

## 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 2.3.1  
Author: Plekhanov Andrey andyplekhanov@gmail.com  
Events number: 207



Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 2		LinOccult 2.3.1			
		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 (%)	$\sigma_{km}$
2020/10/03 22:55:57	1391 Carelia	13.9	16.95	3.24	162	1.2	37°02'25'' 48°40'31''	161	2.0	UCAC4	13.77	6 <sup>h</sup> 09 <sup>m</sup> 08.348 <sup>s</sup> 18°41'51.579''	34.1	102	98.7	-40.4	58.4	49.3	96.1	130
2020/10/04 01:12:05	1688 Wilkens	9.2	16.10	6.58	227	0.9	36°32'01'' 48°01'07''	176	0.3	TYC 1195-1777-1	9.52	0 <sup>h</sup> 56 <sup>m</sup> 29.367 <sup>s</sup> 22°05'30.291''	40.1	256	161.8	-23.9	22.6	40.9	95.7	105
2020/10/04 01:24:32	3407 Jim-mysimms	10.0	17.02	3.50	169	0.7	36°41'23'' 48°33'00''	170	1.1	UCAC4	13.56	6 <sup>h</sup> 19 <sup>m</sup> 02.502 <sup>s</sup> 14°36'11.531''	49.7	142	96.3	-22.0	59.7	39.5	95.7	109
2020/10/04 03:39:45	1202 Marina	54.9	17.44	5.22	81	1.7	36°04'49'' 50°45'47''	350	7.4	UCAC4	12.23	9 <sup>h</sup> 54 <sup>m</sup> 28.521 <sup>s</sup> 15°48'47.130''	40.9	118	45.9	-0.6	109.6	20.7	95.3	283
2020/10/04 15:35:27	683 Lanzia	82.0	13.69	1.19	213	5.9	39°05'21'' 49°25'40''	109	6.7	UCAC4	12.94	0 <sup>h</sup> 23 <sup>m</sup> 38.867 <sup>s</sup> 28°37'45.030''	26.5	76	155.5	-5.6	36.0	-6.8	93.2	129
2020/10/04 16:34:57	1595 Tanga	22.2	17.09	3.24	23	0.6	36°19'32'' 49°50'35''	173	4.9	UCAC4	13.91	16 <sup>h</sup> 31 <sup>m</sup> 38.573 <sup>s</sup> -20°31'13.308''	6.4	227	57.8	-15.2	152.8	2.0	93.0	180
2020/10/04 16:41:05	614 Pia	25.8	16.47	3.26	112	1.6	36°18'58'' 51°03'04''	1	4.9	UCAC4	13.27	18 <sup>h</sup> 48 <sup>m</sup> 32.510 <sup>s</sup> -15°27'36.056''	22.7	199	90.2	-16.1	120.6	2.9	93.0	169
2020/10/04 17:54:10	2371 Dim-itrov	10.3	17.11	4.38	213	1.0	34°50'57'' 51°44'07''	331	0.6	UCAC4	12.75	19 <sup>h</sup> 55 <sup>m</sup> 34.604 <sup>s</sup> -18°33'52.601''	19.3	200	105.6	-27.2	105.7	14.3	92.8	112
2020/10/04 19:56:09	162388 BK39	10.9	18.77	6.51	91	0.8	37°08'24'' 49°26'60''	137	1.7	UCAC4	12.27	1 <sup>h</sup> 28 <sup>m</sup> 35.640 <sup>s</sup> 3°57'14.723''	36.4	138	168.7	-41.3	21.9	33.3	92.3	244
2020/10/04 20:56:42	1119 Euboea	31.5	15.65	3.17	4	4.9	36°17'59'' 50°00'44''	166	11.7	UCAC4	12.54	3 <sup>h</sup> 25 <sup>m</sup> 02.189 <sup>s</sup> 14°53'25.452''	38.6	116	139.0	-44.5	8.4	41.8	92.1	107
2020/10/04 23:53:56	1108 Demeter	25.6	14.83	4.92	185	2.1	37°31'09'' 48°35'35''	151	0.8	UCAC4	9.92	20 <sup>h</sup> 59 <sup>m</sup> 50.128 <sup>s</sup> 24°16'55.357''	16.0	289	122.8	-34.7	83.8	53.7	91.5	79
2020/10/05 00:06:00	5206 Kodomonomori	8.1	17.30	4.40	32	1.2	36°44'06'' 50°05'19''	82	3.0	UCAC4	12.92	4 <sup>h</sup> 18 <sup>m</sup> 48.382 <sup>s</sup> 38°38'32.192''	75.6	137	120.8	-33.2	30.8	53.4	91.5	102
2020/10/05 19:21:09	4510 Shawna	8.7	16.69	5.32	242	0.6	38°27'59'' 48°24'32''	139	0.1	UCAC4	11.38	19 <sup>h</sup> 55 <sup>m</sup> 54.921 <sup>s</sup> -26°40'38.780''	4.6	217	103.0	-38.5	119.1	24.3	86.8	89
2020/10/06 00:21:23	5416 Es-tremadoyro	8.7	17.82	4.71	253	0.7	34°25'54'' 51°59'55''	329	0.4	UCAC4	13.12	6 <sup>h</sup> 37 <sup>m</sup> 14.157 <sup>s</sup> 24°37'55.275''	48.7	112	94.5	-31.5	40.7	57.8	85.4	127
2020/10/06 00:28:17	9381 Lyon	9.0	18.12	4.74	230	0.7	35°19'33'' 52°01'09''	343	0.7	UCAC4	13.39	6 <sup>h</sup> 23 <sup>m</sup> 49.584 <sup>s</sup> 24°34'38.790''	51.6	117	97.5	-30.6	37.6	57.8	85.4	140
2020/10/06 00:55:10	5111 Jacloff	9.3	16.98	5.00	249	0.9	36°14'48'' 47°48'39''	181	0.2	UCAC4	12.00	6 <sup>h</sup> 01 <sup>m</sup> 06.484 <sup>s</sup> 23°45'56.954''	57.5	134	102.7	-26.9	32.1	57.1	85.2	101
2020/10/06 03:14:26	1133 Lugduna	11.9	16.25	2.82	13	0.7	36°21'51'' 49°56'36''	154	4.8	UCAC4	13.52	7 <sup>h</sup> 08 <sup>m</sup> 04.762 <sup>s</sup> 24°18'43.571''	64.0	166	87.6	-5.1	46.3	43.5	84.6	97
2020/10/06 03:29:41	795 Fimi	74.7	15.38	3.10	193	5.3	34°31'36'' 51°22'36''	320	8.5	UCAC4	12.35	6 <sup>h</sup> 09 <sup>m</sup> 30.965 <sup>s</sup> 41°16'50.828''	78.3	227	100.6	-2.7	37.6	41.4	84.5	143
2020/10/06 15:20:24	1562 Gondolatsch	11.5	16.43	3.56	250	0.6	36°16'34'' 47°48'12''	180	0.3	UCAC4	12.92	19 <sup>h</sup> 04 <sup>m</sup> 45.728 <sup>s</sup> -22°47'37.610''	17.2	176	91.3	-3.9	140.4	-12.5	81.0	109
2020/10/06 15:24:14	3201 Sijthoff	22.7	18.59	7.19	143	0.6	35°31'55'' 51°14'15''	338	3.8	UCAC4	11.40	16 <sup>h</sup> 02 <sup>m</sup> 24.570 <sup>s</sup> -19°32'39.870''	11.0	220	48.9	-4.5	177.1	-12.1	81.0	153

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.				Table 1		Page 3		LinOccult 2.3.1			
		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 (%)	$\sigma_{km}$	
2020/10/06 15:27:45	3835 Ko-rolenko	11.1	17.39	6.06	208	0.8	34°34'58'' 48°32'25''	216	0.9	UCAC4 390-119901	11.33	19 <sup>h</sup> 24 <sup>m</sup> 37.268 <sup>s</sup> −12°11'49.896''	27.6	172	97.3	-5.1	134.0	-11.8	81.0	130	
2020/10/06 15:43:49	999 Zachia	21.2	14.74	2.06	74	1.5	36°38'47'' 50°40'08''	20	6.4	UCAC4 406-126530	12.85	19 <sup>h</sup> 49 <sup>m</sup> 39.653 <sup>s</sup> −8°55'28.322''	30.6	169	103.8	-7.6	127.2	-10.2	80.9	100	
2020/10/06 17:00:24	628 Christine	49.7	14.48	1.42	263	1.7	37°16'26'' 47°46'31''	164	2.9	UCAC4 341-98201	13.40	17 <sup>h</sup> 30 <sup>m</sup> 41.513 <sup>s</sup> −21°58'42.181''	8.0	221	69.6	-19.8	162.9	-1.0	80.5	150	
