

## Occultations table

Observation point: VladimirNebotov  
EMail: nebotov@ukr.net  
Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')  
Maximal Distance = 250.0  
Maximal  $M_v = 14.00$   
Minimal Duration = 0.5s  
Maximal Sun Elevation = 0.0  
Minimal drop: 0.5  
Minimal probability: 0.0  
Minimal probability in nearest point: 0.5  
Minimal star elevation: 0.0  
Program: LinOccult 2.2.0 BETA  
Author: Plekhanov Andrey andyplekhanov@gmail.com  
Events number: 197

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 1		LinOccult 2.2.0 BETA				
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2015/12/01 02:07:07	33763 1999 RB84	7.2	17.91	6.13	91	0.6	35°34'03" 49°22'17"	214	1.3 1.5	TYC 233900930	11.79	3 <sup>h</sup> 08 <sup>m</sup> 43.087 <sup>s</sup> 31°16'15.844"	23.1	292	160.2	-28.5	81.0	53.5	71.2	196
2015/12/01 02:12:08	6787 1991 PF15	7.2	16.39	5.27	54	0.6	36°26'48" 50°31'09"	12	2.2 2.5	TYC 183201667	11.13	4 <sup>h</sup> 59 <sup>m</sup> 35.160 <sup>s</sup> 23°44'36.675"	34.5	267	172.1	-27.7	57.3	53.4	71.2	116
2015/12/01 03:01:25	1980 Tez-catlipoca	13.0	14.94	1.97	210	1.0	34°07'46" 51°20'50"	313	0.0 11.7	UCAC2 31486932	13.17	7 <sup>h</sup> 34 <sup>m</sup> 34.223 <sup>s</sup> 0° - 57'17.717"	29.8	225	128.8	-19.8	25.7	51.1	70.8	44
2015/12/01 03:52:59	20102 Takasago	10.0	18.16	4.30	164	0.8	35°42'06" 48°37'25"	195	1.4 1.8	UCAC2 34425720	13.89	6 <sup>h</sup> 25 <sup>m</sup> 14.769 <sup>s</sup> 7°34'27.353"	20.0	258	148.1	-11.8	39.1	46.5	70.5	217
2015/12/01 20:11:36	116238 2003 YJ12	10.0	19.78	6.11	13	0.8	36°15'42" 49°55'40"	188	0.9 0.9	UCAC2 43260528	13.67	7 <sup>h</sup> 01 <sup>m</sup> 37.752 <sup>s</sup> 32°53'43.823"	46.0	91	144.7	-58.6	41.5	5.7	64.3	424
2015/12/01 20:20:45	36624 2000 QA157	17.4	18.68	4.71	106	1.1	36°58'51" 49°12'41"	152	1.7 1.8	UCAC2 47823496	13.99	6 <sup>h</sup> 03 <sup>m</sup> 12.114 <sup>s</sup> 48°20'54.716"	64.8	79	147.5	-59.4	57.7	7.1	64.2	395
2015/12/01 20:37:59	11309 Malus	8.3	18.48	7.30	223	0.7	37°26'39" 51°55'00"	22	0.9 1.6	TYC 25100691	11.18	10 <sup>h</sup> 18 <sup>m</sup> 37.982 <sup>s</sup> 7°18'32.594"	0.2	79	95.3	-60.6	10.9	9.7	64.0	203
2015/12/01 20:55:36	78869 2003 QV88	5.8	18.67	6.92	216	0.5	36°09'34" 51°59'14"	358	0.6 1.2	TYC 189101418	11.75	6 <sup>h</sup> 31 <sup>m</sup> 40.146 <sup>s</sup> 29°01'58.003"	55.1	113	151.6	-61.4	46.8	12.4	64.0	188
2015/12/02 17:36:17	3407 Jim-mysimms	10.5	16.96	5.22	181	1.1	38°45'07" 49°42'41"	102	1.4 2.4	TYC 526800221	11.75	0 <sup>h</sup> 28 <sup>m</sup> 34.257 <sup>s</sup> -14°46'27.136"	25.2	185	109.7	-37.8	147.5	-23.6	55.8	173
2015/12/02 20:23:56	51921 2001 QU90	6.9	17.10	5.19	229	0.5	34°05'19" 48°34'34"	224	0.4 2.3	UCAC2 35205216	11.92	8 <sup>h</sup> 09 <sup>m</sup> 23.265 <sup>s</sup> 9°45'06.699"	21.1	100	127.1	-59.8	33.4	-1.9	54.6	123
2015/12/02 20:36:09	2868 Upupa	25.3	17.04	11.49	28	7.6	36°21'07" 49°47'56"	170	9.7 10.1	HIP 37521	5.55	7 <sup>h</sup> 42 <sup>m</sup> 03.217 <sup>s</sup> 14°12'30.431"	30.8	105	134.8	-60.6	40.2	-0.1	54.7	100
2015/12/03 02:11:20	6397 1991 BJ	7.9	16.29	4.06	252	1.1	34°07'15" 48°16'41"	218	0.2 2.9	TYC 188800780	12.26	6 <sup>h</sup> 36 <sup>m</sup> 07.434 <sup>s</sup> 26°34'29.239"	50.6	249	152.1	-28.1	60.0	44.5	52.3	108
2015/12/03 03:55:37	16970 1998 VV2	15.1	18.23	5.44	128	1.3	36°41'19" 51°10'08"	13	2.0 2.2	UCAC2 37162151	12.80	7 <sup>h</sup> 01 <sup>m</sup> 30.843 <sup>s</sup> 15°02'12.460"	29.7	258	144.7	-11.7	53.9	46.5	51.6	276
2015/12/03 14:47:04	2774 Tenojoki	35.6	17.36	3.48	80	1.0	37°00'25" 49°29'47"	140	4.3 4.5	UCAC2 25214228	13.93	20 <sup>h</sup> 02 <sup>m</sup> 26.297 <sup>s</sup> -17°42'28.271"	17.5	210	48.2	-11.1	134.9	-33.5	47.3	318
2015/12/03 15:35:23	178291 1989 UV7	10.5	20.11	6.80	135	0.6	38°04'28" 50°27'21"	70	0.8 0.9	UCAC2 39287372	13.31	6 <sup>h</sup> 21 <sup>m</sup> 51.369 <sup>s</sup> 21°20'07.962"	2.4	59	155.8	-18.5	69.4	-35.1	47.0	481
2015/12/03 18:29:50	36757 2000 RY71	5.5	16.60	5.77	151	0.7	37°09'36" 48°49'09"	155	0.8 2.0	TYC 241400607	10.83	5 <sup>h</sup> 54 <sup>m</sup> 42.480 <sup>s</sup> 35°31'37.835"	43.3	83	158.5	-46.1	77.5	-25.9	45.9	108
2015/12/04 00:34:50	59852 1999 RN82	5.2	18.55	6.38	195	0.6	35°22'52" 48°24'12"	199	0.6 1.2	TYC 177401176	12.17	2 <sup>h</sup> 22 <sup>m</sup> 30.242 <sup>s</sup> 27°14'47.188"	25.6	283	148.7	-43.6	125.9	26.4	43.4	177
2015/12/04 03:04:22	1030 Vitja	64.1	15.19	3.54	143	4.5	35°52'50" 48°47'18"	192	10.4 14.3	UCAC2 32817539	11.69	4 <sup>h</sup> 41 <sup>m</sup> 06.978 <sup>s</sup> 3°26'34.038"	6.0	268	161.3	-19.8	100.3	41.5	42.5	178
2015/12/04 04:16:23	3457 Ar-nenordheim	13.2	16.22	3.37	212	1.1	37°57'44" 51°38'04"	34	1.3 3.4	UCAC2 39446857	12.90	5 <sup>h</sup> 35 <sup>m</sup> 49.595 <sup>s</sup> 21°34'05.606"	16.9	284	167.0	-8.8	86.4	43.2	42.0	154
2015/12/04 19:35:15	1980 Tez-catlipoca	13.0	14.92	1.60	17	1.0	36°03'29" 50°01'27"	261	10.9 11.6	UCAC2 30674896	13.60	7 <sup>h</sup> 28 <sup>m</sup> 38.219 <sup>s</sup> -3°18'58.963"	10.9	109	132.0	-55.1	66.4	-26.6	36.2	44

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 2		LinOccult 2.2.0 BETA			
	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 (%)	$\sigma_{km}$
2015/12/04 20:27:51	19750 2000 CM62	7.2	17.45	5.47	184	0.8	37°27'56'' 48°35'03''	153	0.9	UCAC2 31828159	11.98	6 <sup>h</sup> 48 <sup>m</sup> 17.767 <sup>s</sup> 0°20'01.391''	27.2	127	142.4	-60.3	76.8	-19.7	35.8	149
2015/12/04 20:40:02	13275 1998 QT39	5.5	17.34	7.00	233	1.9	36°32'34'' 47°57'35''	175	0.3	TYC 78600492	10.34	7 <sup>h</sup> 44 <sup>m</sup> 58.838 <sup>s</sup> 12°33'46.032''	30.9	108	135.6	-61.1	63.1	-18.0	35.9	120
