50.9	95.7	180
2017/01/10 20:05:35	17236 EK45	5.5	15.79	3.57	134	0.9	36°43'07" 51°13'06"	13	0.4 3.3	UCAC4 511-25745	12.26	6 <sup>h</sup> 33 <sup>m</sup> 22.813 <sup>s</sup> 12°06'10.178"	51.4	164	163.6	-56.2	12.0	58.9	96.1	66
2017/01/10 21:09:53	15514 VW24	14.5	16.40	3.56	210	1.2	37°09'03" 48°14'45"	163	1.4 3.9	UCAC4 526-17439	12.88	5 <sup>h</sup> 50 <sup>m</sup> 48.380 <sup>s</sup> 15°01'41.272"	52.7	207	155.8	-61.3	3.8	56.5	96.3	149
2017/01/10 22:04:31	25292 WQ16	6.6	18.59	5.15	182	0.6	35°21'54" 48°31'42"	201	0.8 2.0	UCAC4 575-45340	13.45	9 <sup>h</sup> 43 <sup>m</sup> 17.118 <sup>s</sup> 24°53'19.962"	57.1	129	149.2	-61.6	52.5	51.4	96.4	133
2017/01/10 22:09:11	1066 Lobelia	12.0	15.28	2.11	32	1.0	36°16'38" 49°45'49"	181	5.4 5.8	UCAC4 593-41023	13.34	7 <sup>h</sup> 29 <sup>m</sup> 04.355 <sup>s</sup> 28°32'27.323"	68.1	196	173.2	-61.5	23.1	50.8	96.5	82
2017/01/10 22:26:01	33349 XFF72	6.0	16.08	2.50	243	0.7	36°25'26" 52°13'47"	2	0.0 3.3	UCAC4 599-44499	13.70	8 <sup>h</sup> 28 <sup>m</sup> 09.931 <sup>s</sup> 29°42'48.627"	69.8	171	164.6	-60.7	35.8	48.8	96.5	72
2017/01/10 22:27:08	7987 Walshkevin	5.5	17.34	4.19	144	0.7	37°03'29" 51°14'53"	22	0.8 2.1	UCAC4 543-22960	13.18	6 <sup>h</sup> 04 <sup>m</sup> 06.797 <sup>s</sup> 18°24'09.532"	49.2	231	159.7	-60.6	1.4	48.7	96.5	103
2017/01/11 00:57:04	6635 Zuber	5.2	16.16	5.10	127	1.1	35°03'60" 50°53'16"	317	0.3 3.7	UCAC4 307-45282	11.07	8 <sup>h</sup> 25 <sup>m</sup> 27.147 <sup>s</sup> −28°45'47.434"	5.4	210	127.6	-42.7	58.5	27.0	97.0	57
2017/01/11 02:17:48	24109 VO20	6.6	16.68	6.69	68	0.7	36°01'33" 49°27'42"	196	2.1 2.8	UCAC4 574-22298	10.00	6 <sup>h</sup> 01 <sup>m</sup> 04.388 <sup>s</sup> 24°46'55.256"	18.0	287	159.4	-29.9	6.2	14.6	97.2	95

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.				Table 1		Page 10		LinOccult 2.3.0 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 (%)	$\sigma_{km}$	
2017/01/11 02:56:55	15643 3540 P-L	6.3	17.40	5.44	221	0.6	37°53'15" 51°45'20"	31	0.2	UCAC4 569-22111	11.96	5 <sup>h</sup> 59 <sup>m</sup> 42.140 <sup>s</sup> 23°40'31.377"	11.0	294	159.1	-23.6	5.4	8.8	97.3	102	
2017/01/11 03:12:02	2588 Flavia	7.2	17.13	3.36	58	0.9	35°41'13" 50°23'39"	312	2.5	UCAC4 558-15833	13.82	5 <sup>h</sup> 25 <sup>m</sup> 55.622 <sup>s</sup> 21°27'43.958"	2.3	301	151.2	-21.2	10.8	6.6	97.3	98	
2017/01/11 03:58:16	2413 van de Hulst	22.8	17.44	3.64	241	0.5	39°11'30" 48°58'41"	120	2.3	UCAC4 374-120785	13.83	18 <sup>h</sup> 26 <sup>m</sup> 05.591 <sup>s</sup> -15°17'53.319"	0.7	115	16.5	-13.9	175.2	0.2	97.4	259	
2017/01/11 03:59:27	8305 Teika	5.8	16.50	3.47	31	0.5	36°02'28" 49°49'22"	215	2.7	UCAC4 560-40011	13.07	7 <sup>h</sup> 15 <sup>m</sup> 42.083 <sup>s</sup> 21°50'23.719"	11.6	290	176.6	-13.8	15.1	0.0	97.4	80	
2017/01/11 04:57:24	1416 Renauxa	28.9	16.95	3.91	162	1.0	38°01'35" 50°59'34"	50	4.2	UCAC4 334-73113	13.07	14 <sup>h</sup> 58 <sup>m</sup> 48.125 <sup>s</sup> -23°12'35.393"	16.8	177	62.1	-5.2	134.2	-7.2	97.6	187	
2017/01/11 05:32:39	71158 1999 XQ194	6.0	19.13	6.31	56	0.5	36°26'07" 50°32'35"	11	1.5	UCAC4 490-56633	12.83	12 <sup>h</sup> 54 <sup>m</sup> 45.367 <sup>s</sup> 7°59'46.542"	38.2	229	101.2	-0.3	96.4	-11.1	97.7	149	
2017/01/11 13:51:26	66990 1999 XA103	5.2	18.09	5.62	71	0.5	35°31'38" 50°27'48"	310	1.4	UCAC4 577-25985	12.48	6 <sup>h</sup> 15 <sup>m</sup> 15.071 <sup>s</sup> 25°20'30.088"	14.1	67	162.0	-0.3	8.3	5.7	98.7	122	
2017/01/11 16:31:00	371 Bohemia	54.6	13.31	0.73	148	6.7	37°47'14" 49°08'35"	133	7.5	UNKNOWN UN- KNOWN	13.36	4 <sup>h</sup> 52 <sup>m</sup> 06.661 <sup>s</sup> 25°37'12.384"	52.3	116	143.2	-24.2	26.9	29.8	99.0	101	
2017/01/11 18:03:36	7764 1991 AB	7.9	16.12	5.64	12	0.7	36°17'43" 49°56'24"	177	3.4	UCAC4 528-37563	10.48	7 <sup>h</sup> 02 <sup>m</sup> 38.773 <sup>s</sup> 15°24'11.087"	38.8	115	170.5	-39.0	4.8	43.6	99.1	91	
2017/01/11 18:18:09	9044 Kaoru	6.3	16.48	3.53	76	0.6	36°17'04" 50°43'34"	360	2.0	UCAC4 564-36591	12.99	7 <sup>h</sup> 07 <sup>m</sup> 23.105 <sup>s</sup> 22°43'57.813"	46.0	112	174.0	-41.3	5.8	45.5	99.1	75	
2017/01/11 18:52:00	63124 2000 WK174	5.5	18.44	4.83	117	0.6	36°55'34" 51°00'48"	23	1.1	UCAC4 526-12312	13.62	5 <sup>h</sup> 19 <sup>m</sup> 54.342 <sup>s</sup> 15°07'28.838"	54.5	165	147.8	-46.4	22.0	49.9	99.2	133	
2017/01/11 23:04:44	24109 1999 VO20	6.6	16.71	6.10	90	0.7	36°23'19" 49°14'42"	175	1.8	UCAC4 574-22116	10.61	6 <sup>h</sup> 00 <sup>m</sup> 17.526 <sup>s</sup> 24°40'38.253"	47.8	250	158.3	-57.5	15.5	51.4	99.5	96	
2017/01/11 23:12:15	7094 Go-daisan	9.5	16.42	2.57	38	1.1	35°56'00" 49°47'17"	221	3.3	UCAC4 497-16927	13.96	5 <sup>h</sup> 55 <sup>m</sup> 56.659 <sup>s</sup> 9°20'30.634"	33.9	240	153.5	-56.7	18.6	50.5	99.5	108	
2017/01/11 23:22:02	9386 Hitomi	6.3	17.55	4.17	228	0.5	35°10'42" 48°08'06"	200	0.3	UCAC4 552-36304	13.41	7 <sup>h</sup> 07 <sup>m</sup> 13.608 <sup>s</sup> 20°22'55.072"	51.4	232	173.7	-55.6	2.0	49.4	99.5	111	
2017/01/11 23:24:27	6764 Kir-illavrov	7.9	16.59	4.52	128	0.8	35°33'32" 48°59'43"	204	1.1	UCAC4 590-46621	12.08	9 <sup>h</sup> 10 <sup>m</sup> 17.023 <sup>s</sup> 27°48'30.088"	68.0	183	157.3	-55.4	30.6	49.1	99.5	81	
2017/01/11 23:25:28	22688 1998 QB77	5.0	19.12	5.94	244	0.7	36°14'17" 47°51'27"	181	0.3	UCAC4 619-10703	13.18	3 <sup>h</sup> 32 <sup>m</sup> 23.409 <sup>s</sup> 33°41'28.973"	27.4	291	126.0	-55.2	49.0	48.9	99.5	139	
2017/01/11 23:44:58	1201 Strenua	34.9	15.38	1.99	228	3.5	35°14'38" 48°07'03"	199	1.2	UCAC4 516-18909	13.57	5 <sup>h</sup> 59 <sup>m</sup> 35.634 <sup>s</sup> 13°06'02.138"	32.7	250	156.0	-52.9	16.4	46.4	99.6	103	
2017/01/11 23:53:36	15134 2000 ED92	7.6	18.08	5.17	232	2.0	36°16'10" 52°07'58"	360	0.4	UCAC4 469-43449	12.92	10 <sup>h</sup> 30 <sup>m</sup> 09.739 <sup>s</sup> 3°42'40.070"	42.9	165	133.7	-51.8	52.6	45.3	99.6	122	
2017/01/12 00:52:23	13520 Feli-cienrops	7.6	17.63	4.70	253	1.4	37°25'58" 47°54'10"	161	0.2	UCAC4 425-52912	12.94	10 <sup>h</sup> 03 <sup>m</sup> 08.992 <sup>s</sup> -5°05'49.793"	34.3	192	134.7	-43.4	49.6	36.9	99.6	108	
2017/01/12 00:53:08	1165 Im-prinetta	48.8	16.31	4.33	5	3.1	36°12'58" 50°03'21"	281	13.1	UCAC4 464-38787	12.00	8 <sup>h</sup> 10 <sup>m</sup> 10.866 <sup>s</sup> 2°40'08.870"	32.5	228	159.1	-43.2	22.3	36.7	99.6	148	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 11		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/12 02:25:19	527 Euryan-the	52.9	15.99	2.98	213	1.4	37°00'22'' 51°54'27''	14	5.5 13.0	UCAC4 383-74149	13.08	16 <sup>h</sup> 14 <sup>m</sup> 47.700 <sup>s</sup> −13°29'54.549''	8.1	122	48.1	-28.6	137.6	22.6	99.7	162
2017/01/12 03:13:51	1319 Disa	24.0	15.74	3.16	235	0.7	38°44'57'' 51°28'36''	48	1.6 7.0	UCAC4 355-71196	12.64	15 <sup>h</sup> 01 <sup>m</sup> 03.036 <sup>s</sup> −19°06'54.571''	16.4	152	63.6	-20.8	120.9	15.1	99.7	136
2017/01/12 03:53:00	18009 Patrickgeer	5.5	18.02	4.93	212	1.2	39°14'25'' 50°13'12''	85	0.3 2.1	UCAC4 483-50800	13.10	10 <sup>h</sup> 15 <sup>m</sup> 06.470 <sup>s</sup> 6°26'07.721''	28.4	244	138.4	-14.7	45.7	9.2	99.8	105
2017/01/12 16:21:46	93832 2000 WU77	5.0	19.68	6.32	242	0.5	38°40'08'' 48°31'50''	135	0.4 1.2	UCAC4 526-3618	13.36	2 <sup>h</sup> 04 <sup>m</sup> 37.427 <sup>s</sup> 15°05'53.584''	55.2	185	101.8	-22.6	81.0	18.5	99.9	169
2017/01/12 20:35:12	12567 Her-reweghe	8.3	17.44	4.24	75	1.0	36°26'10'' 50°42'48''	8	2.2 2.7	UCAC4 554-15719	13.22	5 <sup>h</sup> 32 <sup>m</sup> 51.511 <sup>s</sup> 20°38'59.335''	58.7	206	150.9	-58.7	34.0	53.5	99.7	124
2017/01/12 22:34:21	57098 2001 OB66	5.8	17.24	4.49	22	0.5	36°20'42'' 50°14'33''	11	2.1 2.1	UCAC4 600-44871	12.76	8 <sup>h</sup> 15 <sup>m</sup> 36.781 <sup>s</sup> 29°58'59.151''	70.0	189	168.0	-59.9	13.0	57.1	99.6	108
2017/01/12 22:39:38	3532 Tracie	13.8	17.05	4.18	142	1.1	35°09'30'' 49°00'22''	215	2.3 4.2	UCAC4 505-2970	12.89	1 <sup>h</sup> 56 <sup>m</sup> 48.172 <sup>s</sup> 10°54'54.761''	2.3	284	98.3	-59.5	87.8	56.9	99.7	131
2017/01/13 00:47:46	33798 1999 TO95	5.0	18.74	6.85	232	0.6	33°45'17'' 48°46'09''	232	0.3 1.5	UNKNOWN UN- KNOWN	11.89	10 <sup>h</sup> 21 <sup>m</sup> 46.594 <sup>s</sup> 27°14'49.116''	67.1	192	142.5	-44.0	32.7	44.8	99.5	131
2017/01/13 01:26:22	22688 1998 QB77	5.0	19.13	8.09	152	0.7	35°06'41'' 48°54'57''	214	0.8 1.4	UCAC4 618-10925	11.04	3 <sup>h</sup> 32 <sup>m</sup> 18.347 <sup>s</sup> 33°34'47.255''	10.1	311	124.9	-38.0	63.4	39.4	99.5	140
2017/01/13 01:35:33	3163 Randi	5.2	19.19	5.37	53	0.8	36°37'10'' 50°28'17''	27	1.6 1.7	UCAC4 474-46022	13.83	10 <sup>h</sup> 44 <sup>m</sup> 47.942 <sup>s</sup> 4°47'10.091''	43.9	196	131.9	-36.6	40.2	38.1	99.5	121