2020/10/06 17:16:16	2469 Tadjik-istan	10.3	17.75	3.83	208	0.5	36°15'34'' 48°10'54''	181	1.1	UCAC4 360-178000	13.95	18 <sup>h</sup> 49 <sup>m</sup> 56.567 <sup>s</sup> −18°04'59.096''	17.4	209	88.3	-22.3	144.3	1.2	80.4	171	
2020/10/06 18:19:06	9738 1987 DF6	8.1	18.30	4.91	42	1.3	36°19'51'' 49°40'22''	176	2.3	UCAC4 642-23096	13.40	5 <sup>h</sup> 09 <sup>m</sup> 44.530 <sup>s</sup> 38°20'13.555''	17.4	50	112.9	-31.4	21.2	10.1	80.1	136	
2020/10/06 21:06:36	1974 Caupolican	26.6	18.58	7.79	59	3.1	35°28'02'' 50°08'01''	279	6.5	UCAC4 493-5802	10.79	3 <sup>h</sup> 47 <sup>m</sup> 57.092 <sup>s</sup> 8°30'51.148''	32.7	119	135.9	-45.5	15.2	36.2	79.2	151	
2020/10/06 21:10:12	971 Alsatia	63.8	14.44	2.08	132	4.2	37°13'19'' 49°01'28''	150	11.1	UCAC4 548-27876	12.53	6 <sup>h</sup> 28 <sup>m</sup> 00.228 <sup>s</sup> 19°25'13.123''	16.6	79	97.2	-45.5	28.5	36.7	79.1	106	
2020/10/06 21:21:51	17683 Kanagawa	9.5	17.68	6.04	159	0.6	36°34'01'' 48°38'06''	173	1.4	UCAC4 530-1780	11.65	0 <sup>h</sup> 59 <sup>m</sup> 44.506 <sup>s</sup> 15°56'26.077''	56.1	176	169.2	-45.6	49.2	38.5	79.1	140	
2020/10/06 21:32:27	44438 1998 UG8	9.1	18.67	7.01	208	0.8	33°51'44'' 51°06'21''	304	1.0	TYC 503-1878-1	11.66	20 <sup>h</sup> 08 <sup>m</sup> 22.025 <sup>s</sup> 5°03'27.112''	14.6	260	109.7	-45.5	120.1	40.1	79.0	166	
2020/10/07 01:05:06	3469 Bulgakov	19.7	17.35	4.23	148	0.6	37°08'01'' 51°15'44''	24	2.9	UCAC4 483-49339	13.14	9 <sup>h</sup> 29 <sup>m</sup> 04.087 <sup>s</sup> 6°28'52.039''	15.5	99	51.9	-25.7	72.3	61.1	77.9	206	
2020/10/07 01:49:26	49513 1999 CK28	9.5	17.92	7.03	161	1.5	34°10'17'' 49°33'44''	250	1.4	TYC 4756-791-1	10.89	5 <sup>h</sup> 17 <sup>m</sup> 03.364 <sup>s</sup> −2°20'06.453''	37.8	181	113.2	-18.9	25.4	59.9	77.6	138	
2020/10/07 02:48:50	1365 Henyey	14.0	16.74	4.55	23	0.9	36°12'01'' 49°51'02''	196	4.2	UCAC4 565-33751	12.20	6 <sup>h</sup> 53 <sup>m</sup> 22.562 <sup>s</sup> 22°51'27.239''	62.2	163	91.7	-9.5	31.2	55.1	77.3	130	
2020/10/07 18:12:29	753 Tiflis	23.6	13.74	1.13	235	2.7	33°00'48'' 50°18'26''	277	0.2	UCAC4 296-234116	13.08	21 <sup>h</sup> 22 <sup>m</sup> 54.375 <sup>s</sup> −30°51'19.176''	9.1	185	117.7	-30.8	123.9	4.4	72.0	80	
2020/10/07 19:15:17	5806 Archieroy	8.1	16.41	2.79	124	1.1	35°37'28'' 51°05'01''	338	1.1	UCAC4 439-111123	13.70	20 <sup>h</sup> 12 <sup>m</sup> 42.439 <sup>s</sup> −2°17'24.180''	28.1	225	109.3	-38.6	131.9	13.3	71.6	76	
2020/10/07 19:29:54	202791 2008 QC4	8.4	20.08	7.57	99	0.7	37°13'00'' 49°23'54''	137	1.1	UCAC4 458-127476	12.51	22 <sup>h</sup> 55 <sup>m</sup> 17.653 <sup>s</sup> 1°29'13.747''	41.6	182	150.0	-40.1	93.8	15.5	71.4	289	
2020/10/07 20:08:10	1031 Aretica	75.5	15.46	1.94	166	3.8	36°42'59'' 51°31'05''	11	10.9	UCAC4 425-83408	13.72	18 <sup>h</sup> 39 <sup>m</sup> 12.233 <sup>s</sup> −5°11'21.617''	5.3	255	85.7	-43.3	153.2	21.3	71.3	174	
2020/10/07 20:10:35	10225 1997 VQ1	8.7	18.08	4.14	241	0.9	36°50'42'' 47°55'01''	170	0.5	UCAC4 396-123957	13.96	20 <sup>h</sup> 01 <sup>m</sup> 22.968 <sup>s</sup> −10°51'41.747''	12.4	236	105.2	-43.5	138.7	21.7	71.3	137	
2020/10/07 20:11:20	5687 Yamamotoshi-nobu	18.5	15.11	4.30	34	3.7	35°52'43'' 50°11'49''	300	6.6	TYC 6398-990-1	10.83	23 <sup>h</sup> 11 <sup>m</sup> 51.128 <sup>s</sup> −19°47'17.782''	19.9	188	144.0	-43.5	98.5	21.8	71.2	105	
2020/10/08 00:34:06	3775 Ellenbeth	9.0	17.67	4.41	161	1.0	37°49'34'' 49°00'20''	136	1.2	UCAC4 599-29145	13.28	6 <sup>h</sup> 08 <sup>m</sup> 59.734 <sup>s</sup> 29°41'02.728''	59.6	120	102.9	-30.4	11.8	59.3	69.6	122	
2020/10/08 01:55:08	3300 McGlasson	25.8	16.68	3.08	189	2.7	38°51'33'' 49°41'44''	102	3.3	UCAC4 642-28900	13.66	5 <sup>h</sup> 41 <sup>m</sup> 05.127 <sup>s</sup> 38°19'07.259''	78.4	168	108.1	-18.3	15.4	63.4	69.1	184	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 4		LinOccult 2.3.1				
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 (%)	$\sigma_{km}$
2020/10/08 02:11:06	5330 Senrikyu	12.4	16.59	3.49	136	1.1	34°41'42'' 49°23'22''	237	2.0	UCAC4 741-1003	13.14	0 <sup>h</sup> 06 <sup>m</sup> 08.627 <sup>s</sup> 58°03'52.826''	42.9	314	126.9	-15.8	65.5	63.3	69.0	104
2020/10/08 02:56:59	1158 Luda	19.1	15.04	2.95	11	1.8	36°11'04'' 50°07'29''	320	7.0	UCAC4 661-37266	12.16	5 <sup>h</sup> 30 <sup>m</sup> 54.251 <sup>s</sup> 42°09'39.499''	77.1	238	109.5	-8.4	18.9	61.0	68.7	109
2020/10/08 03:38:21	5199 Dordmund	13.1	17.28	5.53	133	3.7	35°24'57'' 51°06'23''	332	2.4	TYC 2411-1717-1	11.76	5 <sup>h</sup> 28 <sup>m</sup> 02.471 <sup>s</sup> 34°49'40.113''	65.8	241	111.2	-1.8	11.5	57.1	68.5	137
2020/10/08 15:55:04	803 Picka	46.5	15.00	3.02	106	3.2	36°23'22'' 49°05'59''	176	9.5	UCAC4 382-145677	12.05	19 <sup>h</sup> 26 <sup>m</sup> 35.396 <sup>s</sup> -13°36'26.117''	26.5	181	95.6	-10.1	156.9	-13.2	63.7	155
2020/10/08 19:10:30	999 Zachia	21.2	14.77	1.81	133	1.5	36°10'44'' 48°51'05''	183	3.5	UCAC4 405-121904	13.19	19 <sup>h</sup> 52 <sup>m</sup> 09.731 <sup>s</sup> -9°02'15.910''	19.8	227	102.4	-38.4	150.5	6.6	62.4	102
2020/10/08 19:57:15	457 Alleghe- nia	19.4	15.45	2.96	84	6.3	37°25'58'' 50°12'00''	78	5.2	UCAC4 590-10915	12.56	4 <sup>h</sup> 00 <sup>m</sup> 54.244 <sup>s</sup> 27°52'52.552''	35.7	88	131.5	-42.9	28.8	13.1	62.1	114
2020/10/08 23:18:58	6419 Susono	20.9	15.23	3.09	132	1.8	35°52'10'' 51°12'09''	347	3.7	UCAC4 568-1780	12.21	0 <sup>h</sup> 50 <sup>m</sup> 27.591 <sup>s</sup> 23°30'48.431''	54.1	234	162.5	-39.9	73.1	44.0	60.7	110
