



# Disks in Transit

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## ABSTRACT

*Context.* Collisions occur between planetessimals that generate debris disks through collisional cascades.

*Aims.* We analyze the dust and size distribution of the eclipse seen towards ASASSN-21qj.

*Methods.* Fit the light curve from three different colours to determine the particle size and distribution.

*Results.* The eclipse is coloured, indicating dust. The dust has a lower limit mass of XXXX Earths, eclipse has a duration of XXXX days.

**Key words.** giant planet formation –  $\kappa$ -mechanism – stability of gas spheres

## 1. Introduction

Terrestrial planets are thought to be built up by the quasi-periodic accretion of planetary embryos that generate a significant amount of ejected material.

lets test this: (Luger et al. 2021) and Figure 1.

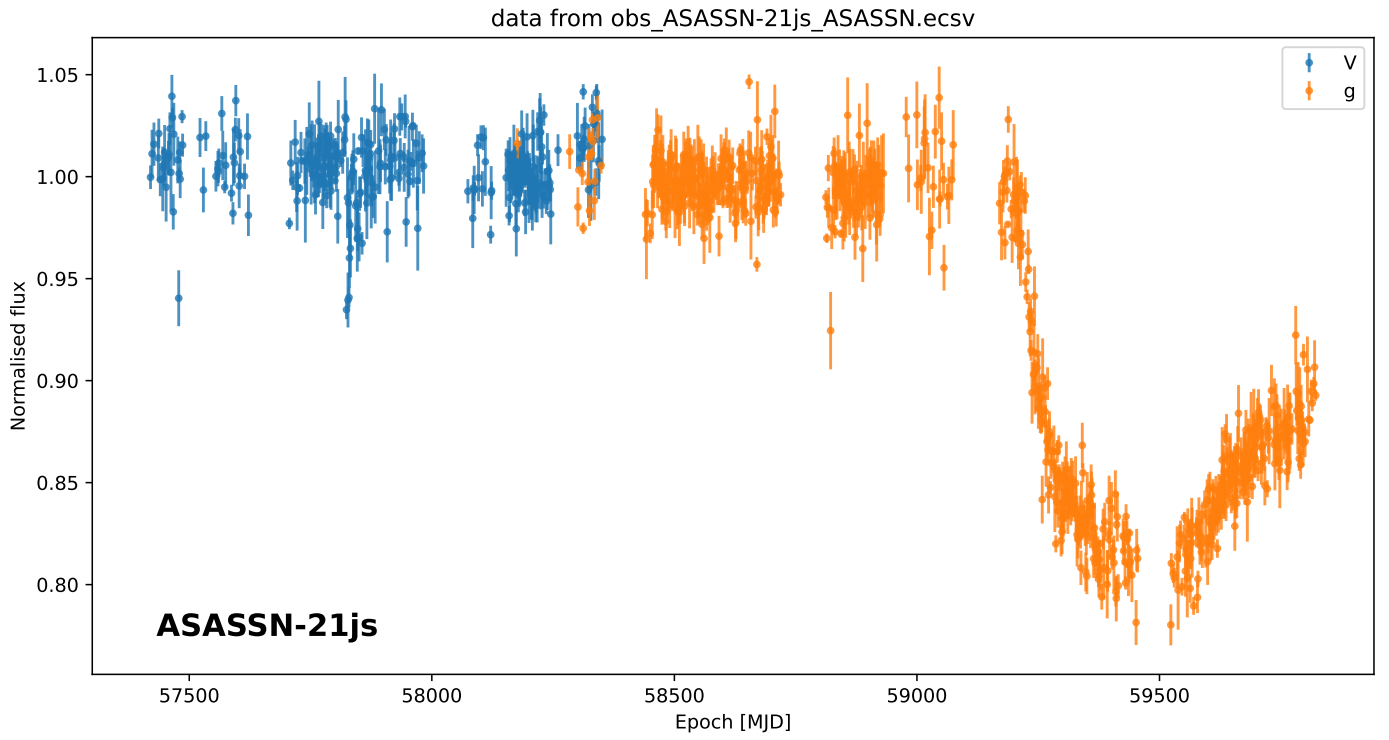
## 2. Conclusions

1. There was a collision between planetoids towards ASASSN-21qj which generated a debris cloud.
2. The cloud moved in front of the star, and we have a fresh measure of the debris from a collision.

