

Daily Space Weather Summary (SUPARCO)

Tuesday, February 22, 2022, 12:33 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	9.9 MHz							
Virtual Height of F2 layer (h`F2)	283 km							
Total Electron Content (TEC)	22 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)	10.1	10.5	11.8	13.6	15.6	17.6	22.3	27.5
FOT (MHz)	8.6	8.9	10.0	11.6	13.3	15.0	18.6	23.4

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	2 (Quiet)
Total Field (F) (SON/ISB)	45532 /50062 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	48
Solar radio flux (F10.7)	98 sfu
Solar wind speed	536.9 km/s (varied in the past 24 hrs between 497 & 585 km/s)
Solar x-ray flares	B1.9 (max flare in the past 24 hrs: C3 1900 UT Feb 21)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.9 nT (varied in the past 12 hrs between -2.16 nT & 2.7 nT) -4.8 nT (varied in the past 12 hrs between 5.1 nT & 6.7 nT)

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

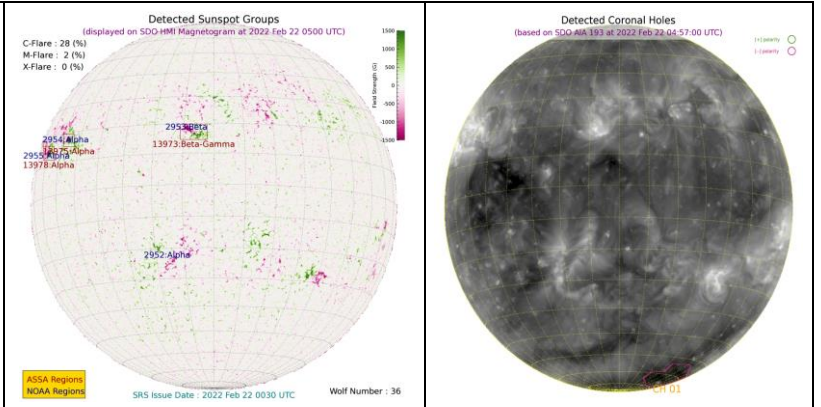
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 22 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.