2020/10/09 01:01:06	13618 1995 BF2	8.6	18.67	8.86	88	0.6	35°44'39'' 50°45'45''	334	1.8	TYC 2436-301-1	9.81	6 <sup>h</sup> 52 <sup>m</sup> 50.048 <sup>s</sup> 31°50'34.899''	59.4	114	94.5	-26.8	10.4	57.9	60.0	163
2020/10/09 15:25:42	18921 2000 PT7	8.0	18.53	4.99	74	0.7	36°32'25'' 50°41'32''	14	1.9	UCAC4 332-202871	13.55	19 <sup>h</sup> 54 <sup>m</sup> 29.426 <sup>s</sup> -23°40'01.352''	15.6	168	99.5	-5.7	165.9	-15.5	54.0	149
2020/10/09 18:15:40	3637 O'Meara	13.1	16.31	2.76	107	0.6	36°06'35'' 49°05'31''	187	2.9	UCAC4 410-83583	13.64	18 <sup>h</sup> 41 <sup>m</sup> 07.705 <sup>s</sup> -8°04'37.460''	18.2	232	84.1	-32.0	162.9	-5.9	52.9	118
2020/10/09 18:31:46	934 Thuringia	53.4	15.08	2.25	274	3.0	38°07'06'' 47°54'01''	151	2.0	UCAC4 316-225254	12.98	19 <sup>h</sup> 09 <sup>m</sup> 16.606 <sup>s</sup> -26°58'09.359''	3.0	220	88.8	-34.1	176.8	-4.2	52.8	135
2020/10/09 19:33:37	156 Xan- thippe	121.0	14.38	2.79	116	11.5	36°20'12'' 51°05'24''	2	23.3	UCAC4 550-29131	11.68	6 <sup>h</sup> 31 <sup>m</sup> 54.563 <sup>s</sup> 19°57'29.191''	3.5	63	99.2	-41.2	8.5	3.0	52.2	154
2020/10/09 23:32:26	1158 Luda	19.1	15.01	1.46	87	2.0	37°26'40'' 49°49'00''	107	5.1	UCAC4 663-38792	13.88	5 <sup>h</sup> 32 <sup>m</sup> 13.216 <sup>s</sup> 42°26'15.615''	65.2	94	111.0	-38.7	27.3	37.9	50.6	108
2020/10/09 23:45:47	6327 Tijn	8.2	17.86	3.98	33	0.6	36°00'57'' 50°17'18''	324	2.5	UCAC4 412-2470	13.90	2 <sup>h</sup> 09 <sup>m</sup> 27.150 <sup>s</sup> -7°40'57.028''	30.0	202	157.9	-37.2	80.4	40.0	50.5	128
2020/10/10 00:29:41	5397 Vojislava	9.2	14.98	3.14	188	1.1	37°15'52'' 48°29'04''	158	0.1	UCAC4 519-730	11.90	0 <sup>h</sup> 26 <sup>m</sup> 48.541 <sup>s</sup> 13°41'26.453''	32.1	252	168.8	-31.5	94.8	46.6	50.1	62
2020/10/10 01:59:41	51790 2001 MG23	11.1	18.07	7.70	31	0.9	36°30'39'' 50°17'14''	31	2.7	TYC 1332-276-1	10.37	6 <sup>h</sup> 31 <sup>m</sup> 45.884 <sup>s</sup> 17°15'39.986''	55.9	158	99.3	-18.1	12.9	58.5	49.5	157
2020/10/10 02:20:16	2475 Semenov	15.4	16.59	3.31	5	2.3	36°17'54'' 50°05'28''	10	4.9	UCAC4 535-15613	13.33	5 <sup>h</sup> 33 <sup>m</sup> 46.262 <sup>s</sup> 16°52'04.061''	56.6	192	113.1	-14.8	25.6	60.6	49.4	125
2020/10/10 02:46:53	1029 La Plata	20.8	16.38	5.50	109	1.4	36°15'23'' 51°01'22''	359	4.3	UCAC4 574-35565	10.89	7 <sup>h</sup> 03 <sup>m</sup> 09.095 <sup>s</sup> 24°47'26.127''	64.1	162	92.7	-10.5	3.7	62.7	49.2	147
2020/10/10 21:30:44	47678 2000 CT75	8.4	18.95	6.93	165	0.7	36°06'03'' 48°34'15''	185	1.2	UCAC4 482-17105	12.02	6 <sup>h</sup> 12 <sup>m</sup> 21.077 <sup>s</sup> 6°21'08.279''	15.0	98	103.9	-47.1	31.8	10.5	41.1	171
2020/10/10 21:53:18	65866 1997 PA4	8.9	16.91	7.14	190	1.6	36°27'01'' 48°20'44''	176	0.6	TYC 1689-22-1	9.77	22 <sup>h</sup> 08 <sup>m</sup> 04.511 <sup>s</sup> 18°47'55.618''	38.2	253	135.3	-46.6	128.1	13.7	40.9	101

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.				Table 1		Page 5		LinOccult 2.3.1			
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 (%)	$\sigma_{km}$	
2020/10/10 22:05:22	242624 KH13	9.2	19.89	6.54	146	0.9	35°04'28" 51°06'45"	324	1.1 1.3	UCAC4 350-195556	13.35	23 <sup>h</sup> 15 <sup>m</sup> 50.947 <sup>s</sup> −20°00'09.701"	12.2	217	141.8	-46.1	135.8	15.5	40.8	282	
2020/10/10 23:25:11	3117 Niepce	10.7	18.13	5.22	80	0.6	36°32'35" 49°21'05"	167	2.3 2.6	UCAC4 557-42152	12.92	7 <sup>h</sup> 47 <sup>m</sup> 22.367 <sup>s</sup> 21°16'14.850"	29.4	91	83.0	-39.8	5.2	27.5	40.3	161	
2020/10/11 01:01:58	22014 1999 XQ96	29.2	17.77	5.89	141	2.0	36°39'51" 51°17'25"	11	3.9 4.5	UCAC4 578-129183	11.88	22 <sup>h</sup> 01 <sup>m</sup> 41.231 <sup>s</sup> 25°26'03.813"	12.3	295	132.4	-27.2	124.5	42.3	39.6	261	
2020/10/11 01:46:42	1685 Toro	12.2	16.11	5.35	53	0.5	36°20'56" 49°34'23"	175	5.5 10.1	TYC 1412-346-1	10.77	10 <sup>h</sup> 01 <sup>m</sup> 57.115 <sup>s</sup> 15°05'09.603"	26.0	97	50.7	-20.4	26.7	48.8	39.3	48	
2020/10/11 02:37:32	14350 1985 VA1	8.8	18.88	5.10	30	0.9	36°26'33" 49°48'03"	158	2.0 2.0	UCAC4 557-32565	13.79	6 <sup>h</sup> 43 <sup>m</sup> 18.796 <sup>s</sup> 21°18'03.251"	61.2	170	97.9	-12.3	21.4	55.4	38.9	171	
2020/10/11 16:03:53	2757 Crisser	19.4	18.66	7.30	101	0.6	36°36'20" 49°09'34"	167	3.0 3.3	UCAC4 337-82004	11.36	16 <sup>h</sup> 39 <sup>m</sup> 09.618 <sup>s</sup> −22°43'04.216"	5.8	224	52.9	-12.6	123.0	-17.4	33.1	233	
2020/10/11 17:49:27	12920 1998 VM15	21.1	17.17	3.52	55	0.7	36°04'11" 50°31'03"	344	3.7 3.9	UCAC4 359-93327	13.69	17 <sup>h</sup> 25 <sup>m</sup> 06.408 <sup>s</sup> −18°22'16.326"	2.0	238	63.2	-29.0	131.6	-17.9	32.4	218	
2020/10/11 18:01:28	570 Kythera	102.8	12.94	1.25	170	9.0	34°38'55" 51°10'09"	317	12.5 34.1	UCAC4 502-2150	12.10	1 <sup>h</sup> 29 <sup>m</sup> 16.566 <sup>s</sup> 10°23'07.593"	30.2	112	174.0	-30.7	104.9	-17.5	32.3	116	
2020/10/11 18:53:09	2120 Tyumenia	41.2	16.24	2.61	162	2.1	36°55'46" 51°26'41"	16	6.2 10.1	UCAC4 435-93833	13.73	19 <sup>h</sup> 14 <sup>m</sup> 15.709 <sup>s</sup> −3°04'35.181"	20.9	237	91.0	-37.5	149.6	-14.9	31.9	163	
2020/10/11 20:01:31	54 Alexandra	165.8	13.62	1.29	188	13.5	34°06'39" 51°00'36"	305	21.1 39.5	UCAC4 607-38491	12.72	7 <sup>h</sup> 18 <sup>m</sup> 56.435 <sup>s</sup> 31°14'04.677"	10.9	54	91.7	-44.4	24.1	-9.2	31.4	160	
