

Daily Space Weather Summary (SUPARCO)

Wednesday, August 31, 2022, 12:34 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	7.62 MHz							
Virtual Height of F2 layer (h`F2)	325 km							
Total Electron Content (TEC)	25 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)	7.7	8.0	8.9	10.3	11.8	13.4	17.2	19.7
FOT (MHz)	6.5	6.8	7.6	8.7	10.0	11.4	14.6	16.7

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	3 (Quiet)
Total Field (F) (Son/Isb)	45575/50085 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	50
Solar radio flux (F10.7)	126 sfu
Solar wind speed	536.7 km/sec (varied in the past 24 hrs between 518 & 617 km/s)
Solar x-ray flares	C1.6 (max flare in the past 24 hrs: (M2.1, 1929 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	7.0 nT (varied in the past 12 hrs between 7.0 nT & 14.8 nT) -1.12 nT (varied in the past 12 hrs between -2.89 nT & 3.58 nT)

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

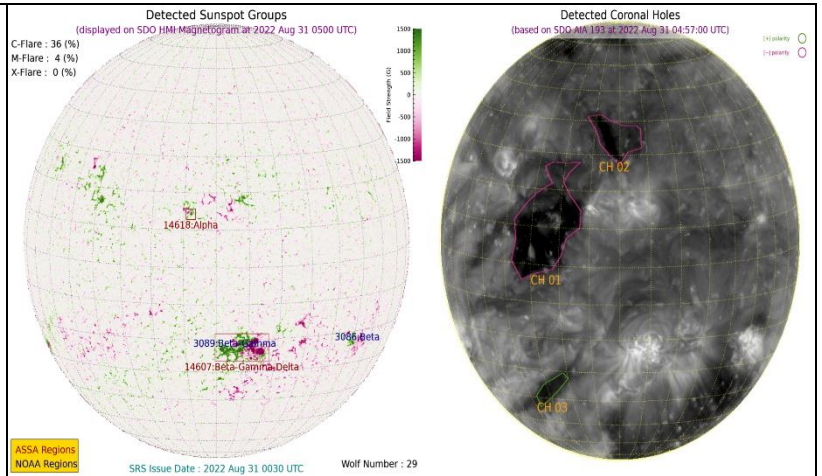
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 31 August 2022

There is one active region present on the Sun out of which AR3089 is capable of producing C and M-Class solar flares having chances of 36% and 4% respectively.

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



DISCUSSION:

Solar activity is expected to remain at moderate to high levels. Short wave fadeouts will be observed in case of solar flares. Low to moderate solar wind speed is expected to prevail. Geomagnetic activity is expected to be quiet to unsettled. HF conditions are slightly depressed.