

Daily Space Weather Summary (SUPARCO)

Tuesday, May 17, 2022, 12:09 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)								
Critical Frequency of F2 layer (foF2)		10.9 MHz						
Virtual Height of F2 layer (h`F2)		345 km						
Total Electron Content (TEC)		40 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)	11.0	11.3	12.4	14.1	16.1	18.0	22.8	28.2
FOT (MHz)	9.4	9.6	10.5	12.0	13.7	15.3	19.4	24.0
Local HF conditions are normal as compared to the predicted monthly median MUF.								
LOCAL GEOMAGNETIC CONDITIONS								
K-index		2 (Quiet)						
Total Field (F) (SON/ISB)		45589 /50099 nT						
The local geomagnetic field is quite at the moment.								
LATEST SOLAR CONDITIONS								
Sunspot Number (SN)		173						
Solar radio flux (F10.7)		162 sfu						
Solar wind speed		524.7 km/s (varied in the past 24 hrs between 465 & 581 km/s)						
Solar x-ray flares		C2.4 (max flare in the past 24 hrs: M2, 1327 UT)						
Interplanetary Magnetic Field (IMF)		10.2 nT (varied in the past 12 hrs between 4.8 nT & 10.7 nT)						
Total Field (Bt)		1.9 nT (varied in the past 12 hrs between -0.9 nT & 6.5 nT)						
Z Component of Field (Bz)								
Solar conditions are at high levels with background X-ray flux at C-class level.								

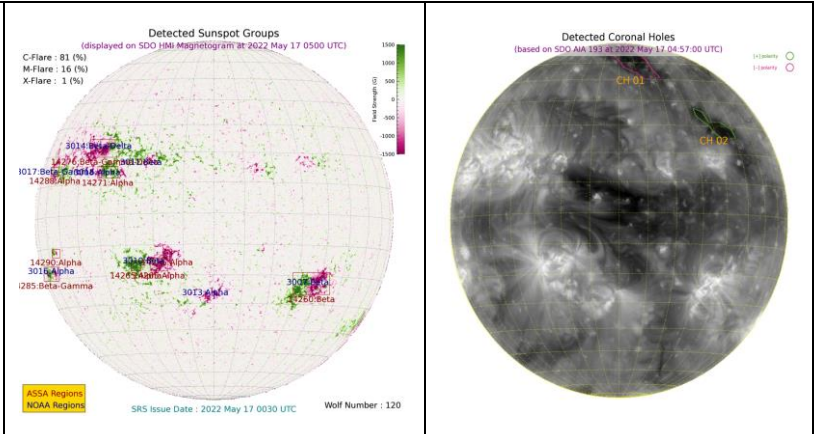
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 17 May 2022

There are two active regions AR3014 and AR3017 present on the Sun capable of producing strong M and X-Class solar flares having chances of 16% and 1%.

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



DISCUSSION:

Solar activity is expected to remain at high levels. Increase in solar wind speed is expected due to the earthward coronal holes. Geomagnetic activity is expected to be quiet. Local HF conditions are normal. Minor to moderate radio blackouts are possible in case of solar flares.