

Daily Space Weather Summary (SUPARCO)

Thursday, June 16, 2022, 12:23 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	10.0 MHz							
Virtual Height of F2 layer (h`F2)	315 km							
Total Electron Content (TEC)	38 TECU							
Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances								
Distance (Km)	100	200	400	600	800	1000	1500	3000
MUF (MHz)	10.1	10.5	11.7	13.5	15.4	17.5	22.3	27.2
FOT (MHz)	8.6	8.9	9.9	11.5	13.1	14.9	19.0	23.1

Local HF conditions are enhanced as compared to the predicted monthly median MUF.

LOCAL GEOMAGNETIC CONDITIONS

K-index	2 (Quiet)
Total Field (F) (SON/ISB)	45583/50093 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	149
Solar radio flux (F10.7)	140 sfu
Solar wind speed	550.1 km/s (varied in the past 24 hrs between 510 & 614 km/s)
Solar x-ray flares	B8.0 (max flare in the past 24 hrs: M1, 0353 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	11.5 nT (varied in the past 12 hrs between 6.2 nT & 9.0 nT) 5.7 nT (varied in the past 12 hrs between -1.4 nT & 5.6 nT)

Solar conditions are at moderate to high levels with background X-ray flux at B-class level.

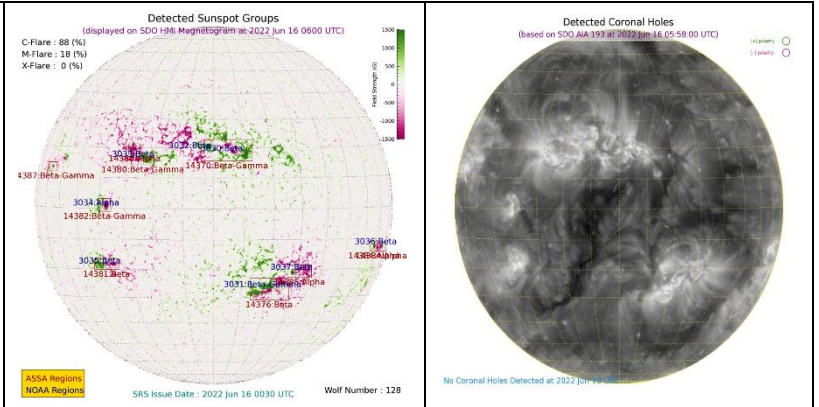
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

Notes: Credits: www.spaceweather.go.kr, www.sws.bom.gov.au, www.spaceweather.com, www.solen.info

Daily Sun: 16 June 2022

There is one active region AR3031 present on the Sun capable of producing strong C and M-Class solar flares having chances of 88% and 18% respectively.

No Coronal Hole (CH) is detected on the solar disk.



DISCUSSION:

Solar activity is expected to remain at moderate to high levels. Minor to moderate radio blackouts may be observed in case of solar flares. Moderate solar wind speed is expected due to CME impact. Quiet geomagnetic activity is expected. Local HF conditions are enhanced.