

# Daily Space Weather Summary (SUPARCO)

Monday, April 18, 2022, 12:33 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

<b>Critical Frequency of F2 layer (foF2)</b>	10.7 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	310 km							
<b>Total Electron Content (TEC)</b>	40 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>	10.9	11.3	12.6	14.4	16.5	18.6	23.6	32.0
<b>FOT (MHz)</b>	9.3	9.6	10.7	12.2	14.0	15.8	20.0	27.0

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>	45566/50076 nT

The local geomagnetic field is quiet at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	74
<b>Solar radio flux (F10.7)</b>	135 sfu
<b>Solar wind speed</b>	571.6 km/s (varied in the past 24 hrs between 453 & 594 km/s)
<b>Solar x-ray flares</b>	C1.6 (max flare in the past 24 hrs: M4 2234 UT Apr 17)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	6.5 nT (varied in the past 12 hrs between 6.4 nT & 9.3 nT) 3.2 nT (varied in the past 12 hrs between -0.4 nT & 5.7 nT)

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

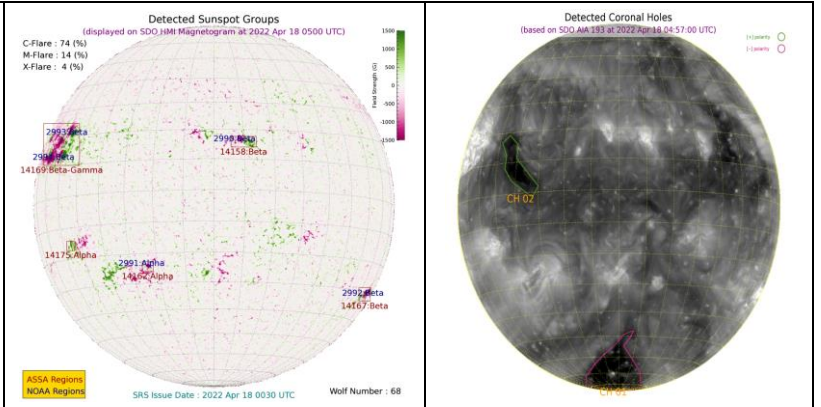
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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: 18 April 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 moderate levels. Moderate solar wind and quiet geomagnetic activity is expected. Local HF conditions are enhanced.