

# Daily Space Weather Summary (SUPARCO)

Thursday, March 14, 2019, 15:04 PST



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

<b>Critical Frequency of F2 layer (foF2)</b>	7.6 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	293 km							
<b>Total Electron Content (TEC)</b>	17 TECU							
<b>Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances</b>								
<b>Distance (Km)</b>	<b>100</b>	<b>200</b>	<b>400</b>	<b>600</b>	<b>800</b>	<b>1000</b>	<b>1500</b>	<b>3000</b>
<b>MUF (MHz)</b>	7.7	8.0	9.2	10.7	12.5	14.3	18.5	25.3
<b>FOT (MHz)</b>	6.6	6.8	7.8	9.1	10.6	12.2	15.7	21.5

Local ionospheric conditions are nominal with normal MUF conditions.

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

K-index	1 (max K in 24 hrs: 1)
Total Field Value (F)	45323/49867 nT
Declination (D)	0.58/0.72 degrees

The local geomagnetic field is quiet at the moment.

## LATEST SOLAR CONDITIONS

Sunspot Number (SN)	0
Solar radio flux (F10.7)	71 sfu
Solar wind speed	339 km/sec (varied in the past 24 hrs between 332 & 353 km/s)
Solar x-ray flares	A 0.0 (max flare in the past 24 hrs: A 0.0 0125 UT Mar 14)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.2 nT (varied in the past 24 hrs between 4.3 nT & 5.3 nT) -3.8 nT (varied in the past 24 hrs between -4.3 nT & +2.8 nT)

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

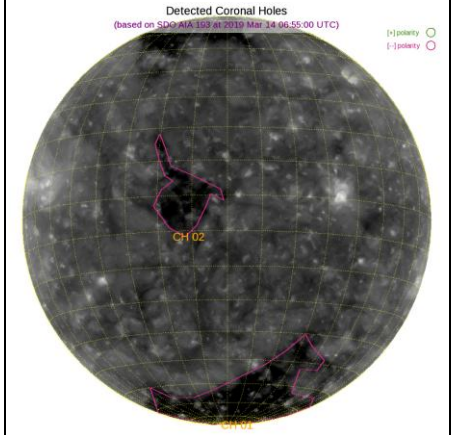
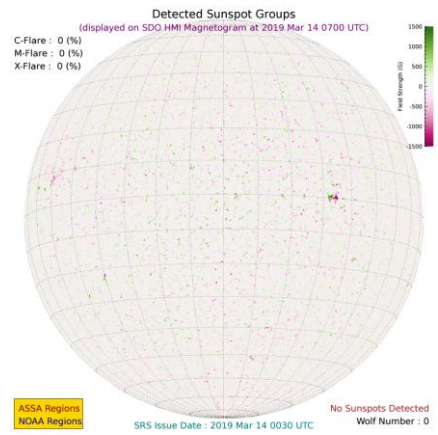
<sup>a</sup>Sonmiani (SON): 25.2° N, 66.75 E° <sup>b</sup>Islamabad (ISB): 33.7° N, 73.13 E°

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.solarmonitor.org](http://www.solarmonitor.org)

## Daily Sun: 14 March 2019

None of the regions are active on the solar disk at the moment.

Currently, 02 Coronal Holes (CH) are detected on the solar disk.



### DISCUSSION:

Nominal ionospheric conditions are expected. HF communication users are advised to use the frequency ranges mentioned in the ionospheric section. Solar wind speed might elevate later in the day which may cause the geomagnetic conditions to get slightly unsettled. Very low solar activity is expected to persist as there are no chances for the strong solar flares to erupt.