

Daily Space Weather Summary (SUPARCO)

Wednesday, July 24, 2024, 11:32 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	10.2 MHz							
Virtual Height of F2 layer (h`F2)	274 km							
Total Electron Content (TEC)	56 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)	7.1	7.5	9.1	11.3	13.7	16.2	21.8	26.3
FOT (MHz)	6.0	6.4	7.8	9.6	11.7	13.8	18.5	23.8

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)	45656/50765 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	167
Solar radio flux (F10.7)	176 sfu
Solar wind speed	314.8 km/s (varied in the past 24 hrs between 247 & 340km/s)
Solar x-ray flares	C1.35 (max flare in the past 24 hrs (M2 1428 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	+12.93 nT (varied in the past 12 hrs between +13.60 nT & +15.66 nT) -0.16 nT (varied in the past 12 hrs between -0.16 nT & +6.28 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

