

Daily Space Weather Summary (SUPARCO)

Thursday, October 31, 2024, 15:11 PST



| Radio Blackouts | | | Solar Radiation Storms | | | Geomagnetic Storms | | |
|-----------------|---------|-----------|------------------------|---------|-----------|--------------------|---------|-----------|
| -24 Hr | Current | Predicted | -24 Hr | Current | Predicted | -24 Hr | Current | Predicted |
| R1/ R2 | R0 | R1 - R2 | S0 | S1 | S1 | G0 | G0 | G0 / G1 |

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

| | | | | | | | | |
|---|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Critical Frequency of F2 layer (foF2) | 13.5 MHz | | | | | | | |
| Virtual Height of F2 layer (h`F2) | 295 km | | | | | | | |
| Total Electron Content (TEC) | 78 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 | 14.1 | 15.9 | 18.4 | 21.1 | 24.0 | 30.6 | 37.3 |
| FOT (MHz) | 11.6 | 12.0 | 13.5 | 15.6 | 17.9 | 20.4 | 26.0 | 31.7 |

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

LOCAL GEOMAGNETIC CONDITIONS

| | |
|----------------------------------|----------------|
| K-index | 0 (Quiet) |
| Total Field (F) (Son/Isb) | 45674/50714 nT |

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

| | |
|---|--|
| Sunspot Number (SN) | 200 |
| Solar radio flux (F10.7) | 270 sfu |
| Solar wind speed | 549.0 km/s (varied in the past 24 hrs between 447 & 622 km/s) |
| Solar x-ray flares | M1.1 (max flare in the past 24 hrs (M7, 2053 UT) |
| Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz) | +6.44 nT (varied in the past 12 hrs between +6.09 nT & +7.45 nT) +3.06 nT (varied in the past 12 hrs between -3.91 nT & +6.28 nT) |

Solar conditions are at high levels with background X-ray flux at M-class level.

