

Daily Space Weather Summary (SUPARCO)

Wednesday, February 23, 2022, 12:20 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	10.4 MHz							
Virtual Height of F2 layer (h`F2)	293 km							
Total Electron Content (TEC)	28 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	11.0	12.3	14.1	16.1	18.1	22.9	28.3
FOT (MHz)	9.0	9.4	10.5	12.0	13.7	15.4	19.5	24.1

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	0 (Quiet)
Total Field (F) (SON/ISB)	45555/50069 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	38
Solar radio flux (F10.7)	95 sfu
Solar wind speed	509.2 km/s (varied in the past 24 hrs between 461 & 575 km/s)
Solar x-ray flares	B1.7 (max flare in the past 24 hrs: B4 0244 UT Feb 23)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.5 nT (varied in the past 12 hrs between 3.8 nT & 5.7 nT) 1.6 nT (varied in the past 12 hrs between -2.2 nT & 3.3 nT)

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

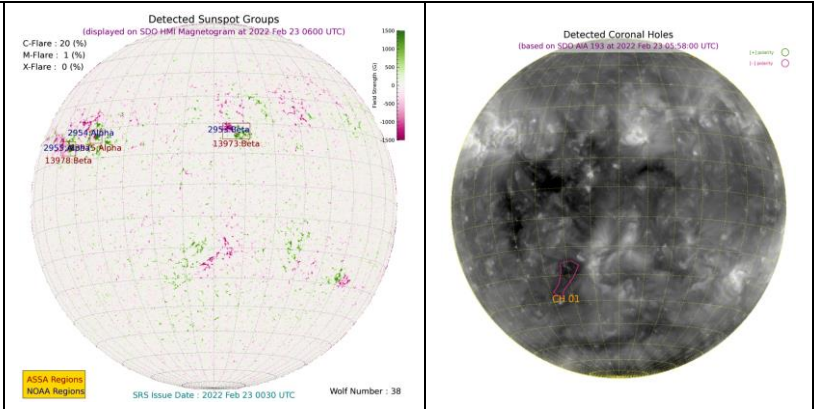
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 23 February 2022

There is no active region present on the Sun capable of producing strong solar flares.

01 Coronal Hole (CH) is detected on the solar disk.



DISCUSSION:

Solar activity is expected to remain at low levels. Moderate solar wind speed is expected due to the presence of coronal hole. Geomagnetic activity is expected to be quiet. Local HF conditions are normal.