

Daily Space Weather Summary (SUPARCO)

Monday, February 11, 2019, 14:55 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS OVER PAKISTAN ^a

Critical Frequency of F2 layer (foF2)	6.7 MHz							
Virtual Height of F2 layer (h`F2)	260 km							
Total Electron Content (TEC)	12 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)	6.8	7.2	8.4	10.1	11.9	13.7	17.8	23.8
FOT (MHz)	5.8	6.1	7.2	8.6	10.1	11.7	15.1	20.2

Local ionospheric conditions are fair with mildly depressed MUF conditions.

LOCAL GEOMAGNETIC CONDITIONS OVER PAKISTAN ^{ab}

K-index	1 (max K in 24 hrs: 1)
Total Field Value (F)	49863/45318 nT
Declination (D)	0.7/0.54 degrees

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	0
Solar radio flux (F10.7)	70 sfu
Solar wind speed	393 km/sec (varied in the past 24 hrs between 392 & 423 km/s)
Solar x-ray flares	A 0.0 (max flare in the past 24 hrs: A 0.0 0753 UT Feb 11)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.7 nT (varied in the past 24 hrs between 2.6 nT & 5.8 nT) -2 nT (varied in the past 24 hrs between -2.9 nT & +1.2 nT)

Solar conditions are at **low** levels with background X-ray flux at A-class level. Local HF working frequencies are fair to normal as compared to monthly average predicted values.

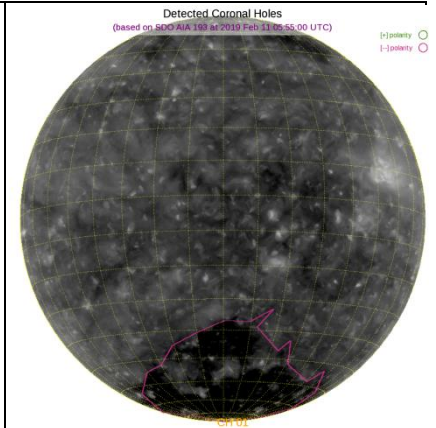
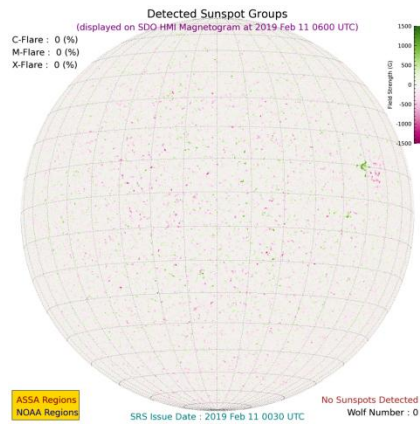
^aSonmiani (SON): 25.2° N, 66.75 E° ^bIslamabad (ISB): 33.7° N, 73.13 E°

Notes: Credits: www.spaceweather.go.kr, www.sws.bom.gov.au, www.spaceweather.com, www.solarmonitor.org

Daily Sun: 11 February 2019

There are no active regions on the solar disk capable of producing strong solar flares.

01 Coronal Hole (CH) is detected on the southern limb of the solar disk, with negative polarity.



DISCUSSION:

Local current ionospheric conditions are expected to remain at fair to nominal levels. HF communication users are advised to use the frequency ranges mentioned in the ionospheric section. Local geomagnetic conditions are expected to remain at quiet to slightly unsettled levels due to the influence of high speed stream from the current CH.

Very low solar activity is expected as there are no sunspots/active regions capable of producing strong solar flares.