

Photometry of NASA Lucy Mission Targets: Jupiter Trojan Asteroids

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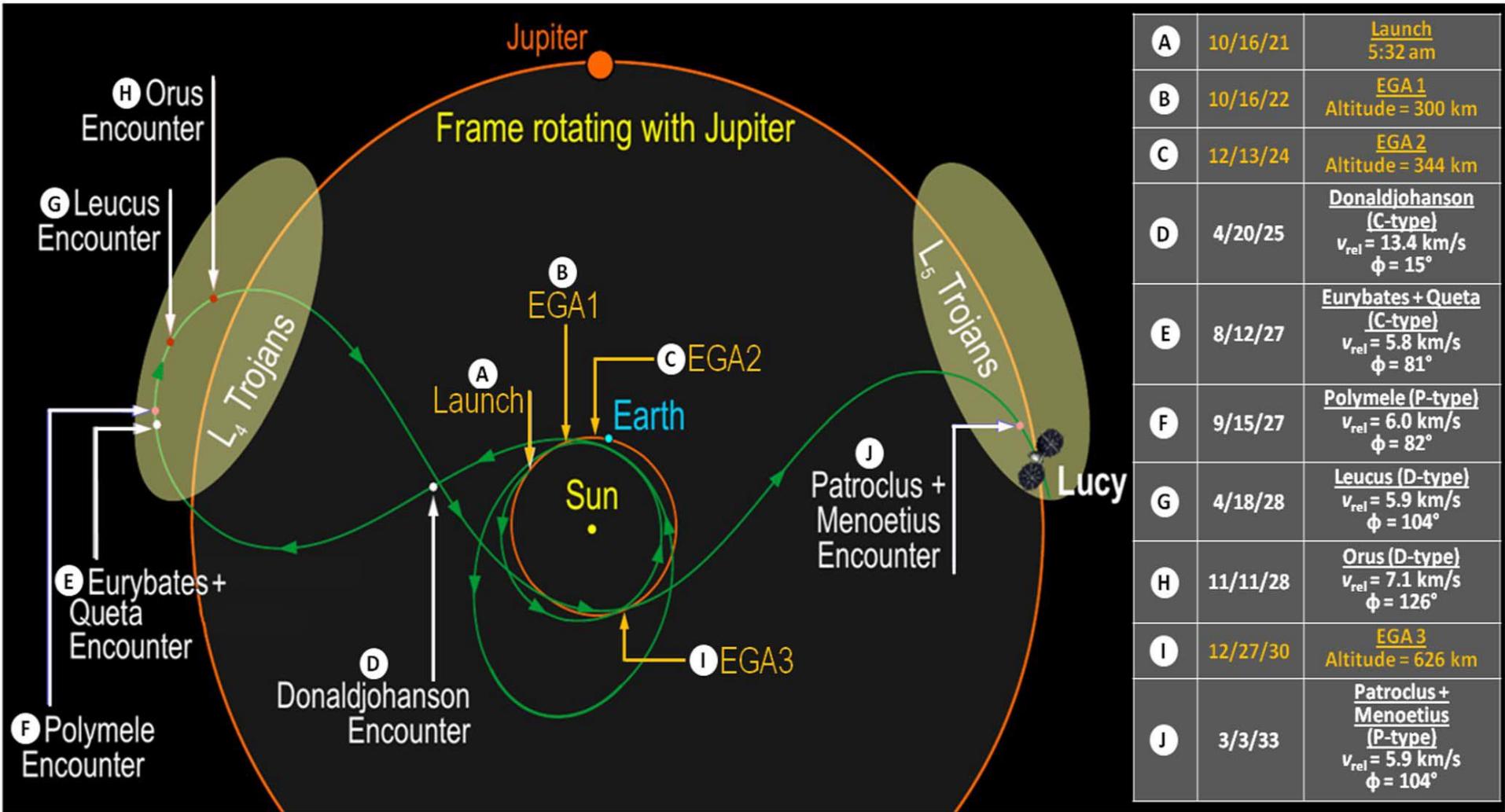
