Daily Space Weather Summary (SUPARCO)

Monday, September 26, 2022, 12:12 PST

SUPARCO

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)	
Critical Frequency of F2 layer (foF2)	10.3 MHz
Virtual Height of F2 layer (h`F2)	273 km
Total Electron Content (TEC)	60 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)	10.5	11.0	12.5	14.6	17.0	19.4	24.7	29.2
FOT (MHz)	8.9	9.4	10.6	12.1	14.5	16.5	21.0	24.8

Local HF conditions are normal as compared to the predicted monthly median MUF.

LOCAL GEOMAGNETIC CONDITIONS	
K-index	0 (Quiet)
Total Field (F) (SON/ISB)	45560/50070 nT

The local geomagnetic field is quiet at the moment.

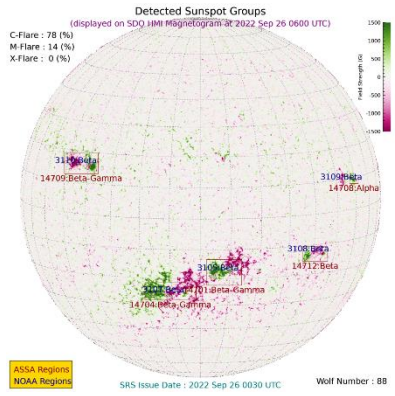
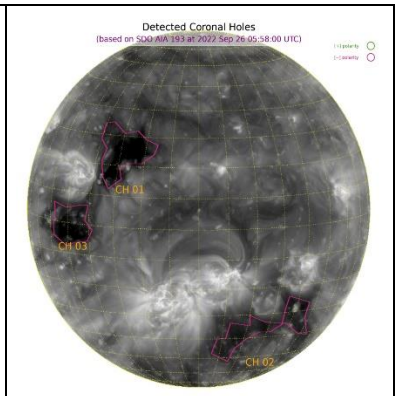
LATEST SOLAR CONDITIONS	
Sunspot Number (SN)	96
Solar radio flux (F10.7)	135 sfu
Solar wind speed	301.2 km/s (varied in the past 24 hrs between 298 & 515 km/s)
Solar x-ray flares	B8.6 (max flare in the past 24 hrs: C6, 0706 UT)
Interplanetary Magnetic Field (IMF) **Total Field (Bt)** **Z Component of Field (Bz)**	4.2 nT (varied in the past 12 hrs between 3.5 nT & 6.0 nT) 1.7 nT (varied in the past 12 hrs between -0.2 nT & 2.4 nT)

Solar conditions are at low to moderate with background X-ray flux at B-class level.

Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (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: 26 September 2022

There is no active region present on the Sun capable of producing strong solar flares. 03 Coronal Holes (CHs) are detected on the solar disk.		

DISCUSSION:

Solar activity is expected to remain at low to moderate levels. In case of solar flares, shortwave fadeouts may be observed. Low solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are normal.