

Daily Space Weather Summary (SUPARCO)

Wednesday, September 21, 2022, 12:21 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	11.5 MHz							
Virtual Height of F2 layer (h`F2)	300 km							
Total Electron Content (TEC)	40 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)	11.6	12.0	13.5	15.5	18.8	20.2	25.8	31.1
FOT (MHz)	9.9	10.2	11.5	13.2	16.0	17.2	21.9	26.4

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)	45525/50035 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	70
Solar radio flux (F10.7)	137 sfu
Solar wind speed	490.3 km/sec (varied in the past 24 hrs between 287 & 542 km/s)
Solar x-ray flares	C1.8 (max flare in the past 24 hrs: (M1, 1122 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	4.2 nT (varied in the past 12 hrs between 2.9 nT & 5.8 nT) -1.7 nT (varied in the past 12 hrs between -3.2 nT & 2.4 nT)

Solar conditions are at low 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

