

**Planetoidy jaśniejsze od 11<sup>m</sup> przebywające w pobliżu opozycji w 2022 roku**

Nazwa	a	e	i	Typ	S	P	H(0)	$\Delta m$	Max	$m_{max}$	Mapa
(198) Ampella	2.458	0.2276	9.321	S	57	10.379	8.49	0.22	9 VIII	10.5	<b>13</b>
( 29) Amphitrite	2.554	0.0733	6.083	S	210	5.392	6.15	0.15	8 VI	9.8	<b>10</b>
( 64) Angelina	2.683	0.1254	1.306	X	56	8.752	7.69	0.42	31 XII	10.6	<b>5</b>
(387) Aquitania	2.741	0.2350	18.116	L	99	24.144	7.57	0.25	30 VI	10.1	10, 11, 12
(230) Athamantis	2.382	0.0621	9.451	S	109	24.006	7.38	0.26	18 X	10.0	<b>2, 15</b>
( 63) Ausonia	2.395	0.1272	5.777	S	90	9.298	7.46	0.47	7 XI	10.9	<b>2, 3, 4</b>
(324) Bamberga	2.680	0.3414	11.105	CP	229	29.430	7.05	0.12	10 XI	9.1	2, 3, 4
(455) Bruchsalia	2.655	0.2950	12.017	CP	84	11.839	8.92	0.50	8 X	10.9	<b>1</b>
( 1) Ceres	2.766	0.0784	10.588	C	939	9.074	3.54	0.06	1 I	7.9	<b>3, 8</b>
( 41) Daphne	2.762	0.2747	15.789	C	187	5.988	7.44	0.45	31 V	10.1	<b>11</b>
(349) Dembowska	2.927	0.0909	8.244	R	140	4.701	5.90	0.41	1 XII	9.7	<b>3, 4</b>
( 13) Egeria	2.577	0.0854	16.534	G	207	7.045	6.84	0.47	3 V	10.1	<b>9</b>
(354) Eleonora	2.802	0.1126	18.401	S	153	4.277	6.35	0.49	8 X	10.8	<b>1</b>
( 15) Eunomia	2.644	0.1866	11.752	S	253	6.083	5.41	0.53	15 IV	10.0	<b>9</b>
( 31) Euphrosyne	3.163	0.2182	26.266	C	280	5.530	6.86	0.11	12 X	10.8	1, 2, 15
( 52) Europa	3.095	0.1107	7.479	C	293	5.630	6.48	0.12	6 IV	10.8	8, 9
( 27) Euterpe	2.347	0.1724	1.583	S	104	10.408	7.08	0.21	10 XI	9.0	<b>2, 3, 4</b>
(164) Eva	2.631	0.3472	24.477	SC	73	13.660	8.83	0.36	27 XI	10.8	<b>4</b>
( 8) Flora	2.202	0.1560	5.889	S	139	12.865	6.54	0.11	13 IV	9.7	8, 9
( 19) Fortuna	2.443	0.1570	1.573	C	223	7.443	7.38	0.30	22 II	10.6	<b>7</b>
( 6) Hebe	2.426	0.2032	14.740	S	183	7.275	5.65	0.21	31 XII	9.2	<b>7</b>
(532) Herculina	2.772	0.1783	16.297	S	220	9.405	5.90	0.25	30 XI	10.1	<b>4</b>
( 46) Hestia	2.525	0.1727	2.351	X	124	21.040	8.54	0.12	28 X	10.7	2, 15
( 10) Hygiea	3.142	0.1117	3.831	C	351	13.828	5.55	0.23	1 V	9.3	<b>9</b>
(704) Interamnia	3.056	0.1555	17.311	F	316	8.727	6.38	0.17	19 VIII	10.3	13, 14
( 14) Irene	2.586	0.1659	9.121	S	152	15.028	6.53	0.16	5 VII	9.9	<b>12</b>
( 7) Iris	2.386	0.2294	5.518	S	199	7.139	5.61	0.37	11 I	7.7	<b>5</b>
( 3) Juno	2.668	0.2569	12.992	S	258	7.210	5.28	0.22	8 IX	7.8	13, 14, 15
( 22) Kalliope	2.910	0.0983	13.701	M	143	4.148	6.51	0.53	1 I	10.2	<b>5</b>
(216) Kleopatra	2.793	0.2513	13.116	M	138	5.385	7.06	1.22	18 IX	9.8	13, 14, 15
( 39) Laetitia	2.770	0.1117	10.371	S	163	5.138	6.07	0.53	15 III	10.4	<b>8</b>
( 21) Lutetia	2.435	0.1635	3.064	M	101	8.166	7.52	0.25	3 V	10.6	<b>9</b>
( 20) Massalia	2.409	0.1430	0.709	S	145	8.098	6.56	0.27	5 II	8.7	<b>7</b>
( 18) Melpomene	2.296	0.2178	10.133	S	139	11.570	6.53	0.34	5 V	10.4	<b>9</b>
( 9) Metis	2.385	0.1235	5.577	S	200	5.079	6.37	0.32	20 VII	9.7	12, 13
(192) Nausikaa	2.402	0.2458	6.800	S	104	13.625	7.36	0.20	25 VII	9.6	12, 13
( 51) Nemausa	2.366	0.0676	9.979	G	148	7.783	7.59	0.25	25 IV	10.3	8, 9
(128) Nemesis	2.749	0.1280	6.246	C	188	77.810	7.71	0.10	18 IX	10.8	1, 14
( 44) Nysa	2.423	0.1488	3.712	E	67	6.422	6.94	0.52	1 I	9.6	3, 4, 5
( 2) Pallas	2.773	0.2299	34.916	B	512	7.813	4.22	0.16	31 XII	7.7	<b>6</b>
( 70) Panopaea	2.616	0.1806	11.594	C	139	15.805	8.16	0.18	25 VI	10.8	10, 12
( 11) Parthenope	2.453	0.0996	4.632	S	160	13.720	6.60	0.12	10 II	10.1	<b>7</b>
(451) Patientia	3.068	0.0722	15.206	C	225	9.727	6.81	0.10	7 XI	10.9	<b>2</b>
( 26) Proserpina	2.655	0.0895	3.563	S	95	13.110	7.49	0.21	21 V	10.3	9, 10
( 16) Psyche	2.924	0.1339	3.097	M	222	4.196	6.06	0.34	2 III	10.4	<b>7</b>
( 88) Thisbe	2.770	0.1618	5.213	B	205	6.042	7.27	0.18	1 V	10.9	<b>9</b>
(115) Thyra	2.379	0.1932	11.594	S	79	7.241	7.65	0.20	17 XI	9.6	<b>3</b>
( 30) Urania	2.366	0.1278	2.096	S	99	13.686	7.56	0.45	27 XI	9.7	3, 4
(416) Vaticana	2.792	0.2177	12.859	S	86	5.372	7.71	0.38	5 VI	10.1	<b>10</b>
( 4) Vesta	2.361	0.0883	7.142	V	525	5.342	3.40	0.19	19 VIII	5.8	13, 14
(156) Xanthippe	2.729	0.2264	9.778	C	110	22.132	8.71	0.22	9 V	10.9	<b>9</b>

<sup>24</sup> Warner, B.D., Harris, A.W., and Pravec, P., Asteroid Lightcurve Data Base (LCDB) Bundle V4.0. urn:nasa:pds:ast-lightcurve-database::4.0. NASA Planetary Data System, 2021; doi: 10.26033/j3xc-3359; ALCDEF Asteroid Lightcurve Photometry Database [online] <https://alcdef.org/> (dostęp 15.11.2021)