

Daily Space Weather Summary (SUPARCO)

Tuesday, April 26, 2022, 11:56 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	12.8 MHz							
Virtual Height of F2 layer (h`F2)	335 km							
Total Electron Content (TEC)	52 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)	12.9	13.3	14.7	16.6	18.8	12.1	26.7	32.5
FOT (MHz)	11.0	11.3	12.5	14.1	16.0	10.3	22.7	27.7

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)	45574 /50084 nT

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	94
Solar radio flux (F10.7)	157 sfu
Solar wind speed	401.8 km/s (varied in the past 24 hrs between 376 & 550 km/s)
Solar x-ray flares	B9.0 (max flare in the past 24 hrs: C6 1735 UT Apr 25)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	4.2 nT (varied in the past 12 hrs between 3.6 nT & 4.3 nT) -2.3 nT (varied in the past 12 hrs between -0.7 nT & 3.3 nT)

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

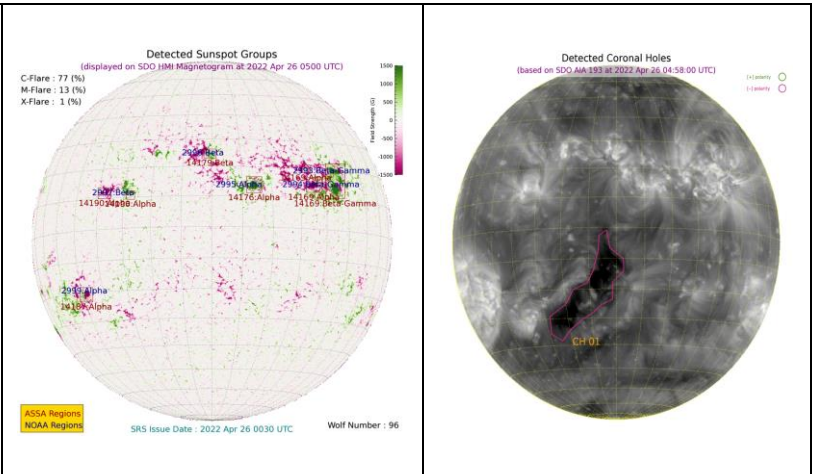
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 26 April 2022

There are two active regions AR2993 and AR2944 present on the Sun capable of producing strong M and X-Class solar flares having chances of 13% and 1% respectively.

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



DISCUSSION:

Solar activity is expected to remain at moderate levels. Low solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are enhanced. Minor radio blackouts may be observed in case of solar flare activity.