

Reports for Dec have so far been received from Raffaello Braga, Clive Brook, Marie Cook, and Gerald North. Routine TLP search times for European observers for Nov (RB, CB, GN, MC) were 374 min (nearly as good as June). Back in December, David Darling, ALPO's TLP coordinator, sent me an interesting Clementine image mosaic of the Pontecoulant crater showing a lack of detail on a quarter of the floor of the crater. The US Navy Clementine mission, orbited the Moon for 2.5 months in 1994 and acquired 2 million multi-spectral CCD images of the surface. During the mission, ALPO, the BAA, and other lunar observers, kept a watch out for TLP over areas the spacecraft was imaging. As I recall, several TLP reports were made, but because these are relatively short lived events, and the fact that the spacecraft sees only a very small area of the Moon at any one time, it is not surprising that no definitive Clementine:Earth TLP were confirmed – but it was a worthwhile effort endorsed by the mission scientists at the time. However because the spacecraft acquired images almost continuously whilst it was over the illuminated side of the Moon, there is a chance that it could have snapped a TLP in progress (not noticed from Earth). Examining the processed image mosaics (at 500 m/pixel) might be one way to do this, simply by looking for regions devoid in detail, or for strongly coloured areas in the digital colour mosaics – it certainly beats examining all 2 million individual images! Here at my museum we have the original compressed images on 88 CDRoms, so for any suspect area in the mosaic, it is possible to pull up the images of the area taken one month apart and to look for changes. In the case of Pontecoulant, the obscure area alas turned out to be just a smoother area of the crater floor (more recently geologically coated) than the rest and no changes were found. Anyway David Darling has certainly devised a new approach to TLP hunting, namely the possibility of data mining through the image mosaics.

During the Christmas holidays I was briefly back in the UK and had a chance to take a look through 2 boxes of TLP reports going back to 1992 and earlier. It will take a while to scan these in, but I have made a start. It might make sense, for those of you with computers on the internet to try writing your reports up in text, Excel or Word files and emailing these to me in future. Raffaello Braga sent me a copy of the UAI way of reporting observations, and I shall endeavor to devise a standard electronic TLP report form. It will not be compulsory to submit electronically – written paper reports are most welcome as ever.

For March please have a go at attempting to observe Earthshine on the following 3 days (% sunlit illuminated): Mar 17 19:00-19:30 (12%), Mar 18 19:00-19:40 (19%), and Mar 19 19:00-20:40 (27%). March is a good month for Earthshine, without much glare, because the Moon is at a very respectable altitude and the crescent is small. Although there are no meteor showers worth mentioning, the enhanced visibility of Earthshine can improve chances of detecting faint sporadic meteorite impact flashes, which in theory should be considerably more numerous than very rare bright sporadic impact flashes. Hopefully at least one of these nights should be clear and even if no impact flashes are seen, the exercise can prove useful for perfecting Earthshine observing techniques and for timing faint occultations. In addition to the confirmed Nov 2001 lunar Leonid impact flashes, ALPO has now received news that Florida observer, Allan Kimble, video recorded possible impact flashes from the Leonids back in 1997. Although these were unconfirmed, they have similar brightness decay signatures to the 1999 and 2001 Leonid impact flashes.

UK TLP search schedule in UTC for lunar features in general + Aristarchus (Ar), Alphonsus (Al), and Gassendi (Ga):

Feb28/Mar01 21:50-05:50 (Ar,Al,Ga)	Mar01/02 23:25-06:00 (Ar,Al,Ga)	Mar03 01:10-06:00 (Ar,Al,Ga)
Mar04 03:20-05:40 (Ar,Al,Ga)	Mar17 18:15-19:30	Mar18 18:15-20:40
Mar19 18:20-21:40	Mar20 18:20-22:55	Mar21 18:20-23:55 (Al)
Mar22/23 18:25-00:55 (Al)	Mar23/24 18:25-01:45 (Al)	Mar24/25 18:25-02:30 (Al,Ga)
Mar25/26 18:30-03:10 (Ar,Al,Ga)	Mar26/27 18:30- 03:35 (Ar,Al,Ga)	Mar27/28 19:10-03:55 (Ar,Al,Ga)
Mar28/2920:45-04:05 (Ar,Al,Ga)	Mar29/30 22:30-04:10 (Ar,Al,Ga)	Mar31 00:25-04:05 (Ar,Al,Ga)

Please post all letters/TLP reports to: *Mr & Mrs Cook, 6 Lakeland Drive, Frimley, Camberley, Surrey, GU16 8LD* - these will be scanned in and emailed. In the mean time if you see possible TLP, my contact times (in your local UK time) are as follows. To keep your phone bill low just give me your name, Tel No., named feature, and latest time for a return call: WEEK DAYS any time up till 2:15AM on: (USA) 202 633 9748, WEEK DAYS after 3AM or WEEKENDS (any time) on: (USA) 703 751 3365. Dr Tony Cook, Center for Earth and Planetary Studies, National Air and Space Museum, Washington, D.C. 20560-0315. USA. Email: [tcook@nasm.si.edu](mailto:tcook@nasm.si.edu)