Daily Space Weather Summary (SUPARCO)





								SUFARCE	
LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)									
Critical Frequency of F2 layer (foF2)				9.4 MHz					
Virtual Height of F2 layer (h`F2)				280 km					
Total Electron Content (TEC)				32 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)	9.5	9.9	11.3	13.3	15.6	17.8	22.8	27.4	
FOT (MHz)	8.1	8.4	9.6	11.3	13.3	15.1	19.4	23.3	

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)	45512/50022 nT			

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS				
Sunspot Number (SN)	159			
Solar radio flux (F10.7)	156 sfu			
Solar wind speed	428.3 km/s (varied in the past 24 hrs between 413 & 550 km/s)			
Solar x-ray flares	C1.3 (max flare in the past 24 hrs (M8, 1419 UT)			
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	+4.9 nT (varied in the past 12 hrs between +0.6 nT & +5.0 nT) +1.2 nT (varied in the past 12 hrs between -1.7 nT & +3.2 nT)			
Solar conditions are at moderate levels with background X-ray flux at C-class level.				

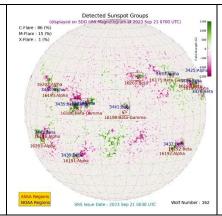
Sonmiani (SON): 25.20 N, 66.750 E, Islamabad (ISB): 33.70 N, 73.130 E

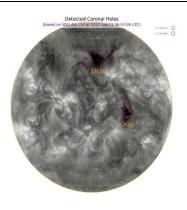
Notes: Credits: www.spaceweather.go.kr,www.sws.bom.gov.au,www.spaceweather.com,www.solen.info

Daily Sun: 21 September 2023

There is one active region AR3435 present on the Sun capable of producing strong M and X-class solar flares having chances of 15% and 1% respectively.

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





DISCUSSION:

Solar activity is expected to be at moderate levels. In case of solar flares, shortwave fadeouts may be observed. Low to moderate solar wind speed is expected due to the presence of coronal holes. Geomagnetic activity is expected to be quiet. HF conditions are normal.