

Daily Space Weather Summary (SUPARCO)

Wednesday, November 16, 2022, 12:18 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	10.1 MHz							
Virtual Height of F2 layer (h`F2)	280 km							
Total Electron Content (TEC)	55 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)	10.3	10.7	12.4	14.6	17.1	19.6	25.4	28.2
FOT (MHz)	8.7	9.1	10.5	12.4	14.5	16.7	21.6	24.0

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)	45555/50060 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	69
Solar radio flux (F10.7)	134 sfu
Solar wind speed	358 km/sec (varied in the past 24 hrs between 304 & 511 km/s)
Solar x-ray flares	C 2.2 (max flare in the past 24 hrs: (C 6.0, 1051 UT Nov 15)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.2 nT (varied in the past 12 hrs between 4.7 nT & 14.6 nT) +5.0 nT (varied in the past 12 hrs between -9.4 nT & +10.3 nT)

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

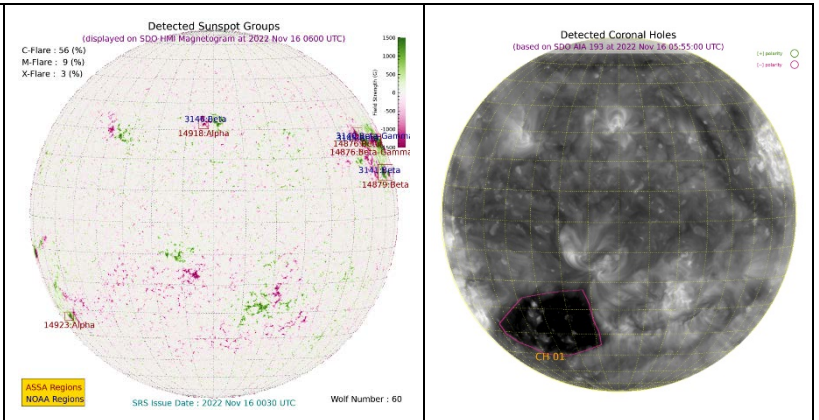
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 16 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 56% and 09% respectively.

01 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. Light solar wind speed and quiet to geomagnetic activity is expected. HF conditions are enhanced.