2017/01/13 15:12:28	15297 1992 CF	6.9	17.81	4.50	127	1.2	37°05'11'' 51°04'02''	27	1.3 2.6	UCAC4 573-6626	13.33	3 <sup>h</sup> 02 <sup>m</sup> 03.220 <sup>s</sup> 24°31'47.615''	56.8	130	116.4	-11.5	79.1	-1.7	98.2	107
2017/01/13 15:20:11	23077 1999 XZ93	6.6	17.03	3.22	134	0.7	36°23'19'' 48°50'57''	177	1.1 2.4	UCAC4 553-20875	13.87	5 <sup>h</sup> 56 <sup>m</sup> 53.951 <sup>s</sup> 20°35'20.289''	28.7	92	155.7	-12.7	39.4	-0.7	98.2	108
2017/01/13 16:41:18	38261 1999 RY16	5.8	18.55	7.19	251	0.6	35°42'43'' 52°16'30''	351	0.3 1.7	UCAC4 526-14078	11.36	5 <sup>h</sup> 33 <sup>m</sup> 34.404 <sup>s</sup> 15°02'15.848''	40.6	119	149.1	-25.5	46.1	11.1	98.0	134
2017/01/13 17:29:11	17236 2000 EK45	5.5	15.87	4.72	48	0.9	36°19'20'' 50°28'34''	3	2.5 3.3	UCAC4 512-24602	11.16	6 <sup>h</sup> 30 <sup>m</sup> 51.123 <sup>s</sup> 12°15'35.266''	37.0	119	160.9	-33.2	33.2	18.4	97.9	67
2017/01/13 18:19:52	795 Fini	74.7	14.17	2.49	221	12.2	37°39'35'' 48°16'28''	154	1.7 32.7	UCAC4 615-47563	11.79	10 <sup>h</sup> 56 <sup>m</sup> 14.552 <sup>s</sup> 32°59'57.888''	19.2	61	135.6	-41.2	33.6	26.2	97.8	88
2017/01/13 18:30:04	14603 1998 SK115	6.0	16.91	3.25	135	0.7	35°15'60'' 51°04'30''	327	0.9 2.6	UCAC4 673-49374	13.71	6 <sup>h</sup> 53 <sup>m</sup> 03.429 <sup>s</sup> 44°27'04.342''	65.2	89	154.8	-42.8	38.0	27.7	97.8	94
2017/01/13 18:50:48	19953 1982 VU2	8.7	18.30	4.71	144	0.8	35°19'21'' 51°11'05''	331	1.5 2.5	UCAC4 508-3283	13.60	2 <sup>h</sup> 01 <sup>m</sup> 39.954 <sup>s</sup> 11°25'32.575''	38.4	237	98.8	-45.9	98.4	30.9	97.7	140
2017/01/13 19:12:10	10876 1996 UB	7.9	17.39	3.95	60	0.7	36°15'37'' 50°35'05''	358	2.5 2.9	UCAC4 564-24057	13.47	6 <sup>h</sup> 09 <sup>m</sup> 43.451 <sup>s</sup> 22°37'07.967''	60.5	152	158.7	-48.9	38.8	34.0	97.7	110
2017/01/13 20:11:16	5983 Praxiteles	6.6	17.10	4.43	197	0.6	36°37'33'' 48°17'37''	173	0.4 2.5	UCAC4 619-42860	12.69	8 <sup>h</sup> 20 <sup>m</sup> 36.709 <sup>s</sup> 33°44'46.634''	61.3	112	164.9	-56.3	19.9	42.3	97.5	103
2017/01/13 22:47:21	4724 Brocken	7.9	17.64	4.01	29	0.9	36°35'55'' 50°12'44''	51	2.9 3.0	UCAC4 501-4081	13.66	2 <sup>h</sup> 43 <sup>m</sup> 25.580 <sup>s</sup> 10°08'54.668''	7.2	277	107.8	-58.8	91.2	55.2	97.2	106

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 12		LinOccult 2.3.0 BETA			
Date Time (UTC)	Asteroid			Nearest point			Star					Sun			Moon			$\sigma_{km}$		
	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 (%)
2017/01/13 23:11:05	12966 1102 T- 3	6.6	17.68	4.58	172	0.7	36°23'54'' 51°35'14''	3	0.8	UCAC4 523-20985	13.12	6 <sup>h</sup> 03 <sup>m</sup> 29.440 <sup>s</sup> 14°24'28.752''	38.2	244	155.5	-56.6	42.9	55.2	97.1	129
2017/01/14 01:05:58	43773 1989 AJ	5.0	16.82	5.13	185	0.6	36°56'24'' 51°39'14''	15	0.3	UCAC4 543-46432	11.70	8 <sup>h</sup> 12 <sup>m</sup> 12.662 <sup>s</sup> 18°27'58.034''	43.4	244	172.5	-41.1	13.4	47.3	96.8	90
2017/01/14 18:06:36	640 Brambilla	80.8	14.24	2.95	145	5.9	36°14'21'' 48°44'43''	181	12.9	UCAC4 455-44921	11.36	8 <sup>h</sup> 28 <sup>m</sup> 27.483 <sup>s</sup> 0°57'57.217''	16.7	109	157.2	-39.0	22.3	13.5	93.5	116
2017/01/14 18:37:34	4872 Grieg	7.9	16.78	3.39	150	0.8	36°42'26'' 51°22'14''	12	1.0	UCAC4 554-24233	13.44	6 <sup>h</sup> 19 <sup>m</sup> 10.219 <sup>s</sup> 20°38'18.169''	54.9	137	159.8	-43.7	50.0	18.3	93.4	100
2017/01/14 22:18:46	6701 Warhol	10.5	16.56	3.59	248	1.1	35°47'28'' 52°14'59''	352	0.2	UCAC4 625-24079	13.01	5 <sup>h</sup> 29 <sup>m</sup> 49.860 <sup>s</sup> 34°51'32.528''	55.5	261	147.1	-60.5	63.7	47.7	92.5	104
2017/01/15 00:13:33	13084 Vir- chow	6.0	18.18	4.30	242	1.2	39°07'11'' 51°16'50''	56	0.2	UCAC4 518-52367	13.90	10 <sup>h</sup> 55 <sup>m</sup> 32.856 <sup>s</sup> 13°33'08.298''	52.9	165	134.5	-48.8	14.0	51.7	92.1	106
2017/01/15 01:16:27	2524 Budovi- cium	31.4	16.46	4.16	40	2.1	36°01'03'' 49°43'55''	209	8.9	UCAC4 539-46579	12.33	8 <sup>h</sup> 47 <sup>m</sup> 58.123 <sup>s</sup> 17°40'31.522''	45.7	237	165.3	-39.4	18.7	48.4	91.7	134
2017/01/15 01:43:20	6701 Warhol	10.5	16.56	3.03	156	1.1	35°09'35'' 48°51'16''	211	1.3	UCAC4 625-24057	13.60	5 <sup>h</sup> 29 <sup>m</sup> 43.748 <sup>s</sup> 34°50'31.810''	23.4	297	146.9	-35.2	65.6	46.0	91.6	104
2017/01/15 02:22:39	15834 McBride	7.2	18.92	6.95	208	0.5	37°22'08'' 51°47'08''	22	0.8	UCAC4 619-8994	11.97	3 <sup>h</sup> 05 <sup>m</sup> 31.610 <sup>s</sup> 33°40'52.400''	0.7	328	117.4	-28.9	95.5	41.6	91.4	181
2017/01/15 02:28:27	6701 Warhol	10.5	16.56	4.35	210	1.1	38°09'27'' 51°30'51''	39	0.5	UCAC4 625-24050	12.23	5 <sup>h</sup> 29 <sup>m</sup> 42.453 <sup>s</sup> 34°50'18.136''	17.1	304	146.9	-27.9	66.0	40.9	91.4	104
2017/01/15 03:16:08	677 Aaltje	28.9	15.26	4.26	190	0.9	37°54'07'' 51°24'37''	37	3.5	UCAC4 327-72867	11.02	15 <sup>h</sup> 10 <sup>m</sup> 57.324 <sup>s</sup> -24°36'35.108''	11.5	155	63.1	-20.3	82.6	34.6	91.2	150
2017/01/15 04:15:25	29528 Kaplin- ski	5.2	19.27	5.89	165	0.7	36°11'10'' 51°31'33''	357	0.7	UCAC4 503-57197	13.39	12 <sup>h</sup> 55 <sup>m</sup> 22.923 <sup>s</sup> 10°32'31.775''	47.0	211	105.9	-11.0	41.1	25.8	91.0	139
2017/01/15 14:23:50	40207 1998 SE44	8.7	17.00	3.77	97	0.8	36°58'26'' 49°18'10''	149	2.1	UCAC4 516-32575	13.26	6 <sup>h</sup> 47 <sup>m</sup> 35.788 <sup>s</sup> 13°09'34.624''	7.2	78	163.3	-4.0	54.4	-25.0	88.3	116
2017/01/15 16:16:47	17610 1995 UJ1	9.1	17.72	4.14	142	2.8	34°19'05'' 50°15'23''	279	1.5	UCAC4 493-5579	13.60	3 <sup>h</sup> 41 <sup>m</sup> 26.722 <sup>s</sup> 8°29'18.273''	45.6	152	119.0	-21.2	101.3	-12.7	87.7	128
2017/01/15 16:27:17	525 Adelaide	10.3	14.74	2.27	104	1.4	36°24'37'' 49°07'02''	175	1.6	UCAC4 508-32589	12.61	6 <sup>h</sup> 50 <sup>m</sup> 52.282 <sup>s</sup> 11°24'00.866''	25.2	103	162.9	-22.9	54.9	-11.3	87.7	61
2017/01/15 17:07:39	8498 Ufa	9.5	17.88	4.36	114	0.5	36°07'11'' 51°04'02''	354	2.0	UCAC4 541-2225	13.54	1 <sup>h</sup> 11 <sup>m</sup> 21.728 <sup>s</sup> 18°01'21.781''	49.8	229	87.9	-29.4	132.9	-5.7	87.4	133
2017/01/15 17:44:36	7776 Takeishi	8.3	16.76	4.98	72	0.8	35°58'29'' 50°39'30''	342	2.8	UCAC4 511-49321	11.79	9 <sup>h</sup> 48 <sup>m</sup> 04.930 <sup>s</sup> 12°01'49.736''	9.7	83	150.4	-35.3	12.4	-0.4	87.3	84
2017/01/15 19:52:34	28743 2000 GO142	7.9	17.80	7.33	245	0.6	35°23'45'' 47°55'21''	195	0.3	UCAC4 564-24505	10.47	6 <sup>h</sup> 11 <sup>m</sup> 18.182 <sup>s</sup> 22°36'33.209''	62.7	174	157.0	-53.8	66.0	19.2	86.6	122
2017/01/15 22:01:02	3078 Horrocks	29.9	15.78	3.67	2	2.8	36°15'23'' 50°03'28''	298	8.6	UCAC4 588-45506	12.15	9 <sup>h</sup> 08 <sup>m</sup> 57.833 <sup>s</sup> 27°24'46.427''	64.8	147	161.1	-60.9	29.9	37.1	86.0	139
2017/01/16 00:03:52	5399 Awa	20.3	15.42	2.35	57	2.5	36°26'47'' 50°32'41''	12	6.3	UCAC4 555-34642	13.20	6 <sup>h</sup> 53 <sup>m</sup> 02.715 <sup>s</sup> 20°58'23.448''	41.6	252	166.4	-50.0	58.7	47.4	85.3	115

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 13		LinOccult 2.3.0 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	Phase (%)	$\sigma_{km}$		
2017/01/16 03:38:35	50609 EU56	5.5	18.29	4.83	89	0.8	36°06'20" 50°50'09"	352	1.4 1.8	UCAC4 600-16660	13.48	5 <sup>h</sup> 04 <sup>m</sup> 07.021 <sup>s</sup> 29°58'46.072"	1.1	319	141.3	-16.6	85.1	35.0	84.1	122
2017/01/16 04:52:26	509 Iolanda	53.0	14.30	1.15	51	1.1	36°10'08" 50°29'55"	350	10.6 11.0	UCAC4 393-110929	13.61	19 <sup>h</sup> 10 <sup>m</sup> 42.367 <sup>s</sup> −11°32'22.240"	8.0	119	13.6	-5.5	123.2	24.6	83.8	192
2017/01/16 14:50:47	7759 QD2	6.0	17.81	4.23	85	0.7	36°42'30" 49°20'19"	159	1.7 2.5	UCAC4 562-17904	13.60	5 <sup>h</sup> 33 <sup>m</sup> 17.175 <sup>s</sup> 22°16'10.506"	30.9	91	147.4	-7.7	85.1	-30.5	80.5	98
2017/01/16 14:57:30	42719 QL66	5.2	19.18	6.38	58	1.5	36°42'12" 50°29'53"	31	1.4 1.6	UCAC4 539-6248	12.80	3 <sup>h</sup> 23 <sup>m</sup> 09.632 <sup>s</sup> 17°42'56.422"	48.0	128	116.5	-8.7	116.2	-30.0	80.4	135
2017/01/16 15:19:06	11996 YC1	7.2	18.10	6.48	207	0.5	36°47'26" 48°13'09"	170	0.7 2.0	UCAC4 552-25845	11.62	6 <sup>h</sup> 25 <sup>m</sup> 23.640 <sup>s</sup> 20°22'50.625"	25.7	88	159.3	-12.0	73.3	-28.2	80.4	144
2017/01/16 16:30:20	22016 XU101	8.3	17.68	8.14	33	0.6	36°25'32" 49°45'46"	163	2.4 2.5	UCAC4 547-44160	9.55	8 <sup>h</sup> 11 <sup>m</sup> 21.479 <sup>s</sup> 19°16'09.439"	19.3	83	175.7	-23.2	49.1	-20.5	80.0	133
2017/01/16 17:27:00	91777 TM206	7.6	18.53	4.97	41	0.9	36°34'37" 49°43'51"	150	1.8 1.8	UCAC4 621-19824	13.57	5 <sup>h</sup> 03 <sup>m</sup> 03.478 <sup>s</sup> 34°04'45.856"	67.8	127	140.1	-32.3	92.0	-13.0	79.6	168
