

# Daily Space Weather Summary (SUPARCO)

Tuesday, June 14, 2022, 12:31 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

<b>Critical Frequency of F2 layer (foF2)</b>	10.0 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	358 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>	10.1	10.4	11.4	12.8	14.5	16.2	20.4	25.1
<b>FOT (MHz)</b>	8.6	8.8	9.7	10.9	12.3	13.8	17.3	21.3

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

## LOCAL GEOMAGNETIC CONDITIONS

<b>K-Index</b>	1 (Quiet)
<b>Total Field (F) (SON/ISB)</b>	45102 /50112 nT

The local geomagnetic field is quite at the moment.

## LATEST SOLAR CONDITIONS

<b>Sunspot Number (SN)</b>	96
<b>Solar radio flux (F10.7)</b>	132 sfu
<b>Solar wind speed</b>	482.9 km/s (varied in the past 24 hrs between 436 & 558 km/s)
<b>Solar x-ray flares</b>	C1.5 (max flare in the past 24 hrs: C8, 0639 UT)
<b>Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)</b>	6.9 nT (varied in the past 12 hrs between 4.9 nT & 8.4 nT) -0.4 nT (varied in the past 12 hrs between -1.7 nT & 4.3 nT)

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

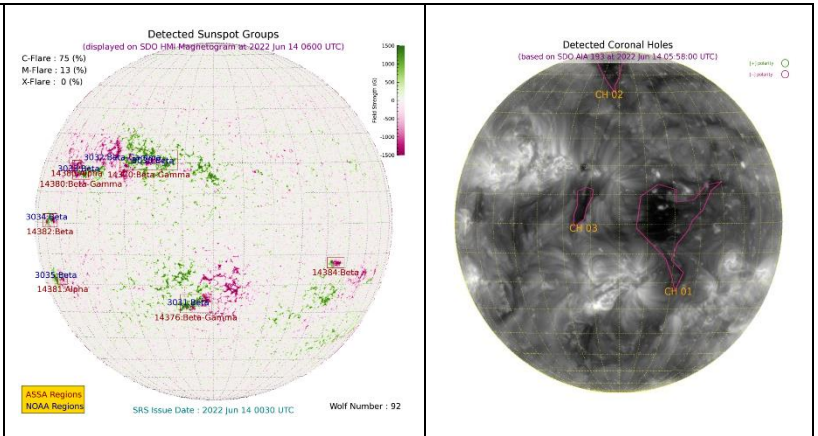
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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: 14 June 2022

There is one active region AR3032 present on the Sun capable of producing strong C and M-Class solar flares with chances of 75% and 13%.

03 Coronal Holes (CHs) are detected on the solar disk.



### DISCUSSION:

Solar activity is expected to remain at moderate levels. Low to moderate solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are enhanced. Minor to moderate radio blackouts may be observed in case of solar flares.