

ASTEROID-DEEPSKY APPULSES IN 2023

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The following list is a *very small* subset of the results of a search for asteroid-deepsky appulses for 2023, presenting only the highlights for the year based on close approaches of brighter asteroids to brighter DSOs. For the complete set visit

<https://www.minorplanet.info/php/dsoappulses.php>

For any event not covered, the Minor Planet Center's web site at <https://www.minorplanetcenter.net/cgi-bin/checkmp.cgi> allows you to enter the location of a suspected asteroid or supernova and check if there are any known targets in the area.

The table gives the following data:

Date/Time	Universal Date (MM DD) and Time of closest approach.
#/Name	The number and name of the asteroid.
RA/Dec	The J2000 position of the asteroid.
AM	The approximate visual magnitude of the asteroid.
Sep/PA	The separation in arcseconds and the position angle from the DSO to the asteroid.
DSO	The DSO name or catalog designation.
DM	The approximate total magnitude of the DSO.
DT	DSO Type: OC = Open Cluster; GC = Globular Cluster; G = Galaxy.
SE/ME	The elongation in degrees from the sun and moon, respectively.
MP	The phase of the moon: 0 = New, 1.0 = Full. Positive = waxing; Negative = waning.

Date	UT	#	Name	RA	Dec	AM	Sep	PA	DSO	DM	DT	SE	ME	MP
02 15 09:32		631	Philippina	09:11.41	-14 50.7	12.5	179	207	NGC 2781	11.6	G	151 108	-0.31	
02 23 11:37		68	Leto	12:58.10	+01 34.9	12.3	4	208	NGC 4845	11.2	G	141 172	0.14	
02 25 04:08		96	Aegle	11:54.78	-14 01.3	11.7	212	161	NGC 3962	10.7	G	149 142	0.29	
02 26 01:49		410	Chloris	12:42.76	+13 13.1	12.4	277	231	NGC 4639	11.5	G	148 129	0.38	
02 26 14:58		1	Ceres	12:43.93	+13 07.0	7.2	90	226	NGC 4654	10.5	G	148 123	0.43	
03 19 00:32		753	Tiflis	12:22.48	+15 27.9	12.9	322	199	NGC 4312	11.7	G	164 141	-0.10	
03 22 05:19		1	Ceres	12:27.17	+15 30.7	6.9	170	20	NGC 4421	11.6	G	163 163	0.00	
03 23 04:31		410	Chloris	12:25.60	+16 31.8	11.9	186	27	NGC 4383	12.1	G	162 152	0.03	
03 23 14:13		1	Ceres	12:25.99	+15 36.9	6.9	262	201	NGC 4396	12.6	G	163 148	0.05	
03 24 07:13		1	Ceres	12:25.37	+15 40.1	6.9	194	19	NGC 4379	11.7	G	163 139	0.09	
03 24 22:13		179	Klytaemnestra	11:39.27	-09 18.1	12.9	131	27	NGC 3771	12.6	G	168 133	0.13	
03 24 23:19		410	Chloris	12:24.05	+16 43.4	11.9	97	26	NGC 4350	11.0	G	162 130	0.13	
03 25 07:13		410	Chloris	12:23.75	+16 45.5	11.9	101	26	NGC 4340	11.2	G	162 125	0.16	
03 26 13:42		1	Ceres	12:23.41	+15 49.4	6.9	23	19	NGC 4328	13.0	G	162 110	0.26	
03 27 00:18		1	Ceres	12:23.02	+15 51.1	6.9	68	16	M100	9.4	G	162 105	0.30	
04 13 09:33		68	Leto	12:22.54	+04 36.7	11.9	166	13	NGC 4303A	13.0	G	159 110	-0.50	