2020/10/11 21:28:16	5287 Heishu	9.5	16.80	3.41	130	0.7	35°39'39" 51°08'32"	340	1.6 3.8	UCAC4 527-30141	13.44	6 <sup>h</sup> 39 <sup>m</sup> 28.558 <sup>s</sup> 15°19'45.996"	17.7	87	99.1	-47.4	33.9	0.7	30.8	98	
2020/10/12 02:54:54	10222 Klotz	8.5	17.07	5.56	86	0.7	36°42'34" 50°46'14"	21	2.3 3.0	UCAC4 522-1282	11.52	0 <sup>h</sup> 50 <sup>m</sup> 42.249 <sup>s</sup> 14°17'25.775"	11.9	278	171.6	-9.7	116.4	48.4	28.5	111	
2020/10/12 03:39:57	556 Phyllis	37.8	13.76	0.81	86	3.4	36°35'40" 50°47'45"	15	10.4 15.1	UCAC4 587-28341	13.65	6 <sup>h</sup> 20 <sup>m</sup> 35.467 <sup>s</sup> 27°20'59.932"	64.0	217	104.4	-2.5	40.3	53.8	28.3	100	
2020/10/12 03:41:33	931 Whittemora	45.3	13.87	0.69	253	3.7	36°46'07" 52°18'04"	8	1.5 15.4	UCAC4 525-28423	13.99	6 <sup>h</sup> 30 <sup>m</sup> 42.904 <sup>s</sup> 14°48'41.470"	52.9	205	101.4	-2.3	39.4	53.9	28.2	116	
2020/10/12 16:35:04	1190 Pelagia	17.4	18.33	4.77	94	0.6	34°58'46" 49°58'42"	265	3.6 4.2	UCAC4 322-105195	13.57	17 <sup>h</sup> 16 <sup>m</sup> 12.889 <sup>s</sup> −25°44'42.570"	3.3	222	60.7	-17.9	117.8	-19.8	23.0	167	
2020/10/12 18:30:38	26325 1998 VD29	10.2	17.80	7.82	236	1.4	39°34'27" 49°56'47"	93	0.8 2.8	TYC 7500-1314-1	9.98	22 <sup>h</sup> 24 <sup>m</sup> 13.656 <sup>s</sup> −33°33'39.803"	6.5	180	122.6	-35.0	162.4	-21.9	22.3	146	
2020/10/12 19:08:55	5754 1992 PR2	8.5	16.57	3.22	189	0.6	37°54'56" 48°43'05"	142	0.3 4.1	UCAC4 325-212352	13.41	20 <sup>h</sup> 17 <sup>m</sup> 04.814 <sup>s</sup> −25°02'12.091"	6.6	217	101.1	-39.7	157.0	-20.6	22.0	83	
2020/10/13 02:20:47	862 Franzia	27.3	15.56	6.27	194	0.7	36°04'42" 51°47'18"	356	3.4 5.5	TYC 255-398-1	9.30	10 <sup>h</sup> 52 <sup>m</sup> 14.440 <sup>s</sup> 0°51'06.683"	13.7	105	36.3	-15.5	19.0	32.7	19.2	196	
2020/10/13 02:38:57	5657 Groombridge	8.7	17.56	3.72	53	0.6	36°42'27" 50°26'06"	35	2.7 2.9	UCAC4 483-32781	13.87	7 <sup>h</sup> 04 <sup>m</sup> 59.196 <sup>s</sup> 6°34'10.790"	46.2	168	93.0	-12.6	46.0	35.4	19.1	118	
2020/10/13 15:52:17	700 Auravictrix	15.4	15.74	2.16	211	0.7	34°31'16" 51°34'48"	324	1.3 4.5	UCAC4 318-216642	13.74	18 <sup>h</sup> 51 <sup>m</sup> 07.954 <sup>s</sup> −26°28'20.592"	12.6	193	81.0	-11.3	125.3	-16.1	14.4	135	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 6		LinOccult 2.3.1				
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 (%)	$\sigma_{km}$
2020/10/13 16:20:54	214 Aschera	23.2	14.81	2.84	87	0.7	35°54'19" 49°18'30"	198	4.7	UCAC4 321-111376	12.06	17 <sup>h</sup> 21 <sup>m</sup> 23.739 <sup>s</sup> -25°50'05.851"	4.8	219	60.8	-15.9	105.0	-19.1	14.2	173
2020/10/13 23:02:27	65866 PA4	8.9	16.95	3.24	52	1.9	36°21'19" 50°30'50"	5	3.0	UCAC4 544-142345	13.77	22 <sup>h</sup> 06 <sup>m</sup> 52.700 <sup>s</sup> 18°38'24.511"	25.0	270	132.8	-43.1	146.8	-8.4	11.9	102
2020/10/14 17:36:40	1929 Kollaa	9.6	17.70	5.20	93	0.5	37°29'01" 49°43'27"	113	2.3	UCAC4 302-262089	12.51	19 <sup>h</sup> 26 <sup>m</sup> 51.435 <sup>s</sup> -29°39'21.393"	5.3	208	87.4	-28.1	117.3	-26.5	6.7	132
2020/10/14 17:50:18	15552 Sanchounkan	9.8	17.09	3.36	161	1.2	37°00'14" 48°40'26"	161	1.5	UCAC4 620-14164	13.78	4 <sup>h</sup> 09 <sup>m</sup> 49.016 <sup>s</sup> 33°55'49.973"	22.5	63	133.3	-30.1	103.6	-27.7	6.7	164
2020/10/14 19:52:58	24412 Ericpalmer	9.4	17.13	5.13	86	0.7	37°26'55" 49°50'54"	105	2.4	UCAC4 462-3319	12.01	2 <sup>h</sup> 27 <sup>m</sup> 49.878 <sup>s</sup> 2°13'10.307"	32.2	133	162.0	-44.8	138.1	-32.8	6.1	117
2020/10/14 20:09:08	699 Hela	17.2	14.03	2.03	114	0.9	36°36'22" 51°03'20"	12	2.6	UCAC4 462-107758	12.18	19 <sup>h</sup> 52 <sup>m</sup> 57.856 <sup>s</sup> 2°14'15.952"	18.1	251	98.5	-46.1	121.5	-32.7	6.1	70
2020/10/14 21:10:36	7750 McEwen	12.4	16.46	3.49	204	0.6	35°33'40" 51°49'13"	345	0.2	UCAC4 441-104263	13.01	19 <sup>h</sup> 29 <sup>m</sup> 03.722 <sup>s</sup> -1°51'10.991"	1.4	265	91.9	-48.6	115.6	-30.3	5.8	79
2020/10/14 21:59:49	2536 Kozyrev	10.3	15.95	2.64	119	1.4	37°00'42" 49°05'07"	154	1.6	UCAC4 586-26125	13.40	6 <sup>h</sup> 09 <sup>m</sup> 07.411 <sup>s</sup> 27°05'03.379"	38.1	92	109.7	-47.8	82.5	-26.6	5.6	77
2020/10/14 22:14:04	2911 Miahelena	14.7	17.10	6.65	30	2.2	36°20'37" 50°18'56"	8	3.4	TYC 738-1743-1	10.45	6 <sup>h</sup> 09 <sup>m</sup> 34.034 <sup>s</sup> 12°19'03.542"	29.4	107	109.0	-47.1	83.8	-25.3	5.5	168
2020/10/15 00:20:09	4484 Sif	21.3	17.31	5.39	159	0.8	37°41'22" 48°56'37"	141	3.1	UCAC4 586-43636	11.93	8 <sup>h</sup> 33 <sup>m</sup> 44.784 <sup>s</sup> 27°11'08.987"	37.5	91	78.0	-34.2	52.0	-9.8	5.1	132
2020/10/15 16:04:33	597 Bandusia	36.1	14.20	1.57	195	1.3	33°49'33" 49°18'53"	245	4.1	UCAC4 274-163138	12.92	18 <sup>h</sup> 15 <sup>m</sup> 55.236 <sup>s</sup> -35°23'30.833"	1.1	203	71.3	-13.9	88.3	-13.9	2.2	147
2020/10/15 20:09:02	982 Franklina	32.7	14.27	1.98	113	2.9	37°07'29" 49°11'42"	148	7.0	UCAC4 569-579	12.48	0 <sup>h</sup> 15 <sup>m</sup> 40.561 <sup>s</sup> 23°47'13.629"	64.0	179	157.8	-46.4	154.5	-38.8	1.6	116
2020/10/15 23:29:13	8388 FO6	8.2	17.15	4.66	224	1.0	37°11'41" 48°07'42"	163	0.4	UCAC4 428-126481	12.51	23 <sup>h</sup> 58 <sup>m</sup> 28.916 <sup>s</sup> -4°34'53.404"	18.5	238	154.7	-40.9	166.9	-28.7	1.2	109
2020/10/16 00:20:23	1342 Brabantia	18.0	15.55	3.26	66	2.1	37°00'54" 50°24'39"	52	5.8	UCAC4 705-26801	12.34	3 <sup>h</sup> 47 <sup>m</sup> 00.446 <sup>s</sup> 50°53'08.893"	83.8	281	128.7	-34.5	116.8	-22.3	1.2	100
