

# Daily Space Weather Summary (SUPARCO)

Wednesday, November 18, 2020, 15:10 PST



## LOCAL CURRENT IONOSPHERIC CONDITIONS OVER PAKISTAN <sup>a</sup>

Critical Frequency of F2 layer (foF2)		6.2 MHz						
Virtual Height of F2 layer (h`F2)		263 km						
Total Electron Content (TEC)		19 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)	6.3	6.6	7.8	9.3	10.9	12.6	16.3	22.0
FOT (MHz)	5.4	5.6	6.6	7.9	9.3	10.7	13.9	18.6

Local ionospheric conditions are normal with slightly depressed MUF conditions.

## LOCAL GEOMAGNETIC CONDITIONS OVER PAKISTAN <sup>ab</sup>

K-index	2
Total Field Value (F)	45426/49995 nT
Declination (D)	0.94/1.8 degrees

The local geomagnetic field is quiet at the moment.

## LATEST SOLAR CONDITIONS

Sunspot Number (SN)	11
Solar radio flux (F10.7)\	79 sfu
Solar wind speed	293 km/sec (varied in the past 24 hrs between 282 & 301 km/s)
Solar x-ray flares	A 5.1 ( <u>max flare in the past 48 hrs</u> : A 7.0 1020 UT Nov 17)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	2.5 nT (varied in the past 24 hrs between 2.1 nT & 5.1 nT) -1.9 nT (varied in the past 24 hrs between -3.1 nT & +0.9 nT)

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

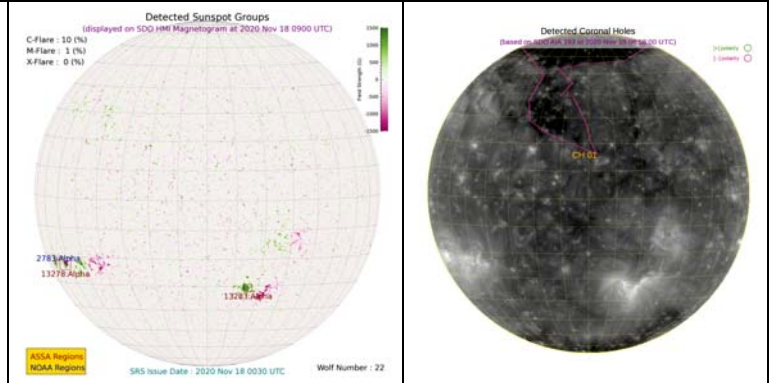
<sup>a</sup>Sonmiani (SON): 25.2° N, 66.75 E° <sup>b</sup>Islamabad (ISB): 33.7° N, 73.13 E°

Notes: Credits: [www.spaceweather.go.kr](http://www.spaceweather.go.kr), [www.sws.bom.gov.au](http://www.sws.bom.gov.au), [www.spaceweather.com](http://www.spaceweather.com), [www.solen.info](http://www.solen.info)

## Daily Sun: 18 November 2020

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

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



### DISCUSSION:

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