

Daily Space Weather Summary (SUPARCO)

Wednesday, April 27, 2022, 11:57 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SONMIANI)

Critical Frequency of F2 layer (foF2)	11.3 MHz							
Virtual Height of F2 layer (h`F2)	368 km							
Total Electron Content (TEC)	54 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	11.6	12.6	14.1	15.8	17.6	22.1	26.7
FOT (MHz)	9.7	9.9	10.7	12.0	13.4	15.0	18.8	22.7

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	1 (Quiet)
Total Field (F) (Son/Isb)	45588/50099 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	126
Solar radio flux (F10.7)	157 sfu
Solar wind speed	425.8 km/sec (varied in the past 24 hrs between 365 & 433 km/s)
Solar x-ray flares	B8.6 (max flare in the past 24 hrs: C3 1624 UT Apr 26)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	6.1 nT (varied in the past 12 hrs between 3.9 nT & 7.1 nT) -3.8 nT (varied in the past 12 hrs between -1.4 nT & 3.9 nT)

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

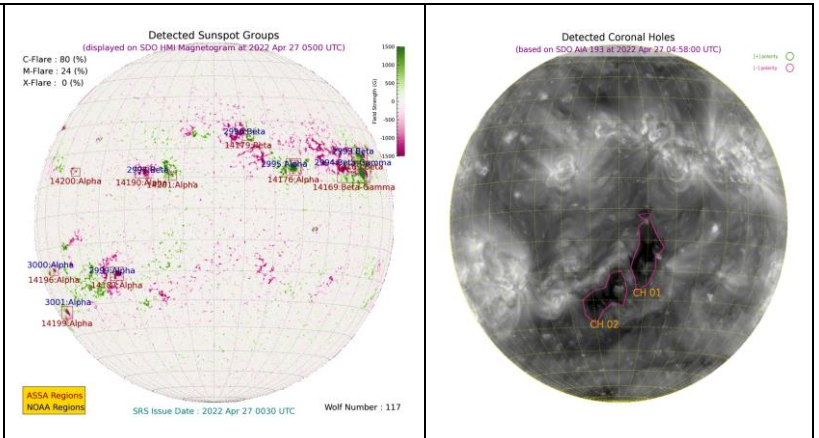
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 27 April 2022

There is one active region AR2994 present on the Sun capable of producing strong M and C-Class solar flares having 24% and 80% chances respectively.

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



DISCUSSION:

Solar activity is expected to remain at high levels. Low solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are normal.