2020/10/16 00:44:43	12243 RD1	8.8	17.99	6.50	103	1.8	37°22'14" 49°26'22"	131	1.9	UCAC4 623-30063	11.49	6 <sup>h</sup> 00 <sup>m</sup> 52.458 <sup>s</sup> 34°25'01.847"	69.9	134	112.2	-31.1	100.3	-19.0	1.1	133
2020/10/16 00:59:48	1183 Jutta	17.9	16.62	3.55	189	2.5	36°07'27" 48°21'04"	184	1.7	UCAC4 562-8081	13.11	3 <sup>h</sup> 50 <sup>m</sup> 10.741 <sup>s</sup> 22°20'12.713"	58.9	215	142.6	-28.8	131.1	-16.9	1.1	118
2020/10/16 02:07:11	23408 Beijinggaoyun	9.5	17.41	3.67	68	0.9	37°04'38" 50°23'04"	56	2.7	UCAC4 510-23714	13.77	6 <sup>h</sup> 20 <sup>m</sup> 15.664 <sup>s</sup> 11°55'40.347"	52.1	177	107.5	-18.4	98.3	-7.0	1.0	119
2020/10/16 15:59:45	390 Alma	23.7	15.97	2.89	62	0.7	35°25'40" 49°59'15"	264	4.5	UCAC4 309-107473	13.16	17 <sup>h</sup> 07 <sup>m</sup> 44.222 <sup>s</sup> -28°16'28.145"	2.2	218	55.2	-13.5	57.9	-10.0	0.2	202
2020/10/16 18:47:36	5502 Brashear	8.3	18.06	5.19	37	0.6	36°33'01" 50°20'04"	31	2.4	UCAC4 318-237049	12.88	20 <sup>h</sup> 22 <sup>m</sup> 58.261 <sup>s</sup> -26°28'08.242"	6.4	214	98.1	-38.6	99.1	-34.4	0.1	133
2020/10/16 19:25:02	1552 Bessel	18.6	16.93	4.68	147	1.0	38°20'26" 50°06'13"	88	3.1	UCAC4 602-43599	12.26	8 <sup>h</sup> 14 <sup>m</sup> 00.293 <sup>s</sup> 30°17'31.133"	1.6	41	84.8	-42.9	84.0	-38.6	0.1	150

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.				Table 1		Page 7		LinOccult 2.3.1			
		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 (%)	$\sigma_{km}$	
2020/10/17 00:24:39	9257 Ku-nisuke	10.1	16.87	3.32	83	0.8	36°45'31" 49°21'59"	156	2.7	UCAC4 484-3011	13.61	2 <sup>h</sup> 13 <sup>m</sup> 13.156 <sup>s</sup> 6°42'09.117"	37.8	226	168.6	-34.2	173.1	-34.1	0.2	116	
2020/10/17 01:33:21	195324 2002 EO123	8.3	19.75	6.15	122	0.6	36°08'28" 48°57'09"	185	1.1	UCAC4 466-576	13.60	0 <sup>h</sup> 24 <sup>m</sup> 30.352 <sup>s</sup> 3°02'38.383"	9.1	264	163.0	-24.0	158.8	-25.0	0.2	265	
2020/10/17 14:45:43	1554 Yu-goslavia	18.2	16.02	3.14	111	0.6	36°29'49" 51°02'10"	8	3.6	UNKNOWN UN-KNOWN	12.94	18 <sup>h</sup> 18 <sup>m</sup> 35.203 <sup>s</sup> -11°56'06.144"	27.6	191	70.6	-1.9	58.7	5.1	1.1	153	
2020/10/17 15:19:44	390 Alma	23.7	15.98	2.32	257	0.7	38°04'60" 48°03'46"	150	2.1	UCAC4 309-109473	13.79	17 <sup>h</sup> 09 <sup>m</sup> 13.738 <sup>s</sup> -28°15'26.912"	5.7	211	54.6	-7.3	43.5	-0.0	1.2	203	
2020/10/17 15:28:07	1096 Re-unerta	45.8	15.54	1.84	57	1.4	35°54'35" 50°30'14"	332	12.1	UNKNOWN UN-KNOWN	13.92	17 <sup>h</sup> 40 <sup>m</sup> 00.804 <sup>s</sup> -27°17'24.303"	8.3	207	61.2	-8.7	49.8	-1.3	1.2	138	
2020/10/17 16:01:28	1908 Pobeda	21.8	16.82	4.25	177	0.8	34°30'09" 51°10'04"	314	3.0	UCAC4 312-203164	12.59	18 <sup>h</sup> 22 <sup>m</sup> 55.252 <sup>s</sup> -27°45'28.913"	8.5	204	70.7	-14.1	58.9	-6.5	1.2	169	
2020/10/17 16:29:05	13962 Delambre	8.0	16.38	7.11	77	0.8	35°38'32" 50°35'57"	323	2.4	TYC 621-772-1	9.27	1 <sup>h</sup> 40 <sup>m</sup> 19.309 <sup>s</sup> 7°36'47.508"	15.6	97	177.0	-18.5	169.1	-10.8	1.3	96	
2020/10/17 20:48:20	24420 2000 BU22	17.0	18.70	6.76	25	1.1	36°26'54" 49°50'45"	153	2.5	UCAC4 417-797	11.95	0 <sup>h</sup> 39 <sup>m</sup> 13.889 <sup>s</sup> -6°38'26.585"	33.3	186	159.2	-49.2	146.2	-47.2	1.8	271	
2020/10/17 22:25:12	284 Amalia	53.1	12.93	1.45	242	6.4	37°58'48" 48°10'20"	150	0.1	UCAC4 508-461	11.81	0 <sup>h</sup> 16 <sup>m</sup> 20.907 <sup>s</sup> 11°30'52.379"	41.9	230	161.4	-47.4	145.4	-52.0	2.1	67	
2020/10/18 03:33:41	144 Vibilia	141.8	14.23	1.47	162	3.7	36°49'33" 51°27'56"	14	19.8	UCAC4 490-54787	13.08	11 <sup>h</sup> 25 <sup>m</sup> 25.830 <sup>s</sup> 7°54'33.531"	28.4	114	36.2	-5.0	55.0	-20.0	2.8	212	
2020/10/18 15:36:33	338 Budrosa	63.1	14.41	1.08	225	2.0	34°42'30" 51°48'27"	330	6.5	UCAC4 332-116441	13.83	17 <sup>h</sup> 44 <sup>m</sup> 39.913 <sup>s</sup> -23°44'21.745"	11.1	209	61.1	-10.4	35.1	1.3	5.2	187	
2020/10/18 18:15:07	160528 1996 RD32	10.5	19.03	6.49	197	0.7	34°51'10" 51°34'13"	329	1.2	UCAC4 454-982	12.54	0 <sup>h</sup> 44 <sup>m</sup> 44.736 <sup>s</sup> 0°45'07.830"	33.2	139	164.6	-35.0	137.4	-22.8	5.8	241	
2020/10/18 19:32:38	4162 SAF	23.4	17.36	4.14	214	1.1	37°31'27" 51°48'29"	24	2.6	UCAC4 393-106151	13.25	18 <sup>h</sup> 59 <sup>m</sup> 38.767 <sup>s</sup> -11°35'04.035"	2.2	249	79.5	-44.4	51.2	-34.8	6.1	221	
2020/10/18 21:08:59	282 Clorinde	39.0	14.61	1.50	175	8.7	35°34'45" 48°32'25"	197	2.0	UCAC4 500-12814	13.43	5 <sup>h</sup> 29 <sup>m</sup> 35.127 <sup>s</sup> 9°48'52.875"	26.0	107	122.4	-50.0	151.0	-48.2	6.6	82	
2020/10/18 22:08:21	971 Alsatia	63.8	14.23	1.46	69	5.9	36°57'41" 49°36'10"	136	20.0	UCAC4 551-30661	13.10	6 <sup>h</sup> 39 <sup>m</sup> 58.098 <sup>s</sup> 20°05'56.145"	32.1	97	106.3	-48.8	136.3	-54.2	6.7	98	
2020/10/19 01:56:52	711 Marmulla	14.9	17.01	4.01	25	0.8	36°27'28" 49°50'53"	151	4.1	UCAC4 575-43338	13.03	8 <sup>h</sup> 34 <sup>m</sup> 59.557 <sup>s</sup> 24°48'42.556"	53.1	120	81.1	-20.8	112.8	-46.2	7.7	143	
2020/10/19 02:59:45	26636 2000 HX57	8.2	17.42	4.31	7	1.3	36°11'25" 50°03'44"	283	3.1	UCAC4 587-18838	13.13	5 <sup>h</sup> 36 <sup>m</sup> 25.986 <sup>s</sup> 27°15'36.075"	60.4	230	121.1	-10.7	153.2	-37.6	8.0	105	
2020/10/19 19:16:46	6650 Mori-moto	8.6	17.54	5.61	130	1.5	37°54'07" 49°30'50"	117	1.6	UCAC4 370-186053	11.93	21 <sup>h</sup> 35 <sup>m</sup> 19.611 <sup>s</sup> -16°00'40.438"	18.8	211	114.3	-43.1	72.5	-26.6	12.8	116	
