

Daily Space Weather Summary (SUPARCO)

Wednesday, September 16, 2020, 15:39 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS OVER PAKISTAN ^a

Critical Frequency of F2 layer (foF2)	7.6 MHz							
Virtual Height of F2 layer (h`F2)	293 km							
Total Electron Content (TEC)	21 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)	7.7	8	9.2	10.7	12.5	14.3	18.5	25.3
FOT (MHz)	6.6	6.8	7.8	9.1	10.6	12.2	15.7	21.5

Local ionospheric conditions are nominal with normal conditions.

LOCAL GEOMAGNETIC CONDITIONS OVER PAKISTAN ^{ab}

K-index	1 (max K in 24 hrs: 1)
Total Field Value (F)	45429/49935 nT
Declination (D)	0.97/1.64 degrees

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	0
Solar radio flux (F10.7)	69 sfu
Solar wind speed	323 km/sec (varied in the past 24 hrs between 317 & 390 km/s)
Solar x-ray flares	A 0.0 (max flare in the past 48 hrs: A 1.0 1100 UT Sep 16)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	1.5 nT (varied in the past 24 hrs between 1.0 nT & 5.8 nT) -1.0 nT (varied in the past 24 hrs between -3.4 nT & +1.2 nT)

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

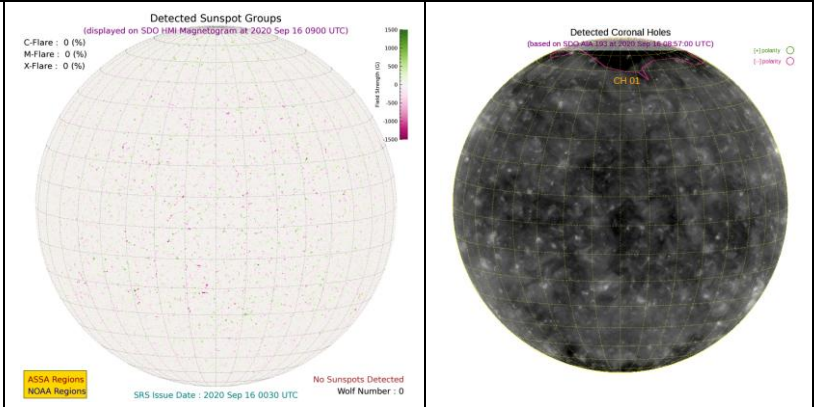
^aSonmiani (SON): 25.2° N, 66.75 E° ^bIslamabad (ISB): 33.7° N, 73.13 E°

Notes: Credits: www.spaceweather.go.kr, www.sws.bom.gov.au, www.spaceweather.com, www.solen.info

Daily Sun: 16 September 2020

There are no active regions capable of producing strong solar flares as the Sun is currently spotless.

01 Coronal Hole (CH) is detected on the northern solar limb.



DISCUSSION:

Solar activity is expected to remain at very low levels. The solar wind speed is expected to remain near its background levels. Geomagnetic conditions are expected to be at quiet levels. Local HF conditions are normal.