

Daily Space Weather Summary (SUPARCO)

Tuesday, September 13, 2022, 12:13 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	12.1 MHz							
Virtual Height of F2 layer (h`F2)	320 km							
Total Electron Content (TEC)	30 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)	12.2	12.6	14.0	15.9	18.2	20.5	26.0	31.5
FOT (MHz)	10.4	10.7	11.9	13.5	15.5	17.4	22.1	26.8

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

LOCAL GEOMAGNETIC CONDITIONS

K-Index	0 (quiet)
Total Field (F) (SON/ISB)	45585 /50095 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	117
Solar radio flux (F10.7)	150 sfu
Solar wind speed	332.3 km/s (varied in the past 24 hrs between 335 & 595 km/s)
Solar x-ray flares	C2.6 (max flare in the past 24 hrs: M1, 2344 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	3.5 nT (varied in the past 12 hrs between 4.1 nT & 5.7 nT) 2.4 nT (varied in the past 12 hrs between -1.0 nT & 3.9 nT)

Solar conditions are at moderate levels with background X-ray flux at C-class level.

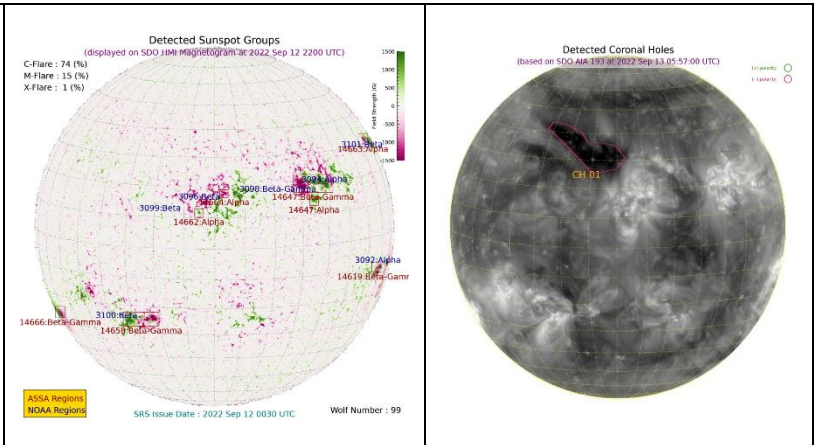
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 13 September 2022

There is one active region AR3098 present on the sun capable of producing strong C and M-class solar flares having chances of 74% and 15% respectively.

01 Coronal Hole (CH) is detected on the solar disk.



DISCUSSION:

Solar activity is expected to remain at moderate levels. Shortwave fadeouts and minor radio blackouts may be observed in case of solar flares. Low to moderate solar wind speed is expected to prevail. Quiet geomagnetic activity is expected. Local HF conditions are enhanced.