2017/01/16 17:48:48	9516 Inasan	6.9	17.45	4.24	88	0.6	36°22'40" 49°15'30"	176	1.8 2.5	UCAC4 547-36581	13.23	7 <sup>h</sup> 01 <sup>m</sup> 36.290 <sup>s</sup> 19°20'29.933"	42.8	114	167.5	-35.8	66.1	-9.9	79.5	110
2017/01/16 18:23:25	59825 RV27	5.0	18.21	4.29	27	0.6	36°23'21" 50°16'47"	16	1.5 1.6	UCAC4 529-21781	13.94	6 <sup>h</sup> 04 <sup>m</sup> 45.184 <sup>s</sup> 15°45'14.937"	51.3	144	153.5	-41.2	80.0	-4.9	79.3	126
2017/01/16 18:55:09	7879 EX17	5.0	16.35	3.90	156	0.7	36°42'58" 51°25'17"	11	0.2 2.8	UCAC4 487-36533	12.48	7 <sup>h</sup> 15 <sup>m</sup> 28.082 <sup>s</sup> 7°16'08.196"	39.6	137	163.5	-45.9	63.2	-0.1	79.1	70
2017/01/16 19:54:37	319 Leona	68.2	15.53	4.05	52	2.6	36°11'60" 49°34'51"	187	17.5 18.6	UCAC4 449-850	11.50	0 <sup>h</sup> 40 <sup>m</sup> 49.389 <sup>s</sup> 0° − 14°22.062"	5.5	263	72.7	-53.8	162.2	9.1	78.8	145
2017/01/16 20:19:20	7487 Toshi- tanaka	10.5	15.89	2.15	8	1.2	36°14'33" 49°58'37"	202	4.6 4.6	UCAC4 565-23903	13.91	6 <sup>h</sup> 09 <sup>m</sup> 33.198 <sup>s</sup> 22°50'48.000"	62.8	190	155.5	-56.5	79.7	12.9	78.6	91
2017/01/16 20:27:42	135 Hertha	79.2	12.26	1.14	73	6.9	36°14'18" 50°42'04"	357	25.3 34.9	UCAC4 582-28494	11.59	6 <sup>h</sup> 26 <sup>m</sup> 04.907 <sup>s</sup> 26°21'20.194"	66.4	187	158.9	-57.3	76.0	14.1	78.6	87
2017/01/16 22:14:14	22024 XY114	5.2	17.35	5.39	226	0.8	35°26'06" 52°00'19"	344	0.2 2.1	UCAC4 681-36766	11.97	5 <sup>h</sup> 26 <sup>m</sup> 10.052 <sup>s</sup> 46°03'36.829"	60.2	280	140.5	-60.3	88.7	29.4	77.9	99
2017/01/16 22:25:54	3333 Schaber	14.5	17.71	4.50	203	2.2	38°08'35" 51°26'37"	40	1.6 3.8	UCAC4 380-62827	13.23	12 <sup>h</sup> 10 <sup>m</sup> 43.704 <sup>s</sup> −14°04'03.543"	10.8	128	108.2	-59.8	20.2	30.9	77.8	154
2017/01/16 23:37:09	2950 Rousseau	13.3	16.39	3.03	166	2.2	34°24'34" 49°11'02"	234	1.6 4.6	UCAC4 515-53050	13.43	11 <sup>h</sup> 23 <sup>m</sup> 44.023 <sup>s</sup> 12°51'39.256"	48.2	144	129.7	-53.3	9.5	38.7	77.5	116
2017/01/17 00:33:33	348 May	82.8	14.57	1.76	95	12.1	37°08'11" 49°23'44"	140	20.5 29.0	UCAC4 498-59541	13.05	12 <sup>h</sup> 29 <sup>m</sup> 35.961 <sup>s</sup> 9°25'23.215"	44.2	143	113.3	-45.7	13.2	42.6	77.1	111
2017/01/17 00:45:54	55103 QE138	6.6	17.21	3.36	4	0.9	36°16'07" 50°00'42"	198	2.8 2.8	UCAC4 603-20962	13.90	5 <sup>h</sup> 20 <sup>m</sup> 59.474 <sup>s</sup> 30°30'17.890"	26.5	287	144.0	-43.9	92.5	43.2	77.0	95
2017/01/17 01:25:27	15514 VW24	14.5	16.52	3.45	177	1.4	35°59'20" 48°28'09"	187	1.9 3.8	UCAC4 524-15944	13.12	5 <sup>h</sup> 46 <sup>m</sup> 26.590 <sup>s</sup> 14°37'47.955"	12.6	278	148.7	-37.8	88.3	44.0	76.7	152
2017/01/17 01:32:37	2691 Sersic	7.6	16.18	2.94	207	0.7	37°44'45" 51°40'01"	30	0.1 4.2	UCAC4 577-37996	13.31	7 <sup>h</sup> 17 <sup>m</sup> 08.359 <sup>s</sup> 25°12'08.982"	33.8	270	170.0	-36.7	67.2	44.0	76.7	73

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 14		LinOccult 2.3.0 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 (%)	$\sigma_{km}$	
2017/01/17 03:47:17	Kubokawa	6.6	16.80	3.50	249	0.6	33°38'59" 48°37'04"	230	0.0	UCAC4	13.35	8 <sup>h</sup> 50 <sup>m</sup> 16.872 <sup>s</sup> 18°55'15.452"	22.5	273	167.1	-15.2	46.1	35.9	75.9	81	
2017/01/17 04:07:53	Min-naert	28.1	17.55	6.84	81	0.7	37°23'04" 49°53'01"	103	5.3	UCAC4	10.71	17 <sup>h</sup> 25 <sup>m</sup> 11.838 <sup>s</sup> -25°06'49.661"	4.5	139	34.9	-12.0	86.2	33.6	75.8	196	
2017/01/17 04:50:47	38471 TH39	5.2	19.18	6.19	210	0.9	34°52'14" 51°42'14"	331	0.5	UCAC4	12.99	12 <sup>h</sup> 13 <sup>m</sup> 30.861 <sup>s</sup> 11°32'06.952"	38.3	237	117.9	-5.6	10.2	28.2	75.6	139	
2017/01/17 14:22:08	11470 EE47	5.8	17.14	4.82	168	0.6	35°17'11" 51°24'47"	335	0.6	UCAC4	12.34	6 <sup>h</sup> 52 <sup>m</sup> 58.667 <sup>s</sup> 14°56'47.617"	8.7	77	163.5	-3.4	78.9	-38.1	72.1	101	
2017/01/17 16:36:03	20754 AD244	6.0	17.94	4.56	126	0.5	36°40'29" 51°08'58"	13	1.2	UCAC4	13.40	7 <sup>h</sup> 07 <sup>m</sup> 27.608 <sup>s</sup> 4°51'58.739"	20.1	107	160.0	-23.9	76.4	-28.8	71.3	123	
2017/01/17 16:40:35	8271 Imai	6.9	17.13	5.32	149	0.6	36°07'23" 48°42'52"	185	0.8	UCAC4	11.82	6 <sup>h</sup> 26 <sup>m</sup> 50.183 <sup>s</sup> 13°35'29.584"	33.9	111	157.1	-24.6	86.4	-28.3	71.2	93	
2017/01/17 16:49:50	6147 Straub	8.3	17.71	4.53	183	0.6	36°50'29" 51°38'58"	13	0.8	UCAC4	13.20	8 <sup>h</sup> 40 <sup>m</sup> 00.014 <sup>s</sup> 1°02'40.649"	4.7	94	157.9	-26.1	53.4	-27.2	71.2	117	
2017/01/17 17:19:28	20217 Kathy-clemmer	7.6	17.44	5.21	174	0.7	36°17'14" 51°36'33"	0	0.9	UCAC4	12.24	6 <sup>h</sup> 44 <sup>m</sup> 16.585 <sup>s</sup> 11°05'51.430"	35.0	118	159.8	-30.9	82.5	-23.6	71.0	118	
2017/01/17 18:40:23	28301 CW67	6.3	18.47	5.56	253	2.1	32°57'24" 49°19'13"	251	0.3	UCAC4	12.91	3 <sup>h</sup> 31 <sup>m</sup> 10.745 <sup>s</sup> 22°09'23.999"	57.8	218	118.2	-43.6	127.5	-12.4	70.4	127	
2017/01/17 19:37:01	15428 SV128	7.6	18.01	6.23	17	0.6	36°18'52" 50°12'05"	7	2.1	UCAC4	11.78	6 <sup>h</sup> 42 <sup>m</sup> 38.323 <sup>s</sup> 35°19'27.863"	72.8	143	157.7	-51.5	84.8	-3.8	70.1	140	
2017/01/17 20:55:06	22724 Byatt	7.9	19.24	5.52	41	1.2	36°12'39" 50°24'42"	352	1.8	UCAC4	13.73	2 <sup>h</sup> 41 <sup>m</sup> 34.596 <sup>s</sup> 13°29'03.419"	25.0	261	104.5	-59.2	142.5	8.2	69.7	176	
2017/01/17 21:44:24	7899 Joya	6.6	17.45	6.41	211	0.7	35°18'33" 48°15'32"	199	0.2	UCAC4	11.04	6 <sup>h</sup> 02 <sup>m</sup> 51.727 <sup>s</sup> 26°14'32.834"	57.5	234	152.8	-60.8	94.4	15.6	69.2	94	
2017/01/17 21:54:13	53067 XY45	5.5	17.41	4.39	203	1.0	37°53'42" 51°33'32"	34	0.1	UCAC4	13.04	10 <sup>h</sup> 49 <sup>m</sup> 03.723 <sup>s</sup> 19°00'10.830"	45.8	120	140.2	-60.7	29.7	17.0	69.3	81	
2017/01/17 22:05:58	42132 BP24	5.8	19.55	6.95	31	0.6	35°56'50" 49°52'23"	231	1.3	UCAC4	12.60	5 <sup>h</sup> 00 <sup>m</sup> 48.379 <sup>s</sup> 15°05'36.110"	36.8	247	137.3	-60.4	110.0	18.7	69.1	170	
2017/01/18 00:03:44	5065 Johnstone	7.6	17.10	3.96	205	1.3	35°15'14" 48°19'53"	201	0.4	UNKNOWN	13.17	5 <sup>h</sup> 08 <sup>m</sup> 22.226 <sup>s</sup> 32°47'56.343"	32.0	284	140.1	-49.8	106.7	33.1	68.3	100	
									3.0	UN-KNOWN											
2017/01/18 00:09:52	7834 1993 JL	11.0	16.66	5.24	224	0.9	38°35'38" 51°25'42"	47	0.4	UCAC4	11.43	6 <sup>h</sup> 27 <sup>m</sup> 25.546 <sup>s</sup> 32°59'05.928"	43.7	272	156.0	-49.0	90.2	33.7	68.3	105	
2017/01/18 01:38:27	10783 RB9	6.3	17.82	4.56	35	0.8	36°28'23" 50°20'18"	22	2.2	UCAC4	13.28	5 <sup>h</sup> 43 <sup>m</sup> 22.986 <sup>s</sup> 20°31'17.319"	13.9	285	148.1	-35.7	101.3	39.3	67.7	111	
2017/01/18 01:53:17	16685 JU8	6.9	17.60	4.79	120	0.5	36°05'10" 48°58'47"	187	1.4	UCAC4	12.82	7 <sup>h</sup> 29 <sup>m</sup> 18.299 <sup>s</sup> 0° - 3'46.344"	12.7	254	158.0	-33.3	75.6	39.6	67.6	127	
2017/01/18 01:54:33	21036 Nakamura-yoshi	7.9	18.15	4.51	165	0.6	38°26'33" 50°35'28"	69	1.1	UCAC4	13.65	12 <sup>h</sup> 59 <sup>m</sup> 19.129 <sup>s</sup> -17°13'28.213"	22.0	167	97.5	-33.1	18.3	39.7	67.6	134	
2017/01/18 02:00:49	4880 Tovstonogov	12.6	17.57	5.00	138	0.5	35°16'22" 48°59'36"	212	2.1	UCAC4	12.58	14 <sup>h</sup> 34 <sup>m</sup> 07.934 <sup>s</sup> -21°16'28.795"	12.6	147	75.1	-32.1	36.5	39.8	67.6	173	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 15		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/18 04:55:05	35175 TJ21	9.1	18.26	4.48	131	1.0	38°06'48'' 50°07'28''	86	1.6	UCAC4 670-32840	13.80	4 <sup>h</sup> 57 <sup>m</sup> 42.452 <sup>s</sup> 43°52'16.080''	6.6	341	135.6	-4.9	108.3	29.6	66.4	157
2017/01/18 15:20:53	91864 UW24	7.2	17.23	3.65	218	0.6	34°00'36'' 51°22'12''	312	0.4	UCAC4 621-44831	13.62	8 <sup>h</sup> 37 <sup>m</sup> 22.851 <sup>s</sup> 34°02'35.700''	17.1	57	164.3	-11.8	71.0	-41.8	62.5	110
2017/01/18 16:31:53	44172 KN9	5.8	17.98	4.77	13	0.5	36°22'17'' 49°56'34''	153	2.0	UCAC4 465-17002	13.22	6 <sup>h</sup> 21 <sup>m</sup> 01.473 <sup>s</sup> 2°53'45.995''	25.4	118	149.7	-23.0	99.8	-37.4	62.0	111
2017/01/18 17:27:08	5346 QE3	11.0	17.53	4.12	255	0.7	37°21'23'' 47°52'02''	163	0.6	UCAC4 558-46583	13.43	8 <sup>h</sup> 35 <sup>m</sup> 03.477 <sup>s</sup> 21°25'07.345''	27.5	89	172.4	-31.9	69.5	-31.6	61.6	137
2017/01/18 17:45:08	6122 Henrard	6.0	16.84	3.10	56	0.8	36°12'42'' 49°32'47''	185	2.4	UCAC4 483-20447	13.80	6 <sup>h</sup> 19 <sup>m</sup> 49.626 <sup>s</sup> 6°32'59.085''	38.2	135	151.4	-34.8	100.8	-29.4	61.5	78
2017/01/18 17:47:22	25886 SY181	5.0	16.52	3.14	92	0.6	36°26'38'' 49°13'36''	173	1.2	UCAC4 565-45525	13.44	9 <sup>h</sup> 24 <sup>m</sup> 54.176 <sup>s</sup> 22°51'15.350''	23.8	82	160.8	-35.1	58.8	-29.2	61.5	68
