

# Daily Space Weather Summary (SUPARCO)

Thursday, February 17, 2022, 13:06 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

<b>Critical Frequency of F2 layer (foF2)</b>	12.9 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	255 km							
<b>Total Electron Content (TEC)</b>	38 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>	13.1	13.9	16.3	19.6	23.2	26.8	28.5	38.1
<b>FOT (MHz)</b>	11.2	11.8	14.0	16.7	19.7	22.8	24.2	32.3

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

## LOCAL GEOMAGNETIC CONDITIONS

<b>K-index</b>	1 (Quiet)
<b>Total Field (F) (SON/ISB)</b>	45575/50084 nT

The local geomagnetic field is quite at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	111
<b>Solar radio flux (F10.7)</b>	103 sfu
<b>Solar wind speed</b>	391.7 km/sec (varied in the past 24 hrs between 350 & 401 km/s)
<b>Solar x-ray flares</b>	B3.3 (max flare in the past 24 hrs: C2 0602 UT Feb 17)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	4.4 nT (varied in the past 12 hrs between 3.6 nT & 10.92 nT) -0.7 nT (varied in the past 12 hrs between -5.5 nT & -0.7 nT)

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

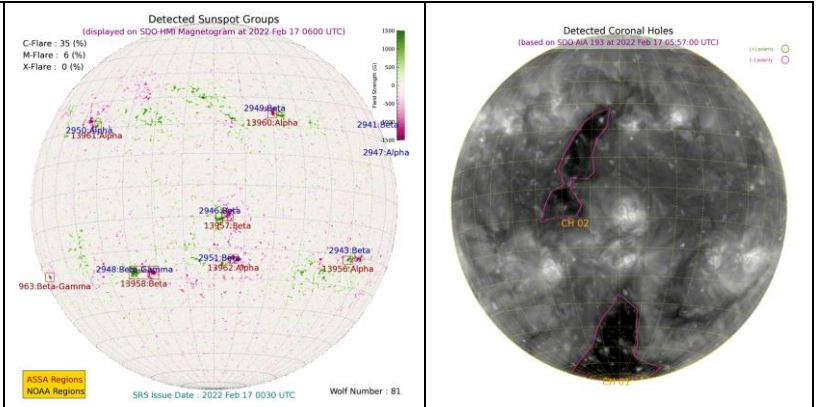
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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: 17 February 2022

There is one active region AR2948 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 moderate levels. Low solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are enhanced.