

### Komety przechodzące przez perihelium w 2021 roku

Nazwa	q	e	i	a	P	H(0)	T <sub>0</sub>	m <sub>max</sub>
P/Takamizawa (98P)	1.663	0.5622	10.561	3.799	7.40	9	I 4.9	15.5
A/2019 T1	4.282	0.8881	120.87	38.263	236.68	13	14.2	19.2
PANSTARRS (P/2020 S1)	2.947	0.5071	13.734	5.980	14.62	14	16.9	21.1
P/McNaught (320P)	0.972	0.6857	4.909	3.094	5.44	20.5	17.1	21.8
P/SOHO (323P)	0.039	0.9848	5.339	2.582	4.15	20	17.8	6.4
PANSTARRS (C/2019 B3)	6.824	1.0026	66.538	—	—	5.5	19.9	18.0
PANSTARRS (P/2020 T3)	1.437	0.5915	7.296	3.517	6.60	18	20.5	19.3
P/Shoemaker (102P)	2.070	0.4573	25.884	3.814	7.45	6.5	22.4	14.9
P/Beshore (297P)	2.343	0.3192	10.329	3.442	6.39	15	22.8	19.9
Christensen (P/2007 B1)	2.439	0.5809	12.376	5.82	14.04	13.5	25.6	18.2
LONEOS-Hill (P/2005 XA54)	1.754	0.7101	17.118	6.051	14.88	14	28.2	16.3
PANSTARRS (P/2020 O3)	4.167	0.1056	8.441	4.659	10.06	12	29.2	20.8
McNaught (P/2009 U4)	1.647	0.6761	10.081	5.083	11.46	14	II 1.1	18.3
Rankin (C/2020 U3)	2.276	0.9648	30.177	64.582	519	15	6.0	20.3
SOHO (P/2010 H3)	0.044	0.9855	23.092	3.060	5.35	20	8.0	13.1
P/LINEAR (265P)	1.499	0.6475	14.365	4.252	8.77	14.5	9.0	18.0
P/PANSTARRS (400P)	2.103	0.4090	10.929	3.559	6.71	15.5	10.1	19.1
Lemmon-PANSTARRS (P/2020 K9)	2.849	0.3218	23.207	4.201	8.61	12.5	11.8	19.5
PANSTARRS (P/2014 U4)	1.876	0.4651	6.429	3.508	6.57	18	13.5	22.9
Tenagra (P/2013 EW90)	3.314	0.1949	31.789	4.116	8.35	12	15.7	19.0
Scotti (P/2013 A2)	2.190	0.4544	3.361	4.014	8.04	15.5	15.8	19.3
P/Holmes (17P)	2.081	0.4280	19.031	3.638	6.94	10	19.8	17.1
P/NEAT (246P)	2.864	0.2868	15.987	4.016	8.05	10.5	22.8	16.6
ATLAS (C/2020 R4)	1.029	0.9894	164.463	97.117	957	13.5	III 1.9	13.1
ATLAS (C/2019 T3)	5.947	0.9985	121.863	—	—	6.8	2.6	18.3
