

Daily Space Weather Summary (SUPARCO)

Tuesday, August 16, 2022, 12:17 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	7.2 MHz							
Virtual Height of F2 layer (h`F2)	385 km							
Total Electron Content (TEC)	19 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)	7.3	7.4	8.0	8.9	10.0	11.2	14.1	18.6
FOT (MHz)	6.2	6.3	6.8	7.6	8.5	9.5	12.0	15.8

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

LOCAL GEOMAGNETIC CONDITIONS

K-Index	1 (quiet)
Total Field (F) (SON/ISB)	45599 /50109 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	92
Solar radio flux (F10.7)	131 sfu
Solar wind speed	372.2 km/s (varied in the past 24 hrs between 350 & 484 km/s)
Solar x-ray flares	B7.0 (max flare in the past 24 hrs: M2, 1654 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	3.7 nT (varied in the past 12 hrs between 0.1 nT & 3.7 nT) -2.4 nT (varied in the past 12 hrs between -1.6 nT & 1.1 nT)

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

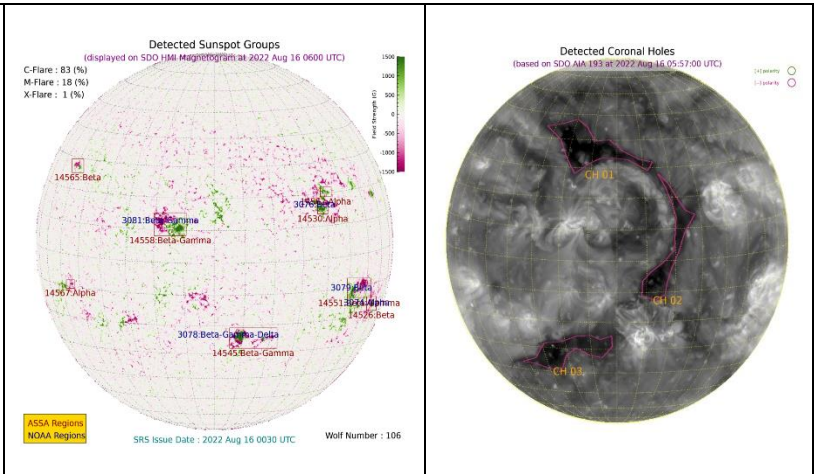
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 16 August 2022

There are three active regions present on the sun of which AR3078 is capable of producing strong M and X-Class solar flares having chances of 18% and 1% respectively.

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



DISCUSSION:

Solar activity is expected to remain at moderate levels. In case of solar flares, short wave fadeouts may be observed. Low to moderate solar wind speed will be prevail due to the presence of coronal holes. Quiet geomagnetic activity is expected. Local HF conditions are normal.