2015/12/05 02:16:29	2802 Weisell	21.9	16.00	2.50	143	9.0	37°20'16'' 48°57'23''	148	3.5	UCAC2 36820593	13.62	8 <sup>h</sup> 55 <sup>m</sup> 14.368 <sup>s</sup> 14°17'50.499''	53.5	197	120.1	-27.6	49.4	30.4	33.8	189
2015/12/05 03:41:36	47551 2000 AM128	7.6	18.01	7.98	136	0.8	37°12'31'' 51°07'14''	29	1.2	TYC 244201769	10.03	7 <sup>h</sup> 09 <sup>m</sup> 30.383 <sup>s</sup> 31°55'20.896''	44.1	270	146.4	-14.2	77.6	37.5	33.1	188
2015/12/06 01:32:05	1032 Pafuri	57.0	15.10	2.17	7	3.6	36°23'17'' 50°03'00''	88	11.7	UCAC2 39802552	13.09	5 <sup>h</sup> 07 <sup>m</sup> 04.468 <sup>s</sup> 22°56'20.864''	38.4	260	175.5	-34.9	115.2	16.4	25.4	193
2015/12/06 14:12:12	849 Ara	61.8	13.53	0.58	212	1.9	36°04'22'' 51°56'46''	356	7.1	UCAC2 32464005	13.90	21 <sup>h</sup> 16 <sup>m</sup> 13.616 <sup>s</sup> 1°37'24.545''	41.6	187	69.1	-6.1	120.6	-27.0	21.2	215
2015/12/06 14:24:26	1077 Cam-panula	11.5	14.80	1.60	13	1.4	36°23'36'' 49°57'25''	143	4.8	UCAC2 42361715	13.49	3 <sup>h</sup> 57 <sup>m</sup> 56.823 <sup>s</sup> 30°29'06.116''	21.7	68	165.8	-7.9	134.3	-28.7	21.1	95
2015/12/06 16:10:18	71534 2000 CU92	7.2	18.48	7.10	189	0.5	38°29'03'' 49°07'15''	123	0.9	TYC 335400212	11.38	4 <sup>h</sup> 36 <sup>m</sup> 32.773 <sup>s</sup> 52°06'16.600''	44.9	57	150.2	-24.2	118.5	-41.3	20.6	221
2015/12/06 16:24:19	49651 1999 JR66	11.5	17.24	3.53	247	0.9	37°29'51'' 47°58'40''	159	1.1	UCAC2 39432721	13.76	3 <sup>h</sup> 37 <sup>m</sup> 02.969 <sup>s</sup> 21°45'15.922''	37.8	101	163.0	-26.4	142.9	-42.5	20.5	201
2015/12/06 18:57:36	29394 Hiroko-hamanowa	5.8	18.73	8.51	227	0.6	38°16'05'' 48°28'09''	141	0.6	TYC 136901174	10.22	7 <sup>h</sup> 43 <sup>m</sup> 09.593 <sup>s</sup> 19°25'13.357''	21.2	85	139.8	-50.3	87.4	-44.8	19.7	178
2015/12/06 19:12:53	3141 Buchar	36.0	17.23	4.79	28	1.6	36°29'40'' 50°15'48''	32	4.4	TYC 580200180	12.45	21 <sup>h</sup> 58 <sup>m</sup> 28.155 <sup>s</sup> -7°49'41.014''	6.5	250	74.9	-52.4	126.9	-43.9	19.6	322
2015/12/06 19:12:53	3141 Buchar	36.0	17.23	4.98	28	1.6	36°29'40'' 50°15'48''	32	4.4	UCAC2 29203801	12.26	21 <sup>h</sup> 58 <sup>m</sup> 28.155 <sup>s</sup> -7°49'41.014''	6.5	250	74.9	-52.4	126.9	-43.9	19.6	322
2015/12/06 20:30:42	4904 Makio	10.5	15.22	6.46	137	1.2	37°31'41'' 49°07'03''	139	0.6	TYC 72900470	8.76	6 <sup>h</sup> 03 <sup>m</sup> 49.102 <sup>s</sup> 13°08'27.290''	45.1	134	160.4	-60.6	111.5	-36.6	19.2	63
2015/12/06 22:29:14	3597 Kakkuri	14.5	17.79	4.23	91	1.3	36°31'55'' 49°14'57''	169	2.3	UCAC2 35214921	13.58	10 <sup>h</sup> 48 <sup>m</sup> 41.234 <sup>s</sup> 9°58'36.799''	18.5	96	94.5	-59.9	43.6	-20.4	18.5	231
2015/12/06 23:12:06	6476 1987 VT	13.8	15.87	3.61	10	1.2	36°18'23'' 49°57'23''	172	3.8	UCAC2 39431755	12.30	3 <sup>h</sup> 21 <sup>m</sup> 57.666 <sup>s</sup> 21°49'08.162''	42.5	252	159.2	-55.5	149.5	-13.8	18.3	146
2015/12/06 23:24:53	10426 Char-lierouse	13.2	15.53	3.03	235	2.5	38°27'42'' 51°39'19''	41	0.7	UCAC2 36634881	12.57	7 <sup>h</sup> 38 <sup>m</sup> 39.324 <sup>s</sup> 13°50'27.898''	52.8	161	139.6	-54.0	89.9	-11.9	18.3	121
2015/12/07 02:04:51	852 Wladilena	22.8	13.63	1.42	228	2.1	33°51'40'' 48°44'50''	230	1.2	UCAC2 45454997	12.56	2 <sup>h</sup> 55 <sup>m</sup> 00.214 <sup>s</sup> 39°18'14.389''	23.9	303	149.9	-29.8	143.7	12.0	17.5	116
2015/12/07 16:02:48	15446 1998 XQ4	5.2	17.57	5.31	38	0.8	36°01'59'' 49°44'49''	208	1.7	TYC 191501009	12.27	7 <sup>h</sup> 35 <sup>m</sup> 35.336 <sup>s</sup> 25°38'47.498''	2.0	51	143.3	-23.0	100.3	-39.0	13.5	117
2015/12/07 16:29:21	6364 Casarini	13.2	16.49	3.52	67	1.0	35°44'32'' 50°32'19''	325	2.9	UCAC2 44980398	13.01	5 <sup>h</sup> 56 <sup>m</sup> 50.020 <sup>s</sup> 37°33'40.154''	28.2	64	159.9	-27.2	120.9	-42.1	13.4	165
2015/12/07 17:54:18	6364 Casarini	13.2	16.49	3.57	234	1.0	38°00'02'' 48°16'22''	148	1.2	UCAC2 44980387	12.96	5 <sup>h</sup> 56 <sup>m</sup> 46.057 <sup>s</sup> 37°33'45.244''	41.1	77	160.0	-40.8	121.6	-48.9	13.0	165

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 3		LinOccult 2.2.0 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		Phase (%)		
2015/12/07 19:06:45	756 Lilliana	71.5	15.12	4.93	90	4.6	36°57'45" 49°22'07"	147	13.4 15.0	TYC 10001292	10.20	5 <sup>h</sup> 22 <sup>m</sup> 22.601 <sup>s</sup> 1°04'16.385"	29.9	130	157.5	-51.6	-49.7	12.7	189	
2015/12/07 23:15:54	Bechuana	26.3	15.84	2.57	123	2.6	36°14'48" 51°08'54"	359	4.3 5.2	UCAC2 41531220	13.38	7 <sup>h</sup> 30 <sup>m</sup> 48.341 <sup>s</sup> 27°56'23.460"	66.6	155	144.8	-55.2	-22.6	11.6	201	
2015/12/08 01:23:08	15790 Keizan	6.9	16.92	8.09	168	0.6	34°34'12" 49°01'25"	227	0.3 3.6	TYC 331101604	8.83	3 <sup>h</sup> 21 <sup>m</sup> 34.623 <sup>s</sup> 45°44'59.696"	37.0	300	149.8	-36.7	-3.1	11.0	77	
2015/12/08 18:44:35	723 Hammonia	35.7	13.95	0.89	42	3.0	36°08'29" 50°24'45"	346	9.7 10.2	UCAC2 37313337	13.69	5 <sup>h</sup> 21 <sup>m</sup> 27.836 <sup>s</sup> 15°33'01.692"	39.7	116	171.2	-48.5	-52.2	7.1	140	
2015/12/08 19:14:38	3724 Annenskij	14.2	15.95	3.51	255	1.0	36°05'56" 47°45'36"	183	1.1 3.3	UCAC2 34388484	12.48	23 <sup>h</sup> 39 <sup>m</sup> 34.263 <sup>s</sup> 7°12'36.568"	32.0	239	101.9	-52.7	-53.1	7.0	169	
2015/12/08 19:19:14	11355 1997 XL11	7.2	17.12	6.30	175	0.6	35°58'18" 51°36'17"	353	1.0 1.9	HIP 24284	10.82	5 <sup>h</sup> 12 <sup>m</sup> 42.541 <sup>s</sup> 19°40'00.232"	49.1	125	175.8	-53.3	-53.1	7.0	153	
2015/12/08 19:35:38	36052 1999 RS19	5.0	18.50	7.95	94	0.6	36°21'53" 49°12'14"	177	1.0 1.1	TYC 6001232	10.55	3 <sup>h</sup> 24 <sup>m</sup> 23.967 <sup>s</sup> 4°01'08.236"	44.1	175	150.3	-55.3	-53.1	6.9	177	
