

# Daily Space Weather Summary (SUPARCO)

Tuesday, August 01, 2023, 12:31 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

<b>Critical Frequency of F2 layer (foF2)</b>	10.4 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	288 km							
<b>Total Electron Content (TEC)</b>	45 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>	10.5	11.0	12.5	14.5	16.8	19.2	24.7	28.2
<b>FOT (MHz)</b>	8.8	9.4	10.6	12.3	14.3	16.3	21.0	24.0

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

## LOCAL GEOMAGNETIC CONDITIONS

<b>K-index</b>	0 (Quiet)
<b>Total Field (F) (Son/Isb)</b>	45515/50025 nT

The local geomagnetic field is quiet at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	197
<b>Solar radio flux (F10.7)</b>	174 sfu
<b>Solar wind speed</b>	379.2 km/s (varied in the past 24 hrs between 348 & 490 km/s)
<b>Solar x-ray flares</b>	M2.3 (max flare in the past 24 hrs (M3, 0657 UT)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	+3.0 nT (varied in the past 12 hrs between +2.3 nT & +5.4 nT) +0.8 nT (varied in the past 12 hrs between -3.8 nT & +3.4 nT)

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

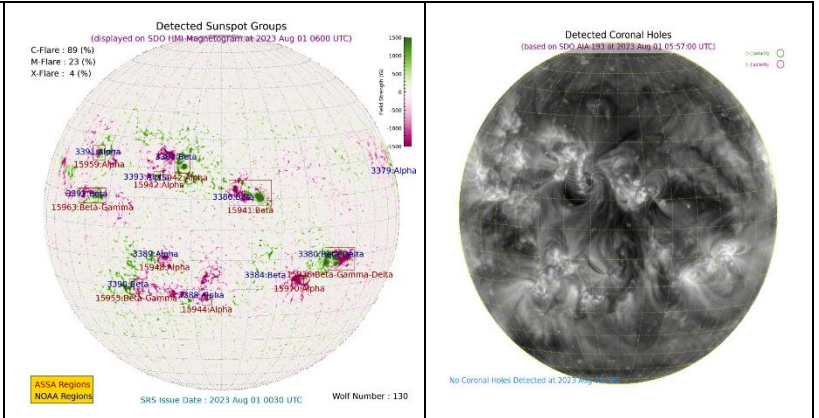
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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: 1 August 2023

There is one active region AR3380 present on the Sun capable of producing strong C and M-class solar flares having chances of 23% and 4% respectively.

No Coronal Hole (CH) is detected on the solar disk.



## DISCUSSION:

Solar activity is expected to be at moderate levels. In case of solar flares, shortwave fadeouts may be observed. Low to moderate solar wind speed and quiet geomagnetic activity is expected. HF conditions are normal.