

Daily Space Weather Summary (SUPARCO)

Thursday, July 14, 2022, 12:10 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	11.1 MHz							
Virtual Height of F2 layer (h`F2)	373 km							
Total Electron Content (TEC)	35 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)	11.2	11.4	12.4	14.0	15.7	17.6	22.1	27.4
FOT (MHz)	9.5	9.7	10.5	11.9	13.3	15.0	18.8	23.3

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)	45589/50099nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	101
Solar radio flux (F10.7)	165 sfu
Solar wind speed	547.7 km/s (varied in the past 24 hrs between 261 & 586 km/s)
Solar x-ray flares	C1.4 (max flare in the past 24 hrs: (M1, 0431 UT))
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	7.1 nT (varied in the past 12 hrs between 5.9 nT & 7.1 nT) 1.6 nT (varied in the past 12 hrs between 0.1 nT & 2.7 nT)

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

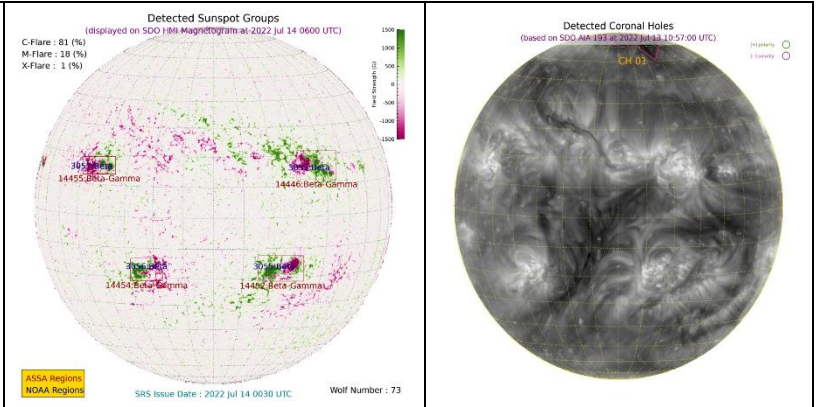
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 14 July 2022

There is no active region present on the Sun capable of producing strong solar flares.

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



DISCUSSION:

Solar activity is expected to remain at moderate levels. Moderate solar wind speed is expected due to the presence of coronal hole. Geomagnetic activity is expected to be quiet. Local HF conditions are enhanced. Minor radio blackouts may be observed in case of M-class solar flares.