

Daily Space Weather Summary (SUPARCO)

Tuesday, May 24, 2022, 12:09 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	10.5 MHz							
Virtual Height of F2 layer (h`F2)	378 km							
Total Electron Content (TEC)	40 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)	10.6	10.8	11.8	13.1	14.7	16.4	20.7	25.5
FOT (MHz)	8.8	9.2	10.0	11.1	12.5	13.9	17.6	21.7

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

LOCAL GEOMAGNETIC CONDITIONS

K-Index	1 (Quiet)
Total Field (F) (SON/ISB)	45591 /50101 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	132
Solar radio flux (F10.7)	165 sfu
Solar wind speed	426.4 km/s (varied in the past 24 hrs between 402 & 562 km/s)
Solar x-ray flares	C2.7 (max flare in the past 24 hrs: C5, 1105 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	1.5 nT (varied in the past 12 hrs between 1.9 nT & 3.4 nT) 1.3 nT (varied in the past 12 hrs between -0.8 nT & 2.4 nT)

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

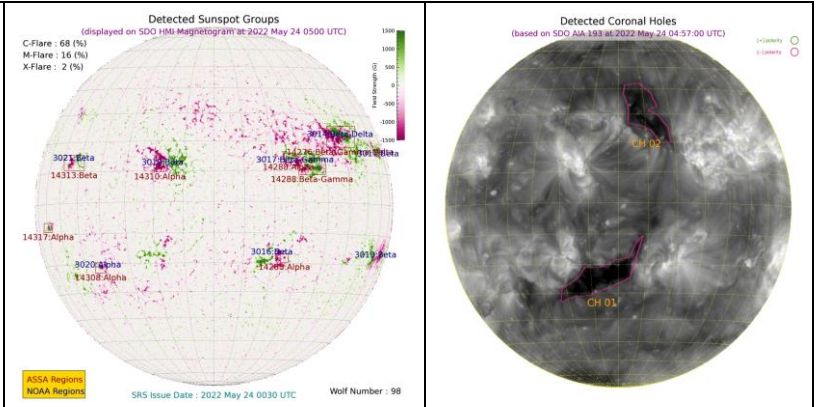
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 24 May 2022

There are two active regions AR3014 and AR3017 present on the Sun capable of producing strong solar flares.

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



DISCUSSION:

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