2015/12/08 20:23:22	55678 Lampos	11.5	19.01	6.30	166	0.8	35°26'52" 51°26'25"	339	1.2 1.3	UCAC2 37327438	12.72	6 <sup>h</sup> 13 <sup>m</sup> 53.510 <sup>s</sup> 15°36'21.449"	46.1	129	161.2	-60.2	-51.4	6.8	355	
2015/12/08 20:24:52	301013 JJ18	7.6	20.84	10.55	249	1.5	35°50'32" 52°16'05"	353	0.5 0.6	TYC 81602059	10.29	8 <sup>h</sup> 48 <sup>m</sup> 28.622 <sup>s</sup> 14°04'55.162"	22.1	94	125.4	-60.3	-51.3	6.8	489	
2015/12/09 00:15:02	1860 Barbarossa	15.8	16.44	2.60	91	1.6	35°56'17" 49°15'51"	196	3.3 3.8	UCAC2 36810537	13.94	7 <sup>h</sup> 29 <sup>m</sup> 49.714 <sup>s</sup> 14°25'57.161"	54.4	188	143.8	-47.3	-22.9	6.0	165	
2015/12/09 01:23:11	17365 1978 VF11	27.5	17.80	5.61	152	2.4	36°01'56" 51°24'20"	353	2.4 2.5	UCAC2 36285452	12.20	7 <sup>h</sup> 43 <sup>m</sup> 43.243 <sup>s</sup> 12°55'46.931"	50.1	209	140.2	-36.8	-12.3	5.8	433	
2015/12/09 01:39:34	12844 1997 JE10	11.0	16.29	2.66	114	0.8	35°21'30" 49°13'22"	216	2.1 2.7	UCAC2 39974308	13.73	4 <sup>h</sup> 58 <sup>m</sup> 20.957 <sup>s</sup> 23°00'31.389"	34.0	266	179.3	-34.2	-9.8	5.7	162	
2015/12/09 02:25:40	7305 Ossakajusto	12.6	17.37	5.14	195	1.1	37°39'27" 51°34'04"	30	1.6 2.6	UCAC2 43093149	12.24	7 <sup>h</sup> 39 <sup>m</sup> 58.026 <sup>s</sup> 32°28'16.638"	58.8	249	143.7	-26.8	-2.9	5.6	192	
2015/12/09 14:01:33	4184 Berdyayev	8.3	16.35	5.82	43	0.7	36°45'45" 49°48'49"	127	2.3 2.5	TYC 241501318	10.54	5 <sup>h</sup> 29 <sup>m</sup> 44.179 <sup>s</sup> 35°38'13.425"	11.7	47	165.8	-4.7	-11.7	3.6	135	
2015/12/09 15:40:06	1712 Angola	59.5	16.04	3.69	60	2.4	36°05'44" 49°31'30"	193	9.5 9.8	UCAC2 34206957	12.39	22 <sup>h</sup> 03 <sup>m</sup> 25.933 <sup>s</sup> 6°32'13.266"	44.0	206	78.9	-19.4	-27.2	3.4	241	
2015/12/09 22:27:42	618 Elfriede	120.3	13.14	1.01	76	8.9	35°55'36" 49°24'24"	200	25.0 27.5	UCAC2 36786732	12.68	6 <sup>h</sup> 20 <sup>m</sup> 12.117 <sup>s</sup> 14°20'07.458"	54.4	174	160.3	-60.4	-46.7	2.5	171	
2015/12/10 02:15:13	1043 Beate	31.6	14.54	1.17	63	3.1	36°27'19" 50°36'03"	11	6.8 7.2	UCAC2 35912793	13.82	7 <sup>h</sup> 04 <sup>m</sup> 44.555 <sup>s</sup> 11°34'44.180"	38.3	237	149.5	-28.6	-13.5	2.0	174	
2015/12/10 03:14:43	18191 Rayhe	5.5	17.89	6.02	111	0.6	35°47'56" 49°06'05"	198	1.1 1.6	TYC 133500354	11.88	6 <sup>h</sup> 54 <sup>m</sup> 00.121 <sup>s</sup> 18°06'00.653"	33.0	259	154.3	-19.1	-4.6	1.9	141	
2015/12/10 04:06:58	7815 Dolon	30.2	17.42	4.58	16	2.0	36°28'30" 49°58'11"	123	3.4 3.4	UCAC2 32833871	12.86	6 <sup>h</sup> 33 <sup>m</sup> 53.181 <sup>s</sup> 3°17'14.115"	10.2	263	151.1	-11.1	2.7	1.8	354	
2015/12/10 20:04:13	1946 Walraven	13.2	14.71	1.37	143	1.4	35°55'09" 51°18'50"	349	1.7 5.6	UCAC2 44816102	13.70	6 <sup>h</sup> 17 <sup>m</sup> 32.751 <sup>s</sup> 37°06'14.605"	60.2	101	159.4	-58.6	-55.7	0.6	94	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 4		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2015/12/10 20:21:55	31695 1999 JQ32	7.2	17.23	5.11	6	0.6	36°13'01'' 50°04'45''	305	2.1	TYC 244700229	12.13	6 <sup>h</sup> 37 <sup>m</sup> 42.963 <sup>s</sup> 35°49'11.298''	59.0	102	156.8	-60.2	148.3	-56.6	0.5	141
2015/12/10 21:59:43	19522 1998 XQ83	7.6	18.00	6.39	158	1.8	36°15'46'' 48°37'36''	181	1.2	TYC 1200326	11.61	0 <sup>h</sup> 51 <sup>m</sup> 21.177 <sup>s</sup> 0°17'11.410''	11.3	257	113.5	-62.3	120.1	-55.6	0.5	165
2015/12/10 22:17:57	18743 1998 YD5	9.1	17.13	8.00	40	1.1	36°36'12'' 50°20'43''	34	2.1	TYC 76700862	9.13	7 <sup>h</sup> 21 <sup>m</sup> 16.957 <sup>s</sup> 10°30'07.035''	47.3	150	146.1	-61.3	141.7	-54.3	0.5	168
2015/12/10 22:30:09	27259 1999 XS136	10.0	15.95	2.92	174	0.9	35°47'45'' 51°34'42''	348	1.4	UCAC2 45793175	13.10	5 <sup>h</sup> 11 <sup>m</sup> 42.851 <sup>s</sup> 40°09'08.713''	75.6	233	162.7	-60.3	156.6	-53.3	0.4	152
2015/12/11 00:34:19	7217 Dacke	17.4	16.94	4.19	111	1.5	35°51'22'' 49°05'14''	196	2.4	UCAC2 42747149	12.77	7 <sup>h</sup> 32 <sup>m</sup> 39.536 <sup>s</sup> 31°15'53.010''	69.7	208	147.2	-44.7	141.0	-37.8	0.4	269
2015/12/11 02:31:38	42313 2001 VH97	7.2	19.19	6.69	85	1.0	35°35'10'' 49°25'38''	216	1.1	TYC 79801861	12.51	8 <sup>h</sup> 15 <sup>m</sup> 31.811 <sup>s</sup> 9°39'28.069''	42.8	222	133.8	-26.1	130.9	-19.9	0.3	246
2015/12/11 02:58:13	25743 2000 AA229	11.5	17.06	6.47	39	0.8	36°01'44'' 49°44'32''	208	2.5	TYC 11800057	10.59	5 <sup>h</sup> 32 <sup>m</sup> 36.460 <sup>s</sup> 2°03'21.790''	9.8	261	158.4	-21.8	162.0	-15.8	0.3	179
2015/12/11 04:35:32	757 Port-landia	32.1	14.90	1.39	16	1.6	36°13'17'' 49°54'33''	197	7.8	UCAC2 34656691	13.86	11 <sup>h</sup> 53 <sup>m</sup> 04.863 <sup>s</sup> 8°10'33.221''	48.0	190	83.5	-7.1	80.1	-1.5	0.2	163
2015/12/12 01:09:11	4193 Salanave	12.6	15.93	2.82	141	1.1	35°35'35'' 48°51'48''	201	2.2	UCAC2 39272221	13.20	5 <sup>h</sup> 29 <sup>m</sup> 55.571 <sup>s</sup> 21°11'12.225''	40.6	254	175.9	-39.4	175.2	-40.9	0.6	148
2015/12/12 15:34:13	55538 2001 WX39	11.5	16.60	3.70	87	0.8	35°30'33'' 50°38'44''	320	2.5	UCAC2 39467052	12.93	6 <sup>h</sup> 44 <sup>m</sup> 37.317 <sup>s</sup> 21°57'36.507''	4.6	61	159.7	-18.5	173.0	-5.4	1.8	158
2015/12/12 20:29:59	41167 1999 VV172	6.9	18.17	6.31	179	0.5	36°11'11'' 48°26'40''	182	0.9	TYC 189100863	11.87	6 <sup>h</sup> 30 <sup>m</sup> 58.995 <sup>s</sup> 29°05'16.698''	57.8	118	162.5	-60.9	169.2	-49.1	2.4	191
2015/12/12 20:54:54	1475 Yalta	9.1	17.25	4.08	221	0.8	39°13'55'' 49°28'20''	107	0.8	TYC 25700048	13.20	10 <sup>h</sup> 47 <sup>m</sup> 24.366 <sup>s</sup> 2°35'32.228''	1.6	88	98.0	-62.5	115.6	-51.9	2.4	146
2015/12/12 23:52:05	1768 Appenzella	20.9	15.79	4.45	186	9.9	36°55'27'' 51°40'01''	14	1.5	TYC 62800832	11.36	1 <sup>h</sup> 47 <sup>m</sup> 09.731 <sup>s</sup> 14°39'28.223''	11.9	279	129.7	-51.2	110.9	-55.9	2.7	100
