

Daily Space Weather Summary (SUPARCO)

Thursday, May 25, 2023, 12:12 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)								
Critical Frequency of F2 layer (foF2)		11.0 MHz						
Virtual Height of F2 layer (h`F2)		298 km						
Total Electron Content (TEC)		49 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)	11.2	11.6	13.1	15.1	17.5	19.9	25.4	28.3
FOT (MHz)	9.5	9.9	11.1	12.8	14.9	16.9	21.6	24.1
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)		45535/50045 nT						
The local geomagnetic field is quiet at the moment.								
LATEST SOLAR CONDITIONS								
Sunspot Number (SN)		153						
Solar radio flux (F10.7)		164 sfu						
Solar wind speed		553.2 km/s (varied in the past 24 hrs between 454 & 617 km/s)						
Solar x-ray flares		C1.1 (max flare in the past 24 hrs (M1, 1726 UT)						
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)		+4.3 nT (varied in the past 12 hrs between +4.3 nT & +5.2 nT) +2.2 nT (varied in the past 12 hrs between -5.2 nT & +3.7 nT)						
Solar conditions are at low to moderate levels with background X-ray flux at C-class level.								

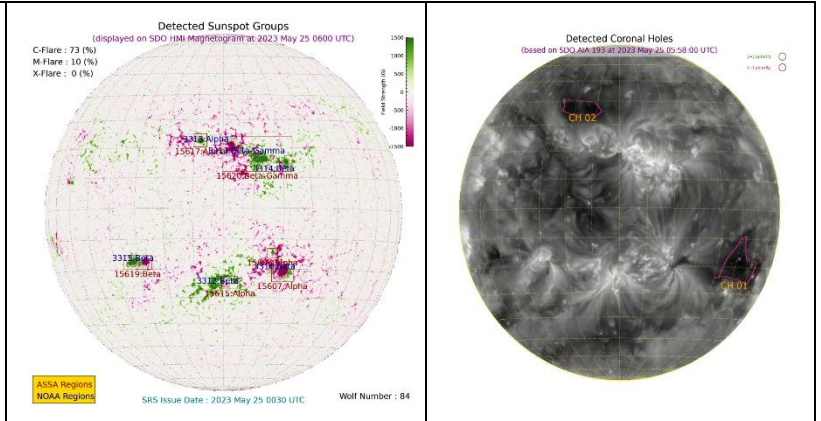
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 25 May 2023

There is one active region AR3311 present on the Sun capable of producing strong C and M-class solar flares having chances of 73% and 10% respectively.

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



DISCUSSION:

Solar activity is expected to be at low to moderate levels. In case of solar flares, shortwave fadeouts may be observed. Low to moderate solar wind speed is expected due to the presence of coronal holes. Geomagnetic activity is expected to be quiet. HF conditions are normal.