

# Daily Space Weather Summary (SUPARCO)

Thursday, September 22, 2022, 12:33 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

<b>Critical Frequency of F2 layer (foF2)</b>	10.1 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	280 km							
<b>Total Electron Content (TEC)</b>	62 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>	10.3	10.7	12.1	14.2	16.4	18.8	23.9	28.1
<b>FOT (MHz)</b>	8.8	9.1	10.3	12.1	13.9	16.0	20.3	23.9

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>	45513/50023 nT

The local geomagnetic field is quiet at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	70
<b>Solar radio flux (F10.7)</b>	137 sfu
<b>Solar wind speed</b>	413.9 km/sec (varied in the past 24 hrs between 310 & 539 km/s)
<b>Solar x-ray flares</b>	B9.8 (max flare in the past 24 hrs: (M1, 0702 UT)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	5.4 nT (varied in the past 12 hrs between 3.6 nT & 5.6 nT) 0.6 nT (varied in the past 12 hrs between 0.3 nT & 3.3 nT)

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

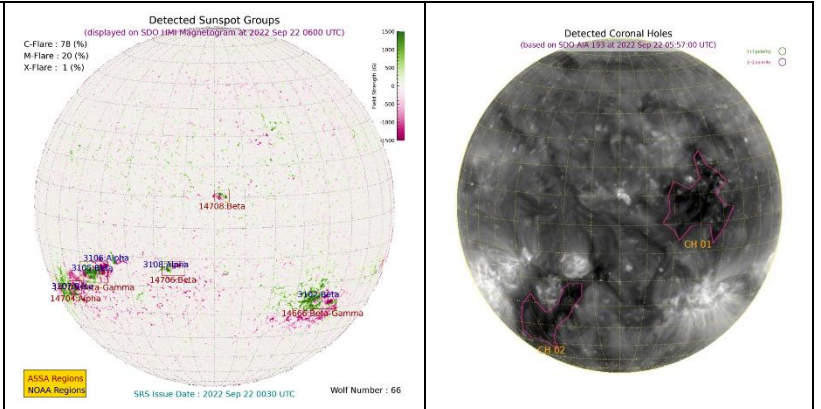
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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: 22 September 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 low to moderate levels. In case of solar flares, shortwave fadeouts may be observed. Low solar wind speed and quiet geomagnetic activity is expected. HF conditions are slightly enhanced.