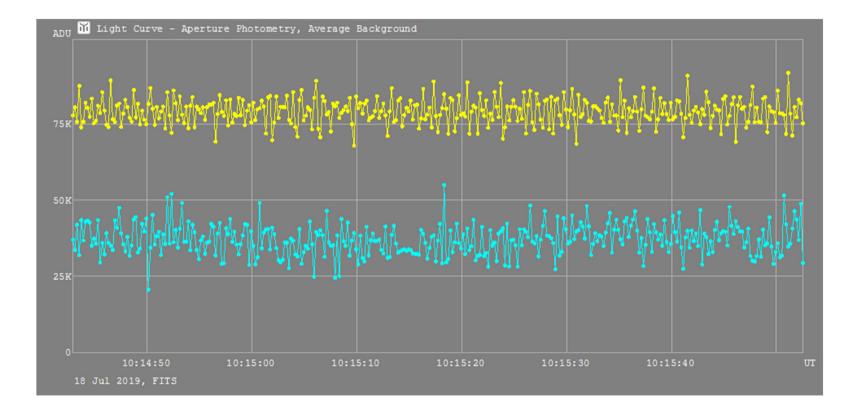
Unusual Tangra Light Curves

Bill Hanna Columbia Falls, Montana 15th Trans-Tasman Symposium on Occultations Saturday 11 September 2021

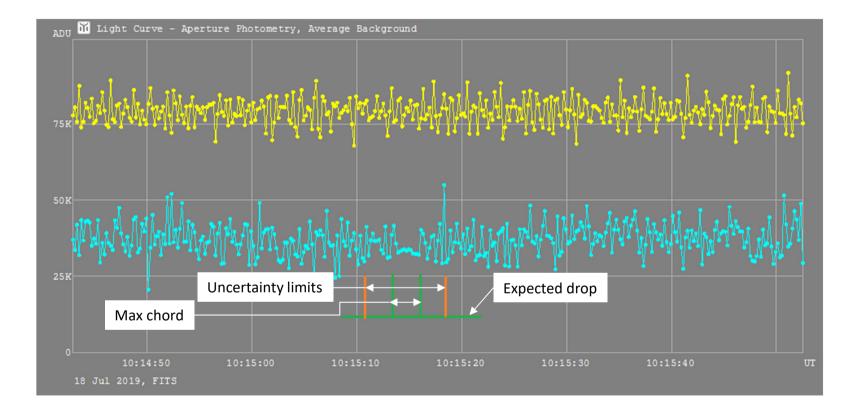
Discussion

- Of nearly 600 reports processed via Tangra to date, 8 had unusual characteristics
- All 8 were clearly misses, and yet...
- *Mea Culpa*, or is there something going on?

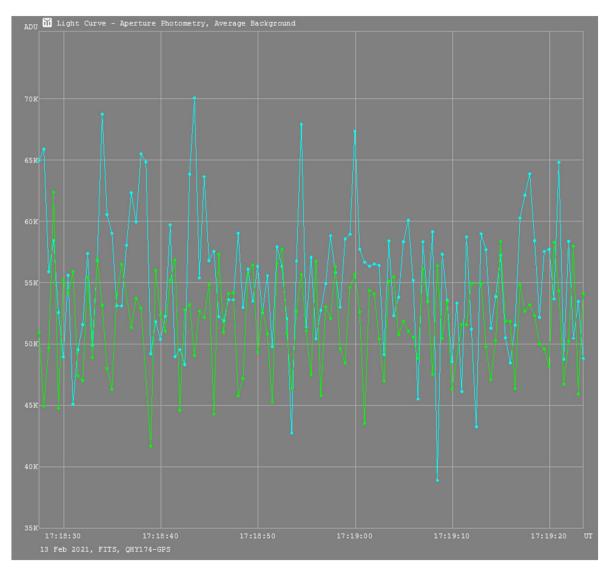
(272) Antonia; 10:15:15 ±4s, max 2.7s, drop 1.3 mag



