

Daily Space Weather Summary (SUPARCO)

Wednesday, June 22, 2022, 12:10 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	9.3 MHz							
Virtual Height of F2 layer (h`F2)	338 km							
Total Electron Content (TEC)	32 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)	9.4	9.6	10.7	12.1	13.8	15.5	19.7	27.2
FOT (MHz)	8.0	8.2	9.1	10.3	11.7	13.2	16.7	20.4

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	1 (Quiet)
Total Field (F) (Son/Isb)	45103/50113 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	104
Solar radio flux (F10.7)	139 sfu
Solar wind speed	484.8 km/sec (varied in the past 24 hrs between 395 & 548 km/s)
Solar x-ray flares	C1.8 (max flare in the past 24 hrs: C5, 1621 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	7.6 nT (varied in the past 12 hrs between 5.8 nT & 7.7 nT) -5.6 nT (varied in the past 12 hrs between -5.6 nT & 3.3 nT)

Solar conditions are at moderate levels with background X-ray flux at C-class level.

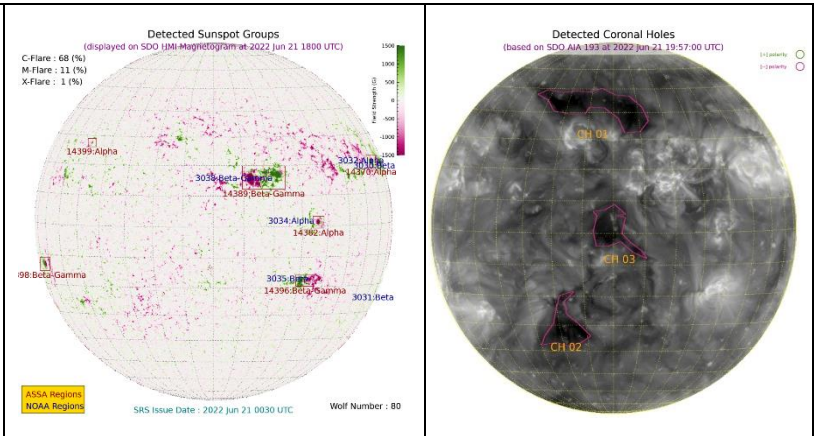
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 22 June 2022

There is one active region AR3038 present on the Sun capable of producing strong C and M-Class solar flares having chances of 68% and 11% respectively.

03 Coronal Holes (CHs) are detected on the solar disk.



DISCUSSION:

Solar activity is expected to remain at moderate levels. Minor to moderate radio blackouts may be observed in case of solar flares. Low solar wind speed and quiet geomagnetic activity is expected. HF conditions are enhanced.