2015/12/13 00:52:27	6955 Ekaterina	11.0	16.79	4.19	9	0.9	36°17'01'' 49°58'04''	181	2.7	UCAC2 40486522	12.62	6 <sup>h</sup> 04 <sup>m</sup> 38.104 <sup>s</sup> 24°35'30.709''	50.4	245	169.3	-42.2	169.4	-50.0	3.0	164
2015/12/13 01:10:26	76837 2000 SL316	12.0	19.57	9.27	34	0.9	36°25'06'' 50°20'18''	16	1.0	TYC 191601204	10.30	7 <sup>h</sup> 48 <sup>m</sup> 11.550 <sup>s</sup> 24°34'24.231''	61.1	216	145.9	-39.4	163.2	-47.8	3.0	484
2015/12/13 15:28:28	57013 2000 TD39	14.5	19.14	5.16	217	0.8	33°43'14'' 51°07'31''	303	1.2	UCAC2 46259910	13.99	5 <sup>h</sup> 20 <sup>m</sup> 12.029 <sup>s</sup> 41°56'25.807''	31.0	60	161.1	-17.6	145.6	3.4	5.5	433
2015/12/13 15:36:58	56976 2000 SS161	16.6	18.56	5.20	236	1.1	38°24'50'' 48°26'36''	140	1.5	UCAC2 42047229	13.37	6 <sup>h</sup> 59 <sup>m</sup> 44.919 <sup>s</sup> 29°06'20.371''	9.1	55	157.1	-18.9	168.0	2.3	5.5	338
2015/12/13 16:25:21	1958 Chandra	34.0	16.21	2.76	60	2.3	35°45'02'' 50°27'54''	321	6.9	UCAC2 44967816	13.54	5 <sup>h</sup> 01 <sup>m</sup> 16.070 <sup>s</sup> 37°33'52.961''	39.5	76	164.9	-26.6	144.3	-4.4	5.7	185
2015/12/13 16:49:00	306 Unitas	46.7	13.53	2.07	57	1.3	36°02'54'' 50°31'58''	343	10.2	UCAC2 25672305	11.63	21 <sup>h</sup> 35 <sup>m</sup> 50.232 <sup>s</sup> -16°57'34.240''	11.5	225	59.6	-30.4	33.0	-7.9	5.8	173
2015/12/13 17:21:04	13398 1999 RF62	7.2	15.91	4.64	127	0.8	37°13'34'' 49°05'06''	148	1.3	TYC 239700262	11.29	5 <sup>h</sup> 09 <sup>m</sup> 01.950 <sup>s</sup> 33°46'24.163''	44.8	88	168.9	-35.5	146.8	-12.6	5.9	106

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 5		LinOccult 2.2.0 BETA				
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2015/12/13 23:00:17	118303 1998 UG	6.0	16.49	5.38	227	0.5	39°27'41" 50°02'15"	90	0.2	TYC 278201148	11.11	0 <sup>h</sup> 10 <sup>m</sup> 31.547 <sup>s</sup> 38°57'44.331"	22.7	304	113.3	-57.8	85.9	-56.5	7.1	101
2015/12/13 23:54:43	1980 Tez-catlipoca	13.0	14.92	2.14	236	1.0	38°57'06" 48°49'15"	126	0.0	UCAC2 28877895	12.94	7 <sup>h</sup> 11 <sup>m</sup> 21.645 <sup>s</sup> -8°29'33.312"	31.0	191	138.7	-50.9	153.8	-57.1	7.3	46
2015/12/14 01:27:38	31188 1997 YM7	6.0	17.39	8.00	117	0.6	36°54'32" 51°01'02"	22	1.2	TYC 65900573	9.39	4 <sup>h</sup> 03 <sup>m</sup> 49.058 <sup>s</sup> 8°51'06.178"	13.4	268	156.3	-36.8	127.4	-51.0	7.7	146
2015/12/14 04:04:03	1980 Tez-catlipoca	13.0	14.92	1.50	73	1.0	35°18'56" 49°51'18"	253	3.2	UCAC2 28690842	13.74	7 <sup>h</sup> 11 <sup>m</sup> 00.178 <sup>s</sup> -8°34'42.333"	4.7	251	138.8	-12.0	153.3	-29.5	8.3	46
2015/12/14 20:33:03	13330 Don-davis	8.3	17.54	5.69	34	0.6	36°24'39" 49°45'04"	165	1.8	UCAC2 39976184	11.85	5 <sup>h</sup> 08 <sup>m</sup> 36.287 <sup>s</sup> 23°09'21.315"	62.4	161	175.9	-61.2	134.0	-32.4	12.8	180
2015/12/14 22:31:08	47926 2000 GK135	5.8	17.21	5.37	57	1.0	36°22'19" 50°33'27"	6	1.6	UCAC2 32853315	11.85	7 <sup>h</sup> 33 <sup>m</sup> 20.014 <sup>s</sup> 3°02'50.272"	41.3	159	143.4	-60.7	162.3	-48.0	13.4	126
2015/12/15 04:55:58	1142 Aetolia	30.2	16.08	2.60	134	0.7	37°44'16" 50°49'21"	50	3.9	UCAC2 26464329	13.58	14 <sup>h</sup> 53 <sup>m</sup> 30.427 <sup>s</sup> -14°52'39.616"	20.2	149	37.3	-4.7	83.3	-27.9	15.5	271
2015/12/15 14:47:10	1146 Biarmia	31.1	15.30	2.27	114	1.8	36°15'32" 49°01'11"	181	5.2	UCAC2 33158420	13.17	23 <sup>h</sup> 36 <sup>m</sup> 06.557 <sup>s</sup> 3°52'16.681"	42.9	164	93.0	-11.2	41.6	22.8	18.9	205
2015/12/15 21:20:37	26829 Sakai-hoikuen	6.6	16.28	4.72	162	0.6	37°21'57" 48°46'35"	151	0.9	UCAC2 38217986	11.57	5 <sup>h</sup> 54 <sup>m</sup> 37.666 <sup>s</sup> 18°22'26.205"	57.9	166	172.7	-63.4	130.7	-29.3	21.3	117
2015/12/15 23:44:51	92273 2000 CQ81	5.2	17.97	8.39	166	0.5	36°04'36" 48°33'54"	185	0.8	TYC 246301139	9.58	7 <sup>h</sup> 15 <sup>m</sup> 22.538 <sup>s</sup> 36°56'38.282"	76.0	207	153.8	-52.5	142.0	-47.4	22.2	154
2015/12/16 13:43:43	6858 1990 ST10	8.7	16.92	5.06	85	0.7	35°31'56" 50°38'29"	321	2.1	TYC 117700797	11.87	23 <sup>h</sup> 58 <sup>m</sup> 16.955 <sup>s</sup> 13°52'50.728"	45.4	132	100.9	-2.2	38.8	30.0	27.8	134
2015/12/16 15:38:36	11487 1988 RG10	19.1	18.36	7.24	136	1.3	37°30'06" 49°06'46"	140	2.1	TYC 191301885	11.12	7 <sup>h</sup> 20 <sup>m</sup> 36.323 <sup>s</sup> 25°50'06.691"	5.5	56	155.8	-19.0	139.1	26.2	28.5	339
2015/12/16 21:43:29	16663 1993 VG4	9.1	18.14	6.88	71	1.3	36°51'13" 49°31'18"	145	1.7	UCAC2 34837557	11.26	8 <sup>h</sup> 39 <sup>m</sup> 46.791 <sup>s</sup> 8°40'05.379"	35.8	125	133.6	-63.3	156.9	-22.1	31.1	195
2015/12/16 22:08:09	4944 Ko-zlovskij	7.6	16.67	5.14	162	0.6	36°24'19" 48°35'53"	177	1.1	TYC 186500925	11.54	5 <sup>h</sup> 35 <sup>m</sup> 53.886 <sup>s</sup> 25°10'04.632"	64.3	200	178.1	-62.4	112.1	-25.8	31.3	138
2015/12/16 23:01:40	5818 1989 RC1	7.9	15.31	3.47	183	0.8	37°58'09" 51°17'36"	41	0.5	UCAC2 35529851	11.89	5 <sup>h</sup> 57 <sup>m</sup> 16.053 <sup>s</sup> 10°41'01.024"	48.2	206	166.4	-57.9	116.3	-33.3	31.7	94
2015/12/17 01:51:52	24167 1999 WC4	5.8	17.46	5.55	190	0.5	35°08'18" 48°30'48"	206	0.7	UCAC2 42028781	11.92	5 <sup>h</sup> 47 <sup>m</sup> 10.578 <sup>s</sup> 29°01'13.754"	39.0	270	173.7	-33.2	112.3	-48.0	33.0	151
2015/12/17 03:03:59	765 Mattiaca	11.5	14.67	1.18	211	1.6	37°54'49" 51°38'24"	33	0.3	UCAC2 42571189	13.94	7 <sup>h</sup> 06 <sup>m</sup> 58.188 <sup>s</sup> 30°47'51.703"	41.4	271	158.6	-21.7	128.4	-47.0	33.5	91
2015/12/17 03:27:05	4709 En-nomos	80.8	16.04	5.33	21	5.3	36°19'14" 50°14'16"	7	8.7	TYC 483301376	10.71	7 <sup>h</sup> 56 <sup>m</sup> 47.830 <sup>s</sup> 0° - 21'12.287"	21.8	241	138.5	-18.0	141.8	-45.7	33.7	368