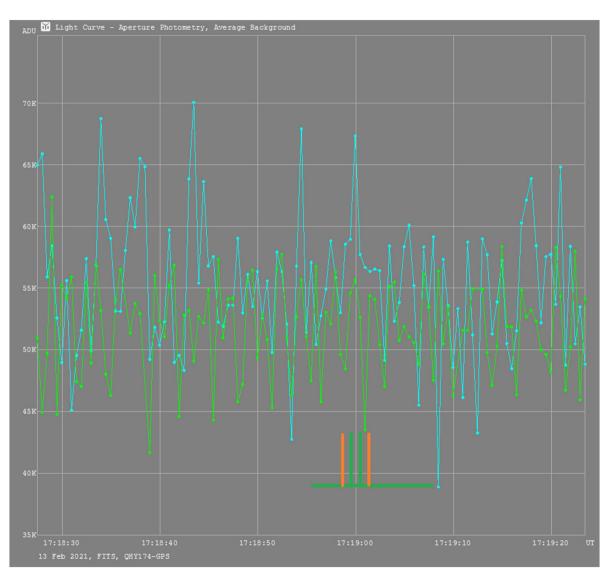
(272) Antonia; 10:15:15 ±4s, max 2.7s, drop 1.3 mag



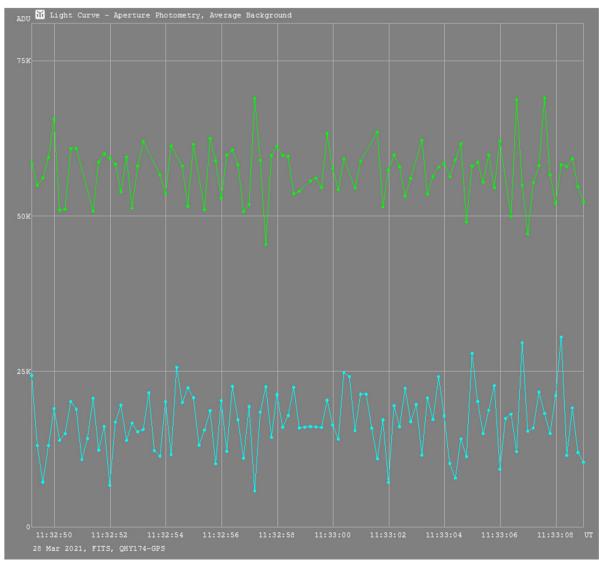
(264) Libussa; 17:19:00 ±2s, max 1.6s, drop 0.3 mag



(264) Libussa; 17:19:00 ±2s, max 1.6s, drop 0.3 mag



(1070) Tunica; 11:32:58 ±5s, max 2.9s, drop 2.0 mag



(1070) Tunica; 11:32:58 ±5s, max 2.9s, drop 2.0 mag



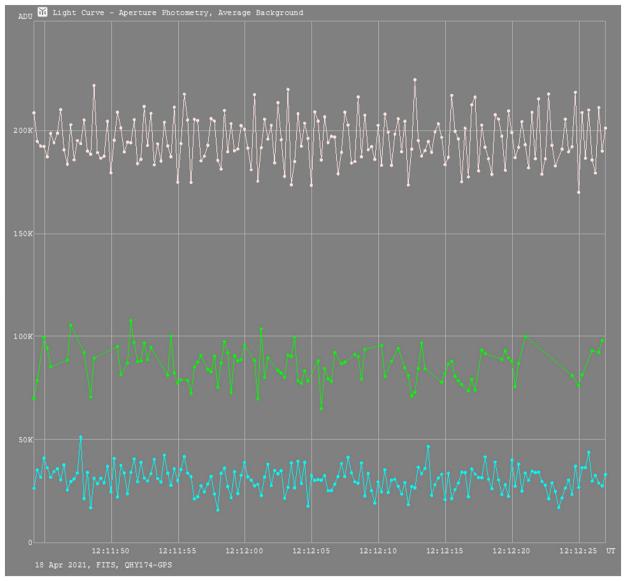
(29931) 1999 JL44; 11:23:56 ±4s, max 1.8s, drop 1.6 mag