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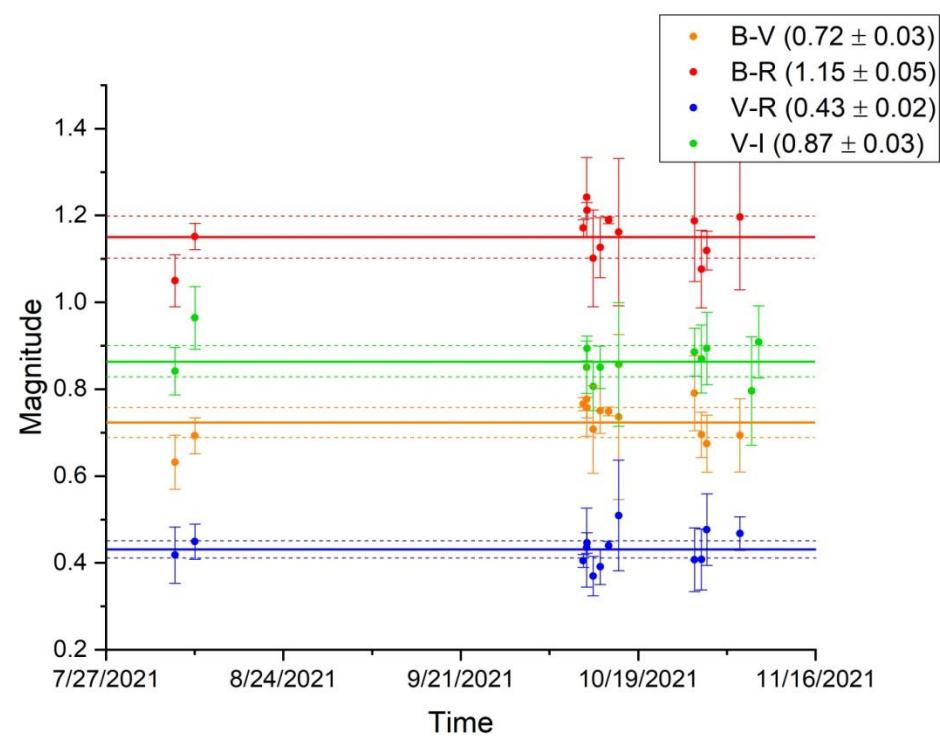
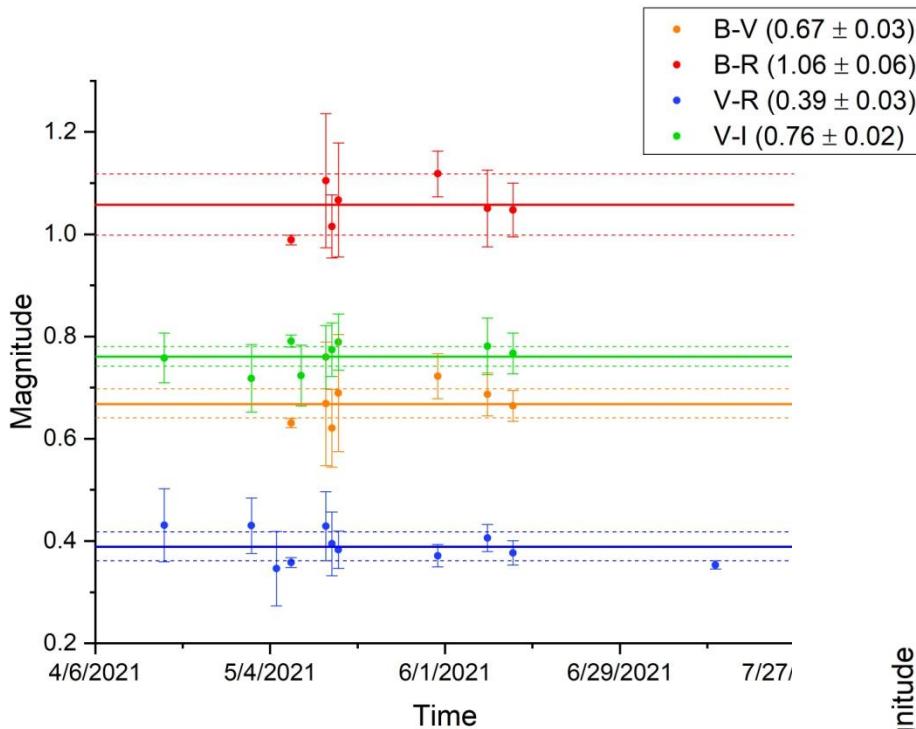