2015/12/17 03:50:25	25067 1998 QW86	6.3	17.15	6.67	147	0.5	37°29'11" 51°07'25"	36	1.0	TYC 237800042	10.48	4 <sup>h</sup> 47 <sup>m</sup> 21.137 <sup>s</sup> 32°02'44.752"	14.0	304	166.0	-14.4	98.4	-43.9	33.8	157
2015/12/17 04:02:30	21109 Sunkel	7.2	17.38	6.04	192	0.6	34°02'17" 49°07'13"	237	0.9	TYC 292301253	11.34	5 <sup>h</sup> 49 <sup>m</sup> 50.059 <sup>s</sup> 44°25'38.304"	29.8	305	158.6	-12.6	110.0	-42.8	33.9	167

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 6		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2015/12/17 05:19:06	2758 Cordelia	5.8	15.49	5.32	243	0.9	38°44'44" 51°35'06"	46	0.0	TYC 186001134	10.18	5 <sup>h</sup> 27 <sup>m</sup> 56.691 <sup>s</sup> 28°35'42.356"	5.0	310	174.3	-1.8	106.2	-34.1	34.5	86
2015/12/17 14:24:29	1614 Goldschmidt	46.3	16.82	2.95	195	1.1	36°41'51" 48°19'11"	171	5.0	UCAC2 26779906	13.95	19 <sup>h</sup> 33 <sup>m</sup> 50.505 <sup>s</sup> -14°10'38.762"	14.8	225	28.7	-7.8	49.0	34.0	38.5	296
2015/12/17 15:43:18	24171 1999 XE1	6.3	16.29	4.37	114	0.7	35°36'46" 50°58'43"	335	1.3	TYC 131201916	11.93	5 <sup>h</sup> 58 <sup>m</sup> 09.421 <sup>s</sup> 16°18'05.470"	11.5	78	171.7	-19.7	107.2	32.9	39.1	108
2015/12/17 15:55:12	10856 Bechstein	10.0	18.39	6.52	230	0.6	39°09'31" 49°08'32"	116	1.0	TYC 377301423	11.87	6 <sup>h</sup> 37 <sup>m</sup> 55.781 <sup>s</sup> 57°14'01.585"	36.3	42	144.4	-21.6	108.7	32.3	39.2	238
2015/12/17 22:07:51	2364 Seillier	22.3	16.44	2.61	102	1.6	36°02'22" 49°08'49"	190	4.0	UCAC2 42015144	13.93	4 <sup>h</sup> 23 <sup>m</sup> 37.305 <sup>s</sup> 29°18'49.749"	60.3	237	161.9	-62.5	82.7	-14.8	42.1	196
2015/12/18 02:19:39	1106 Cydonia	15.1	16.12	2.71	46	1.5	35°43'19" 49°51'07"	242	3.7	UCAC2 44612572	13.51	3 <sup>h</sup> 01 <sup>m</sup> 16.495 <sup>s</sup> 36°47'24.523"	15.3	310	143.3	-28.8	66.0	-43.0	44.1	156
2015/12/18 13:59:00	69854 1998 SS54	6.6	18.02	6.64	73	0.5	37°13'16" 49°47'24"	113	1.4	TYC 337700990	11.39	6 <sup>h</sup> 43 <sup>m</sup> 42.338 <sup>s</sup> 46°27'56.218"	16.4	34	153.8	-4.2	101.7	34.8	49.5	179
2015/12/18 16:43:31	14811 1981 ED43	5.8	18.66	7.57	70	0.5	35°42'50" 50°33'46"	324	1.2	TYC 60301078	11.10	0 <sup>h</sup> 36 <sup>m</sup> 52.985 <sup>s</sup> 7°47'52.723"	47.8	187	105.3	-29.3	15.0	36.9	50.8	171
2015/12/18 17:10:27	3710 Bogoslovskij	10.0	17.09	3.53	251	0.8	35°26'06" 52°14'31"	346	0.7	UCAC2 32836175	13.61	6 <sup>h</sup> 42 <sup>m</sup> 20.049 <sup>s</sup> 3°17'25.321"	9.2	96	155.4	-33.6	103.1	35.2	51.0	162
2015/12/18 17:16:53	15954 1998 BG11	6.6	17.66	6.27	153	0.6	35°20'35" 51°17'14"	334	1.0	UCAC2 39303078	11.39	7 <sup>h</sup> 18 <sup>m</sup> 04.393 <sup>s</sup> 21°10'26.357"	18.0	78	158.1	-34.6	110.9	34.7	51.0	146
2015/12/18 18:28:08	68519 2001 VW15	15.1	18.83	5.53	208	0.8	36°07'18" 48°11'05"	183	1.3	UCAC2 35712662	13.30	6 <sup>h</sup> 08 <sup>m</sup> 56.059 <sup>s</sup> 11°05'16.834"	32.6	114	166.4	-45.8	94.1	27.8	51.6	396
2015/12/18 19:30:15	16394 1981 QD4	8.3	17.33	5.36	64	0.9	35°39'01" 50°27'13"	315	1.9	UCAC2 44784527	11.98	2 <sup>h</sup> 53 <sup>m</sup> 05.433 <sup>s</sup> 37°19'47.007"	74.6	220	141.0	-54.6	56.0	19.9	52.2	164
2015/12/18 23:48:25	848 Inna	18.2	16.69	2.84	190	1.8	35°48'16" 48°21'58"	190	2.3	UCAC2 38430885	13.93	8 <sup>h</sup> 12 <sup>m</sup> 26.703 <sup>s</sup> 18°32'36.801"	58.7	176	145.3	-52.3	120.0	-18.4	54.2	201
2015/12/19 00:05:44	6338 Isaosato	14.5	16.83	3.29	61	1.0	36°41'34" 50°31'43"	28	2.8	UCAC2 39263519	13.60	4 <sup>h</sup> 28 <sup>m</sup> 28.827 <sup>s</sup> 21°18'51.929"	36.7	259	162.2	-49.9	67.4	-20.8	54.3	199
2015/12/19 02:22:56	1686 De Sitter	36.3	16.39	3.36	91	2.5	37°00'23" 50°43'41"	34	6.3	UCAC2 40169658	13.08	6 <sup>h</sup> 52 <sup>m</sup> 51.674 <sup>s</sup> 23°43'58.470"	39.6	260	164.5	-28.4	99.4	-35.8	55.4	208
2015/12/19 04:32:56	1823 Gliese	10.0	15.82	2.99	139	0.8	35°02'04" 49°05'59"	220	1.7	UCAC2 40999519	12.90	6 <sup>h</sup> 22 <sup>m</sup> 43.474 <sup>s</sup> 26°17'14.655"	16.0	292	171.1	-8.3	91.1	-38.7	56.5	114
2015/12/19 04:34:09	21887 Dipippo	6.6	17.88	7.35	208	0.8	36°29'53" 51°54'33"	4	0.7	TYC 19300653	10.53	7 <sup>h</sup> 56 <sup>m</sup> 02.668 <sup>s</sup> 6°36'42.413"	15.8	261	144.5	-8.2	114.7	-38.7	56.5	155
2015/12/19 17:51:53	19329 1996 XZ30	5.2	16.70	6.34	200	0.6	34°42'07" 51°32'15"	326	0.3	TYC 134201244	10.36	6 <sup>h</sup> 40 <sup>m</sup> 00.687 <sup>s</sup> 22°23'25.086"	31.2	92	168.0	-40.2	87.5	40.3	62.6	103
2015/12/19 19:44:56	39783 1997 LB1	5.8	17.84	6.72	246	0.5	36°44'41" 52°14'15"	8	0.4	TYC 191601032	11.12	7 <sup>h</sup> 48 <sup>m</sup> 05.508 <sup>s</sup> 24°31'50.895"	40.0	99	152.7	-56.4	101.7	28.6	63.4	157
2015/12/19 22:58:29	55538 2001 WX39	11.5	16.44	3.13	53	0.8	36°02'04" 49°35'45"	200	2.8	UCAC2 39825504	13.38	6 <sup>h</sup> 37 <sup>m</sup> 23.891 <sup>s</sup> 22°38'49.170"	61.8	199	168.9	-58.5	83.8	0.2	65.0	157

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.				Table 1		Page 7		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon							
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$	
2015/12/20 01:35:51	3389 Sinzot	18.7	15.89	2.15	5	2.0	36°14'08'' 50°04'36''	312	6.3	UCAC2 36624586	13.90	6 <sup>h</sup> 58 <sup>m</sup> 54.566 <sup>s</sup> 13°32'19.908''	39.2	240	160.9	-36.1	87.8	-21.9	66.2	118	
2015/12/20 04:56:58	376 Geometria	34.9	13.09	1.06	64	2.6	35°52'47'' 49°32'06''	207	9.8	UCAC2 41345025	12.55	6 <sup>h</sup> 26 <sup>m</sup> 29.636 <sup>s</sup> 27°29'26.840''	13.4	297	170.8	-5.0	77.7	-34.7	67.7	124	