(29931) 1999 JL44; 11:23:56 ±4s, max 1.8s, drop 1.6 mag



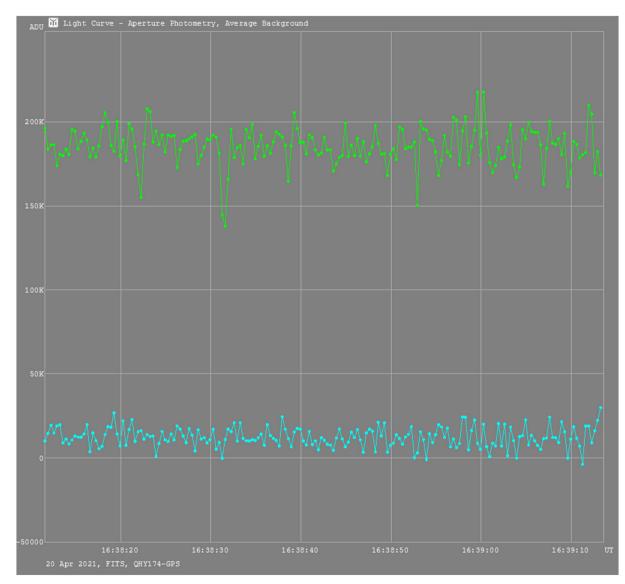
(26387) 1999 TG2; 12:12:05 ±4s, max 1.2s, drop 4.5 mag



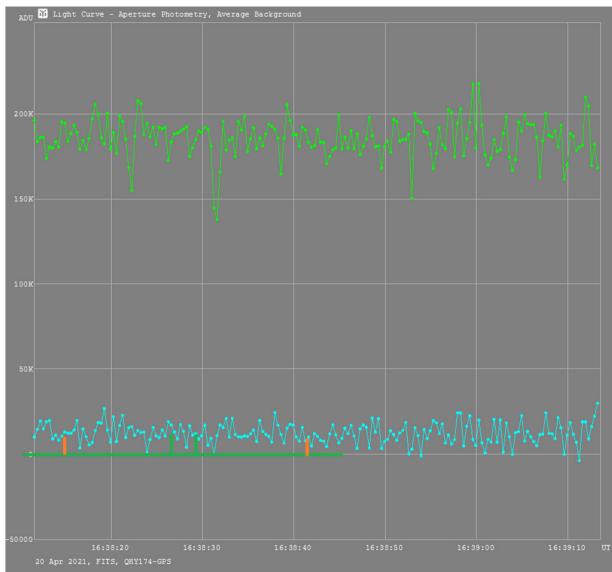
ann 📶 Light Curve - Aperture Photometry, Average Background 18 Apr 2021, FITS, QHY174-GPS

(26387) 1999 TG2; 12:12:05 ±4s, max 1.2s, drop 4.5 mag

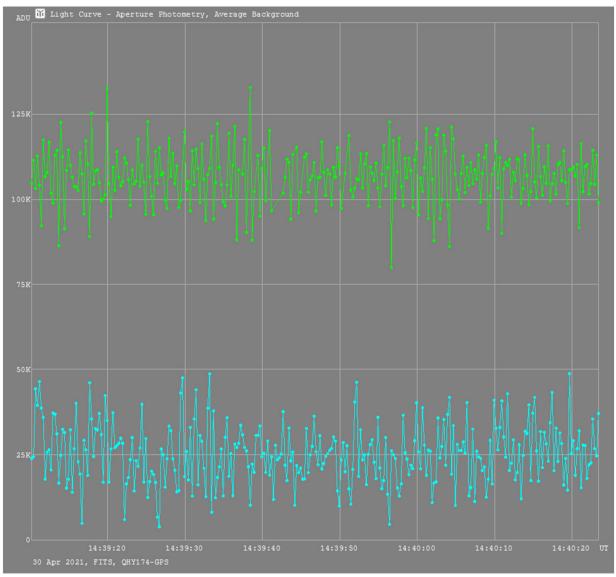
(85390) 1996 QZ2; 16:38:28 ±13s, max 2.5s, drop 5.1 mag



