

Daily Space Weather Summary (SUPARCO)

Wednesday, May 11, 2022, 12:10 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	10.9 MHz							
Virtual Height of F2 layer (h`F2)	348 km							
Total Electron Content (TEC)	48 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)	11.0	11.3	12.4	14.0	15.9	17.9	22.6	28.1
FOT (MHz)	9.4	9.6	10.5	11.9	13.5	15.3	19.2	23.8

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	0 (Quiet)
Total Field (F) (Son/Isb)	45597/50107 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	62
Solar radio flux (F10.7)	116 sfu
Solar wind speed	266.4 km/sec (varied in the past 24 hrs between 266 & 307 km/s)
Solar x-ray flares	C1.6 (max flare in the past 24 hrs: X1 1355 UT May 10)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	6.4 nT (varied in the past 12 hrs between 4.4 nT & 6.3 nT) -4.3 nT (varied in the past 12 hrs between -4.4 nT & 0.1 nT)

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

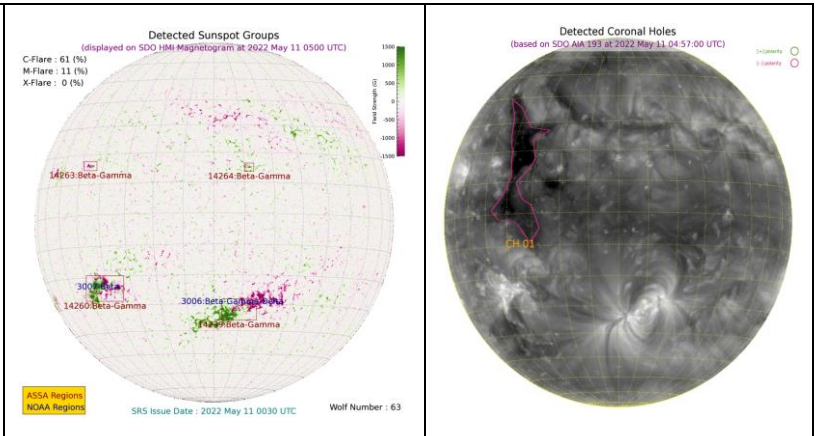
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 11 May 2022

There is one active region AR3006 present on the Sun capable of producing strong M and C-Class solar flares having 11% and 61% chances respectively.

01 Coronal Hole (CH) is 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 normal. Minor to moderate blackouts are possible in case of solar flares.