Trajectory of Lucy in a frame that rotates with Jupiter as it orbits the Sun. Lucy's orbit is shown in green, while the orbits of Jupiter and Earth are shown in orange. As this is not an inertial frame, the trajectory of Lucy does not appear Keplerian. The approximate region of space that the Trojans occupy is shown in brown. [Levison et al. (2021)]

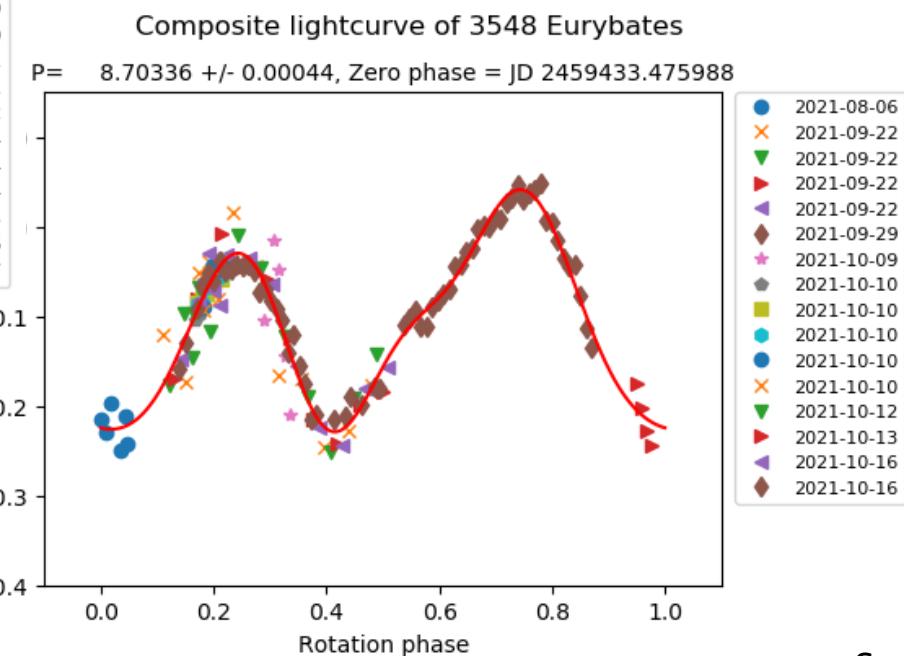
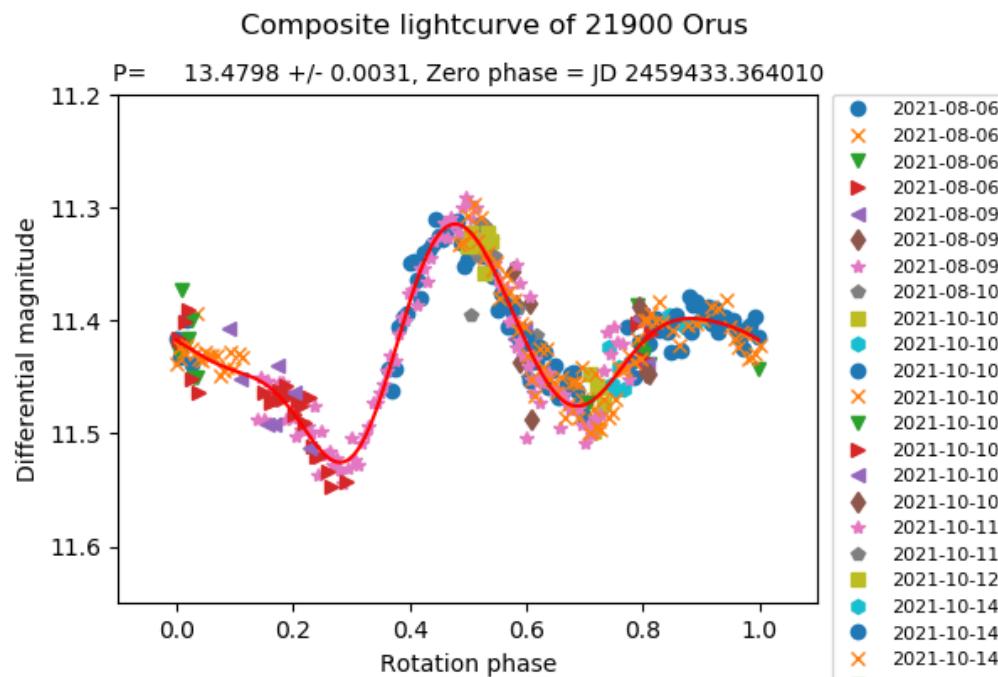
Telescopes

