

Daily Space Weather Summary (SUPARCO)

Monday, June 13, 2022, 12:17 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	10.0 MHz							
Virtual Height of F2 layer (h`F2)	375 km							
Total Electron Content (TEC)	42 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)	10.1	10.3	11.3	12.6	14.1	15.8	19.8	24.3
FOT (MHz)	8.6	8.8	9.6	10.7	12.0	13.4	16.8	20.7

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	4 (unsettled)
Total Field (F) (SON/ISB)	45113/50123 nT

The local geomagnetic field is unsettled at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	63
Solar radio flux (F10.7)	112 sfu
Solar wind speed	540.0 km/s (varied in the past 24 hrs between 363 & 549 km/s)
Solar x-ray flares	C7.9 (max flare in the past 24 hrs: M3, 0407 UT)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	10.2 nT (varied in the past 12 hrs between 6.0 nT & 13.7 nT) -0.6 nT (varied in the past 12 hrs between -6.6 nT & 7.0 nT)

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

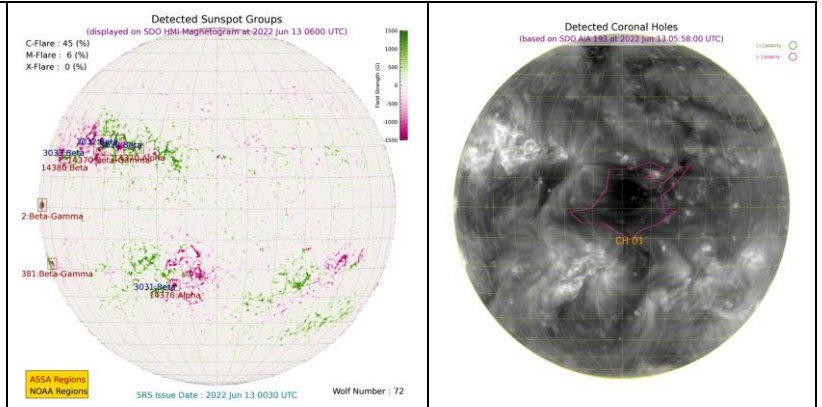
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 13 June 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 low to moderate levels. Moderate solar wind speed is expected due to the presence of coronal hole. Quiet to unsettled geomagnetic activity is expected. Local HF conditions are enhanced. Minor to moderate radio blackouts are possible in case of solar flares.