

Daily Space Weather Summary (SUPARCO)

Thursday, November 10, 2022, 12:41 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	13.5 MHz							
Virtual Height of F2 layer (h`F2)	313 km							
Total Electron Content (TEC)	70 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)	13.7	14.1	15.6	17.7	20.1	22.6	28.3	35.5
FOT (MHz)	11.6	12.0	13.3	15.0	17.1	19.2	24.1	30.1

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	0 (Quiet)
Total Field (F) (Son/Isb)	45534/50044 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	81
Solar radio flux (F10.7)	138 sfu
Solar wind speed	319.1 km/sec (varied in the past 24 hrs between 315 & 624 km/s)
Solar x-ray flares	B7.4 (max flare in the past 24 hrs: (C4, 2005 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.0 nT (varied in the past 12 hrs between 4.9 nT & 5.7 nT) 2.8 nT (varied in the past 12 hrs between 1.6 nT & +3.6 nT)

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

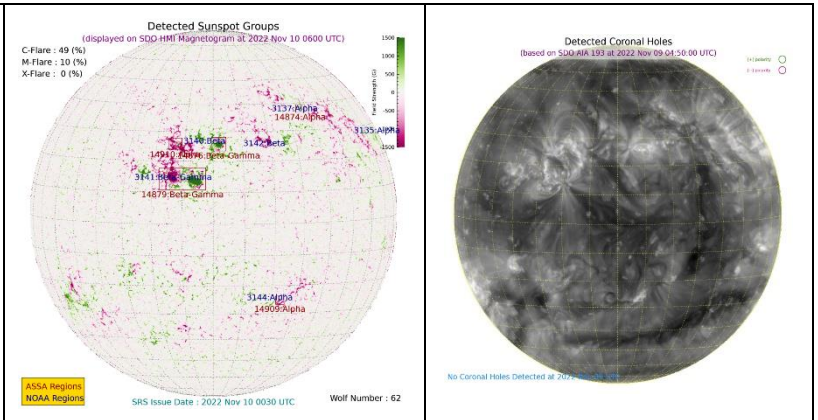
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 10 November 2022

There is one active region AR3140 present on the Sun capable of producing strong C and M-class solar flares having chances of 49% and 10% respectively.

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



DISCUSSION:

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