2020/10/19 19:18:24	25917 2001 DT6	9.6	18.02	5.06	249	0.7	35°36'53" 52°14'40"	349	0.6	UCAC4 495-5006	12.97	3 <sup>h</sup> 24 <sup>m</sup> 05.677 <sup>s</sup> 8°48'05.356"	28.0	111	154.0	-43.2	160.5	-26.8	12.9	147	
2020/10/19 20:32:06	15626 2000 HR50	10.6	18.61	5.07	56	1.2	36°01'06" 50°31'11"	340	2.2	UCAC4 556-36804	13.55	7 <sup>h</sup> 01 <sup>m</sup> 14.186 <sup>s</sup> 21°09'37.509"	14.7	74	102.4	-49.3	145.2	-38.3	13.4	182	



Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 8		LinOccult 2.3.1			
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 (%)	$\sigma_{km}$
2020/10/19 21:12:10	16963 RE2	8.3	17.46	12.54	127	1.3	34°42'09" 50°34'14"	297	0.3 6.3	HIP 20268	4.92	4 <sup>h</sup> 20 <sup>m</sup> 41.225 <sup>s</sup> 6°07'49.938"	33.9	127	139.8	-50.4	164.9	-44.2	13.6	52
2020/10/19 23:18:00	152 Atala	72.1	13.14	1.29	114	12.0	37°20'09" 50°49'37"	41	15.1 22.4	UCAC4 590-14116	12.24	4 <sup>h</sup> 47 <sup>m</sup> 00.337 <sup>s</sup> 27°59'20.446"	64.6	143	132.6	-43.4	172.9	-59.0	14.3	127
2020/10/20 01:27:33	201 Penelope	68.4	12.79	0.93	188	27.4	38°49'37" 49°37'60"	104	5.2 26.0	UCAC4 528-14243	12.45	5 <sup>h</sup> 31 <sup>m</sup> 34.084 <sup>s</sup> 15°24'21.716"	55.4	187	123.4	-25.6	167.4	-58.9	15.2	103
2020/10/20 02:38:43	5692 Shirao	10.3	17.47	4.57	84	0.9	35°51'20" 50°44'49"	338	2.6 3.3	UCAC4 491-6449	12.92	4 <sup>h</sup> 05 <sup>m</sup> 09.170 <sup>s</sup> 8°05'30.701"	34.7	236	144.1	-14.3	163.0	-51.6	15.5	126
2020/10/20 03:20:26	2003 Harding	12.6	17.06	5.15	123	3.5	36°15'58" 51°09'05"	359	2.5 4.1	UCAC4 569-21719	11.92	5 <sup>h</sup> 57 <sup>m</sup> 23.409 <sup>s</sup> 23°43'16.141"	56.9	227	117.5	-7.6	164.0	-46.0	15.7	124
2020/10/20 14:31:49	3981 Stodola	22.6	18.53	4.90	225	0.9	37°08'59" 48°06'21"	164	2.4 4.3	UCAC4 328-143901	13.64	18 <sup>h</sup> 21 <sup>m</sup> 10.493 <sup>s</sup> -24°30'13.296"	15.2	188	67.4	-0.7	14.7	14.0	19.9	210
2020/10/20 15:11:55	1251 Hedera	22.5	16.10	3.43	142	0.7	35°40'22" 51°15'52"	342	3.6 4.9	UCAC4 347-121503	12.71	17 <sup>h</sup> 56 <sup>m</sup> 38.762 <sup>s</sup> -20°40'11.936"	16.1	204	61.8	-7.0	9.0	11.1	20.1	184
2020/10/20 15:18:22	654 Zelinda	127.4	14.24	1.36	171	3.7	37°50'04" 48°53'23"	139	18.0 28.8	UCAC4 335-102031	13.25	17 <sup>h</sup> 20 <sup>m</sup> 56.011 <sup>s</sup> -23°09'28.839"	10.5	213	53.6	-8.0	0.4	10.5	20.2	172
2020/10/20 16:17:01	310432 1999 XN226	9.5	20.14	8.66	89	0.7	37°22'30" 49°39'57"	119	1.2 1.2	UCAC4 549-145183	11.49	23 <sup>h</sup> 01 <sup>m</sup> 54.608 <sup>s</sup> 19°38'08.727"	48.8	124	140.4	-17.5	93.3	4.8	20.6	318
2020/10/20 18:06:55	27142 1998 XG61	9.5	16.79	4.58	227	1.9	34°09'24" 51°34'34"	318	0.3 3.9	UCAC4 657-20228	12.22	4 <sup>h</sup> 13 <sup>m</sup> 18.238 <sup>s</sup> 41°13'28.981"	32.8	63	134.8	-34.4	156.4	-9.2	21.2	98
2020/10/20 20:04:31	41351 2000 AS27	8.5	19.25	5.69	160	1.6	36°27'47" 51°28'41"	5	1.2 1.7	UCAC4 379-165611	13.57	22 <sup>h</sup> 50 <sup>m</sup> 15.599 <sup>s</sup> -14°13'52.013"	22.3	206	130.6	-47.9	75.0	-26.8	22.1	196
2020/10/20 21:02:14	5397 Vojislava	9.2	15.24	1.75	25	1.1	36°36'31" 49°57'34"	113	5.3 5.7	UCAC4 507-555	13.73	0 <sup>h</sup> 20 <sup>m</sup> 54.516 <sup>s</sup> 11°12'17.726"	49.1	205	159.9	-50.6	105.0	-35.7	22.5	64
2020/10/20 23:08:54	808 Merxia	32.5	14.20	1.07	65	3.5	36°17'38" 49°27'59"	180	10.2 12.3	UCAC4 537-30556	13.63	6 <sup>h</sup> 38 <sup>m</sup> 41.297 <sup>s</sup> 17°20'37.013"	40.8	114	108.4	-44.7	164.8	-54.2	23.3	105
2020/10/20 23:51:13	4293 Masumi	12.2	15.98	3.31	140	1.1	36°01'22" 51°17'23"	352	1.8 5.0	UCAC4 423-999	12.72	0 <sup>h</sup> 48 <sup>m</sup> 23.091 <sup>s</sup> -5°33'47.141"	18.8	236	158.8	-39.8	102.9	-59.1	23.6	97
2020/10/21 16:44:11	2541 Edebono	13.0	17.78	3.82	210	0.5	34°22'59" 51°30'13"	320	1.4 3.0	UCAC4 326-185604	13.99	19 <sup>h</sup> 02 <sup>m</sup> 40.713 <sup>s</sup> -24°54'50.000"	9.9	209	75.7	-22.1	8.8	6.8	30.6	172
2020/10/21 17:23:52	53 Kalypso	115.4	15.00	1.53	159	3.9	35°13'01" 51°18'21"	331	16.8 23.3	UNKNOWN UN- KNOWN	13.78	17 <sup>h</sup> 53 <sup>m</sup> 19.906 <sup>s</sup> -20°30'33.481"	2.1	234	60.0	-28.3	8.5	2.7	30.9	195
2020/10/21 19:52:13	7521 1990 QS2	8.6	16.86	5.38	143	0.7	35°12'43" 51°08'15"	328	1.3 3.1	UCAC4 485-2476	11.49	1 <sup>h</sup> 44 <sup>m</sup> 31.730 <sup>s</sup> 6°56'06.133"	43.6	151	176.0	-47.3	109.3	-16.8	31.9	110
2020/10/22 14:51:01	2848 ASP	25.2	18.03	4.08	162	0.8	37°32'06" 48°50'35"	146	3.6 4.9	UCAC4 330-115301	13.97	17 <sup>h</sup> 45 <sup>m</sup> 18.192 <sup>s</sup> -24°04'35.680"	12.9	203	57.3	-4.3	21.4	15.6	40.2	206
2020/10/22 19:38:08	6505 Muzzio	20.0	16.09	2.39	124	1.8	37°33'03" 49°17'20"	133	3.9 6.1	UCAC4 607-9314	13.83	3 <sup>h</sup> 25 <sup>m</sup> 40.478 <sup>s</sup> 31°22'42.998"	49.5	98	150.1	-46.3	126.1	-6.5	42.3	130
2020/10/22 23:11:17	11903 1991 RD7	8.2	16.13	3.10	237	0.9	38°09'49" 51°49'10"	34	0.0 4.1	UCAC4 638-12621	13.09	3 <sup>h</sup> 16 <sup>m</sup> 27.176 <sup>s</sup> 37°29'48.655"	76.8	204	147.5	-45.0	123.2	-38.1	43.9	80

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/ time.				Table 1		Page 9		LinOccult 2.3.1			
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 (%)	$\sigma_{km}$	