P/Barnard-Boattini (206P)	1.565	0.5514	33.633	3.488	6.51	19	4.5	22.8
Palomar (C/2019 O3)	8.820	1.0019	89.815	—	—	3.5	7.7	17.6
P/Neujmin (28P)	1.578	0.7739	14.311	6.979	18.44	8.5	11.9	13.5
PANSTARRS (C/2020 N1)	1.321	1.0004	29.704	—	—	12.5	12.2	14.2
P/McNaught (191P)	2.232	0.3860	8.843	3.635	6.93	13	20.1	18.8
PANSTARRS (P/2016 G1)	2.038	0.2111	10.968	2.583	4.15	14	22.3	18.2
MASTER (C/2020 F5)	4.326	1.0028	51.703	—	—	6.5	24.2	14.5
P/Tempel (10P)	1.412	0.5385	12.04	3.061	5.36	5	24.3	10.4
Lemmon (C/2020 S8)	2.364	0.9912	108.518	270	4 tys.	12.5	IV 10.9	17.0
P/Brooks (16P)	1.878	0.4865	3.012	3.658	7.00	7.5	18.1	16.6
SONEAR (C/2020 J1)	3.355	1.0005	142.297	—	—	8.5	18.5	14.6
ATLAS (C/2020 P3)	6.812	0.9989	61.888	6300	500 tys.	6	21.0	18.4
NEOWISE (P/2015 J3)	1.492	0.5544	8.131	3.348	6.13	16.5	22.1	17.5
Lemmon (C/2019 T2)	2.646	0.9991	111.481	2900	160 tys.	9	22.3	15.3
P/La Sagra (324P)	2.618	0.1547	21.416	3.097	5.45	13	V 6.6	18.5
P/Mueller (120P)	2.478	0.3746	8.489	3.963	7.89	12	7.0	18.0
PANSTARRS (C/2016 Q2)	7.082	1.0001	109.389	—	—	6	11.7	18.7
P/Ge-Wang (142P)	2.513	0.4984	12.244	5.009	11.21	9	12.7	14.7
Sheppard-Trujillo (C/2014 F3)	5.692	0.6414	6.581	15.875	63.25	6	14.3	16.9
P/PANSTARRS (399P)	2.096	0.4468	13.319	3.789	7.38	14	22.6	19.7
P/LONEOS (201P)	1.218	0.6371	5.738	3.355	6.15	14	26.6	16.6
<b>P/Pons-Winnecke (7P)</b>	<b>1.234</b>	<b>0.6385</b>	<b>22.364</b>	<b>3.414</b>	<b>6.31</b>	<b>9</b>	<b>27.1</b>	<b>8.2</b>
PANSTARRS (C/2020 K5)	1.535	1.0015	67.164	—	—	11	VI 5.6	13.8
PANSTARRS (P/2016 P1)	2.270	0.2892	24.456	3.194	5.71	15	10.2	19.4
P/Helin-Roman-Crockett (111P)	3.708	0.1057	4.227	4.146	8.44	5	16.2	18.8
PANSTARRS (P/2016 BA14)	1.013	0.6652	18.894	3.025	5.26	21	17.3	21.9
Gibbs (P/2014 W12)	1.674	0.5241	8.514	3.518	6.60	15	19.3	18.0

