

Partial Solar Eclipse on 21st June 2020

Udaipur Solar Observatory witnessed a Partial Solar Eclipse on Sunday 21st June 2020, that also coincided with the day of summer solstice. The first point of contact occurred at 10:07:37 IST and the maximum ingress was at 11:47:10 IST when the moon eclipsed 85.7% of the Sun's diameter. The last point of contact was at 13:36:59 IST. During these phases the Sun's elevation with respect to Udaipur was 56°, 78.5°, and 76.3°, respectively.



The SPAR telescope on the island, with a 15-cm objective, was used to image the full-disk of the Sun with a cadence of 10 sec, while high-resolution images of the lunar limb against the solar background were taken in the G-band (430.5 nm) and H α (656.3nm) from the 0.5 m Multi-Application Solar Telescope. Full-disk images from the guider telescope on MAST were also utilized for this astronomical event. The event was witnessed by an enthusiastic group of faculty members, technical staff, and research scholars.

Fig.1 – Phases of the partial solar eclipse taken with the SPAR Telescope which show the passage of the Moon over the full disk image of the Sun.

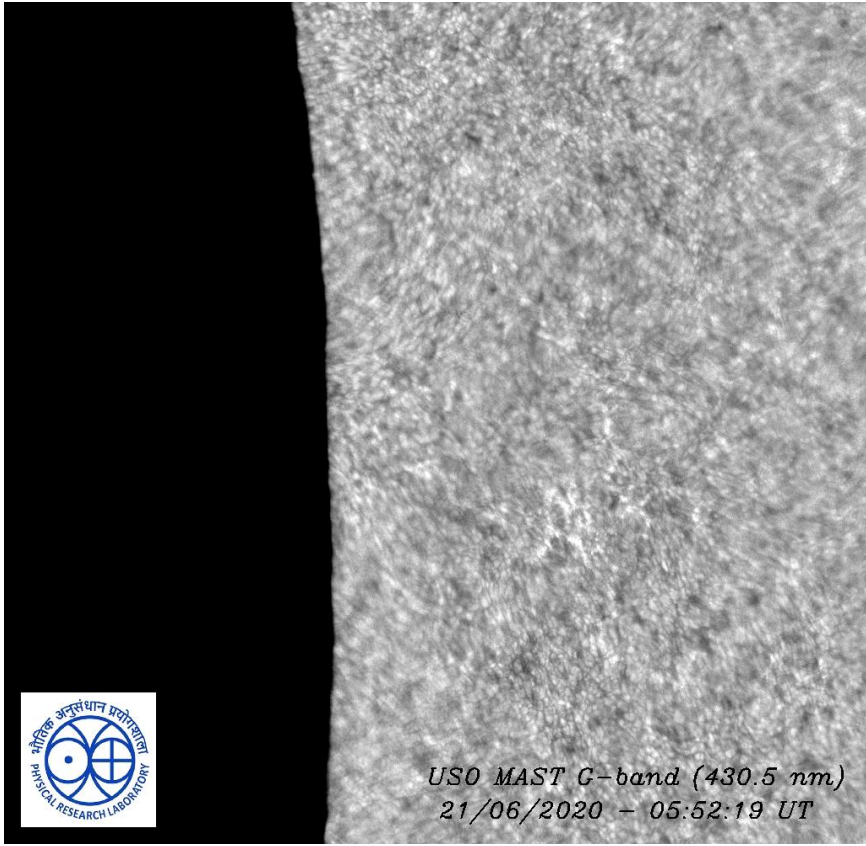


Fig.2 – High resolution images of the Sun in the photosphere (top) and chromosphere (bottom) observed by MAST during the eclipse. The irregularities on the lunar limb can be seen on the left.

