

Daily Space Weather Summary (SUPARCO)

Wednesday, February 16, 2022, 14:39 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	8.4 MHz							
Virtual Height of F2 layer (h`F2)	248 km							
Total Electron Content (TEC)	20 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)	8.6	9.1	10.7	13.0	15.3	17.8	23.1	30.6
FOT (MHz)	7.3	7.8	9.1	11.0	13.1	15.1	19.7	26.0

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	1 (Quiet)
Total Field (F) (SON/ISB)	45556/50090 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	73
Solar radio flux (F10.7)	114 sfu
Solar wind speed	369.3 km/sec (varied in the past 24 hrs between 366 & 420 km/s)
Solar x-ray flares	B3.1 (max flare in the past 24 hrs: M1 1815 UT Feb 15)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	4.4 nT (varied in the past 12 hrs between 2.9 nT & 4.4 nT) 0.8 nT (varied in the past 12 hrs between -3.0 nT & 0.7 nT)

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

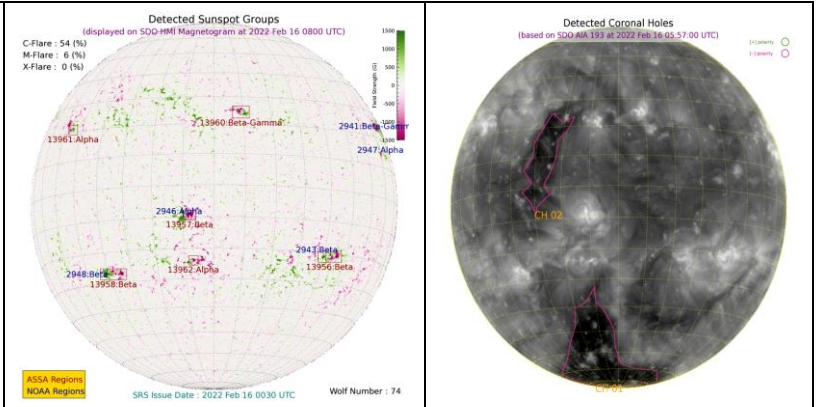
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 16 February 2022

There is one active region AR2941 present on the Sun capable of producing low level M-Class solar flares.

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



DISCUSSION:

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