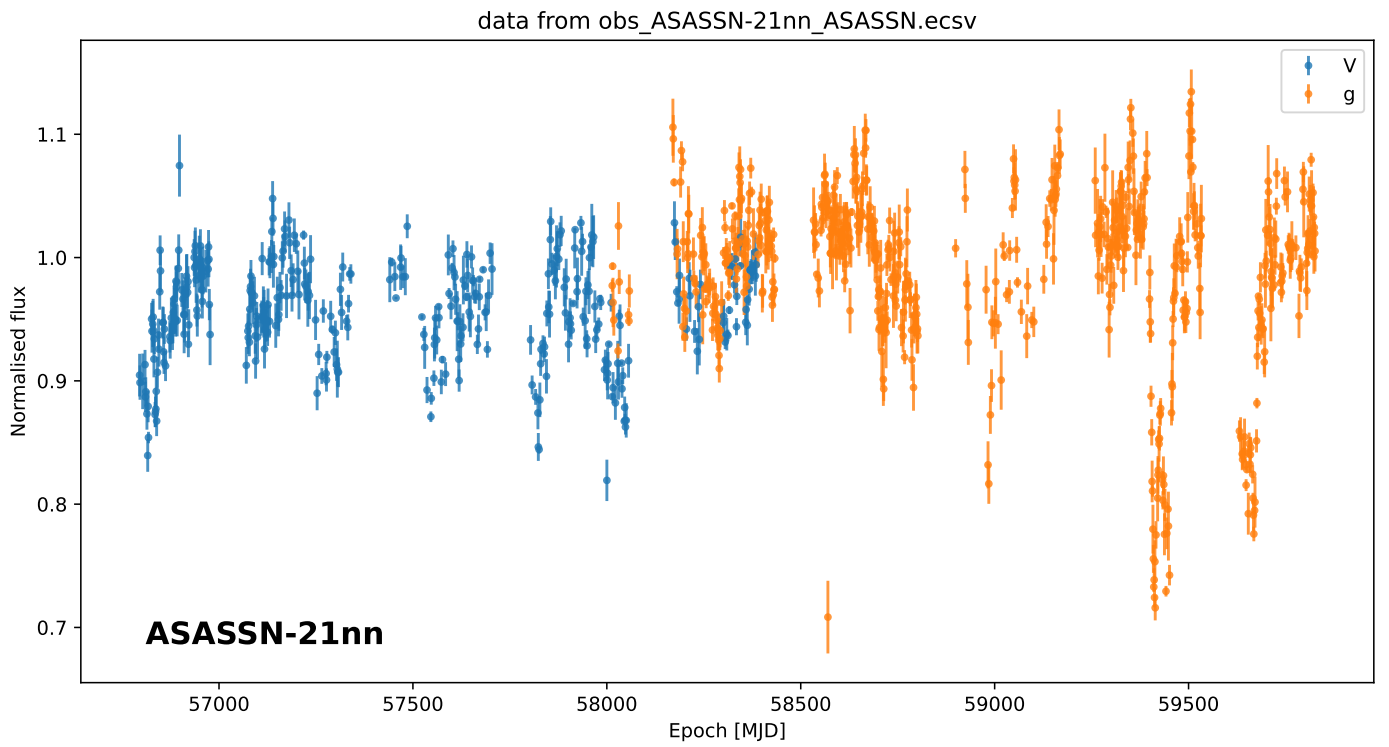
*Acknowledgements.* Thank matplotlib

## References

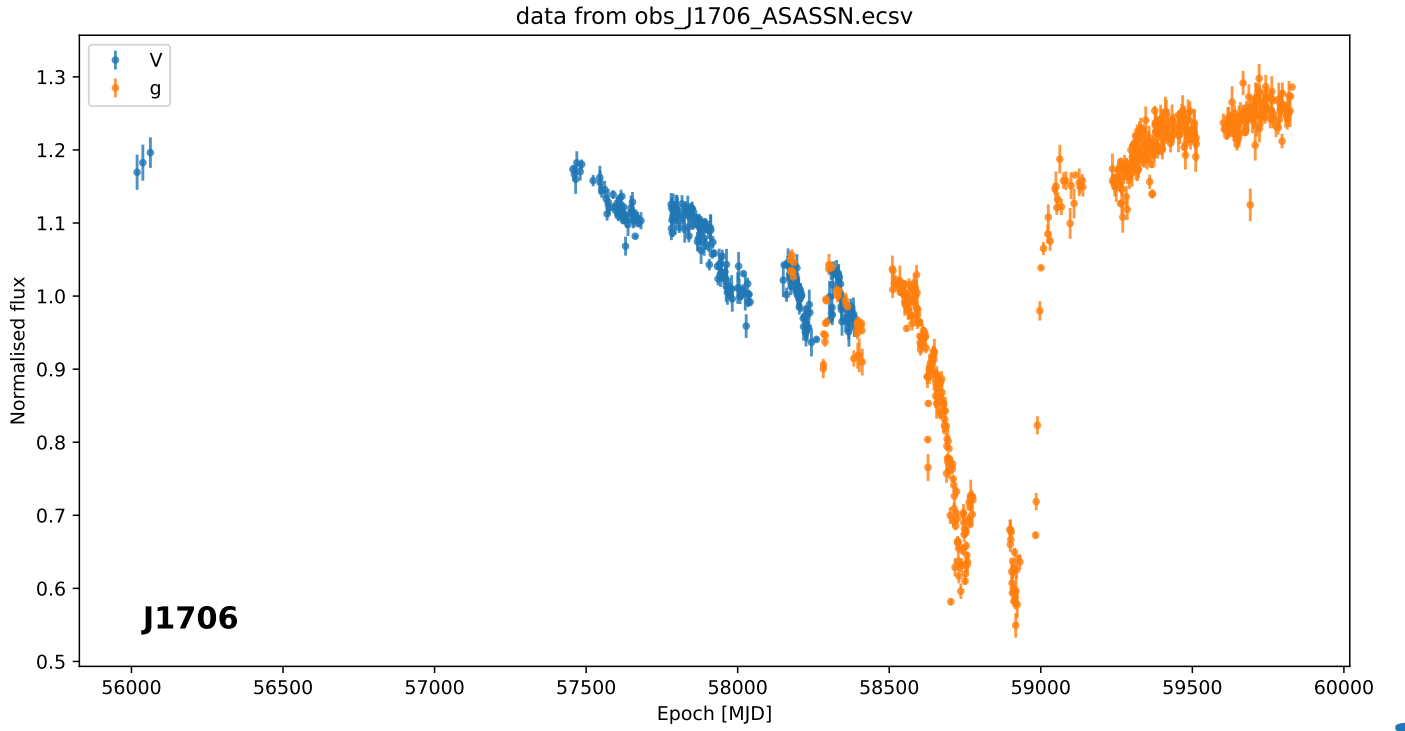
Luger, R., Bedell, M., Foreman-Mackey, D., et