04 13 14:53		194	Prokne	12:37.90	+11 52.1	12.3	155	36	M58	9.7	G	156 113	-0.47	
04 14 10:41		6	Hebe	08:14.23	+21 16.1	10.6	292	175	NGC 2545	12.4	G	97 172	-0.38	
04 14 15:08		138	Tolosa	12:47.87	-01 39.2	12.4	73	199	NGC 4690	12.9	G	167 120	-0.36	
04 14 22:36		68	Leto	12:21.36	+04 40.6	11.9	280	12	NGC 4292	12.2	G	158 133	-0.32	
04 15 10:31		270	Anahita	13:04.29	-10 21.2	11.8	16	207	NGC 4939	11.3	G	173 123	-0.27	
04 16 15:10		194	Prokne	12:35.65	+12 15.1	12.3	78	35	NGC 4550	11.7	G	153 155	-0.15	
04 18 03:31		68	Leto	12:19.00	+04 47.7	12.0	16	190	NGC 4255	12.8	G	154 176	-0.05	
04 21 17:57		579	Sidonia	13:53.00	+02 49.9	12.4	4	195	NGC 5335	12.8	G	165 150	0.03	
04 26 04:26		194	Prokne	12:29.21	+13 14.8	12.5	191	30	NGC 4461	11.2	G	143 74	0.34	
04 26 11:04		194	Prokne	12:29.05	+13 16.2	12.5	81	31	NGC 4458	12.1	G	143 70	0.37	
05 19 14:32		268	Adorea	15:13.78	-14 17.4	12.3	87	192	NGC 5878	11.5	G	171 171	0.00	
06 12 23:50		1	Ceres	12:08.42	+10 26.1	8.3	267	46	NGC 4124	11.4	G	96 156	-0.26	
06 18 10:44		393	Lampetia	19:08.52	+04 39.6	10.7	184	243	NGC 6756	10.6	OC	145 144	0.00	
07 12 14:28		94	Aurora	17:59.02	-34 34.1	12.8	114	7	NGC 6453	9.9	GC	157 140	-0.24	
07 16 22:33		247	Eukrate	20:58.01	-51 55.7	12.9	229	164	NGC 6984	12.7	G	146 148	-0.01	
07 23 14:06		739	Mandeville	20:53.35	-12 29.3	12.9	208	321	M72	9.4	GC	167 128	0.28	
07 23 20:22		148	Gallia	01:59.60	-06 03.0	12.2	312	197	NGC 779	11.2	G	95 156	0.30	
08 13 09:51		47	Aglaja	22:32.47	-14 10.9	11.6	244	165	NGC 7302	12.3	G	165 133	-0.08	
08 22 02:38		148	Gallia	02:32.79	-10 46.9	11.7	254	227	NGC 977	13.0	G	114 155	0.28	
09 07 10:56		148	Gallia	02:43.77	-14 44.6	11.4	65	66	NGC 1076	13.0	G	125 56	-0.44	
09 10 08:12		140	Siwa	01:50.52	+06 07.5	12.3	37	145	NGC 693	12.4	G	139 88	-0.19	
09 10 15:09		148	Gallia	02:45.09	-15 35.6	11.4	99	250	NGC 1081	13.0	G	127 89	-0.17	
09 12 22:28		326	Tamara	20:07.22	-56 24.7	12.7	212	102	NGC 6855	12.8	G	115 135	-0.04	
09 14 10:45		140	Siwa	01:48.97	+05 52.5	12.2	109	147	NGC 676	10.5	G	143 137	0.00	
09 17 04:58		304	Olga	03:04.08	-01 04.1	12.9	259	78	NGC 1194	12.9	G	128 150	0.04	
10 13 14:16		678	Fredegundis	00:02.40	+12 56.9	11.7	7	147	NGC 7810	13.0	G	162 167	-0.01	
10 18 08:38		459	Signe	01:16.01	+05 12.1	12.6	64	5	NGC 455	12.6	G	175 132	0.13	
10 20 03:50		537	Pauly	02:30.52	-01 02.6	13.0	220	340	NGC 955	12.0	G	163 121	0.29	
10 21 04:44		18	Melpomene	03:18.96	-01 59.9	8.4	78	132	NGC 1289	12.6	G	153 117	0.40	
10 21 11:07		345	Tercidina	00:38.20	+08 35.2	11.8	247	133	NGC 180	12.9	G	164 84	0.43	
11 06 12:43		416	Vaticana	01:26.00	+01 19.0	12.5	58	1	NGC 545	12.2	G	154 127	-0.39	
12 15 17:56		451	Patientia	10:02.25	+24 43.4	11.9	48	303	NGC 3098	12.0	G	119 155	0.10	