Nazwa	q	e	i	a	P	H(0)	T <sub>0</sub>	m <sub>max</sub>
ATLAS-Africano (C/2019 F1)	3.596	1.0036	54.176	—	—	5.5	VI 22.8	13.5
PANSTARRS (C/2020 T4)	2.192	1.0003	83.823	—	—	13	VII 5.2	17.8
P/LINEAR (252P)	1.000	0.6720	10.410	3.050	5.33	17.5	10.9	18.6
Palomar (C/2020 T2)	2.055	0.9936	27.873	320	6 tys.	11	11.1	14.4
P/Finlay (15P)	0.992	0.7170	6.798	3.505	6.56	12	13.6	12.3
Larson (P/2014 E1)	2.140	0.4235	15.976	3.712	7.15	14	20.2	18.1
P/Kowal-LINEAR (158P)	4.797	0.0223	7.977	4.907	10.87	9	23.7	18.7
P/LINEAR (241P)	1.918	0.6102	21.107	4.920	10.91	13.5	25.7	18.2
P/Ikeya-Murakami (332P)	1.577	0.4894	9.380	3.089	5.43	18	VIII 18.4	22.0
P/Schuster (106P)	1.528	0.5941	19.538	3.765	7.31	14	18.7	17.2
ATLAS (C/2020 M5)	3.004	0.9997	93.222	—	—	9	19.9	16.4
P/LINEAR-NEAT (193P)	2.167	0.3942	10.687	3.577	6.77	14	25.6	17.7
LINEAR (P/2008 WZ96)	1.849	0.4705	7.113	3.491	6.52	13.5	26.6	16.7
P/Tuttle (8P)	1.026	0.8201	54.912	5.705	13.63	8	27.8	9.5
Amaral (C/2020 O2)	4.864	1.0014	71.752	—	—	8	28.2	16.5
P/Spacewatch (283P)	2.132	0.4850	14.454	4.140	8.42	9	IX 8.0	14.6
P/Faye (4P)	1.618	0.5773	8.009	3.828	7.49	8	9.3	11.5
P/Cifreio (108P)	1.660	0.5565	11.439	3.743	7.24	8	10.0	15.2
P/McNaught (284P)	2.295	0.3760	11.859	3.677	7.05	13	13.2	17.2
Rankin (C/2020 K6)	5.869	1.0038	103.653	—	—	8	14.6	19.2
<b>P/d'Arrest (6P)</b>	<b>1.355</b>	<b>0.6126</b>	<b>19.512</b>	<b>3.497</b>	<b>6.54</b>	<b>9</b>	<b>17.8</b>	<b>9.8</b>
Kowalski (P/2005 W3)	2.891	0.5435	16.417	6.332	15.93	12	20.7	18.1
Lemmon (P/2008 CL94)	5.420	0.1203	8.347	6.161	15.29	8	22.0	18.6
LINEAR-NEAT (P/2004 R3)	3.541	0.2613	12.826	4.794	10.50	14.5	27.6	22.0
ATLAS (C/2020 H6)	4.705	1.0009	79.964	—	—	8	30.9	16.4
P/Harrington-Abell (52P)	1.777	0.5399	10.232	3.863	7.59	13.5	X 5.2	18.9
PANSTARRS (C/2020 K7)	5.645	1.0000	34.552	—	—	8	5.3	18.9
P/du Toit-Neujmin-Delporte (57P)	1.720	0.5008	2.851	3.446	6.40	12.5	17.4	17.1
LINEAR (P/2010 A5)	1.703	0.6650	5.798	5.084	11.46	13	17.5	17.4
P/Hartley (110P)	2.456	0.3180	11.707	3.601	6.83	1	18.4	13.9
P/SOHO (342P)	0.052	0.9830	11.693	3.044	5.31	9	19.2	-3.8
282P	3.441	0.1891	5.811	4.244	8.74	13.5	24.2	18.3
Tenagra (P/2012 TK8)	2.996	0.2743	6.340	4.128	8.39	13	25.8	19.3
PANSTARRS (P/2015 F1)	2.543	0.2781	2.803	3.523	6.61	12.5	27.5	18.3
La Sagra (P/2012 S2)	1.362	0.6912	8.687	4.411	9.26	17	31.8	17.8
P/Churyumov-Gerasimenko (67P)	1.209	0.6505	3.872	3.459	6.43	11	XI 1.9	10.0
McNaught (P/2005 L1)	3.143	0.2094	7.739	3.975	7.93	9.5	2.6	16.3
Lemmon (C/2018 U1)	4.994	1.0010	108.300	—	—	5	2.8	15.2
P/Kojima (70P)	2.009	0.4535	6.598	3.676	7.05	11	3.2	16.7
P/Helin-Roman-Alu (132P)	1.690	0.5652	5.379	3.887	7.66	11	13.2	13.8
A/2020 F7	5.332	0.9931	93.951	780	22 tys.	12	14.1	19.1
PANSTARRS (C/2014 OG392)	9.970	0.1838	9.033	12.215	42.69	6	26.7	20.8
Scotti (P/2011 A2)	1.554	0.4994	4.475	3.105	5.47	16.5	XII 1.7	19.4
Garradd (P/2007 R4)	1.956	0.6700	20.227	5.926	14.43	14.5	8.9	18.4
P/LINEAR (402P)	3.938	0.4379	30.853	7.005	18.54	8	14.8	16.3
P/Mueller (173P)	4.216	0.2606	16.496	5.703	13.62	7.5	17.6	16.4
P/LINEAR (221P)	1.753	0.4928	11.426	3.457	6.43	14.5	18.0	19.1
P/Catalina-NEAT (395P)	4.065	0.3773	3.279	6.528	16.68	10	31.4	18.7

### Pozostałe jasne komety widoczne w 2021 roku

141P/Machholz	0.808	0.7356	13.945	3.055	5.34	12	2020 12 15.4	8.8
19P/Borrelly	1.305	0.6381	29.350	3.607	6.85	4.5	2022 2 1.7	8.2

[Elementy orbit wg. <http://cfa-www.harvard.edu/iau/Ephemerides/Comets/>, pobrane 17.11.2020]