

Daily Space Weather Summary (SUPARCO)

Tuesday, June 07, 2022, 12:13 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

| | | | | | | | | |
|-------------------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Critical Frequency of F2 layer (foF2) | 9.1 MHz | | | | | | | |
| Virtual Height of F2 layer (h`F2) | 353 km | | | | | | | |
| Total Electron Content (TEC) | 50 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) | 9.2 | 9.4 | 10.3 | 11.6 | 13.2 | 14.8 | 18.7 | 22.8 |
| FOT (MHz) | 7.8 | 8.0 | 8.8 | 9.9 | 11.2 | 12.6 | 16.0 | 19.4 |

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

LOCAL GEOMAGNETIC CONDITIONS

| | |
|----------------------------------|-----------------|
| K-Index | 1 (Quiet) |
| Total Field (F) (SON/ISB) | 45594 /50104 nT |

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

| | |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sunspot Number (SN) | 45 |
| Solar radio flux (F10.7) | 96 sfu |
| Solar wind speed | 317.6 km/s (varied in the past 24 hrs between 261 & 335 km/s) |
| Solar x-ray flares | B3.3 (max flare in the past 24 hrs: B5, 0329 UT) |
| Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz) | 7.5 nT (varied in the past 12 hrs between 6.0 nT & 9.5 nT) -5.1 nT (varied in the past 12 hrs between -6.1 nT & -0.6 nT) |

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

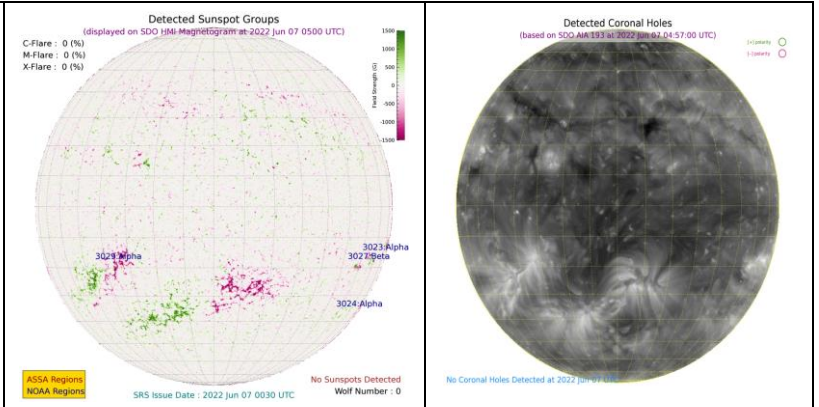
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 7 June 2022

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

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



DISCUSSION:

Solar activity is expected to remain at low levels. Low solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are slightly enhanced.