al. 2021, arXiv e-prints, arXiv:2110.06271



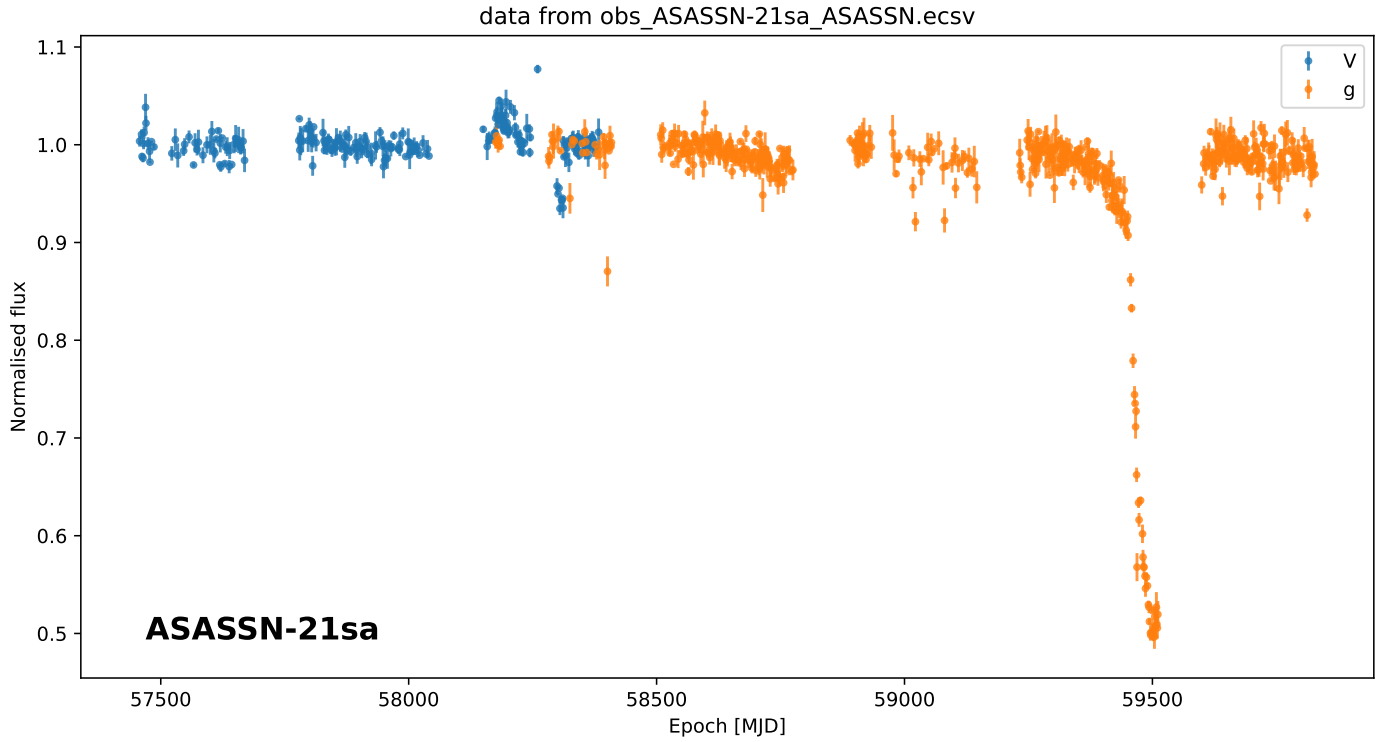
**Fig. 1.** ASASSN-21js light curve. Normalised in both bands  $g$  and  $V$ .