2017/01/18 19:42:11	45191 XU163	6.9	18.17	5.52	100	0.6	35°25'29'' 49°20'42''	218	1.5	UCAC4 540-18093	12.65	5 <sup>h</sup> 40 <sup>m</sup> 58.948 <sup>s</sup> 17°51'03.844''	57.8	189	146.4	-51.9	111.2	-12.9	60.7	142
2017/01/18 19:48:13	8635 riosipov	5.2	16.97	3.35	147	0.9	36°11'51'' 48°43'37''	182	0.5	UCAC4 589-27370	13.67	6 <sup>h</sup> 09 <sup>m</sup> 02.507 <sup>s</sup> 27°47'40.072''	68.0	179	153.0	-52.6	104.2	-12.0	60.7	82
2017/01/18 20:35:35	15224 tila	5.5	19.21	7.14	152	0.6	36°02'10'' 51°24'04''	353	0.9	UCAC4 514-4060	12.07	2 <sup>h</sup> 36 <sup>m</sup> 20.363 <sup>s</sup> 12°39'30.196''	26.0	258	102.0	-57.5	156.1	-4.7	60.4	135
2017/01/18 21:03:53	12191 Vorontsova	7.2	17.77	4.40	110	1.3	36°33'31'' 51°01'29''	10	1.6	UCAC4 586-15055	13.39	5 <sup>h</sup> 07 <sup>m</sup> 51.506 <sup>s</sup> 27°06'32.265''	55.7	241	139.5	-59.5	118.4	-0.3	60.1	128
2017/01/18 22:42:04	36182 Montigiani	7.2	18.92	5.04	19	0.7	36°10'60'' 49°53'16''	203	1.6	UNKNOWN UN- KNOWN	13.89	6 <sup>h</sup> 04 <sup>m</sup> 44.600 <sup>s</sup> 27°27'34.978''	49.8	253	152.0	-58.4	106.6	14.3	59.5	175
2017/01/18 22:47:21	37076 UK54	7.6	18.06	4.47	32	1.2	36°28'11'' 50°18'25''	24	2.1	UCAC4 543-6523	13.61	3 <sup>h</sup> 20 <sup>m</sup> 27.159 <sup>s</sup> 18°34'08.642''	16.3	280	113.8	-58.0	145.1	15.0	59.6	138
2017/01/18 23:02:12	69518 FS4	5.8	19.12	5.51	88	2.8	36°57'35'' 50°42'52''	33	1.3	UCAC4 652-13127	13.62	3 <sup>h</sup> 10 <sup>m</sup> 26.349 <sup>s</sup> 40°16'04.686''	28.1	300	115.5	-56.7	135.0	17.1	59.1	151
2017/01/18 23:02:37	3747 Belinskij	26.7	15.60	3.06	125	2.7	35°25'13'' 49°04'31''	210	5.1	UCAC4 728-42462	12.61	6 <sup>h</sup> 25 <sup>m</sup> 19.508 <sup>s</sup> 55°31'35.848''	63.1	299	140.2	-56.7	99.8	17.1	59.3	133
2017/01/18 23:35:47	37409 XW115	5.0	17.75	3.98	147	0.7	35°41'30'' 48°46'52''	197	0.6	UCAC4 607-24034	13.80	5 <sup>h</sup> 49 <sup>m</sup> 26.447 <sup>s</sup> 31°15'59.640''	41.4	272	148.0	-53.2	110.0	21.5	59.1	93
2017/01/19 00:34:56	40103 QX3	6.6	17.90	5.40	224	0.6	33°48'27'' 48°50'33''	233	0.5	UCAC4 510-20775	12.51	6 <sup>h</sup> 10 <sup>m</sup> 31.309 <sup>s</sup> 11°49'13.203''	21.3	263	151.5	-45.3	106.7	28.2	58.7	130
2017/01/19 00:53:13	34287 QG147	8.7	17.66	6.30	228	0.6	34°12'55'' 48°30'20''	221	0.6	UCAC4 625-41011	11.37	7 <sup>h</sup> 51 <sup>m</sup> 36.129 <sup>s</sup> 34°54'15.536''	50.9	267	165.1	-42.6	85.1	29.9	58.6	128
2017/01/19 02:12:16	4483 Petofi	7.6	16.19	2.55	83	1.2	36°24'45'' 49°18'20''	174	2.1	UCAC4 337-57055	13.74	9 <sup>h</sup> 38 <sup>m</sup> 58.532 <sup>s</sup> -22°44'29.813''	7.8	220	131.0	-30.2	56.2	35.0	58.1	68
2017/01/19 03:29:05	1477 Bonsdorffia	28.1	14.95	2.36	252	2.4	38°14'08'' 51°57'10''	33	0.8	UCAC4 605-43099	12.72	8 <sup>h</sup> 03 <sup>m</sup> 54.522 <sup>s</sup> 30°51'53.185''	25.4	289	169.4	-17.9	83.2	35.4	57.6	112
2017/01/19 03:48:37	1694 Kaiser	16.9	14.73	3.67	212	2.2	33°52'03'' 48°57'56''	235	0.7	UCAC4 660-42700	11.10	6 <sup>h</sup> 13 <sup>m</sup> 00.917 <sup>s</sup> 41°54'16.191''	16.2	317	148.0	-14.8	105.8	34.7	57.4	101



Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 16		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/19 17:09:45	6117 CZ1	7.2	16.01	6.35	3	0.8	36°18'03" 50°01'20"	160	4.0	UCAC4 579-34394	9.66	6 <sup>h</sup> 57 <sup>m</sup> 57.863 <sup>s</sup> 25°38'57.268"	43.9	102	163.2	-28.9	103.9	-41.5	52.2	72
2017/01/19 17:51:17	20731 Mothe- diniz	6.9	18.21	4.52	114	0.6	36°48'14" 49°04'56"	161	1.5	UCAC4 524-50704	13.71	10 <sup>h</sup> 03 <sup>m</sup> 53.015 <sup>s</sup> 14°39'42.062"	12.8	82	151.7	-35.6	59.6	-37.3	51.9	121
2017/01/19 17:56:28	8914 Nick- james	9.5	17.21	4.90	22	1.0	36°14'44" 50°14'49"	352	2.9	UCAC4 587-24809	12.33	6 <sup>h</sup> 04 <sup>m</sup> 32.819 <sup>s</sup> 27°23'26.264"	59.9	128	151.1	-36.4	116.1	-36.7	51.9	127
2017/01/19 19:31:21	15318 Inns- bruck	7.9	17.23	4.74	218	0.5	35°31'14" 48°09'26"	195	0.4	UCAC4 616-38118	12.50	6 <sup>h</sup> 55 <sup>m</sup> 13.708 <sup>s</sup> 33°04'26.967"	69.8	141	159.4	-50.3	105.6	-24.0	51.2	105
2017/01/19 19:45:11	38515 1999 TP245	6.6	17.57	5.21	149	0.5	36°43'55" 51°21'06"	12	1.0	UCAC4 591-44284	12.37	8 <sup>h</sup> 09 <sup>m</sup> 01.973 <sup>s</sup> 28°07'14.769"	58.4	122	172.0	-52.1	89.6	-22.0	51.1	121
2017/01/19 20:57:21	66210 1999 CR14	5.8	19.08	5.57	207	0.7	38°04'38" 48°35'58"	142	0.5	UCAC4 398-53812	13.52	12 <sup>h</sup> 27 <sup>m</sup> 35.005 <sup>s</sup> −10°31'37.867"	0.2	107	109.1	-58.9	21.8	-11.0	50.6	137
2017/01/19 21:14:56	21844 1999 TN112	5.8	18.18	5.36	125	0.8	36°09'13" 48°55'48"	184	1.1	UCAC4 491-54954	12.83	10 <sup>h</sup> 17 <sup>m</sup> 50.778 <sup>s</sup> 8°05'51.204"	36.7	128	146.3	-59.8	56.2	-8.3	50.6	105
2017/01/19 22:31:51	46959 1998 SW129	5.5	17.57	5.44	131	1.4	36°25'35" 48°52'20"	176	1.0	UCAC4 661-28759	12.14	4 <sup>h</sup> 54 <sup>m</sup> 06.357 <sup>s</sup> 42°06'50.493"	48.7	283	133.8	-58.9	128.0	3.4	49.9	108
2017/01/19 22:56:06	9891 Stephen- smith	9.1	17.27	4.51	151	0.9	37°30'07" 51°09'38"	35	1.3	UCAC4 615-28644	12.77	5 <sup>h</sup> 55 <sup>m</sup> 54.815 <sup>s</sup> 32°48'17.061"	49.2	265	148.0	-57.1	119.7	7.0	49.8	112
2017/01/19 23:04:08	13923 Peter- hof	9.5	16.34	3.25	126	0.8	35°15'10" 49°08'09"	216	1.7	UCAC4 654-50568	13.15	8 <sup>h</sup> 59 <sup>m</sup> 04.481 <sup>s</sup> 40°37'30.152"	79.6	210	156.8	-56.4	83.6	8.2	49.8	98
2017/01/20 03:06:45	31205 1998 BW	8.7	17.64	6.86	66	0.7	35°33'25" 49°40'45"	232	2.3	UCAC4 622-32890	10.78	6 <sup>h</sup> 23 <sup>m</sup> 41.269 <sup>s</sup> 34°21'08.886"	16.2	305	152.8	-21.3	115.7	31.5	48.2	131
2017/01/20 04:09:51	1990 Pilcher	7.8	16.86	8.80	236	0.9	38°16'15" 51°45'29"	37	0.0	UCAC4 422-55771	8.06	12 <sup>h</sup> 31 <sup>m</sup> 57.310 <sup>s</sup> −5°47'20.403"	28.4	215	110.4	-11.4	24.0	31.6	47.8	29
2017/01/20 04:25:37	45901 2000 YH16	6.0	17.82	4.15	54	0.6	36°11'14" 49°33'45"	187	1.9	UCAC4 639-26825	13.70	5 <sup>h</sup> 37 <sup>m</sup> 12.968 <sup>s</sup> 37°41'06.664"	5.1	328	142.8	-9.0	124.7	31.2	47.6	110
2017/01/20 14:17:31	13263 1998 QV22	6.9	17.55	3.70	93	0.6	35°38'17" 50°46'26"	330	1.7	UCAC4 578-37803	13.89	7 <sup>h</sup> 08 <sup>m</sup> 48.224 <sup>s</sup> 25°24'45.648"	15.3	69	164.7	-2.1	111.9	-44.3	43.8	111
2017/01/20 15:00:57	14399 1990 WN4	5.5	17.65	7.99	121	0.7	36°42'52" 48°59'37"	165	1.1	UCAC4 611-27467	9.66	5 <sup>h</sup> 57 <sup>m</sup> 35.176 <sup>s</sup> 32°00'57.654"	37.8	83	147.9	-8.4	127.0	-47.9	43.6	114
2017/01/20 17:15:39	41223 1999 XD16	6.3	17.38	6.08	172	0.7	34°40'56" 51°12'40"	318	0.6	UCAC4 656-43505	11.31	6 <sup>h</sup> 28 <sup>m</sup> 21.339 <sup>s</sup> 41°08'07.615"	60.0	91	149.6	-29.7	120.0	-47.8	42.7	104
2017/01/20 17:49:57	6117 1985 CZ1	7.2	16.04	3.80	220	0.9	34°41'15" 51°44'55"	329	0.0	UCAC4 579-34226	12.27	6 <sup>h</sup> 56 <sup>m</sup> 54.376 <sup>s</sup> 25°36'19.260"	50.8	113	162.0	-35.1	116.3	-45.1	42.4	72
2017/01/20 18:22:41	328 Gudrun	122.9	13.49	3.08	213	16.1	38°58'04" 49°14'30"	115	6.5	UCAC4 675-32555	10.47	4 <sup>h</sup> 55 <sup>m</sup> 25.310 <sup>s</sup> 44°54'53.945"	85.0	168	132.7	-40.3	134.1	-41.7	42.2	102
2017/01/20 18:57:45	19079 Her- nandez	7.6	17.94	4.01	197	0.5	36°43'05" 48°18'05"	171	0.7	UCAC4 605-44034	13.96	8 <sup>h</sup> 25 <sup>m</sup> 10.621 <sup>s</sup> 30°56'21.450"	51.5	102	168.6	-45.5	97.7	-37.5	42.0	126
2017/01/20 20:48:56	68896 2002 JN85	5.0	19.09	6.19	57	0.6	36°06'28" 49°32'51"	193	1.1	UCAC4 512-13321	12.91	5 <sup>h</sup> 42 <sup>m</sup> 43.666 <sup>s</sup> 12°20'33.535"	47.9	215	143.5	-58.1	135.4	-21.7	41.2	172

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 17		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/20 22:22:21	28286 1999 CJ40	6.0	17.70	4.29	215	0.5	37°39'45'' 51°46'33''	27	0.3	UCAC4 584-43947	13.44	9 <sup>h</sup> 18 <sup>m</sup> 13.345 <sup>s</sup> 26°39'41.172''	66.2	164	163.4	-59.2	87.2	-7.3	40.7	105
2017/01/20 23:00:48	982 Franklina	33.1	15.62	2.39	151	2.2	35°55'10'' 48°42'42''	190	5.3	UCAC4 590-34655	13.36	6 <sup>h</sup> 39 <sup>m</sup> 23.833 <sup>s</sup> 27°51'14.222''	51.3	251	157.4	-56.5	122.7	-1.4	40.4	144
2017/01/20 23:41:29	3569 Kumon	11.0	15.33	2.05	13	1.1	36°24'60'' 50°07'36''	47	5.5	UCAC4 469-39268	13.46	8 <sup>h</sup> 37 <sup>m</sup> 25.274 <sup>s</sup> 3°43'52.612''	40.0	210	162.7	-52.2	92.8	4.5	40.2	79
2017/01/20 23:42:41	24109 1999 VO20	6.6	16.95	6.56	172	0.8	36°17'12'' 51°35'21''	0	0.6	UCAC4 569-20998	10.40	5 <sup>h</sup> 53 <sup>m</sup> 25.539 <sup>s</sup> 23°36'22.996''	34.4	267	147.6	-52.1	133.8	4.7	40.1	99
2017/01/20 23:55:57	32557 2001 QT30	5.2	18.35	5.64	177	0.9	35°11'04'' 48°37'32''	206	0.6	UCAC4 560-17693	12.72	5 <sup>h</sup> 35 <sup>m</sup> 38.264 <sup>s</sup> 21°59'36.892''	28.2	271	143.4	-50.4	138.2	6.5	40.0	118