2020/10/22 23:50:51	1567 Alikoski	67.8	15.64	2.28	119	2.2	35°22'46'' 50°56'54''	327	11.9 14.7	UCAC4 586-46375	13.50	10 <sup>h</sup> 16 <sup>m</sup> 06.264 <sup>s</sup> 27°10'25.452''	21.6	73	64.8	-40.4	145.1	-44.1	44.2	183	
2020/10/23 03:38:58	44550 1999 BL23	8.1	18.15	5.77	175	1.6	35°25'41'' 51°31'11''	339	1.0 2.4	UCAC4 569-15294	12.39	5 <sup>h</sup> 11 <sup>m</sup> 23.834 <sup>s</sup> 23°46'23.262''	46.4	250	131.0	-5.4	143.7	-63.7	46.0	133	
2020/10/23 15:55:17	2494 Inge	55.6	16.87	4.93	68	2.0	35°31'38'' 50°24'48''	307	10.5 11.1	UCAC4 344-148196	11.96	18 <sup>h</sup> 29 <sup>m</sup> 53.819 <sup>s</sup> -21°15'40.649''	14.0	209	66.6	-14.8	25.3	17.1	51.2	199	
2020/10/23 17:16:00	577 Rhea	39.5	14.44	1.09	137	2.7	37°40'38'' 49°12'17''	133	7.0 11.6	UCAC4 362-196616	13.85	20 <sup>h</sup> 46 <sup>m</sup> 41.724 <sup>s</sup> -17°41'26.521''	20.9	197	98.8	-27.7	7.8	14.6	51.8	135	
2020/10/24 01:14:07	1492 Op- polzer	12.3	17.62	7.31	106	0.6	36°13'15'' 50°59'49''	357	2.8 4.1	UCAC4 524-47855	10.31	8 <sup>h</sup> 38 <sup>m</sup> 13.664 <sup>s</sup> 14°39'50.003''	41.2	121	82.7	-28.7	172.5	-46.9	55.3	119	
2020/10/24 15:44:21	5431 Maxine- helin	8.6	16.35	7.46	246	0.7	35°55'37'' 52°14'41''	354	0.0 10.2	TYC 1074- 1347-1	8.89	20 <sup>h</sup> 24 <sup>m</sup> 07.542 <sup>s</sup> 8°07'10.086''	48.3	180	98.3	-13.4	31.0	18.9	61.3	33	
2020/10/24 19:05:14	1893 Jakoba	21.2	15.43	2.71	68	1.8	36°07'13'' 50°39'03''	350	6.8 8.7	UCAC4 477-3253	12.82	2 <sup>h</sup> 20 <sup>m</sup> 43.580 <sup>s</sup> 5°18'46.392''	34.8	130	171.2	-43.4	78.1	13.1	62.6	97	
2020/10/24 20:25:41	1171 Rusthawelia	70.1	13.52	7.91	114	7.9	35°31'49'' 50°57'18''	332	1.6 65.9	HIP 5315	5.61	1 <sup>h</sup> 07 <sup>m</sup> 59.870 <sup>s</sup> 1°59'25.643''	42.1	179	164.1	-50.7	59.4	4.7	63.2	37	
2020/10/24 23:08:49	1301 Yvonne	22.8	15.32	1.95	51	1.4	35°41'03'' 50°17'54''	303	8.4 9.7	UCAC4 340-17585	13.56	6 <sup>h</sup> 49 <sup>m</sup> 31.791 <sup>s</sup> -22°07'31.728''	7.6	139	100.9	-45.9	123.1	-18.1	64.3	93	
2020/10/25 01:18:26	1301 Yvonne	22.8	15.32	2.46	181	1.4	38°41'05'' 50°35'40''	70	1.5 9.7	UCAC4 340-17614	12.98	6 <sup>h</sup> 49 <sup>m</sup> 36.453 <sup>s</sup> -22°08'54.198''	17.1	168	100.9	-28.3	122.5	-37.8	65.2	93	
2020/10/25 02:52:16	3117 Niepce	10.7	17.99	4.69	84	0.8	36°28'11'' 50°47'27''	9	2.4 2.8	UCAC4 555-42632	13.31	7 <sup>h</sup> 58 <sup>m</sup> 38.312 <sup>s</sup> 20°56'35.367''	60.7	168	94.4	-13.3	157.0	-50.5	65.8	150	
2020/10/25 14:42:53	984 Gretia	31.9	14.87	1.98	174	1.0	37°53'40'' 48°53'18''	138	4.4 8.1	UCAC4 321-177148	13.09	18 <sup>h</sup> 23 <sup>m</sup> 33.405 <sup>s</sup> -25°57'06.056''	12.9	194	63.0	-3.9	50.9	14.8	70.3	158	
2020/10/25 14:48:34	553 Kundry	12.0	16.25	3.86	4	1.1	36°17'57'' 50°04'60''	13	5.0 5.0	UCAC4 339-196740	12.42	21 <sup>h</sup> 26 <sup>m</sup> 33.724 <sup>s</sup> -22°18'25.661''	13.4	153	104.4	-4.7	9.7	15.4	70.4	96	
2020/10/25 16:29:47	7750 McEwen	12.4	16.60	5.55	165	0.5	36°19'24'' 48°33'56''	179	0.9 5.8	UCAC4 441-112034	11.06	19 <sup>h</sup> 52 <sup>m</sup> 10.776 <sup>s</sup> -1°48'10.053''	35.5	205	87.5	-21.0	35.8	22.3	71.0	85	
2020/10/25 17:12:08	9039 1990 WB4	10.9	18.24	4.63	37	0.8	36°19'31'' 49°43'05''	176	2.5 2.6	UCAC4 400-130462	13.63	20 <sup>h</sup> 30 <sup>m</sup> 23.209 <sup>s</sup> -10°06'18.219''	27.2	204	94.9	-27.7	24.1	23.4	71.3	167	
2020/10/25 17:36:44	22044 1999 XS206	11.7	18.13	5.53	40	0.9	36°47'25'' 49°53'03''	117	2.6 2.7	UCAC4 369-179322	12.61	20 <sup>h</sup> 37 <sup>m</sup> 10.324 <sup>s</sup> -16°12'14.721''	20.1	206	95.0	-31.5	21.4	23.4	71.4	175	
2020/10/25 19:00:38	9512 Feijun- long	9.7	16.64	3.96	106	0.8	37°31'10'' 49°31'43''	123	2.2 3.9	UCAC4 435-4327	12.71	3 <sup>h</sup> 20 <sup>m</sup> 42.072 <sup>s</sup> -3°02'49.071''	19.7	121	155.0	-43.2	77.4	20.5	71.9	99	
2020/10/25 21:15:33	44295 1998 QU89	8.4	18.30	6.92	21	0.7	36°06'47'' 49°53'33''	216	2.3 2.4	TYC 773- 1086-1	11.38	7 <sup>h</sup> 34 <sup>m</sup> 27.863 <sup>s</sup> 12°42'19.023''	13.7	86	99.2	-52.5	141.2	7.6	72.8	142	
2020/10/26 21:09:49	13358 Revelle	9.0	17.04	3.51	52	1.1	37°00'34'' 50°04'38''	86	3.1 3.5	UNKNOWN UN- KNOWN	13.57	4 <sup>h</sup> 52 <sup>m</sup> 29.724 <sup>s</sup> 9°51'54.943''	36.2	123	139.0	-52.8	89.9	17.2	80.9	101	
2020/10/26 21:34:27	26520 2000 CQ75	8.3	16.64	3.26	239	0.8	35°49'38'' 52°10'24''	352	0.1 3.8	UCAC4 495-39357	13.43	7 <sup>h</sup> 10 <sup>m</sup> 08.105 <sup>s</sup> 8°49'04.183''	18.4	98	105.4	-52.7	123.0	14.4	81.1	87	

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.		Table 1		Page 10		LinOccult 2.3.1				
		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 (%)	$\sigma_{km}$
2020/10/26 23:42:17	39213 XZ40	8.4	16.47	4.53	5	0.9	36°18'36'' 50°00'23''	160	3.6	UCAC4 644-13013	11.95	3 <sup>h</sup> 11 <sup>m</sup> 47.659 <sup>s</sup> 38°44'07.924''	72.2	239	150.1	-42.6	76.0	-3.1	81.7	94
2020/10/27 15:40:42	4073 Ruianzhongxue	11.6	16.99	4.23	124	1.4	35°20'02'' 50°59'12''	327	2.2	UCAC4 382-161040	12.78	21 <sup>h</sup> 55 <sup>m</sup> 11.261 <sup>s</sup> −13°43'21.301''	23.8	158	111.8	-13.6	25.3	19.5	86.4	119
2020/10/27 15:52:15	13917 Correggia	9.0	16.97	4.49	185	1.5	34°19'60'' 51°09'06''	311	0.7	UCAC4 663-35000	12.50	5 <sup>h</sup> 14 <sup>m</sup> 15.016 <sup>s</sup> 42°28'45.133''	13.1	37	130.3	-15.5	91.7	20.9	86.3	102
