

Daily Space Weather Summary (SUPARCO)

Tuesday, November 22, 2022, 12:11 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	9.8 MHz							
Virtual Height of F2 layer (h`F2)	265 km							
Total Electron Content (TEC)	36 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)	10.0	10.5	11.9	13.9	16.0	18.9	23.0	28.2
FOT (MHz)	8.5	8.9	10.1	11.8	13.6	16.1	20.0	24.0

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	0 (Quiet)
Total Field (F) (Son/Isb)	45536/50046 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	83
Solar radio flux (F10.7)	117 sfu
Solar wind speed	378.4 km/sec (varied in the past 24 hrs between 302 & 474 km/s)
Solar x-ray flares	B6.3 (max flare in the past 24 hrs: (C1, 2308 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.5 nT (varied in the past 12 hrs between 3.1 nT & 4.9 nT) +1.7 nT (varied in the past 12 hrs between -1.9 nT & +4.0 nT)

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

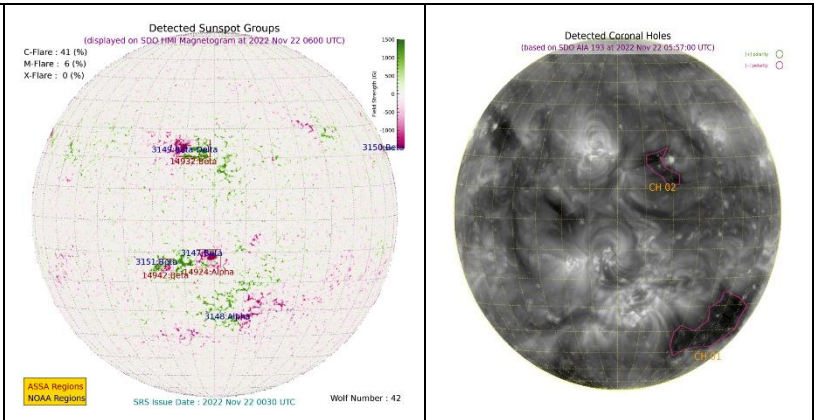
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 22 November 2022

There is one active region AR3149 present on the Sun capable of producing strong C and M-class solar flares having chances of 41% and 6% respectively.

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



DISCUSSION:

Solar activity is expected to be at moderate levels. In case of solar flares, shortwave fadeouts are possible. Light to moderate solar wind speed and quiet geomagnetic activity is expected to prevail. HF conditions are normal.