2015/12/20 16:23:07	1564 Srbija	22.1	14.81	1.98	172	2.1	36°25'17'' 51°35'18''	3	3.0	UCAC2 33897202	13.02	6 <sup>h</sup> 43 <sup>m</sup> 56.935 <sup>s</sup> 6°09'18.787''	4.7	86	158.7	-25.9	76.2	46.2	72.6	146	
2015/12/20 18:35:17	67304 GZ157	6.6	16.76	4.87	54	0.8	36°10'06'' 50°31'25''	351	2.0	UCAC2 39835289	11.91	7 <sup>h</sup> 11 <sup>m</sup> 58.431 <sup>s</sup> 22°32'01.544''	33.8	95	161.8	-46.8	80.2	45.2	73.6	120	
2015/12/20 19:13:27	32397 QL214	16.6	18.40	5.20	54	1.0	36°10'59'' 50°31'31''	352	1.9	UCAC2 38937804	13.21	5 <sup>h</sup> 58 <sup>m</sup> 23.725 <sup>s</sup> 20°21'04.515''	49.1	123	176.7	-52.3	62.8	42.1	73.9	342	
2015/12/20 21:36:30	1686 De Sitter	36.3	16.36	3.11	258	2.4	36°19'02'' 52°21'45''	0	3.2	UCAC2 40169216	13.31	6 <sup>h</sup> 51 <sup>m</sup> 23.877 <sup>s</sup> 23°45'54.418''	62.0	154	166.7	-63.6	73.6	24.0	74.9	207	
2015/12/20 21:39:06	589 Croatia	88.0	13.55	4.12	246	7.2	36°10'36'' 52°15'22''	358	6.8	TYC 74600417	9.45	6 <sup>h</sup> 41 <sup>m</sup> 30.924 <sup>s</sup> 7°31'12.224''	46.8	165	160.3	-63.5	72.4	23.6	74.9	159	
2015/12/20 22:26:34	11552 Boucolion	33.1	17.94	4.27	97	2.6	36°32'53'' 50°54'17''	11	3.0	UCAC2 36641613	13.69	8 <sup>h</sup> 32 <sup>m</sup> 14.463 <sup>s</sup> 13°33'32.149''	48.0	141	141.2	-61.5	98.0	16.5	75.2	428	
2015/12/21 00:30:22	73757 CH10	5.8	18.18	6.45	175	0.7	37°13'09'' 51°30'26''	22	0.8	TYC 180401622	11.73	3 <sup>h</sup> 53 <sup>m</sup> 03.357 <sup>s</sup> 26°01'43.820''	29.2	277	152.5	-46.4	32.7	-2.3	76.1	174	
2015/12/21 03:20:37	16882 BO13	6.6	18.50	6.99	75	0.6	36°48'27'' 50°37'50''	30	1.3	TYC 137301737	11.51	7 <sup>h</sup> 42 <sup>m</sup> 38.922 <sup>s</sup> 21°57'21.407''	35.7	262	155.0	-19.4	82.0	-23.6	77.3	186	
2015/12/21 03:40:50	19727 Allen	7.9	16.75	4.62	18	0.7	36°31'14'' 50°07'03''	65	2.5	TYC 75701655	12.15	7 <sup>h</sup> 06 <sup>m</sup> 29.394 <sup>s</sup> 12°53'28.995''	20.0	266	160.0	-16.3	74.2	-25.3	77.4	127	
2015/12/21 18:09:09	3705 Hotel-Iasilla	11.0	16.05	3.01	169	1.0	36°59'39'' 48°35'51''	163	1.5	UCAC2 39277932	13.11	5 <sup>h</sup> 49 <sup>m</sup> 34.877 <sup>s</sup> 21°26'24.021''	42.5	109	177.4	-42.7	47.1	51.8	82.9	142	
2015/12/21 18:40:41	2191 Uppsala	17.5	14.87	2.25	146	1.5	37°18'12'' 48°54'41''	150	2.9	UCAC2 38393014	12.77	5 <sup>h</sup> 36 <sup>m</sup> 35.310 <sup>s</sup> 18°48'51.908''	46.9	122	173.4	-47.6	43.6	51.4	83.1	147	
2015/12/21 18:53:42	65677 EB1	10.0	17.49	7.09	210	1.1	38°34'55'' 48°53'19''	128	1.1	TYC 284901110	10.41	2 <sup>h</sup> 44 <sup>m</sup> 09.166 <sup>s</sup> 40°30'39.169''	78.9	216	136.3	-49.5	28.9	51.0	83.2	203	
2015/12/21 21:42:07	1401 Lavonne	11.7	14.70	1.76	170	1.1	36°52'45'' 48°34'09''	166	1.0	UCAC2 40817483	13.19	5 <sup>h</sup> 34 <sup>m</sup> 05.504 <sup>s</sup> 25°50'27.790''	65.2	198	174.1	-63.5	42.0	34.1	84.2	94	
2015/12/21 21:50:23	32480 SG348	19.1	18.56	4.76	249	1.1	37°06'51'' 52°13'21''	14	1.6	UCAC2 35915313	13.82	7 <sup>h</sup> 11 <sup>m</sup> 57.603 <sup>s</sup> 11°39'00.982''	50.1	158	158.8	-63.3	65.0	32.9	84.2	378	
2015/12/21 23:29:16	26570 EU77	6.9	17.57	6.11	114	0.5	35°52'18'' 49°03'50''	195	1.3	TYC 131700396	11.47	6 <sup>h</sup> 02 <sup>m</sup> 05.136 <sup>s</sup> 17°18'16.943''	50.3	225	173.9	-55.1	46.7	18.1	84.8	170	
2015/12/22 00:45:45	46616 AM	8.3	17.99	7.03	206	0.5	35°52'09'' 48°12'52''	188	1.0	TYC 188001143	10.96	6 <sup>h</sup> 37 <sup>m</sup> 38.232 <sup>s</sup> 23°34'39.806''	50.2	243	171.0	-44.2	54.3	6.5	85.2	204	
2015/12/22 01:21:51	19329 XZ30	5.2	16.63	4.87	231	0.5	36°53'40'' 52°05'10''	11	0.2	TYC 134100519	11.78	6 <sup>h</sup> 37 <sup>m</sup> 28.177 <sup>s</sup> 22°18'32.410''	43.8	251	171.0	-38.5	53.9	1.1	85.5	103	
2015/12/22 01:57:25	1717 Arlon	12.0	15.97	2.95	170	0.9	37°30'03'' 51°22'08''	31	1.4	UCAC2 33756813	13.09	11 <sup>h</sup> 32 <sup>m</sup> 47.549 <sup>s</sup> 5°36'46.750''	43.5	156	98.1	-32.8	126.4	-3.9	85.6	117	



Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 8		LinOccult 2.2.0 BETA			
	Asteroid			Nearest point			Star			Sun			Moon							
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2015/12/22 04:26:37	46292 2001 KY56	5.5	18.72	7.33	207	0.5	38°57'15" 50°47'31"	67	0.6	UCAC2 39310034	11.40	8 <sup>h</sup> 06 <sup>m</sup> 01.124 <sup>s</sup> 21°17'37.569"	27.7	271	150.6	-9.5	72.6	-21.1	86.5	189
2015/12/22 16:39:38	817 Annika	22.1	13.68	1.69	27	2.7	36°18'53" 49°48'13"	176	8.5	UCAC2 36812541	12.25	7 <sup>h</sup> 39 <sup>m</sup> 40.813 <sup>s</sup> 14°12'58.542 <sup>s</sup>	5.9	75	155.0	-28.4	60.2	44.5	90.1	100
2015/12/22 18:29:30	177 Irma	73.2	13.91	3.49	51	2.9	35°52'19" 50°25'21"	325	18.1	TYC 524700779	10.46	23 <sup>h</sup> 21 <sup>m</sup> 19.726 <sup>s</sup> -3°24'09.469"	19.3	239	79.4	-45.8	65.3	54.2	90.7	151
2015/12/22 19:43:15	98153 2000 SY68	13.2	19.19	6.29	133	0.8	35°55'38" 51°13'02"	349	1.3	UCAC2 42042741	12.91	6 <sup>h</sup> 39 <sup>m</sup> 22.671 <sup>s</sup> 29°28'56.897"	55.8	113	169.6	-56.1	44.2	54.4	91.0	375
2015/12/22 22:32:04	16827 1997 WD2	5.5	16.50	4.57	183	0.5	35°27'06" 48°29'57"	199	0.5	UCAC2 40150390	11.94	5 <sup>h</sup> 44 <sup>m</sup> 26.015 <sup>s</sup> 23°37'45.805"	59.8	217	175.9	-61.1	29.4	37.4	91.8	106
2015/12/23 01:02:06	765 Mattiaca	11.5	14.55	1.79	171	1.5	37°03'53" 51°30'18"	19	0.8	UCAC2 42570181	12.99	7 <sup>h</sup> 00 <sup>m</sup> 29.685 <sup>s</sup> 30°46'57.677"	56.0	250	165.2	-41.7	45.8	14.8	92.4	91
2015/12/23 04:04:55	14920 1994 PE33	5.5	16.81	5.68	10	0.6	36°12'02" 50°07'25"	324	2.1	UCAC2 40979787	11.14	4 <sup>h</sup> 53 <sup>m</sup> 14.059 <sup>s</sup> 26°08'43.590"	5.0	306	163.9	-12.8	16.4	-10.6	93.2	106
2015/12/23 05:17:33	379836 2011 QF	10.0	19.74	8.06	132	0.5	35°32'31" 48°57'58"	204	0.6	UCAC2 39832677	11.69	7 <sup>h</sup> 00 <sup>m</sup> 34.610 <sup>s</sup> 22°53'35.887"	10.1	294	166.9	-2.4	42.7	-18.0	93.5	660