2020/10/27 16:05:00	1096 Re-unerta	45.8	15.56	2.04	113	1.3	35°26'39'' 49°11'30''	212	9.3	UCAC4 312-134286	13.70	18 <sup>h</sup> 00 <sup>m</sup> 43.188 <sup>s</sup> −27°36'53.773''	3.2	218	55.9	-17.5	80.9	22.3	86.5	143
2020/10/27 20:21:55	10235 1998 QR37	9.7	17.12	5.44	158	0.7	35°11'06'' 51°17'05''	330	1.4	UCAC4 540-4547	11.69	2 <sup>h</sup> 28 <sup>m</sup> 52.242 <sup>s</sup> 17°59'57.897''	54.8	148	173.1	-51.5	47.8	29.7	87.6	124
2020/10/27 23:23:25	11441 Anadiego	8.7	16.33	2.83	151	0.6	35°35'45'' 48°46'14''	199	0.7	UCAC4 505-39810	13.58	7 <sup>h</sup> 17 <sup>m</sup> 24.126 <sup>s</sup> 10°58'18.979''	36.2	120	105.1	-45.1	112.6	9.6	88.4	79
2020/10/28 00:41:19	11441 Anadiego	8.7	16.33	3.69	138	0.6	35°17'51'' 48°59'04''	211	1.0	UCAC4 505-39824	12.67	7 <sup>h</sup> 17 <sup>m</sup> 27.387 <sup>s</sup> 10°57'39.633''	45.6	142	105.1	-34.7	112.0	-1.9	88.7	79
2020/10/28 03:44:04	1133 Lugduna	11.9	15.99	2.48	134	1.2	36°19'29'' 48°50'51''	179	1.7	UCAC4 574-39168	13.62	7 <sup>h</sup> 34 <sup>m</sup> 50.296 <sup>s</sup> 24°38'32.646''	62.1	211	103.4	-5.8	114.4	-29.2	89.5	86
2020/10/29 01:07:37	440 Theodora	15.9	15.00	1.45	117	2.3	36°18'37'' 51°06'10''	1	2.7	UCAC4 573-33922	13.88	6 <sup>h</sup> 45 <sup>m</sup> 47.090 <sup>s</sup> 24°28'13.251''	63.4	159	115.4	-31.0	92.6	4.2	94.1	79
2020/10/29 15:20:58	5337 Aoki	14.9	17.63	4.53	251	0.5	37°27'47'' 47°55'50''	160	1.4	UCAC4 363-168204	13.12	18 <sup>h</sup> 54 <sup>m</sup> 05.968 <sup>s</sup> −17°33'22.641''	19.9	202	66.7	-11.0	92.4	13.6	96.4	242
2020/10/29 15:25:36	2646 Abetti	22.4	17.43	4.25	30	0.7	35°51'52'' 50°02'22''	268	3.1	UCAC4 296-187450	13.20	18 <sup>h</sup> 21 <sup>m</sup> 03.659 <sup>s</sup> −30°51'50.502''	4.7	206	58.5	-11.7	99.6	14.3	96.4	285
2020/10/29 15:42:57	49965 1999 XA231	8.6	15.64	3.49	31	0.9	36°02'28'' 50°16'41''	326	4.1	UCAC4 549-5893	12.20	3 <sup>h</sup> 08 <sup>m</sup> 56.913 <sup>s</sup> 19°46'17.964''	10.8	72	166.0	-14.5	35.9	17.0	96.4	76
2020/10/29 17:39:39	85 Io	154.8	12.45	0.58	95	4.7	36°03'17'' 49°12'35''	190	35.4	UCAC4 388-108072	12.83	18 <sup>h</sup> 45 <sup>m</sup> 04.436 <sup>s</sup> −12°26'37.740''	9.4	237	65.2	-33.0	95.6	32.9	96.7	130
2020/10/29 17:48:38	232 Russia	53.3	15.00	1.42	243	6.1	38°07'53'' 48°13'55''	147	2.1	UCAC4 518-8851	13.92	4 <sup>h</sup> 44 <sup>m</sup> 52.072 <sup>s</sup> 13°34'26.057''	10.8	82	144.0	-34.4	55.2	33.9	96.7	115
2020/10/29 18:09:58	3687 Dzus	28.6	16.42	4.56	182	0.9	36°09'26'' 48°24'55''	183	3.8	UCAC4 404-80353	11.88	18 <sup>h</sup> 35 <sup>m</sup> 26.240 <sup>s</sup> −9°20'48.693''	6.3	247	63.4	-37.5	98.2	36.1	96.8	163
2020/10/29 19:26:26	3339 Treshnikov	32.8	16.68	6.27	48	2.2	36°24'20'' 49°37'16''	170	6.5	TYC 67-1336-1	10.41	3 <sup>h</sup> 39 <sup>m</sup> 22.366 <sup>s</sup> 4°37'36.816''	29.3	121	157.7	-47.3	37.5	41.6	97.0	196
2020/10/29 21:29:13	2808 Belgrano	17.1	15.84	3.18	102	2.2	36°48'00'' 49°11'34''	159	4.0	UCAC4 517-152	12.72	0 <sup>h</sup> 05 <sup>m</sup> 08.062 <sup>s</sup> 13°13'38.874''	43.1	231	147.9	-53.8	19.8	40.3	97.2	111
2020/10/30 01:05:56	12658 Peiraos	18.7	17.97	4.60	132	1.2	36°01'05'' 51°13'02''	352	2.7	UCAC4 491-2451	13.39	1 <sup>h</sup> 40 <sup>m</sup> 35.198 <sup>s</sup> 8°04'54.425''	21.3	257	169.2	-31.5	6.9	14.5	97.7	233
2020/10/30 16:56:20	46564 1991 RA11	11.7	16.83	3.37	238	1.0	38°10'27'' 48°17'48''	145	0.5	UCAC4 627-13671	13.51	3 <sup>h</sup> 54 <sup>m</sup> 24.531 <sup>s</sup> 35°16'46.602''	27.0	66	149.9	-26.5	40.7	25.9	99.1	117
2020/10/30 18:21:03	668 Dora	26.8	16.71	3.38	150	0.9	34°16'58'' 49°39'23''	253	4.3	UCAC4 370-164646	13.38	19 <sup>h</sup> 08 <sup>m</sup> 35.527 <sup>s</sup> −16°06'17.464''	3.4	240	69.2	-39.4	102.0	37.4	99.2	169

Longitude = 36.287(36°17'11.5'') Latitude = 50.047(50°02'50.8'')										Sorted by date/time.			Table 1		Page 11		LinOccult 2.3.1			
		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 (%)	$\sigma_{km}$
2020/10/30 23:19:37	1022 Olympiada	26.4	15.77	4.56	124	12.7	36°54'43" 49°00'32"	159	4.9	TYC 732-2812-1	11.23	6 <sup>h</sup> 23 <sup>m</sup> 01.614 <sup>s</sup> 9°12'34.725"	42.4	138	120.8	-46.4	65.0	38.6	99.5	154
2020/10/31 02:51:07	13441 Jan-merlin	9.1	16.21	3.26	119	1.2	37°12'01" 49°09'23"	147	1.5	UCAC4 492-10042	13.00	5 <sup>h</sup> 06 <sup>m</sup> 41.251 <sup>s</sup> 8°20'13.981"	35.7	235	139.3	-15.0	44.5	8.4	99.7	80
2020/10/31 04:19:35	6326 Idamiyoshi	9.0	16.87	3.21	222	1.3	33°57'28" 51°23'14"	312	0.3	UCAC4 497-16995	13.72	5 <sup>h</sup> 56 <sup>m</sup> 14.523 <sup>s</sup> 9°19'37.702"	31.0	245	127.5	-1.1	55.9	-4.9	99.7	95
2020/10/31 19:47:56	44443 UY19	12.2	17.51	3.95	39	0.8	36°41'26" 49°48'48"	132	3.2	UCAC4 550-7757	13.59	3 <sup>h</sup> 47 <sup>m</sup> 56.158 <sup>s</sup> 19°49'50.744"	44.6	116	159.4	-50.1	18.6	46.6	99.9	147
2020/10/31 21:11:18	17618 VO	8.5	18.49	6.29	199	1.1	37°52'56" 48°35'32"	145	1.0	UCAC4 340-203427	12.21	22 <sup>h</sup> 21 <sup>m</sup> 57.251 <sup>s</sup> -22°01'40.429"	1.0	233	110.2	-54.5	71.9	52.1	99.9	158
2020/10/31 22:08:36	5287 Heishu	9.5	16.48	3.91	179	1.5	36°15'05" 48°26'30"	181	0.5	UCAC4 521-34249	12.60	6 <sup>h</sup> 55 <sup>m</sup> 51.130 <sup>s</sup> 14°11'40.012"	33.2	109	114.7	-53.0	61.5	51.9	99.8	87
2020/10/31 23:56:14	5416 Es-tremadoyro	8.7	17.50	3.87	16	2.4	36°04'08" 50°03'01"	271	3.1	UCAC4 579-33058	13.66	6 <sup>h</sup> 50 <sup>m</sup> 07.504 <sup>s</sup> 25°47'54.163"	58.5	130	117.4	-42.1	58.8	43.2	99.8	112