

Daily Space Weather Summary (SUPARCO)

Wednesday, May 18, 2022, 12:13 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	11.3 MHz							
Virtual Height of F2 layer (h`F2)	335 km							
Total Electron Content (TEC)	42 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)	11.4	11.7	12.9	14.7	16.8	18.9	24.1	29.9
FOT (MHz)	9.7	9.9	11.0	12.5	14.3	16.1	20.5	25.4

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	2 (Quiet)
Total Field (F) (Son/Isb)	45574/50084 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	153
Solar radio flux (F10.7)	171 sfu
Solar wind speed	506.7 km/sec (varied in the past 24 hrs between 508 & 616 km/s)
Solar x-ray flares	C1.0 (max flare in the past 24 hrs: M1, 1145 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.0 nT (varied in the past 12 hrs between 3.3 nT & 5.0 nT) 2.2 nT (varied in the past 12 hrs between -2.2 nT & 2.9 nT)

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

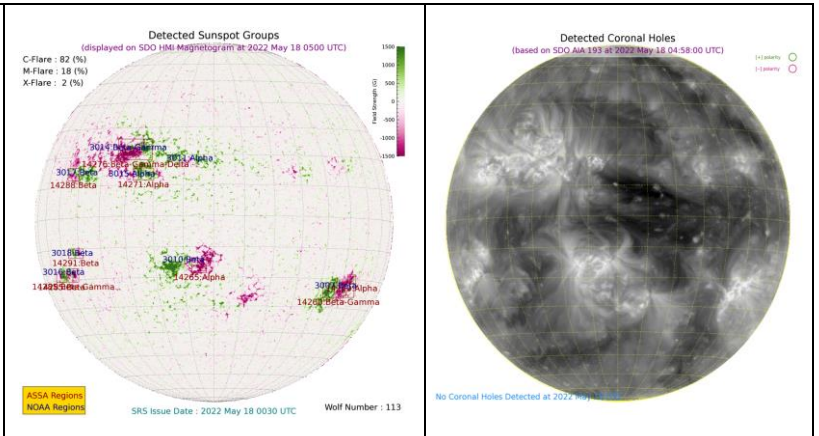
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 18 May 2022

There is one active region AR3014 present on the Sun capable of producing strong M and X-Class solar flares having 18% and 2% chances respectively.

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



DISCUSSION:

Solar activity is expected to remain at high levels. Moderate solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are slightly enhanced. Minor to moderate radio blackouts are possible in case of solar flares.