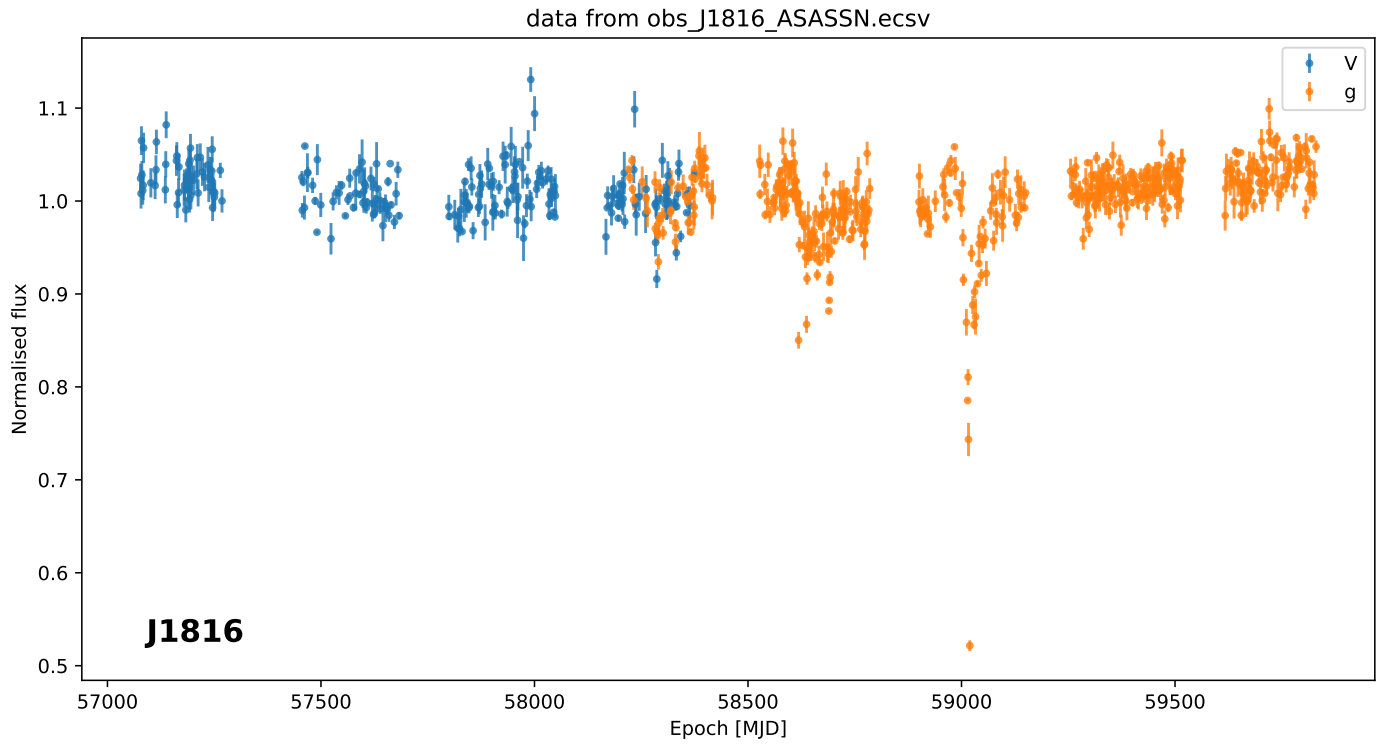
**Fig. 2.** ASASSN-21nn light curve. Normalised in both bands  $g$  and  $V$ .



**Fig. 3.** J1706 light curve. Normalised in both bands  $g$  and  $V$ .



**Fig. 4.** ASASSN-21sa light curve. Normalised in both bands  $g$  and  $V$ .



**Fig. 5.** J1816 light curve. Normalised in both bands g and V.