2017/01/21 00:34:38	38909 2000 SQ172	8.7	17.35	5.04	21	0.7	36°01'50'' 49°57'34''	242	2.7	UCAC4 600-40481	12.32	7 <sup>h</sup> 13 <sup>m</sup> 16.807 <sup>s</sup> 29°57'24.400''	43.2	267	163.2	-45.1	115.9	11.7	39.8	126
2017/01/21 00:43:36	7650 Kananee	10.5	16.79	3.72	195	0.9	37°14'42'' 51°41'13''	21	1.0	UCAC4 478-28870	13.11	6 <sup>h</sup> 54 <sup>m</sup> 40.168 <sup>s</sup> 5°33'55.137''	20.8	253	156.2	-43.8	118.9	12.9	39.7	125
2017/01/21 14:17:22	10613 Kushinadahime	5.0	17.92	6.15	216	1.6	39°02'46'' 50°52'56''	65	0.2	UCAC4 522-7956	11.77	4 <sup>h</sup> 25 <sup>m</sup> 05.728 <sup>s</sup> 14°12'32.644''	33.4	109	125.0	-1.8	162.7	-42.2	34.7	95
2017/01/21 16:38:46	13511 1989 RD1	6.6	17.77	6.71	233	0.7	36°40'02'' 47°58'13''	173	0.3	UCAC4 593-27723	11.06	6 <sup>h</sup> 05 <sup>m</sup> 39.867 <sup>s</sup> 28°31'22.335''	50.5	106	149.3	-23.5	138.3	-53.1	33.8	114
2017/01/21 16:47:45	27969 1997 TT3	5.0	17.23	4.23	77	0.6	36°10'41'' 49°21'44''	186	1.5	UCAC4 455-27238	13.03	6 <sup>h</sup> 59 <sup>m</sup> 21.664 <sup>s</sup> 0°52'54.108''	22.2	117	153.5	-25.0	124.1	-53.2	33.7	105
2017/01/21 18:34:39	72685 2001 FG66	6.9	17.60	4.09	109	1.2	35°02'08'' 50°37'03''	305	1.5	UCAC4 670-32827	13.54	4 <sup>h</sup> 57 <sup>m</sup> 40.231 <sup>s</sup> 43°49'19.140''	83.9	192	132.4	-41.9	143.3	-47.9	33.0	122
2017/01/21 19:27:08	6734 Benzenberg	14.5	16.44	5.15	233	1.1	36°05'40'' 52°08'20''	357	0.8	UCAC4 612-44326	11.30	9 <sup>h</sup> 09 <sup>m</sup> 59.134 <sup>s</sup> 32°23'41.319''	50.7	98	162.5	-49.3	100.1	-42.0	32.7	123
2017/01/21 20:22:15	6680 1970 WD	6.9	17.27	3.62	47	0.7	36°03'20'' 49°38'57''	200	2.7	UCAC4 540-5851	13.69	3 <sup>h</sup> 07 <sup>m</sup> 44.155 <sup>s</sup> 17°49'44.991''	35.1	255	107.7	-55.7	173.7	-34.6	32.4	89
2017/01/21 21:07:30	9877 1993 ST3	7.9	17.14	3.87	41	0.6	36°13'15'' 49°40'57''	187	2.6	UCAC4 612-41580	13.30	7 <sup>h</sup> 54 <sup>m</sup> 45.509 <sup>s</sup> 32°19'25.225''	72.3	169	166.5	-59.0	116.7	-27.9	32.1	112
2017/01/21 22:02:27	38544 1999 VS21	6.9	18.73	5.84	50	0.6	36°35'56'' 50°26'48''	27	1.8	UCAC4 570-27412	12.89	6 <sup>h</sup> 20 <sup>m</sup> 13.122 <sup>s</sup> 23°57'41.975''	53.5	237	152.8	-59.7	138.5	-19.4	31.7	147
2017/01/21 22:24:05	2717 Tellervo	12.0	16.02	2.74	52	2.6	35°51'49'' 49°40'14''	216	4.5	UCAC4 543-14021	13.37	5 <sup>h</sup> 17 <sup>m</sup> 46.376 <sup>s</sup> 18°25'42.605''	36.8	254	137.9	-58.9	153.8	-16.1	31.6	92
2017/01/21 22:55:49	525 Adelaide	10.3	14.90	1.49	56	1.6	36°36'32'' 50°30'28''	24	4.4	UCAC4 509-29281	13.73	6 <sup>h</sup> 45 <sup>m</sup> 12.677 <sup>s</sup> 11°42'12.476''	39.5	235	156.7	-56.8	132.8	-11.2	31.4	62
2017/01/21 23:25:08	344003 2011 QW53	6.3	21.19	7.33	241	0.5	36°47'29'' 52°11'28''	9	0.5	UCAC4 442-51947	13.86	10 <sup>h</sup> 26 <sup>m</sup> 09.532 <sup>s</sup> -1°47'24.092''	37.9	171	141.6	-53.9	76.5	-6.7	31.3	440
2017/01/21 23:48:54	4122 Ferrari	13.2	15.97	4.12	38	1.5	36°14'24'' 49°42'15''	185	4.1	UCAC4 534-21870	11.87	5 <sup>h</sup> 59 <sup>m</sup> 36.745 <sup>s</sup> 16°41'18.308''	28.7	262	147.4	-51.2	144.7	-3.2	31.0	123
2017/01/21 23:55:18	5387 Casleo	6.9	17.17	3.43	90	0.5	35°41'07'' 49°20'04''	208	1.8	UCAC4 544-43759	13.78	7 <sup>h</sup> 51 <sup>m</sup> 59.588 <sup>s</sup> 18°46'35.318''	46.3	239	174.1	-50.4	118.1	-2.3	31.0	95

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 18		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/22 00:40:49	31826 VM2	7.6	16.72	3.35	119	0.7	35°29'53" 50°59'14"	332	1.5	UCAC4 370-43359	13.42	8 <sup>h</sup> 05 <sup>m</sup> 16.145 <sup>s</sup> −16°01'13.169"	12.3	226	144.1	-44.1	106.8	4.2	30.8	98
2017/01/22 01:10:59	3773 Smithso- nian	7.2	16.46	3.75	15	1.0	36°09'60" 49°56'17"	215	3.6	UCAC4 575-26443	12.75	6 <sup>h</sup> 17 <sup>m</sup> 05.487 <sup>s</sup> 24°52'29.300"	24.2	280	151.9	-39.5	140.7	8.2	30.6	78
2017/01/22 01:14:25	5613 Donskoj	8.7	19.19	6.03	97	0.5	35°22'54" 49°23'59"	222	1.7	UCAC4 380-67161	13.17	14 <sup>h</sup> 17 <sup>m</sup> 27.616 <sup>s</sup> −14°03'37.374"	17.9	141	85.2	-39.0	19.1	8.7	30.6	171
2017/01/22 02:13:13	44560 1999 CM42	5.2	18.62	5.03	144	0.9	35°04'39" 49°01'20"	217	0.9	UCAC4 613-19246	13.60	5 <sup>h</sup> 09 <sup>m</sup> 30.097 <sup>s</sup> 32°24'57.385"	11.0	308	136.4	-29.7	152.3	15.6	30.1	130
2017/01/22 03:15:42	49345 1998 WH4	6.3	17.07	3.59	128	0.6	37°34'11" 50°51'11"	46	1.1	UCAC4 583-39008	13.52	7 <sup>h</sup> 28 <sup>m</sup> 02.994 <sup>s</sup> 26°35'30.324"	17.1	291	166.7	-19.6	125.6	21.3	29.8	103
2017/01/22 03:22:14	2262 Mitidika	12.0	16.34	2.55	97	1.8	37°20'12" 50°36'31"	50	3.0	UCAC4 663-33668	13.90	5 <sup>h</sup> 08 <sup>m</sup> 08.619 <sup>s</sup> 42°29'47.452"	11.7	326	134.3	-18.6	146.0	21.8	29.7	107
2017/01/22 04:52:03	5512 1988 VD7	7.2	16.81	3.23	167	0.5	34°25'58" 49°09'21"	233	0.6	UCAC4 588-43651	13.64	8 <sup>h</sup> 17 <sup>m</sup> 53.868 <sup>s</sup> 27°24'58.762"	10.9	300	172.2	-4.8	115.3	25.6	29.3	89
2017/01/22 04:53:00	47219 1999 UU41	8.7	17.70	5.54	236	0.5	32°58'57" 50°08'53"	273	0.4	UCAC4 324-68920	12.17	13 <sup>h</sup> 24 <sup>m</sup> 51.884 <sup>s</sup> −25°18'36.116"	10.2	207	92.8	-4.7	34.2	25.6	29.3	116
2017/01/22 14:39:22	63955 2001 SP65	13.2	19.52	7.14	135	0.7	34°36'43" 50°37'40"	298	1.3	UCAC4 665-54030	12.38	8 <sup>h</sup> 40 <sup>m</sup> 57.054 <sup>s</sup> 42°54'38.464"	20.2	46	156.1	-4.8	115.3	-41.4	25.9	372
2017/01/22 16:45:23	30165 2000 GF61	5.8	17.13	7.21	134	0.5	36°52'45" 48°54'29"	162	0.9	UCAC4 581-41015	9.93	8 <sup>h</sup> 02 <sup>m</sup> 37.098 <sup>s</sup> 26°08'41.054"	31.9	86	172.3	-24.4	124.3	-54.4	25.2	98
2017/01/22 17:00:11	5578 Takakura	9.5	17.23	5.78	222	0.8	35°45'05" 52°00'31"	350	0.5	UCAC4 512-47913	11.45	9 <sup>h</sup> 34 <sup>m</sup> 58.297 <sup>s</sup> 12°16'47.391"	9.3	82	160.5	-26.8	100.9	-55.1	25.1	110
2017/01/22 17:43:13	36095 1999 RL109	7.9	17.22	5.97	228	1.2	36°47'47" 52°04'08"	9	0.5	UCAC4 496-17007	11.26	5 <sup>h</sup> 55 <sup>m</sup> 33.042 <sup>s</sup> 9°03'41.154"	44.4	145	143.6	-33.7	153.1	-55.8	24.8	125
2017/01/22 18:14:11	3980 Hviez- doslav	8.3	17.69	8.06	121	1.5	36°45'52" 49°00'36"	164	1.7	UCAC4 550-7489	9.63	3 <sup>h</sup> 42 <sup>m</sup> 16.086 <sup>s</sup> 19°51'28.756"	57.3	210	115.2	-38.5	172.2	-55.0	24.7	122
2017/01/22 19:43:38	101870 1999 NV	5.5	17.61	5.09	160	0.5	34°19'14" 50°45'35"	299	0.6	UCAC4 482-7347	12.53	4 <sup>h</sup> 33 <sup>m</sup> 10.755 <sup>s</sup> 6°16'37.599"	41.2	216	123.4	-51.2	169.2	-47.6	24.2	103
2017/01/22 19:51:47	71119 1999 XJ161	6.3	18.14	6.56	70	0.7	35°25'42" 49°44'52"	241	1.8	UCAC4 618-10516	11.59	3 <sup>h</sup> 25 <sup>m</sup> 49.183 <sup>s</sup> 33°30'02.914"	53.3	261	114.0	-52.2	159.3	-46.7	24.1	116
2017/01/22 20:28:02	23185 2000 PQ7	6.9	17.38	3.45	26	0.9	36°36'22" 50°09'06"	63	2.1	UCAC4 553-20401	13.97	5 <sup>h</sup> 54 <sup>m</sup> 56.821 <sup>s</sup> 20°29'32.460"	57.8	211	145.9	-56.0	155.7	-42.1	23.9	127
2017/01/22 21:14:11	13562 Bobeg- gleton	5.2	18.10	4.16	153	0.5	35°42'49" 48°43'20"	196	0.7	UCAC4 554-33640	13.96	6 <sup>h</sup> 56 <sup>m</sup> 03.478 <sup>s</sup> 20°41'04.549"	59.1	204	160.2	-59.0	141.8	-35.6	23.6	114
2017/01/22 21:21:07	30584 2001 PF9	5.8	17.66	6.35	210	1.1	38°11'52" 51°29'31"	40	0.2	UCAC4 465-46107	11.31	10 <sup>h</sup> 53 <sup>m</sup> 37.097 <sup>s</sup> 2°59'39.050"	30.0	126	139.1	-59.3	81.7	-34.5	23.7	92
2017/01/23 01:27:57	85675 1998 RC2	5.5	18.63	5.20	215	0.6	37°58'57" 51°39'14"	34	0.5	UCAC4 657-40168	13.43	5 <sup>h</sup> 58 <sup>m</sup> 16.218 <sup>s</sup> 41°12'10.004"	29.6	300	142.7	-36.8	148.0	2.5	22.2	154
2017/01/23 01:33:42	54386 2000 KD64	5.0	19.72	6.34	204	0.6	38°10'11" 48°41'10"	138	0.5	UCAC4 451-54316	13.38	13 <sup>h</sup> 10 <sup>m</sup> 26.546 <sup>s</sup> 0°11'12.867"	38.6	160	106.7	-35.9	50.6	3.3	22.2	138

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 19		LinOccult 2.3.0 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 (%)	$\sigma_{km}$	
2017/01/23 02:48:49	2459 Spell-mann	23.7	17.72	3.94	83	0.6	36°12'36'' 49°18'15''	184	2.9	UCAC4 357-90693	13.81	17 <sup>h</sup> 19 <sup>m</sup> 50.422 <sup>s</sup> −18°45'53.548''	4.0	126	42.8	-23.8	12.7	12.4	21.8	311	
2017/01/23 03:14:28	31123 1997 SU	5.0	17.15	5.31	8	0.5	36°11'22'' 50°00'57''	243	2.4	UCAC4 515-40358	11.84	7 <sup>h</sup> 19 <sup>m</sup> 20.901 <sup>s</sup> 12°49'34.686''	4.9	284	163.7	-19.7	138.6	15.1	21.6	84	
2017/01/23 14:09:02	25263 1998 VM16	9.1	17.29	4.71	157	1.6	35°05'60'' 51°14'40''	328	1.3	UCAC4 618-24159	12.59	5 <sup>h</sup> 28 <sup>m</sup> 54.927 <sup>s</sup> 33°34'16.812''	37.0	80	138.8	-0.2	161.5	-31.7	18.2	127	
