

# Daily Space Weather Summary (SUPARCO)

Wednesday, September 11, 2019, 14:45 UT



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

<b>Critical Frequency of F2 layer (foF2)</b>	8.9 MHz							
<b>Virtual Height of F2 layer (h`F2)</b>	313 km							
<b>Total Electron Content (TEC)</b>	16 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>	9.0	9.4	10.6	12.2	14.1	16.1	20.7	28.6
<b>FOT (MHz)</b>	7.7	8.0	9.0	10.4	12.0	13.7	17.6	24.3

Local ionospheric conditions are nominal with normal MUF conditions.

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

K-index	2(max K in 24 hrs: 2)	
Total Field Value (F)	45290/49810 nT	
Declination (D)	0.54/0.67 degrees	

The local geomagnetic field is quiet at the moment.

Sunspot Number (SN)	0
Solar radio flux (F10.7)	70 sfu
Solar wind speed	446 km/sec (varied in the past 24 hrs between 424 & 525 km/s)
Solar x-ray flares	A 4.1 (max flare in the past 24 hrs: A 7.0 1316 UT Sep 10)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	2.6 nT (varied in the past 24 hrs between 1.6 nT & 5.0 nT) -1.2 nT (varied in the past 24 hrs between -4.1 nT & +2.3 nT)

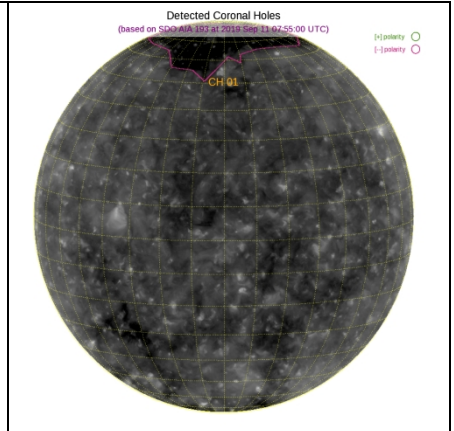
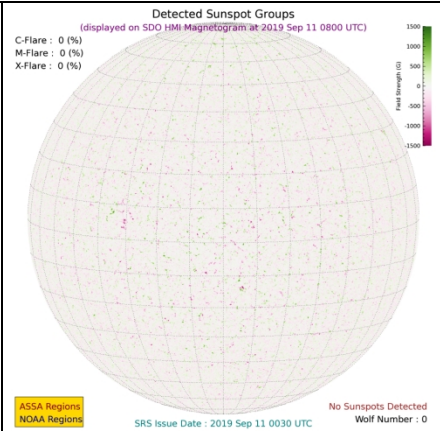
Solar conditions are at very low levels with background X-ray flux at A-class level. Local HF working frequencies are nominal as compared to monthly average predicted values.

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

Solar activity is at very low levels as the Sun is currently spotless.

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



## Daily Sun: 11 September 2019

### DISCUSSION:

Solar activity is at very low levels. The solar wind speed is expected to be mainly at background to slightly enhanced levels for the next two. Global geomagnetic activity is expected to be mostly at Quiet levels during the next two days. Local HF conditions are good.