2015/12/23 05:29:41	2868 Upupa	25.3	16.63	3.66	151	2.6	37°09'51" 51°17'04"	24	4.0	UCAC2 36989490	13.01	7 <sup>h</sup> 30 <sup>m</sup> 38.015 <sup>s</sup> 14°57'04.060"	6.7	285	157.8	-0.9	50.2	-19.0	93.5	139
2015/12/23 14:01:32	1721 Wells	40.0	15.34	1.75	244	3.0	32°52'47" 50°16'36"	276	3.2	UCAC2 46263734	13.83	5 <sup>h</sup> 38 <sup>m</sup> 00.656 <sup>s</sup> 41°42'53.292"	22.1	51	160.8	-4.3	29.9	14.5	95.3	165
2015/12/23 15:53:22	13352 Gyssens	7.9	16.66	4.15	35	0.8	36°04'03" 50°19'42"	333	2.3	TYC 237202092	12.54	4 <sup>h</sup> 28 <sup>m</sup> 32.033 <sup>s</sup> 30°47'43.753"	41.6	90	157.2	-20.9	14.0	31.9	95.7	136
2015/12/23 17:48:53	41227 1999 XN18	5.2	18.89	8.22	246	1.4	34°23'26" 51°54'35"	327	0.4	TYC 140601036	10.67	9 <sup>h</sup> 35 <sup>m</sup> 41.484 <sup>s</sup> 17°37'31.884"	2.2	65	130.8	-39.4	72.2	48.1	96.0	173
2015/12/23 18:57:15	1472 Muonio	11.0	14.63	2.49	254	1.2	35°21'23" 52°15'27"	345	0.1	TYC 187600209	12.25	6 <sup>h</sup> 00 <sup>m</sup> 19.922 <sup>s</sup> 29°30'08.137"	55.3	112	173.7	-49.8	23.3	54.8	96.2	88
2015/12/23 19:56:17	30791 1988 RY11	12.6	19.14	7.78	204	0.8	36°49'42" 51°50'48"	11	1.1	TYC 479301508	11.36	6 <sup>h</sup> 25 <sup>m</sup> 11.228 <sup>s</sup> -5°11'51.353"	29.5	146	151.0	-57.5	34.9	57.3	96.4	385
2015/12/23 20:40:07	283560 2001 VF56	7.9	20.57	9.68	48	0.5	36°48'48" 49°46'49"	128	0.6	UCAC2 26873917	10.89	8 <sup>h</sup> 25 <sup>m</sup> 37.322 <sup>s</sup> -13°38'00.651"	13.8	132	129.6	-61.6	64.0	56.6	96.6	569
2015/12/23 21:27:10	18083 2000 HD22	11.5	16.77	3.39	195	0.8	37°30'27" 51°37'00"	27	1.4	UCAC2 35350602	13.43	6 <sup>h</sup> 06 <sup>m</sup> 04.625 <sup>s</sup> 10°23'51.189"	50.6	178	167.0	-63.5	21.8	53.7	96.7	178
2015/12/23 21:47:15	1724 Vladimir	34.8	15.00	3.38	265	3.3	35°28'07" 47°43'50"	193	1.1	TYC 10800401	11.67	5 <sup>h</sup> 17 <sup>m</sup> 44.528 <sup>s</sup> 3°49'49.305"	42.1	201	157.1	-63.4	16.1	51.8	96.7	123
2015/12/24 01:41:20	45462 2000 AZ197	7.2	17.18	5.65	48	0.6	36°27'11" 50°28'07"	14	1.7	TYC 188800602	11.54	6 <sup>h</sup> 35 <sup>m</sup> 59.452 <sup>s</sup> 26°37'43.722"	42.4	262	172.7	-35.5	25.9	19.0	97.4	163
2015/12/24 03:56:54	53411 1999 LM32	5.2	17.86	6.14	107	0.5	36°07'16" 49°05'31"	186	1.1	TYC 78300459	11.72	7 <sup>h</sup> 47 <sup>m</sup> 37.800 <sup>s</sup> 10°35'27.227"	20.3	262	153.0	-14.0	41.9	-0.9	97.7	139
2015/12/24 16:01:39	4254 Kamel	13.2	14.91	1.98	224	1.5	35°49'16" 52°02'04"	351	0.6	UCAC2 32323730	13.12	6 <sup>h</sup> 04 <sup>m</sup> 06.396 <sup>s</sup> 1°52'24.101"	6.9	95	158.4	-22.1	18.8	25.3	99.0	109

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 9		LinOccult 2.2.0 BETA			
		Asteroid			Nearest point			Star			Sun			Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2015/12/24 17:56:58	6238 1989 NM	10.5	16.98	5.40	128	0.9	35°30'27'' 51°04'50''	334	1.9	UCAC2 39843274	11.59	8 <sup>h</sup> 15 <sup>m</sup> 16.044 <sup>s</sup> 22°33'34.834''	20.0	78	151.3	-40.6	38.7	42.7	99.1	152
2015/12/25 01:22:06	43796 1991 AS1	5.8	16.62	5.84	51	0.5	36°19'10'' 50°30'29''	3	1.9	TYC 411101183	10.79	7 <sup>h</sup> 21 <sup>m</sup> 58.188 <sup>s</sup> 60°49'34.009''	65.5	311	140.6	-38.7	45.6	31.4	99.6	111
2015/12/25 14:16:01	580 Selene	45.8	14.48	1.67	122	4.1	36°57'55'' 49°02'50''	156	8.7	UCAC2 39268993	13.08	5 <sup>h</sup> 11 <sup>m</sup> 18.264 <sup>s</sup> 21°29'40.112''	14.0	73	165.4	-6.1	16.5	1.2	99.8	151
2015/12/25 14:19:14	3201 Sijthoff	22.7	15.78	2.41	55	2.4	36°41'44'' 49°37'53''	148	8.2	UCAC2 39462564	13.50	6 <sup>h</sup> 30 <sup>m</sup> 49.818 <sup>s</sup> 21°54'51.683''	3.1	59	175.9	-6.6	4.3	1.7	99.8	92
2015/12/25 16:12:36	96295 1996 JF7	10.5	19.80	8.39	33	0.6	36°01'18'' 50°17'29''	325	1.0	TYC 130700986	11.41	5 <sup>h</sup> 48 <sup>m</sup> 03.407 <sup>s</sup> 19°57'19.670''	25.6	89	173.0	-23.8	8.9	18.4	99.8	400
2015/12/25 17:36:30	11971 1994 UJ2	10.0	16.65	3.12	234	0.8	34°55'26'' 51°58'15''	336	0.8	UCAC2 44990246	13.60	6 <sup>h</sup> 54 <sup>m</sup> 04.159 <sup>s</sup> 37°32'44.881''	40.4	77	163.4	-37.2	20.1	31.4	99.7	157
2015/12/25 18:08:34	1319 Disa	25.1	15.13	1.72	10	2.6	36°21'53'' 50°07'02''	36	6.2	UCAC2 38067956	13.66	8 <sup>h</sup> 06 <sup>m</sup> 52.701 <sup>s</sup> 17°51'18.369''	20.4	86	153.3	-42.3	23.1	36.2	99.7	162
2015/12/25 21:35:04	19679 Gretabet-teo	5.5	17.00	6.56	208	0.5	36°40'03'' 51°54'13''	8	0.4	TYC 240800673	10.44	5 <sup>h</sup> 40 <sup>m</sup> 29.990 <sup>s</sup> 31°59'55.453''	71.0	204	168.4	-63.5	19.0	58.1	99.6	119
2015/12/25 21:41:29	5080 Oja	10.0	14.51	1.11	160	1.3	36°22'15'' 48°36'39''	178	0.7	UCAC2 43599493	13.88	6 <sup>h</sup> 20 <sup>m</sup> 18.088 <sup>s</sup> 33°34'51.197''	73.8	182	169.7	-63.5	15.9	58.3	99.6	82
2015/12/26 04:41:33	12127 Mamiya	6.3	17.22	5.27	54	0.5	36°48'39'' 50°24'14''	43	1.8	UCAC2 41530155	11.96	7 <sup>h</sup> 23 <sup>m</sup> 53.718 <sup>s</sup> 27°34'58.474''	20.7	289	164.3	-7.6	11.7	9.2	99.2	126
2015/12/26 14:29:33	1036 Ganymed	31.7	12.33	0.67	180	0.6	36°09'58'' 48°26'02''	183	3.8	UCAC2 30771454	12.50	20 <sup>h</sup> 40 <sup>m</sup> 34.364 <sup>s</sup> -3°10'29.109''	27.6	224	39.8	-7.9	155.2	-5.0	98.3	134
2015/12/26 14:58:34	653 Berenike	39.2	15.17	2.38	186	0.9	35°55'00'' 51°42'14''	352	4.4	UCAC2 24484838	12.92	20 <sup>h</sup> 08 <sup>m</sup> 09.289 <sup>s</sup> -19°24'22.096''	6.0	230	25.7	-12.2	168.2	-1.2	98.2	287
2015/12/26 18:36:33	20713 1999 XA32	14.5	16.71	5.66	28	1.0	36°02'31'' 50°14'26''	321	3.0	TYC 239000696	11.06	5 <sup>h</sup> 18 <sup>m</sup> 25.485 <sup>s</sup> 30°49'46.864''	61.1	120	164.5	-46.5	32.3	31.4	97.8	188