2017/01/23 15:09:30	41767 2000 VQ36	5.5	16.75	4.17	148	0.6	36°44'51'' 48°45'24''	167	0.5	UCAC4 578-37998	12.61	7 <sup>h</sup> 10 <sup>m</sup> 23.077 <sup>s</sup> 25°29'47.885''	25.0	79	162.0	-9.1	146.9	-40.8	17.9	80	
2017/01/23 15:28:28	66062 1998 RG1	6.9	17.40	3.66	212	1.1	36°59'04'' 51°53'49''	14	0.5	UCAC4 497-16681	13.78	5 <sup>h</sup> 54 <sup>m</sup> 35.370 <sup>s</sup> 9°15'15.371''	28.0	110	142.6	-12.0	162.9	-43.4	17.8	123	
2017/01/23 16:31:51	3234 Hergiani	30.0	18.34	4.91	94	0.7	35°08'02'' 49°38'20''	241	6.1	UCAC4 406-140360	13.44	22 <sup>h</sup> 43 <sup>m</sup> 37.742 <sup>s</sup> −8°52'39.472''	7.8	246	35.4	-22.0	84.6	-51.3	17.5	166	
2017/01/23 17:35:24	9358 Faro	7.2	17.62	6.00	53	1.2	36°15'46'' 49°34'13''	182	2.3	UCAC4 556-17688	11.63	5 <sup>h</sup> 37 <sup>m</sup> 37.045 <sup>s</sup> 21°01'55.664''	56.8	143	141.0	-32.2	169.9	-56.5	17.2	112	
2017/01/23 17:44:31	121708 1999 XT100	5.5	17.86	4.87	87	0.6	37°28'29'' 49°52'26''	103	1.3	UCAC4 560-17270	13.00	5 <sup>h</sup> 33 <sup>m</sup> 21.946 <sup>s</sup> 21°57'50.665''	58.9	147	140.1	-33.7	170.6	-56.9	17.1	132	
2017/01/23 17:47:09	37211 2000 WK119	5.8	18.43	6.41	127	0.6	35°51'50'' 51°09'19''	346	1.1	UCAC4 620-34153	12.02	6 <sup>h</sup> 25 <sup>m</sup> 21.326 <sup>s</sup> 33°55'39.404''	62.9	115	149.9	-34.1	154.4	-57.0	17.1	152	
2017/01/23 19:28:54	10811 Lau	10.0	16.25	2.40	211	1.6	34°49'42'' 48°24'26''	210	0.5	UCAC4 552-22956	13.98	6 <sup>h</sup> 10 <sup>m</sup> 51.227 <sup>s</sup> 20°18'21.046''	60.5	178	148.7	-49.1	163.4	-55.2	16.6	104	
2017/01/23 21:15:56	122460 2000 QB146	13.2	19.27	5.98	54	0.7	36°02'03'' 49°35'26''	200	1.7	UCAC4 479-43604	13.30	8 <sup>h</sup> 28 <sup>m</sup> 34.407 <sup>s</sup> 5°39'08.581''	45.2	168	166.3	-58.9	128.9	-43.4	16.1	309	
2017/01/23 22:34:45	1130 Skuld	13.2	15.84	2.45	203	3.3	35°10'30'' 48°22'14''	203	0.4	UCAC4 552-14140	13.51	5 <sup>h</sup> 21 <sup>m</sup> 32.403 <sup>s</sup> 20°17'26.654''	35.9	259	137.0	-57.9	176.0	-31.8	15.6	89	
2017/01/24 00:20:03	3181 Ahnert	10.0	15.69	2.78	130	2.1	37°10'50'' 51°03'47''	29	1.1	UCAC4 538-19254	13.00	5 <sup>h</sup> 47 <sup>m</sup> 44.630 <sup>s</sup> 17°33'37.006''	21.1	272	142.7	-46.7	171.5	-15.6	15.1	72	
2017/01/24 00:48:01	9835 1984 UD	7.2	16.90	4.18	68	1.4	37°06'51'' 50°21'10''	60	2.3	UCAC4 616-12586	12.74	4 <sup>h</sup> 06 <sup>m</sup> 11.975 <sup>s</sup> 33°02'24.425''	13.3	306	121.2	-42.7	158.8	-11.3	15.1	97	
2017/01/24 00:50:01	16481 1990 QU7	7.2	16.36	4.14	131	0.8	35°10'19'' 49°06'52''	217	1.1	UCAC4 547-42208	12.24	7 <sup>h</sup> 44 <sup>m</sup> 55.931 <sup>s</sup> 19°15'07.701''	36.3	256	170.5	-42.4	144.0	-11.0	15.0	90	
2017/01/24 02:20:49	4902 Thessandrus	34.7	18.02	4.33	92	1.0	36°08'08'' 49°13'37''	187	4.3	UCAC4 376-81440	13.71	17 <sup>h</sup> 12 <sup>m</sup> 14.090 <sup>s</sup> −14°57'08.123''	4.9	120	46.2	-28.2	3.2	1.9	14.6	310	
2017/01/24 04:27:56	340 Eduarda	30.2	13.88	2.63	185	3.7	34°19'15'' 48°59'17''	230	1.3	UCAC4 531-50634	11.35	10 <sup>h</sup> 32 <sup>m</sup> 55.040 <sup>s</sup> 16°00'21.369''	25.9	264	149.6	-8.1	105.9	16.0	14.0	84	
2017/01/24 16:13:07	24381 2000 AA166	7.6	17.83	5.90	192	0.6	36°24'51'' 51°46'16''	3	0.8	UCAC4 459-38119	11.94	7 <sup>h</sup> 50 <sup>m</sup> 09.220 <sup>s</sup> 1°36'32.616''	11.6	102	160.2	-18.8	144.9	-43.9	10.9	129	
2017/01/24 16:30:29	30449 2000 NH13	7.2	17.66	4.94	5	0.9	36°18'47'' 50°00'05''	160	2.4	UCAC4 578-19520	12.73	5 <sup>h</sup> 48 <sup>m</sup> 32.568 <sup>s</sup> 25°26'27.136''	51.4	115	142.7	-21.6	173.1	-46.3	10.8	120	
2017/01/24 16:48:53	1219 Britta	11.4	15.50	3.81	39	0.7	36°08'53'' 50°23'23''	345	4.9	UCAC4 541-4697	11.72	2 <sup>h</sup> 34 <sup>m</sup> 51.813 <sup>s</sup> 18°03'41.008''	56.3	204	97.4	-24.5	134.7	-48.7	10.7	82	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 20		LinOccult 2.3.0 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 (%)	$\sigma_{km}$	
2017/01/24 19:22:43	8859 PQ11	6.9	17.32	4.70	201	0.7	36°47'18'' 48°16'20''	170	0.4	UCAC4 578-34130	12.63	6 <sup>h</sup> 46 <sup>m</sup> 45.356 <sup>s</sup> 25°35'29.047''	64.5	158	155.6	-48.0	165.5	-58.7	10.1	102	
2017/01/24 21:23:16	5175 Ables	7.2	15.77	2.65	133	1.0	36°06'58'' 48°51'40''	185	0.5	UCAC4 428-19945	13.22	6 <sup>h</sup> 40 <sup>m</sup> 26.019 <sup>s</sup> -4°27'46.913''	32.6	206	144.4	-58.9	154.4	-49.5	9.6	63	
2017/01/24 23:40:40	1832 Mrkos	30.8	16.43	3.13	6	4.2	36°22'21'' 50°02'07''	103	7.7	UCAC4 619-14376	13.37	4 <sup>h</sup> 18 <sup>m</sup> 30.440 <sup>s</sup> 33°42'53.755''	24.4	294	122.8	-51.6	152.6	-29.8	9.0	159	
2017/01/25 14:19:16	735 Marghanna	74.3	14.01	1.96	56	7.0	35°33'35'' 50°14'12''	292	24.5	UCAC4 678-46890	12.24	6 <sup>h</sup> 45 <sup>m</sup> 16.550 <sup>s</sup> 45°30'45.804''	35.8	59	145.4	-1.2	153.2	-19.5	6.0	103	
2017/01/25 15:40:53	21919 Luga	5.5	19.09	6.15	124	0.7	37°34'03'' 49°18'26''	132	1.0	UCAC4 579-16648	12.95	5 <sup>h</sup> 37 <sup>m</sup> 03.282 <sup>s</sup> 25°42'49.171''	46.4	106	139.1	-13.5	164.9	-32.1	5.7	164	
2017/01/25 16:01:57	2261 Keeler	8.7	15.56	6.38	254	0.7	36°55'45'' 47°48'28''	170	0.0	UCAC4 616-42332	9.18	7 <sup>h</sup> 50 <sup>m</sup> 15.769 <sup>s</sup> 33°11'58.295''	33.6	77	162.8	-16.8	158.1	-35.3	5.6	70	
2017/01/25 16:34:45	5369 Virgiugum	5.5	17.39	4.45	226	0.6	36°06'49'' 52°04'28''	357	0.1	UCAC4 535-31995	12.96	6 <sup>h</sup> 41 <sup>m</sup> 53.962 <sup>s</sup> 16°58'07.805''	38.1	111	153.7	-22.0	177.8	-40.2	5.5	81	
2017/01/25 17:12:43	165 Loreley	155.2	13.13	1.02	81	20.6	37°13'43'' 49°38'28''	124	38.1	UCAC4 603-18573	12.65	5 <sup>h</sup> 09 <sup>m</sup> 48.513 <sup>s</sup> 30°29'55.652''	66.6	139	132.9	-28.1	156.7	-45.6	5.4	128	
2017/01/25 17:28:44	22418 1995 WM4	5.2	18.45	5.02	136	1.1	36°06'12'' 48°49'41''	186	0.9	UCAC4 565-16555	13.44	5 <sup>h</sup> 25 <sup>m</sup> 16.136 <sup>s</sup> 22°48'26.114''	59.7	147	136.3	-30.7	162.3	-47.7	5.4	119	
2017/01/25 18:02:53	49652 1999 JW81	5.0	17.30	4.13	58	0.8	36°22'03'' 49°31'56''	174	1.8	UCAC4 634-34203	13.19	6 <sup>h</sup> 26 <sup>m</sup> 46.545 <sup>s</sup> 36°38'17.633''	68.1	118	147.2	-36.1	161.9	-51.9	5.3	88	
2017/01/25 19:40:27	12971 4054 T-3	7.2	18.52	4.58	81	0.7	36°10'17'' 50°46'26''	354	1.7	UCAC4 631-36448	13.96	6 <sup>h</sup> 33 <sup>m</sup> 17.092 <sup>s</sup> 36°07'43.858''	76.3	175	148.5	-50.1	162.5	-58.8	4.9	147	
2017/01/25 20:47:26	59946 1999 RG205	5.8	18.66	5.78	84	0.5	36°44'09'' 49°20'54''	158	1.3	UCAC4 622-29843	12.88	6 <sup>h</sup> 03 <sup>m</sup> 00.537 <sup>s</sup> 34°12'00.076''	67.2	235	143.4	-56.8	161.8	-57.6	4.7	148	
2017/01/25 21:04:48	19607 1999 NF55	6.0	17.19	4.84	224	0.6	36°23'33'' 48°01'56''	178	0.2	UCAC4 493-41188	12.37	7 <sup>h</sup> 13 <sup>m</sup> 09.585 <sup>s</sup> 8°27'31.965''	47.9	194	158.1	-57.9	167.9	-56.5	4.7	97	
2017/01/25 22:19:31	11441 Anadiego	9.1	15.54	2.26	151	1.1	37°14'36'' 51°15'42''	27	0.8	UCAC4 432-45909	13.42	8 <sup>h</sup> 26 <sup>m</sup> 15.917 <sup>s</sup> -3°42'42.000''	35.7	192	157.4	-58.2	147.3	-48.8	4.5	80	
2017/01/25 23:50:28	10235 1998 QR37	10.0	17.56	4.85	233	0.7	37°44'17'' 51°55'39''	26	0.6	UCAC4 541-45193	12.72	8 <sup>h</sup> 10 <sup>m</sup> 52.825 <sup>s</sup> 18°11'47.282''	46.9	236	174.6	-50.3	161.6	-36.0	4.2	133	
2017/01/26 00:28:01	7791 Ebicykl	8.7	16.30	2.63	136	0.8	37°48'48'' 50°46'60''	53	1.4	UCAC4 521-47177	13.77	8 <sup>h</sup> 42 <sup>m</sup> 03.087 <sup>s</sup> 14°10'07.623''	42.7	235	175.0	-45.3	153.9	-30.2	4.1	102	
2017/01/26 15:34:27	4127 Kyogoku	9.5	16.61	4.58	63	0.8	36°45'25'' 49°34'30''	147	3.0	UNKNOWN UN-	12.05	8 <sup>h</sup> 46 <sup>m</sup> 32.825 <sup>s</sup> 16°26'01.892''	9.0	75	176.7	-12.2	161.1	-22.9	2.0	105	
									3.6	KNOWN											
2017/01/26 17:59:37	65668 1988 AX1	7.2	17.17	3.65	195	0.8	38°32'01'' 51°03'26''	55	0.5	UCAC4 612-11306	13.56	3 <sup>h</sup> 56 <sup>m</sup> 41.606 <sup>s</sup> 32°22'50.550''	70.0	214	116.4	-35.4	129.6	-44.6	1.7	102	
2017/01/26 19:11:40	14399 1990 WN4	5.5	17.80	5.25	195	0.9	37°32'39'' 51°36'32''	27	0.5	UCAC4 612-26308	12.56	5 <sup>h</sup> 53 <sup>m</sup> 38.423 <sup>s</sup> 32°23'36.018''	72.6	186	140.9	-46.1	153.0	-53.2	1.6	118	
2017/01/26 21:10:14	15929 Ericlin-ton	6.9	18.57	5.72	88	0.8	37°06'17'' 49°27'45''	138	1.7	UCAC4 418-57301	12.86	13 <sup>h</sup> 15 <sup>m</sup> 15.719 <sup>s</sup> -6°26'32.920''	2.3	103	107.1	-57.9	93.9	-57.9	1.4	129	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 21		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/26 21:21:18	44740 1999 TJ37	5.0	17.26	3.87	162	0.6	34°51'56'' 48°55'26''	219	0.4	UCAC4 542-37149	13.42	7 <sup>h</sup> 03 <sup>m</sup> 57.651 <sup>s</sup> 18°19'09.844''	55.7	209	157.9	-58.3	171.3	-57.6	1.4	90
