

Daily Space Weather Summary (SUPARCO)

Tuesday, October 01, 2024, 13:21 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

| | | | | | | | | |
|---|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Critical Frequency of F2 layer (foF2) | 13.5 MHz | | | | | | | |
| Virtual Height of F2 layer (h`F2) | 363 km | | | | | | | |
| Total Electron Content (TEC) | 70 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) | 13.6 | 14.0 | 15.3 | 17.1 | 19.3 | 21.6 | 27.3 | 34.4 |
| FOT (MHz) | 11.6 | 11.9 | 13.0 | 14.5 | 16.4 | 18.4 | 23.2 | 29.3 |

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) | 45667/50725 nT |

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

| | |
|---|--|
| Sunspot Number (SN) | 150 |
| Solar radio flux (F10.7) | 214 sfu |
| Solar wind speed | 442.6 km/s (varied in the past 24 hrs between 379 & 552 km/s) |
| Solar x-ray flares | C2.9 (max flare in the past 24 hrs (M7, 2359 UT)) |
| Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz) | +6.19 nT (varied in the past 12 hrs between +5.12 nT & +6.81 nT) +4.38 nT (varied in the past 12 hrs between -3.44 nT & +5.68 nT) |

Solar conditions are at low to 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, www.sws.bom.gov.au, www.spaceweather.com, www.solen.info

