

# Daily Space Weather Summary (SUPARCO)

Wednesday, April 13, 2022, 12:16 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SONMIANI)

<b>Critical Frequency of F2 layer (foF2)</b>	12.1 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	345 km							
<b>Total Electron Content (TEC)</b>	44 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>	12.2	12.5	13.8	15.6	17.8	20.0	25.6	34.0
<b>FOT (MHz)</b>	10.4	10.6	11.7	13.3	15.1	17.0	21.8	28.9

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

## LOCAL GEOMAGNETIC CONDITIONS

<b>K-index</b>	2 (Quiet)
<b>Total Field (F) (Son/Isb)</b>	45557/50067 nT

The local geomagnetic field is quite at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	23
<b>Solar radio flux (F10.7)</b>	96 sfu
<b>Solar wind speed</b>	485.7 km/sec (varied in the past 24 hrs between 439 & 521 km/s)
<b>Solar x-ray flares</b>	B1.6 (max flare in the past 24 hrs: C3 0649 UT Apr 12)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	11.3 nT (varied in the past 12 hrs between 3.9 nT & 11.2 nT) -2.5 nT (varied in the past 12 hrs between -3.8 nT & 2.2 nT)

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

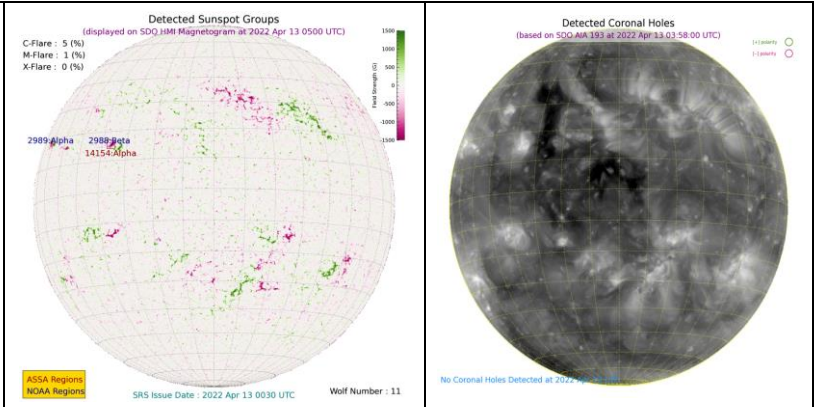
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

Notes: Credits: [www.spaceweather.go.kr](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: 13 April 2022

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

No Coronal Holes (CHs) are detected on the solar disk.



### DISCUSSION:

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