

Daily Space Weather Summary (SUPARCO)

Thursday, April 11, 2019, 14:32 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS OVER PAKISTAN ^a

Critical Frequency of F2 layer (foF2)	11.9 MHz							
Virtual Height of F2 layer (h`F2)	260 km							
Total Electron Content (TEC)	22 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)	12.1	12.7	14.9	17.9	21.1	24.4	31.6	42.3
FOT (MHz)	10.3	10.8	12.7	15.2	18.0	20.7	26.9	35.9

Local ionospheric conditions are nominal with very good MUF conditions.

LOCAL GEOMAGNETIC CONDITIONS OVER PAKISTAN ^{ab}

K-index	1 (max K in 24 hrs: 2)
Total Field Value (F)	45338/49875 nT
Declination (D)	0.54/0.74 degrees

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	13
Solar radio flux (F10.7)	78 sfu
Solar wind speed	445 km/sec (varied in the past 24 hrs between 424 & 446 km/s)
Solar x-ray flares	A 6.2 (max flare in the past 24 hrs: B 1.0 0428 UT Apr 11)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	3.4 nT (varied in the past 24 hrs between 3.1 nT & 4.2 nT) -3.2 nT (varied in the past 24 hrs between -3.6 nT & +1.6 nT)

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

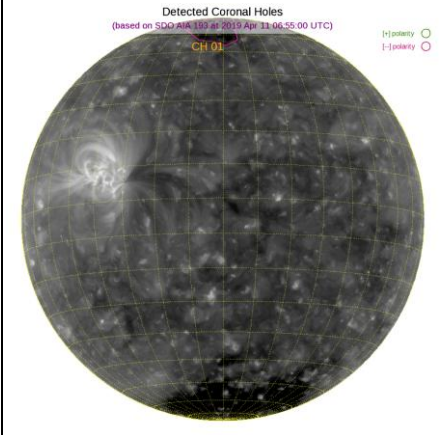
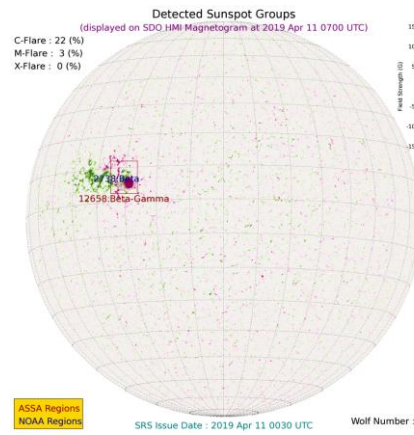
^aSonmiani (SON): 25.2° N, 66.75 E° ^bIslamabad (ISB): 33.7° N, 73.13 E°

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

Daily Sun: 11 April 2019

One active region AR 2738 is visible on the solar disk and possesses 22%, 3% and 0% chances of C, M and X-class solar flare(s) respectively.

Currently, 01 Coronal Hole (CH) is detected on the solar disk.



DISCUSSION:

Ionospheric conditions are expected to remain normal. MUF conditions are very good. HF communication users are advised to use the frequency ranges mentioned in the ionospheric section. The solar wind speed is expected to remain moderate. Geomagnetic conditions are expected to get slightly unsettled. Low solar activity is expected to persist with slight chances of C/M-class solar flare(s).