

Daily Space Weather Summary (SUPARCO)

Wednesday, August 10, 2022, 12:24 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

| | | | | | | | | |
|---|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Critical Frequency of F2 layer (foF2) | 7.3 MHz | | | | | | | |
| Virtual Height of F2 layer (h`F2) | 358 km | | | | | | | |
| Total Electron Content (TEC) | 18 TECU | | | | | | | |
| Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances | | | | | | | | |
| Distance (Km) | 100 | 200 | 400 | 600 | 800 | 1000 | 1500 | 3000 |
| MUF (MHz) | 7.4 | 7.6 | 8.3 | 9.3 | 10.5 | 11.8 | 14.9 | 17.6 |
| FOT (MHz) | 6.3 | 6.5 | 7.1 | 7.9 | 8.9 | 10.0 | 12.7 | 15.0 |

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

LOCAL GEOMAGNETIC CONDITIONS

| | |
|----------------------------------|----------------|
| K-index | 2 (Quiet) |
| Total Field (F) (Son/Isb) | 45573/50083 nT |

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

| | |
|---|---|
| Sunspot Number (SN) | 58 |
| Solar radio flux (F10.7) | 109 sfu |
| Solar wind speed | 599.4 km/sec (varied in the past 24 hrs between 535 & 618 km/s) |
| Solar x-ray flares | B3.5 (max flare in the past 24 hrs: (B9, 0102 UT) |
| Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz) | 5.6 nT (varied in the past 12 hrs between 5.3 nT & 6.2 nT) 1.3 nT (varied in the past 12 hrs between -2.0 nT & 5.3 nT) |

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

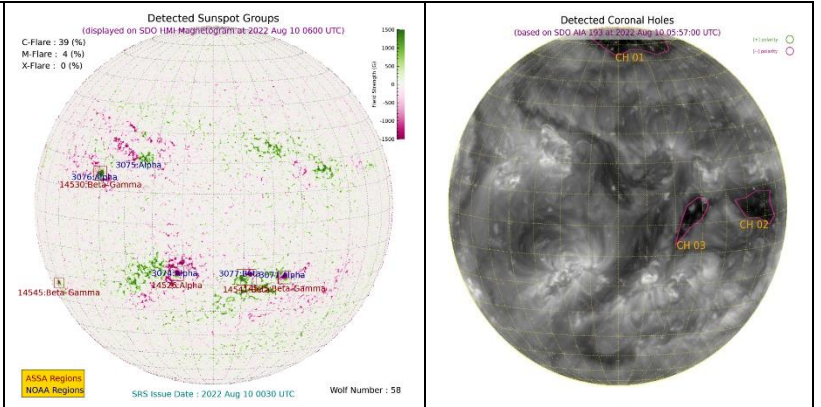
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

Notes: Credits: www.spaceweather.go.kr, www.sws.bom.gov.au, www.spaceweather.com, www.solen.info

Daily Sun: 10 August 2022

There is no active region present on the Sun capable of producing strong solar flares.

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



DISCUSSION:

Solar activity is expected to remain at low levels. Moderate solar wind speed will be prevailed due to the presence of coronal holes. Geomagnetic activity is expected to be quiet. HF conditions are normal.