2017/01/26 23:31:19	27566 2000 LX32	6.0	17.25	4.32	183	0.6	37°53'52'' 51°20'06''	39	0.4	UCAC4 491-46471	12.95	7 <sup>h</sup> 47 <sup>m</sup> 00.834 <sup>s</sup> 8°10'38.079''	37.3	231	164.0	-52.3	170.2	-45.3	1.2	99
2017/01/26 23:48:23	12080 1998 FC111	10.5	18.06	4.32	32	2.1	35°50'40'' 50°01'15''	265	2.7	UCAC4 565-8175	13.76	3 <sup>h</sup> 47 <sup>m</sup> 24.327 <sup>s</sup> 22°58'43.262''	9.6	295	112.7	-50.3	124.3	-42.9	1.2	152
2017/01/27 01:14:36	25409 1999 VD36	5.0	17.41	4.80	92	0.6	36°03'09'' 49°14'16''	191	1.3	UCAC4 480-31124	12.62	7 <sup>h</sup> 04 <sup>m</sup> 39.674 <sup>s</sup> 5°57'47.055''	14.0	262	154.1	-38.2	163.9	-30.1	1.0	100
2017/01/27 02:13:42	49496 1999 CC2	5.2	18.21	7.38	183	0.8	38°02'22'' 51°15'37''	43	0.6	UCAC4 589-25105	10.83	6 <sup>h</sup> 02 <sup>m</sup> 10.650 <sup>s</sup> 27°38'19.747''	11.6	299	143.2	-28.9	153.0	-20.9	0.9	121
2017/01/27 02:16:14	25829 2000 DU108	7.6	18.45	5.51	173	1.0	34°33'34'' 48°58'02''	226	1.0	UCAC4 509-51596	12.94	11 <sup>h</sup> 15 <sup>m</sup> 27.319 <sup>s</sup> 11°38'21.959''	45.4	221	141.5	-28.5	130.4	-20.5	0.9	137
2017/01/27 03:08:08	92248 2000 AM154	5.8	19.18	7.10	250	0.6	38°55'25'' 51°33'18''	48	0.5	UCAC4 622-30027	12.08	6 <sup>h</sup> 04 <sup>m</sup> 32.796 <sup>s</sup> 34°17'06.037''	10.1	313	142.4	-20.2	150.6	-12.4	0.9	168
2017/01/27 03:23:29	40167 1998 QF103	5.5	19.10	5.93	102	0.6	35°18'55'' 49°22'36''	223	1.1	UCAC4 636-33538	13.18	6 <sup>h</sup> 12 <sup>m</sup> 58.538 <sup>s</sup> 37°05'17.233''	11.6	315	143.2	-17.7	150.5	-10.1	0.8	160
2017/01/27 03:23:58	503 Evelyn	81.7	15.47	5.50	121	2.1	37°57'53'' 50°12'59''	81	13.7	UCAC4 329-122360	9.98	18 <sup>h</sup> 04 <sup>m</sup> 20.562 <sup>s</sup> -24°13'54.803''	0.2	130	36.2	-17.6	26.3	-10.0	0.9	195
2017/01/27 04:24:21	1085 Amaryllis	70.0	15.77	2.22	129	1.6	37°51'25'' 50°38'10''	60	11.5	UCAC4 355-154826	13.70	18 <sup>h</sup> 37 <sup>m</sup> 39.433 <sup>s</sup> -19°08'56.291''	7.9	133	28.5	-8.2	18.6	-1.2	0.8	194
2017/01/27 14:25:39	34642 2000 WN2	24.0	18.27	5.59	110	1.3	37°42'42'' 49°40'35''	112	3.0	UCAC4 657-51354	12.68	9 <sup>h</sup> 01 <sup>m</sup> 24.015 <sup>s</sup> 41°16'50.481''	17.2	45	156.5	-1.7	153.8	-3.8	0.2	300
2017/01/27 14:52:07	71449 2000 AJ242	5.5	17.89	4.58	210	0.6	36°13'37'' 51°55'53''	359	0.5	UCAC4 461-29174	13.33	7 <sup>h</sup> 06 <sup>m</sup> 25.633 <sup>s</sup> 2°03'33.704''	7.9	96	151.8	-5.5	156.9	-7.6	0.2	136
2017/01/27 15:19:32	44258 1998 QT47	5.5	16.93	6.50	41	0.5	36°15'18'' 49°40'39''	183	2.3	UCAC4 484-41421	10.43	7 <sup>h</sup> 52 <sup>m</sup> 12.469 <sup>s</sup> 6°41'03.200''	8.5	90	163.5	-9.7	167.8	-11.7	0.2	86
2017/01/27 16:51:33	1495 Helsinki	18.4	16.63	3.19	229	3.3	33°11'23'' 50°36'25''	286	1.2	UCAC4 643-20603	13.49	4 <sup>h</sup> 45 <sup>m</sup> 14.146 <sup>s</sup> 38°32'49.783''	74.5	132	125.5	-24.3	127.9	-25.9	0.1	130
2017/01/27 16:52:10	1806 Derice	12.6	14.39	2.54	256	2.0	37°26'09'' 47°52'33''	161	0.0	UCAC4 547-37848	11.96	7 <sup>h</sup> 08 <sup>m</sup> 36.576 <sup>s</sup> 19°20'24.710''	39.7	109	158.3	-24.4	162.1	-26.0	0.2	60
2017/01/27 18:14:35	14229 1999 XV94	5.5	17.87	5.90	111	0.6	36°47'14'' 49°06'15''	161	1.2	UCAC4 598-34705	11.98	6 <sup>h</sup> 38 <sup>m</sup> 15.047 <sup>s</sup> 29°29'26.604''	63.6	132	150.0	-37.5	152.1	-38.3	0.1	97
2017/01/27 18:46:42	53938 2000 GZ45	5.0	18.76	4.81	199	0.8	35°41'26'' 48°17'55''	192	0.4	UCAC4 544-18973	13.96	5 <sup>h</sup> 47 <sup>m</sup> 34.307 <sup>s</sup> 18°47'38.379''	59.0	177	139.0	-42.3	141.9	-42.8	0.1	124
2017/01/27 21:32:48	1873 Agenor	53.8	17.39	4.32	32	3.5	36°36'58'' 50°14'34''	47	9.0	UCAC4 431-25020	13.10	6 <sup>h</sup> 58 <sup>m</sup> 41.071 <sup>s</sup> -3°52'23.037''	32.9	207	146.4	-58.3	149.0	-56.5	0.1	235
2017/01/27 21:39:01	63923 2001 SV41	12.6	18.82	5.64	27	0.8	36°08'41'' 49°49'19''	202	1.8	UCAC4 517-41643	13.19	7 <sup>h</sup> 28 <sup>m</sup> 49.999 <sup>s</sup> 13°20'24.447''	51.2	206	161.9	-58.4	164.0	-56.5	0.1	281
2017/01/27 22:02:34	6020 Miyamoto	5.5	17.63	3.71	116	0.7	36°38'47'' 51°04'02''	13	1.1	UCAC4 606-33795	13.96	6 <sup>h</sup> 35 <sup>m</sup> 17.520 <sup>s</sup> 31°01'58.062''	57.6	248	148.8	-58.3	149.0	-56.1	0.0	90

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 22		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/27 23:20:03	5369 Vir- gium	5.5	17.46	3.51	4	0.6	36°15'19" 50°00'45"	210	2.7	UCAC4 536-31492	13.99	6 <sup>h</sup> 40 <sup>m</sup> 06.390 <sup>s</sup> 17°05'57.962"	36.2	252	151.1	-53.3	151.8	-51.0	0.0	82
2017/01/27 23:21:21	12562 Brian- grazer	14.5	17.27	3.89	252	2.3	37°10'44" 52°14'35"	15	0.9	UCAC4 644-23507	13.41	5 <sup>h</sup> 04 <sup>m</sup> 29.804 <sup>s</sup> 38°39'08.849"	35.7	290	128.9	-53.2	128.4	-50.9	0.0	151
2017/01/28 00:13:20	24013 1999 RR113	7.6	16.15	3.25	157	0.7	36°27'02" 51°27'21"	4	0.6	UCAC4 564-40890	12.95	7 <sup>h</sup> 43 <sup>m</sup> 51.547 <sup>s</sup> 22°37'18.347"	41.9	255	165.7	-47.0	165.3	-44.9	0.0	83
2017/01/28 00:49:18	2474 Ruby	17.8	16.62	2.76	115	1.5	36°57'56" 50°58'59"	25	3.7	UCAC4 526-29295	13.95	6 <sup>h</sup> 34 <sup>m</sup> 20.603 <sup>s</sup> 15°08'07.920"	19.6	270	149.3	-41.9	149.5	-40.0	0.0	131
2017/01/28 01:00:56	11438 Zel- dovich	6.3	17.41	3.54	86	0.6	36°55'08" 50°42'22"	32	1.8	UCAC4 543-35951	13.91	6 <sup>h</sup> 53 <sup>m</sup> 09.894 <sup>s</sup> 18°27'05.698"	23.2	271	154.2	-40.2	154.0	-38.3	0.0	88
2017/01/28 03:12:11	9714 1975 LF1	10.0	17.77	5.74	21	0.8	36°01'59" 49°56'52"	239	2.8	UCAC4 698-48406	12.04	7 <sup>h</sup> 11 <sup>m</sup> 11.203 <sup>s</sup> 49°24'59.894"	28.6	314	143.8	-19.3	141.1	-18.2	0.1	139
2017/01/28 18:24:11	23511 1992 PB2	6.3	18.94	7.37	112	0.6	36°21'34" 49°02'23"	177	1.3	UCAC4 543-31702	11.57	6 <sup>h</sup> 37 <sup>m</sup> 59.031 <sup>s</sup> 18°28'25.596"	55.2	148	149.9	-38.7	141.1	-30.4	0.6	149
2017/01/28 18:30:25	3450 Dom- manget	10.5	16.37	2.85	248	1.0	36°04'49" 52°16'11"	357	0.2	UCAC4 596-41476	13.61	7 <sup>h</sup> 27 <sup>m</sup> 55.798 <sup>s</sup> 29°02'34.287"	59.4	122	159.2	-39.6	150.2	-31.3	0.6	99
2017/01/28 20:02:25	2261 Keeler	8.7	15.62	2.75	140	0.7	35°14'50" 48°59'22"	212	0.7	UCAC4 620-42162	12.96	7 <sup>h</sup> 46 <sup>m</sup> 18.717 <sup>s</sup> 33°57'45.772"	72.1	148	159.3	-51.9	150.3	-43.9	0.8	70
2017/01/28 20:42:53	21967 1999 WS9	12.0	17.52	3.68	178	0.8	36°32'04" 51°38'15"	6	1.5	UCAC4 510-4076	13.88	2 <sup>h</sup> 42 <sup>m</sup> 44.084 <sup>s</sup> 11°53'43.234"	19.0	266	93.1	-55.7	83.0	-48.3	0.8	233
2017/01/28 21:30:22	4478 Blanco	5.0	17.84	3.98	87	0.5	36°36'12" 50°47'57"	15	1.4	UCAC4 555-32695	13.89	6 <sup>h</sup> 44 <sup>m</sup> 30.402 <sup>s</sup> 20°56'47.042"	54.5	225	151.4	-58.0	140.8	-52.1	0.9	89
2017/01/28 22:31:40	172 Baucis	62.4	13.66	0.62	153	4.9	36°36'41" 48°41'26"	171	8.6	UCAC4 364-63276	13.94	13 <sup>h</sup> 37 <sup>m</sup> 38.571 <sup>s</sup> -17°20'48.287"	3.5	123	100.0	-56.9	111.2	-53.8	1.0	109
2017/01/28 22:34:27	14399 1990 WN4	5.5	17.86	4.94	120	1.0	34°55'56" 49°25'26"	234	1.1	UCAC4 613-27861	12.93	5 <sup>h</sup> 52 <sup>m</sup> 34.191 <sup>s</sup> 32°30'23.069"	46.2	268	138.6	-56.8	127.4	-53.8	1.0	119
2017/01/28 23:37:01	21360 2001 TO108	9.1	20.27	7.40	67	0.5	35°56'14" 49°29'18"	202	1.0	UCAC4 417-37262	12.87	7 <sup>h</sup> 41 <sup>m</sup> 45.877 <sup>s</sup> -6°38'11.063"	22.1	228	150.7	-51.3	146.2	-51.3	1.1	372
2017/01/29 00:15:26	18569 1997 UC11	6.0	18.70	4.74	164	0.7	36°55'10" 51°27'46"	16	0.9	UCAC4 704-28070	13.98	4 <sup>h</sup> 06 <sup>m</sup> 37.616 <sup>s</sup> 50°47'45.171"	28.3	317	116.5	-46.5	105.7	-48.0	1.1	136
2017/01/29 00:17:06	2404 Antarc- tica	14.5	17.23	3.31	67	0.8	35°51'35" 49°30'54"	207	3.3	UCAC4 394-56196	13.97	14 <sup>h</sup> 24 <sup>m</sup> 37.490 <sup>s</sup> -11°18'04.881"	16.2	132	91.5	-46.3	103.5	-47.9	1.1	161
2017/01/29 00:21:38	214511 2006 BA213	9.1	20.22	6.86	202	0.5	34°36'42" 48°35'54"	217	0.8	UCAC4 494-45323	13.36	7 <sup>h</sup> 40 <sup>m</sup> 09.242 <sup>s</sup> 8°36'54.355"	28.7	247	161.5	-45.6	152.0	-47.4	1.1	372
2017/01/29 01:56:10	43876 1994 XV4	5.8	17.27	3.95	175	0.9	37°13'06" 51°30'14"	22	0.5	UCAC4 541-28752	13.35	6 <sup>h</sup> 32 <sup>m</sup> 16.534 <sup>s</sup> 18°03'48.946"	10.1	286	148.2	-31.4	135.5	-35.4	1.3	102
2017/01/29 03:35:56	72727 2001 FP96	6.9	18.53	5.39	189	0.5	34°00'38" 49°12'00"	240	0.8	UCAC4 659-48904	13.15	7 <sup>h</sup> 36 <sup>m</sup> 56.401 <sup>s</sup> 41°36'19.166"	22.8	308	152.0	-15.4	140.8	-20.2	1.4	149
