

# Daily Space Weather Summary (SUPARCO)

Thursday, February 10, 2022, 14:19 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SONMIANI)

<b>Critical Frequency of F2 layer (foF2)</b>	9.5 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	290 km							
<b>Total Electron Content (TEC)</b>	26 TECU							
<b>Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances</b>								
<b>Distance (Km)</b>	<b>100</b>	<b>200</b>	<b>400</b>	<b>600</b>	<b>800</b>	<b>1000</b>	<b>1500</b>	<b>3000</b>
<b>MUF (MHz)</b>	7.7	8.0	9.2	10.9	12.7	14.6	19.0	26.0
<b>FOT (MHz)</b>	6.5	6.8	7.8	9.2	10.8	12.4	16.1	22.1

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

## LOCAL GEOMAGNETIC CONDITIONS

<b>K-index</b>	1 (Quiet)
<b>Total Field (F) (Son/Isb)</b>	45556/50072 nT

The local geomagnetic field is quite at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	78
<b>Solar radio flux (F10.7)</b>	123 sfu
<b>Solar wind speed</b>	396.7 km/sec (varied in the past 24 hrs between 386 & 504 km/s)
<b>Solar x-ray flares</b>	B4.7 (max flare in the past 24 hrs:C5 1736 UT Feb09)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	11.3 nT (varied in the past 12 hrs between 4.23nT & 10.92 nT) 6.3 nT (varied in the past 12 hrs between -2.06nT & 3.31 nT)

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

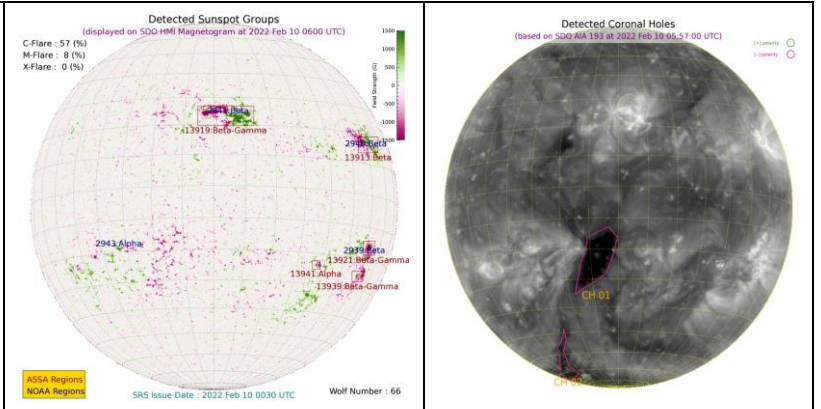
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

Notes: Credits: [www.spaceweather.go.kr](http://www.spaceweather.go.kr), [www.sws.bom.gov.au](http://www.sws.bom.gov.au), [www.spaceweather.com](http://www.spaceweather.com), [www.solen.info](http://www.solen.info)

## Daily Sun: 10 February 2022

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