

Daily Space Weather Summary (SUPARCO)

Thursday, September 01, 2022, 12:27 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	9.7 MHz							
Virtual Height of F2 layer (h`F2)	290 km							
Total Electron Content (TEC)	25 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)	9.8	10.1	11.5	13.3	15.3	17.6	22.2	26.3
FOT (MHz)	8.3	8.6	9.8	11.3	13.0	15.0	19.0	22.4

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	3 (Quiet)
Total Field (F) (Son/Isb)	45583/50093 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	42
Solar radio flux (F10.7)	113 sfu
Solar wind speed	547.4 km/sec (varied in the past 24 hrs between 474 & 594 km/s)
Solar x-ray flares	B9.7 (max flare in the past 24 hrs: (C4 0750 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	5.5 nT (varied in the past 12 hrs between 4.8 nT & 8.1 nT) -1.1 nT (varied in the past 12 hrs between -7.5 nT & 4.1 nT)

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

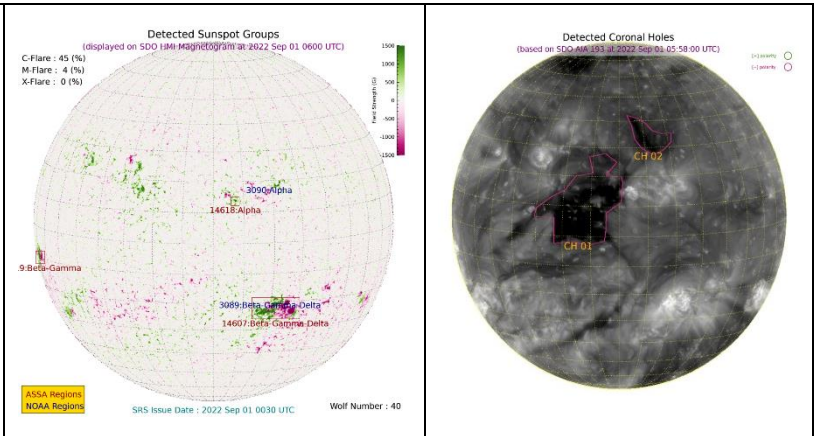
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 1 September 2022

There is one active region AR3089 present on the Sun capable of producing strong C and M-class solar flares having chances of 45% and 4% respectively.

02 Coronal Holes (CHs) are detected on the solar disk.



DISCUSSION:

Solar activity is expected to remain at low levels. Shortwave fadeouts and radio blackouts may be observed in case an X-class flare occurs. Moderate solar wind speed and quiet geomagnetic activity is expected. HF conditions are enhanced.