2017/01/29 14:20:19	12919 Tomjohn- son	5.8	17.80	4.14	74	0.6	36°41'39" 49°26'01"	157	1.8	UCAC4 538-33206	13.68	6 <sup>h</sup> 46 <sup>m</sup> 19.861 <sup>s</sup> 17°28'53.442"	18.9	85	151.0	-0.4	132.2	14.9	2.8	98

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 23		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/29 15:31:11	31123 1997 SU	5.0	17.33	3.56	195	0.6	36°45'40'' 48°19'20''	170	0.2	UCAC4 516-39729	13.81	7 <sup>h</sup> 13 <sup>m</sup> 39.071 <sup>s</sup> 13°10'10.163''	22.8	97	156.7	-11.0	138.1	5.7	2.9	86
2017/01/29 16:16:28	20130 1996 BO1	7.6	18.50	5.56	53	1.1	36°53'39'' 49°46'60''	124	1.9	UCAC4 597-20633	12.94	5 <sup>h</sup> 35 <sup>m</sup> 01.416 <sup>s</sup> 29°23'51.665''	57.2	116	134.5	-18.2	114.5	-0.8	3.1	150
2017/01/29 16:36:04	66614 1999 RE200	5.5	18.73	6.36	37	0.5	36°00'06'' 49°46'16''	214	1.6	UCAC4 597-8280	12.38	3 <sup>h</sup> 18 <sup>m</sup> 42.862 <sup>s</sup> 29°17'23.236''	69.2	192	105.0	-21.3	85.0	-3.7	3.1	129
2017/01/29 16:44:46	68444 2001 RH142	16.6	18.78	6.44	192	1.0	35°15'45'' 48°27'18''	202	1.8	UCAC4 504-28162	12.35	6 <sup>h</sup> 37 <sup>m</sup> 10.071 <sup>s</sup> 10°41'09.413''	37.4	123	147.4	-22.7	128.3	-5.0	3.1	313
2017/01/29 16:55:25	1607 Mavis	12.0	15.47	2.84	170	0.8	36°45'35'' 48°32'58''	169	1.2	UCAC4 543-49174	12.71	9 <sup>h</sup> 15 <sup>m</sup> 17.731 <sup>s</sup> 18°32'39.075''	20.8	86	173.6	-24.5	165.2	-6.7	3.1	102
2017/01/29 18:34:01	16257 2000 JY6	11.0	17.24	6.83	173	0.9	34°43'34'' 48°52'03''	220	1.4	UCAC4 509-22990	10.41	6 <sup>h</sup> 19 <sup>m</sup> 57.524 <sup>s</sup> 11°47'57.786''	50.9	163	143.5	-39.9	123.2	-21.8	3.4	127
2017/01/29 19:07:26	24075 1999 TY209	7.9	16.61	2.71	75	1.0	35°39'47'' 50°35'15''	323	2.4	UCAC4 686-47732	13.99	7 <sup>h</sup> 13 <sup>m</sup> 38.336 <sup>s</sup> 47°06'56.949''	79.1	99	144.6	-44.8	127.6	-26.8	3.5	99
2017/01/29 19:22:52	35075 1989 XW1	6.6	18.03	4.14	6	0.9	36°13'47'' 50°00'38''	225	2.0	UCAC4 504-21133	13.92	6 <sup>h</sup> 10 <sup>m</sup> 50.817 <sup>s</sup> 10°42'36.017''	50.8	185	141.1	-46.9	120.4	-29.1	3.5	129
2017/01/29 20:09:43	1386 Storeia	6.9	17.90	4.61	247	0.5	34°32'35'' 48°08'47''	210	0.6	UCAC4 499-37825	13.31	7 <sup>h</sup> 04 <sup>m</sup> 44.321 <sup>s</sup> 9°47'38.856''	49.9	183	153.4	-52.4	133.1	-35.6	3.7	171
2017/01/29 21:57:22	3920 Aubig-nan	8.3	16.34	3.53	146	0.7	37°20'46'' 51°10'32''	31	0.9	UCAC4 561-45660	12.86	8 <sup>h</sup> 06 <sup>m</sup> 54.239 <sup>s</sup> 22°04'31.488''	60.4	205	169.0	-57.8	146.2	-47.2	4.0	83
2017/01/30 01:19:55	1093 Freda	116.7	14.88	1.50	226	11.5	33°56'14'' 48°42'47''	229	10.4	UCAC4 678-40664	13.70	5 <sup>h</sup> 46 <sup>m</sup> 27.622 <sup>s</sup> 45°24'49.317''	28.3	308	132.9	-36.9	110.9	-43.4	4.6	152
2017/01/30 01:46:32	8539 Laban	8.3	17.63	4.99	118	1.5	35°11'42'' 49°15'22''	222	1.7	UCAC4 573-22810	12.65	5 <sup>h</sup> 59 <sup>m</sup> 12.509 <sup>s</sup> 24°25'41.599''	10.9	295	139.7	-32.8	114.7	-40.4	4.7	131
2017/01/30 02:10:14	2410 Morrison	9.5	15.54	2.27	183	1.2	38°03'33'' 51°15'06''	43	0.2	UCAC4 560-38117	13.41	7 <sup>h</sup> 03 <sup>m</sup> 39.323 <sup>s</sup> 21°51'28.212''	15.1	286	154.6	-29.0	129.4	-37.4	4.8	70
2017/01/30 02:13:32	582 Olympia	43.4	15.11	1.98	54	1.2	35°47'43'' 50°24'55''	319	9.3	UCAC4 457-69554	13.33	17 <sup>h</sup> 53 <sup>m</sup> 13.122 <sup>s</sup> 1°15'46.152''	14.3	105	47.5	-28.5	69.5	-37.0	4.8	178
2017/01/30 14:20:47	6240 Lucretius Carus	5.5	17.06	5.21	138	1.5	36°08'08'' 51°16'59''	356	0.6	UCAC4 558-22109	11.86	5 <sup>h</sup> 55 <sup>m</sup> 12.613 <sup>s</sup> 21°25'18.583''	30.8	93	138.2	-0.2	107.0	23.7	7.3	78
2017/01/30 15:58:07	27136 1998 XJ16	6.6	16.62	4.76	30	1.7	36°15'19'' 49°46'39''	184	2.9	UCAC4 611-30631	11.87	6 <sup>h</sup> 15 <sup>m</sup> 22.258 <sup>s</sup> 32°08'51.108''	50.6	98	141.7	-15.0	110.4	12.0	7.7	85
2017/01/30 17:09:03	13244 Darnymeyer	14.5	16.81	3.30	241	1.3	38°31'20'' 48°27'01''	138	1.4	UCAC4 562-30368	13.56	6 <sup>h</sup> 30 <sup>m</sup> 47.453 <sup>s</sup> 22°14'41.135''	51.7	124	146.3	-26.4	113.5	1.8	8.0	263
2017/01/30 18:00:24	2122 Pyatletka	13.2	15.21	2.72	67	1.2	36°23'00'' 49°26'52''	174	4.6	UCAC4 572-43313	12.58	8 <sup>h</sup> 13 <sup>m</sup> 07.304 <sup>s</sup> 24°17'08.433''	45.9	108	168.4	-34.6	136.0	-6.0	8.2	81
2017/01/30 18:10:01	20789 Hugh-grant	7.2	16.64	3.74	87	0.8	36°35'08'' 49°17'25''	166	2.0	UCAC4 583-9995	12.94	3 <sup>h</sup> 57 <sup>m</sup> 31.326 <sup>s</sup> 26°27'00.757''	62.2	220	111.8	-36.1	78.7	-7.5	8.3	87
2017/01/30 18:18:01	7189 Kumiko	6.0	16.54	3.06	36	0.5	36°14'22'' 50°21'55''	355	2.9	UCAC4 523-49301	13.55	8 <sup>h</sup> 45 <sup>m</sup> 07.562 <sup>s</sup> 14°28'04.173''	36.2	113	176.4	-37.3	145.3	-8.7	8.3	75



Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 24		LinOccult 2.3.0 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 (%)	$\sigma_{km}$
2017/01/30 19:55:20	2685 Ma-sursky	12.6	16.32	2.81	4	2.8	36°20'13'' 50°02'46''	92	3.7	UCAC4 493-7622	13.59	4 <sup>h</sup> 28 <sup>m</sup> 14.951 <sup>s</sup> 8°31'26.014''	37.9	231	115.1	-50.6	81.6	-23.4	8.7	134
2017/01/30 22:31:07	5839 GOI	15.1	16.41	3.76	240	2.0	33°08'38'' 50°50'20''	291	1.3	UCAC4 662-19920	12.69	3 <sup>h</sup> 56 <sup>m</sup> 01.305 <sup>s</sup> 42°14'50.933''	33.6	298	113.0	-56.4	80.4	-42.2	9.4	169
2017/01/31 00:06:28	8271 Imai	6.9	17.48	4.40	71	0.8	35°20'53'' 49°50'47''	252	2.2	UCAC4 525-24572	13.10	6 <sup>h</sup> 17 <sup>m</sup> 29.749 <sup>s</sup> 14°51'27.986''	21.7	268	142.4	-47.2	106.4	-46.3	9.8	100
2017/01/31 02:11:11	340 Eduarda	30.2	13.73	1.08	36	3.1	35°58'32'' 49°47'46''	218	13.3	UCAC4 533-51066	13.15	16°30'11.216''	42.3	241	157.6	-28.6	163.2	-39.5	10.4	82
2017/01/31 02:42:50	4057 De-mophon	30.2	18.62	5.53	78	1.0	35°58'35'' 49°22'37''	197	3.6	UCAC4 327-92252	13.10	17 <sup>h</sup> 06 <sup>m</sup> 39.920 <sup>s</sup> -24°45'59.262''	3.5	137	53.3	-23.6	91.0	-36.0	10.6	329
2017/01/31 03:48:02	16457 1989 VF	9.1	17.01	4.14	58	0.8	36°54'36'' 50°22'55''	50	2.8	UCAC4 630-42621	12.89	8 <sup>h</sup> 15 <sup>m</sup> 00.764 <sup>s</sup> 35°50'01.030''	20.9	301	159.5	-13.1	127.0	-27.4	10.9	114
2017/01/31 04:50:58	1401 Lavonne	11.7	17.00	4.80	181	1.6	38°37'34'' 49°27'24''	111	1.1	UCAC4 366-62116	12.21	13 <sup>h</sup> 07 <sup>m</sup> 43.170 <sup>s</sup> -16°51'41.011''	13.3	222	108.9	-3.4	146.6	-18.1	11.2	112
2017/01/31 16:12:52	4912 Emil-haury	7.9	16.55	3.40	41	2.2	36°44'13'' 49°48'48''	129	3.1	UCAC4 536-11009	13.20	4 <sup>h</sup> 59 <sup>m</sup> 48.300 <sup>s</sup> 17°09'52.552''	51.9	140	123.6	-17.2	78.8	20.2	14.6	91
2017/01/31 16:55:52	3842 Harlan-smith	8.7	15.91	2.16	19	3.2	36°31'50'' 49°58'24''	115	4.4	UCAC4 596-26990	13.91	6 <sup>h</sup> 00 <sup>m</sup> 18.339 <sup>s</sup> 29°09'13.684''	60.1	123	138.0	-24.1	93.2	14.4	14.9	77
2017/01/31 17:08:12	962 Aslog	39.5	15.78	2.18	215	3.1	35°59'38'' 51°58'23''	354	2.2	UCAC4 543-46526	13.76	8 <sup>h</sup> 13 <sup>m</sup> 41.693 <sup>s</sup> 18°29'30.946''	33.9	102	169.6	-26.1	124.3	12.6	14.9	111
2017/01/31 18:22:16	13358 Revelle	9.1	16.37	4.24	118	1.1	37°12'15'' 50°55'54''	34	1.8	UCAC4 462-26388	12.15	7 <sup>h</sup> 01 <sup>m</sup> 11.472 <sup>s</sup> 2°20'35.019''	38.9	151	147.9	-37.7	106.6	1.6	15.3	97
2017/01/31 18:28:13	1278 Kenya	21.9	15.33	1.67	93	3.6	36°39'41'' 50°50'56''	17	5.7	UCAC4 585-21423	13.93	5 <sup>h</sup> 56 <sup>m</sup> 52.627 <sup>s</sup> 26°56'57.343''	66.9	169	137.3	-38.6	91.6	0.7	15.4	98
2017/01/31 19:48:12	6426 Vanysek	6.0	18.15	5.28	93	1.0	36°22'34'' 50°52'38''	4	1.5	UCAC4 584-20923	12.87	5 <sup>h</sup> 54 <sup>m</sup> 05.222 <sup>s</sup> 26°45'18.020''	63.9	214	136.7	-49.5	90.1	-11.6	15.8	107
2017/01/31 19:49:58	9044 Kaoru	6.3	17.03	3.98	97	0.8	35°54'53'' 49°12'26''	196	1.5	UCAC4 570-33627	13.08	6 <sup>h</sup> 46 <sup>m</sup> 54.946 <sup>s</sup> 23°52'34.756''	64.0	187	148.8	-49.7	102.1	-11.8	15.8	79
2017/01/31 20:03:06	32396 2000 QY213	12.0	19.52	6.54	193	0.7	35°43'06'' 48°21'21''	192	1.3	UCAC4 532-48331	12.98	9 <sup>h</sup> 24 <sup>m</sup> 22.726 <sup>s</sup> 16°19'54.987''	47.4	130	173.5	-51.2	139.6	-13.8	15.9	282
2017/01/31 20:30:30	51276 2000 JZ81	5.8	17.93	4.51	89	0.7	36°07'20'' 50°50'15''	352	1.5	UCAC4 542-28981	13.44	6 <sup>h</sup> 32 <sup>m</sup> 40.347 <sup>s</sup> 18°17'56.451''	55.7	209	145.5	-53.9	98.5	-17.9	16.1	112
2017/01/31 22:27:55	5774 Ratliff	5.2	17.76	4.95	104	1.1	35°29'46'' 50°50'03''	327	1.2	UCAC4 602-17958	12.82	5 <sup>h</sup> 12 <sup>m</sup> 05.586 <sup>s</sup> 30°23'52.559''	37.5	274	127.2	-56.3	79.8	-33.1	16.8	95