Observatory	Telescope	Aperture	IAU code	Nights
Terskol	Zeiss-2000	2.0 m	B18	9
Terskol	Zeiss-600	0.6 m	B18	34
Odessa-Mayaki	OMT-800	0.8 m	583	5
Odessa-Mayaki	AZT-3	0.47 m	583	8
Winer	RBT/PST2	0.7 m	648	11
Lowell	Hall	1.07 m	688	5
Lowell	PlaneWave	1.0 m	688	2
Kitt Peak	B&C	0.96 m	G82	5
Teide	IAC80	0.82 m	954	3
Mauna Kea-UH	UH88	2.24 m	T12	3
Nikolaev	KT-50	0.5 m	089	9
Kyiv comet station	14 inch	0.356	585	2
LiShan	Cassegrain	0.5	O85	1
Total:				97

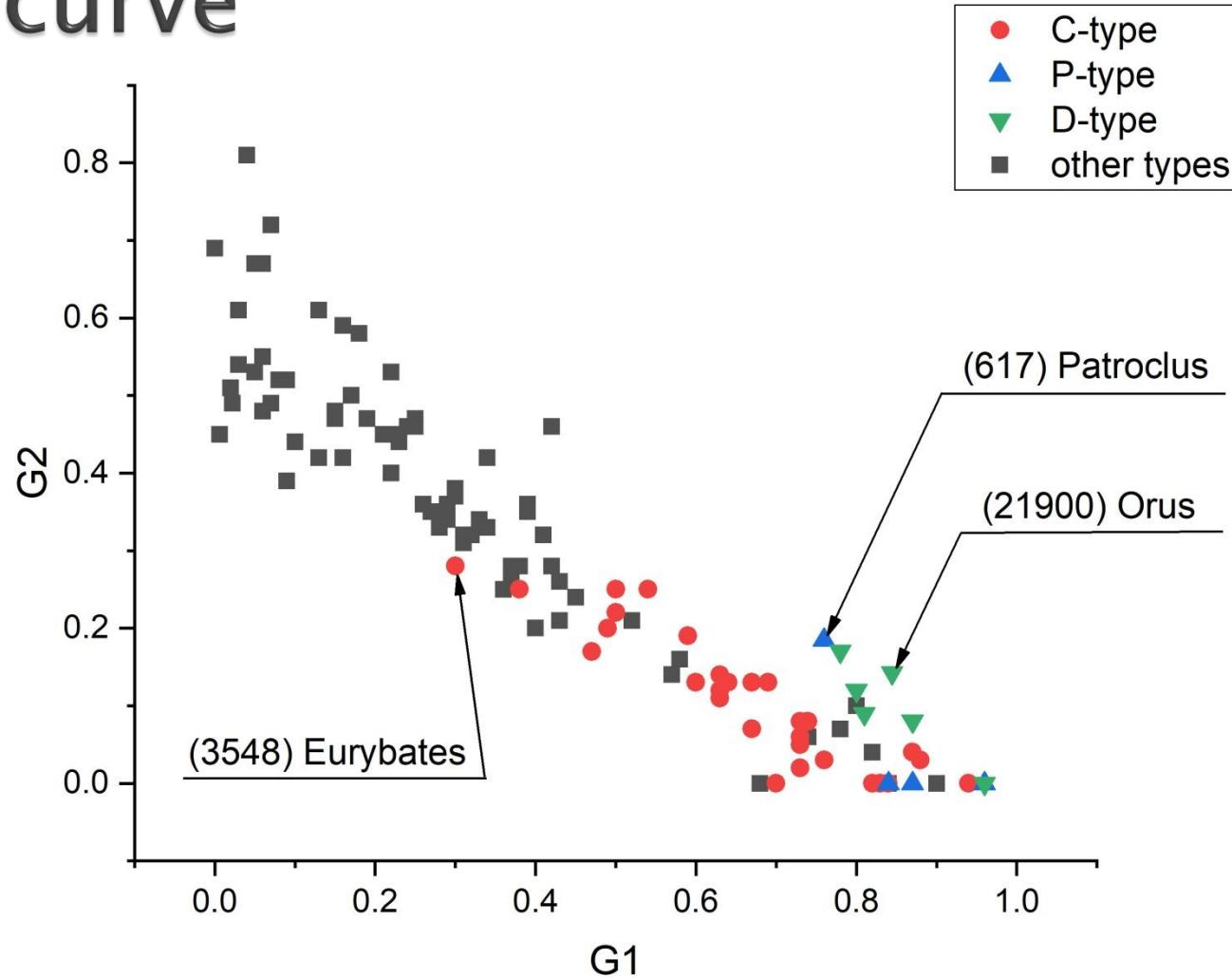
Color-Index



Composite lightcurve



Phasecurve



Distribution of the observed asteroids in G_1 , G_2 parameters phase space.
[Shevchenko et al. (2016), Oszkiewicz et al. (2021)]



Thanks for attention !!!