2015/12/26 19:25:30	47926 2000 GK135	5.8	16.97	6.18	121	0.7	36°00'56'' 48°58'22''	189	1.1	TYC 16901158	10.79	7 <sup>h</sup> 25 <sup>m</sup> 05.951 <sup>s</sup> 3°29'47.082''	28.2	122	154.6	-53.5	13.8	38.7	97.7	121
2015/12/26 21:30:23	11005 Waldtrud-ering	7.2	16.70	5.41	229	1.6	33°09'12'' 50°30'32''	283	0.5	TYC 177600917	11.30	2 <sup>h</sup> 40 <sup>m</sup> 33.877 <sup>s</sup> 27°18'41.438''	43.6	261	130.7	-63.5	67.9	53.7	97.4	129
2015/12/27 01:04:38	71558 2000 DH21	5.5	18.80	7.09	58	0.6	35°53'30'' 49°35'44''	209	1.1	UCAC2 37306238	11.71	4 <sup>h</sup> 08 <sup>m</sup> 46.066 <sup>s</sup> 15°57'39.241''	15.1	277	148.2	-41.5	51.2	48.2	96.9	196
2015/12/27 03:34:02	42744 1998 RH74	8.3	17.88	6.07	33	0.6	36°38'00'' 50°14'12''	50	1.8	UCAC2 39475194	11.82	7 <sup>h</sup> 15 <sup>m</sup> 24.529 <sup>s</sup> 21°33'55.619''	25.1	274	167.3	-17.7	9.2	26.8	96.5	182
2015/12/28 01:29:32	17106 1999 JT48	5.8	17.30	6.01	159	0.5	37°28'44'' 51°15'33''	32	0.8	UCAC2 41677606	11.29	5 <sup>h</sup> 46 <sup>m</sup> 21.843 <sup>s</sup> 28°07'27.222''	34.9	274	170.0	-37.7	41.8	49.2	92.3	133
2015/12/28 21:53:43	7770 Siljan	10.5	16.74	4.78	43	0.9	36°11'46'' 49°39'46''	189	2.6	UCAC2 40010250	11.97	7 <sup>h</sup> 30 <sup>m</sup> 35.930 <sup>s</sup> 23°05'07.213''	62.0	158	165.8	-63.2	28.4	41.0	87.1	153
2015/12/28 23:12:58	31529 1999 CW127	6.6	17.30	5.46	200	0.6	38°16'54'' 51°19'07''	45	0.7	UCAC2 44967926	11.85	5 <sup>h</sup> 01 <sup>m</sup> 42.610 <sup>s</sup> 37°51'29.051''	55.3	268	156.3	-57.3	63.4	49.1	86.7	146

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 10		LinOccult 2.2.0 BETA				
		Asteroid			Nearest point			Star				Sun		Moon						
Date Time (UTC)	Number Name	Diam (km)	Mag	Drop	Dist (km)	Durat (sec)	Longitude Latitude	Az	Prob (%)	Catalog Number	Mag	RA Dec	Alt	Az	Dist	Alt	Dist	Alt	Phase (%)	$\sigma_{km}$
2015/12/29 03:14:31	4562 Pole-ungkuk	15.4	17.53	4.21	165	3.1	36°35'33" 51°31'09"	8	2.2 4.0	UCAC2 35575735	13.34	9 <sup>h</sup> 37 <sup>m</sup> 41.292 <sup>s</sup> 10°40'22.650"	40.0	232	133.6	-20.9	1.6	40.1	85.5	152
2015/12/29 03:39:35	45745 2000 HU84	6.0	15.95	4.13	36	0.7	36°11'22" 50°21'51"	349	2.2 2.3	UCAC2 38034039	11.85	5 <sup>h</sup> 50 <sup>m</sup> 21.356 <sup>s</sup> 17°58'25.700"	6.9	290	169.4	-17.0	54.1	36.8	85.3	104
2015/12/29 05:13:33	14031 Rozyo	10.0	15.45	4.81	142	0.8	37°57'37" 50°45'10"	57	1.7 2.4	TYC 188500637	10.65	6 <sup>h</sup> 16 <sup>m</sup> 26.477 <sup>s</sup> 26°42'33.564"	4.3	308	175.3	-3.2	49.3	22.9	84.9	166
2015/12/29 16:09:30	1047 Geisha	14.1	15.06	2.01	21	2.0	36°30'42" 50°09'50"	51	5.3 5.4	UCAC2 39846452	13.24	9 <sup>h</sup> 03 <sup>m</sup> 26.146 <sup>s</sup> 22°57'37.965"	0.4	53	145.3	-22.8	18.5	-17.6	81.6	104
2015/12/29 20:12:28	16970 1998 VV2	15.1	17.85	7.61	169	0.9	36°37'50" 48°32'32"	172	1.9 2.3	TYC 75800137	10.24	6 <sup>h</sup> 45 <sup>m</sup> 33.616 <sup>s</sup> 14°44'00.186"	49.9	143	171.0	-58.8	49.4	17.2	80.3	267
2015/12/29 22:17:22	19329 1996 XZ30	5.2	16.41	4.49	252	0.5	36°27'06" 47°47'23"	177	0.1 2.0	UCAC2 39643184	11.94	6 <sup>h</sup> 28 <sup>m</sup> 37.834 <sup>s</sup> 22°01'30.896"	60.8	202	178.4	-62.2	54.9	35.3	79.6	104
2015/12/29 22:30:05	1956 Artek	12.6	17.92	6.69	222	1.3	34°53'09" 51°50'18"	333	1.4 2.2	TYC 2500739	11.23	1 <sup>h</sup> 06 <sup>m</sup> 25.552 <sup>s</sup> 5°29'42.401"	0.8	278	99.8	-61.3	134.0	36.9	79.6	225
2015/12/30 02:20:40	11494 Hibiki	5.2	16.24	7.20	243	0.8	33°54'45" 48°30'38"	225	0.1 2.2	HIP 26290	9.04	5 <sup>h</sup> 35 <sup>m</sup> 55.208 <sup>s</sup> 35°30'27.133"	29.0	292	162.3	-29.5	69.6	46.8	78.2	93
2015/12/30 05:01:31	14349 Nikita-mikhalkov	7.6	17.44	6.48	106	0.6	35°40'40" 49°10'36"	204	1.5 1.8	TYC 134202009	10.96	6 <sup>h</sup> 47 <sup>m</sup> 56.375 <sup>s</sup> 21°20'11.424"	5.4	297	176.4	-4.9	53.8	29.0	77.3	171
2015/12/30 15:58:32	96295 1996 JF7	10.5	19.87	8.58	41	0.6	36°12'28" 50°24'59"	352	1.0 1.0	TYC 130701209	11.29	5 <sup>h</sup> 45 <sup>m</sup> 22.276 <sup>s</sup> 19°58'18.961"	26.9	90	167.7	-21.0	73.9	-26.7	73.5	401
2015/12/30 17:34:28	2219 Man-nucci	39.5	16.43	3.63	18	1.8	36°32'23" 50°02'23"	93	6.8 6.9	UCAC2 29943543	12.83	0 <sup>h</sup> 12 <sup>m</sup> 53.486 <sup>s</sup> -5°09'39.095"	27.0	220	82.5	-36.4	159.1	-15.7	73.0	229
2015/12/30 17:59:37	1271 Isergina	44.3	14.36	1.68	197	3.6	35°47'58" 51°47'28"	350	5.1 11.4	UCAC2 38235589	12.94	6 <sup>h</sup> 53 <sup>m</sup> 06.212 <sup>s</sup> 18°26'19.516"	34.4	103	174.0	-40.4	58.8	-12.3	72.8	155
2015/12/31 00:30:52	131 Vala	40.4	13.34	0.50	160	3.5	35°06'37" 48°49'54"	212	5.4 13.8	UCAC2 4139305	13.92	6 <sup>h</sup> 05 <sup>m</sup> 34.457 <sup>s</sup> 27°17'16.977"	44.9	260	171.5	-46.9	73.7	41.5	70.4	116
2015/12/31 00:33:36	519 Sylvania	48.2	13.46	0.94	193	25.1	33°36'55" 50°20'49"	280	5.4 13.5	UCAC2 39790349	13.10	2 <sup>h</sup> 59 <sup>m</sup> 57.909 <sup>s</sup> 22°55'08.526"	12.0	291	130.1	-46.5	115.6	41.7	70.4	142
2015/12/31 02:37:36	24471 2000 SH313	20.0	18.28	6.73	124	1.1	35°59'41" 48°57'01"	190	2.1 2.2	TYC 14801569	11.55	6 <sup>h</sup> 47 <sup>m</sup> 19.059 <sup>s</sup> 0°38'51.575"	11.3	257	157.4	-26.8	64.9	44.5	69.6	354
2015/12/31 15:52:58	564 Dudu	49.6	15.60	2.50	177	1.8	38°22'20" 49°12'53"	122	6.7 10.2	UCAC2 26588924	13.22	0 <sup>h</sup> 10 <sup>m</sup> 47.150 <sup>s</sup> -14°13'37.706"	25.1	192	77.6	-20.0	165.1	-34.2	64.7	193
2015/12/31 18:27:01	15532 2000 AP126	10.5	17.32	6.05	107	0.8	37°13'38" 49°18'02"	141	1.9 2.3	TYC 239000129	11.27	5 <sup>h</sup> 15 <sup>m</sup> 06.320 <sup>s</sup> 31°39'10.654"	63.6	124	159.0	-44.5	93.3	-17.6	63.7	182

