

Daily Space Weather Summary (SUPARCO)

Wednesday, May 15, 2019, 12:40 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS OVER PAKISTAN ^a

Critical Frequency of F2 layer (foF2)	8.6 MHz							
Virtual Height of F2 layer (h`F2)	340 km							
Total Electron Content (TEC)	20 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)	8.7	9.0	10.0	11.4	13.0	14.7	18.8	26.2
FOT (MHz)	7.4	7.6	8.5	9.7	11.1	12.5	16.0	22.3

Local ionospheric conditions are nominal with normal MUF conditions.

LOCAL GEOMAGNETIC CONDITIONS OVER PAKISTAN ^{ab}

K-index	1 (max K in 24 hrs: 3)
Total Field Value (F)	45350/49865 nT
Declination (D)	0.58/0.77 degrees

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	24
Solar radio flux (F10.7)	74 sfu
Solar wind speed	433 km/sec (varied in the past 24 hrs between 433 & 485 km/s)
Solar x-ray flares	A 9.5 (max flare in the past 24 hrs: B 1.0 1730 UT May 14)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	8.9 nT (varied in the past 24 hrs between 8.3 nT & 9.2 nT) +7.4 nT (varied in the past 24 hrs between +1.3 nT & +7.5 nT)

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

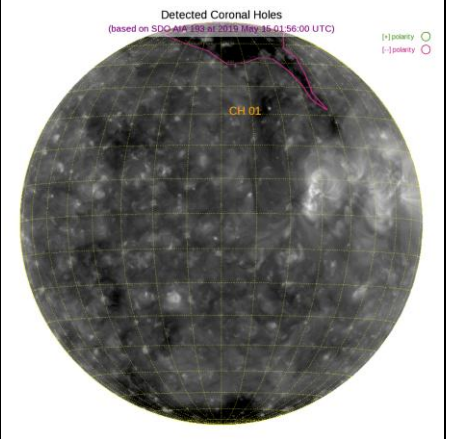
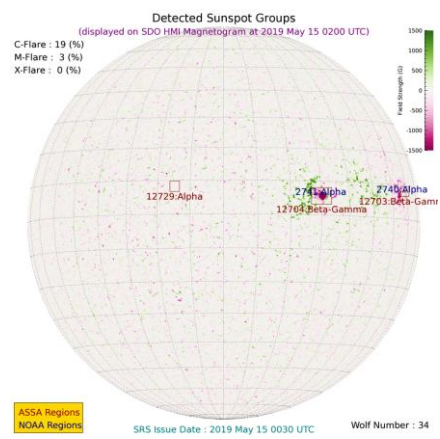
^aSonmiani (SON): 25.2° N, 66.75 E° ^bIslamabad (ISB): 33.7° N, 73.13 E°

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

Daily Sun: 15 May 2019

AR2740 and AR2741 are active regions on the solar disk which possesses 19%, 3% and 0% chances to produce C, M and X-class solar flare(s) respectively.

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



DISCUSSION:

Ionospheric conditions are expected to remain normal. Solar activity is at low levels with slight chances of C-class solar flare(s). The solar wind speed is currently moderate and is anticipated to enhance on the next two days due to the influence of 12 and 13 May CMEs. Slightly unsettled geomagnetic conditions are expected with chances to reach at minor storm levels in the next two days.