

# Daily Space Weather Summary (SUPARCO)

Tuesday, May 10, 2022, 12:07 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

<b>Critical Frequency of F2 layer (foF2)</b>	9.7 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	348 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>	9.8	10.1	11.1	12.5	14.2	16.0	20.2	28.0
<b>FOT (MHz)</b>	8.3	8.6	9.4	10.6	12.1	13.6	17.2	23.8

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

## LOCAL GEOMAGNETIC CONDITIONS

<b>K-index</b>	0 (Quiet)
<b>Total Field (F) (SON/ISB)</b>	45580 /50090 nT

The local geomagnetic field is quite at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	71
<b>Solar radio flux (F10.7)</b>	117 sfu
<b>Solar wind speed</b>	306.2 km/s (varied in the past 24 hrs between 295 & 318 km/s)
<b>Solar x-ray flares</b>	C1.0 (max flare in the past 24 hrs: C2 1431 UT May 09)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	4.4 nT (varied in the past 12 hrs between 4.3 nT & 5.8 nT) 0.4 nT (varied in the past 12 hrs between -2.7 nT & 1.8 nT)

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

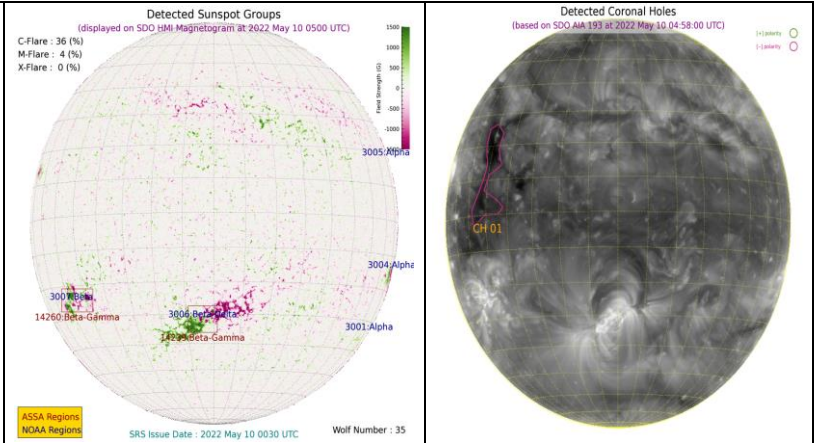
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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: 10 May 2022

There is one active region AR3006 present on the Sun capable of producing strong solar flares.

01 Coronal Hole (CH) is 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 slightly enhanced.