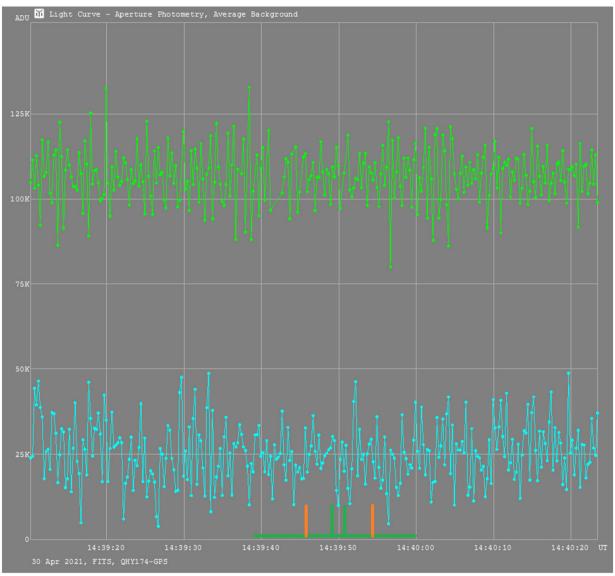
(85390) 1996 QZ2; 16:38:28 ±13s, max 2.5s, drop 5.1 mag



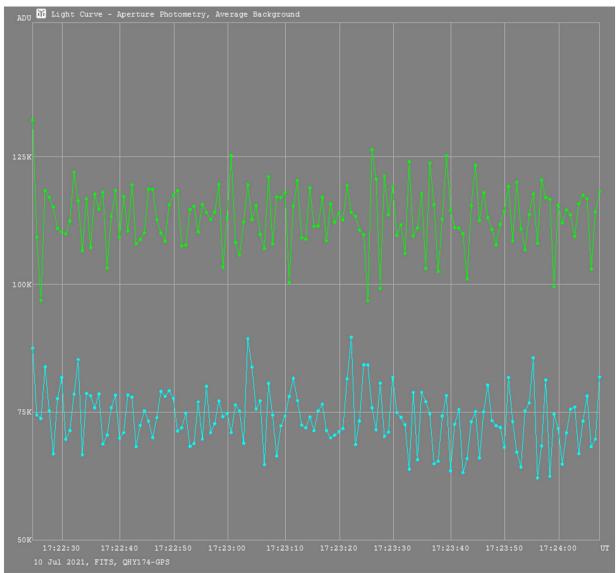
(2053) Nuki; 14:39:50 ±4s, max 2.2s, drop 3.7 mag



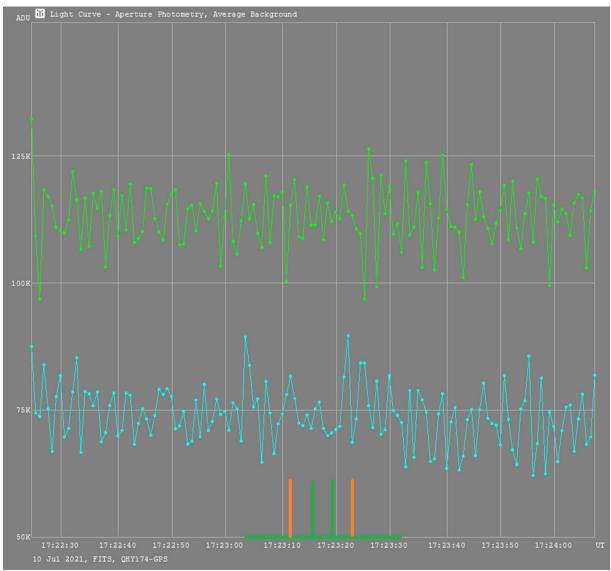
(2053) Nuki; 14:39:50 ±4s, max 2.2s, drop 3.7 mag



(1493) Sigrid; 17:23:17 ±6s, max 3.8s, drop 0.4 mag



(1493) Sigrid; 17:23:17 ±6s, max 3.8s, drop 0.4 mag



Going Forward

- If whatever this is had happened just once I would write it off as a fluke, but it continues to occur.
- When processed by PyMovie these features do not appear, so it is likely that they are somehow an artifact of Tangra processing, or possibly my incorrect use of it.
- I am open to suggestions!

Questions?

