



Small-Body Database Lookup

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C/2017 K2 (PANSTARRS)

Classification: Hyperbolic Comet
[/app.html#/?spk=1003517](#)**SPKID:** 1003517**Related Links:** [Ephemeris \(/horizons](#)[Orbit Viewer](#) [\[show\]](#)[Orbit Parameters](#) [\[hide\]](#)

Osculating Orbital Elements

Epoch 2459088.5 (2020-Aug-27.0) TDB Reference: JPL 80 (heliocentric IAU76/J2000 ecliptic)			
Element	Value	Uncertainty (1-sigma)	Units
e	1.000432648857823	1.8534E-6	
a	-4157.647672927562	17.799	au
q	1.798801516922625	5.5603E-6	au
i	87.54501442428581	9.6875E-6	deg
node	88.26026333043211	1.7324E-5	deg
peri	236.1717099510239	.00017315	deg
M	-0.003106311610936874	1.9947E-5	deg
tp	2459933.413932300963 2022-Dec-19.91393230	.00039553	TDB
period	<i>not defined</i>	<i>not defined</i>	d
n	3.676482884448861E-6	2.3609E-8	deg/d
Q	<i>not defined</i>	<i>not defined</i>	au

Model Parameters

Parameter	Value	Uncertainty (1-sigma)	Units
A2	-4.239575046339165E-8	4.776E-9	au/d^2
ALN	.0408373333128795		
NK	2.6		

Parameter	Value	Uncertainty (1-sigma)	Units
NM	2.		
NN	3.		
R0	5.		au

Miscellaneous Details

solution date	2022-Jun-28 07:51:14
# obs. used (total)	186
data-arc span	3331 days (9.12 years)
first obs. used	2013-05-12
last obs. used	2022-06-25
planetary ephem.	DE441
SB-pert. ephem.	SB441-N16
norm. resid. RMS	.42992
source	JPL
producer	Davide Farnocchia
Earth MOID	1.09209 au
Jupiter MOID	1.25703 au
T_{jup}	0.170
Nongrav. accels. using CO driven g(r)	

Physical Parameters [hide]

Parameter	Value	Units	Sigma	Reference	Notes
[M1] comet total magnitude	7.8		1.	80	2 parameter fit from 6335 observations, ...
[K1] comet total magnitude slope	4.5			80	autocmod 3.0b

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