## **Daily Space Weather Summary (SUPARCO)**





Monday, August 19, 2024, 12:37 PST

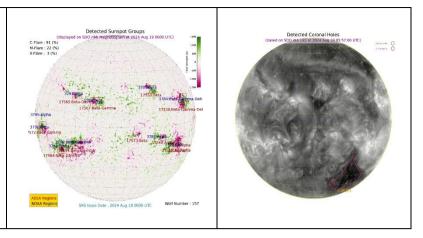
		LOC	CAL CURRENT	IONOSPHERIC	CONDITIONS (	SON)		
Critical Frequency of F2 layer (foF2)				13.5 MHz				
Virtual Height of F2 layer (h`F2)				328 km				
Total Electron Content (TEC)				60 TECU				
Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances								
Distance (Km)	100	200	400	600	800	1000	1500	3000
MUF (MHz)	13.6	14.1	15.5	17.8	20.3	23.1	29.4	36.7
FOT (MHz)	11.6	12.0	13.2	15.1	17.3	19.6	25.0	31.2
Local HF conditions are enhanced as compared to the predicted monthly median MUF.								
LOCAL GEOMAGNETIC CONDITIONS								
K-index				1 (Quiet)				
Total Field (F) (Son/Isb)				45698/50710 nT				
The local geo	omagnetic fie	ld is quiet at t	he moment.					
			LATES	ST SOLAR CON	DITIONS			
Sunspot Number (SN)				170				
Solar radio flux (F10.7)				231 sfu				
Solar wind speed				442.0 km/s (varied in the past 24 hrs between 359 & 471 km/s)				
Solar x-ray flares				C2.9 (max flare in the past 24 hrs (M1, 0000 UT)				
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)				+7.12 nT (varied in the past 12 hrs between +7.24 nT & +8.62 nT) +6.8 nT (varied in the past 12 hrs between -1.17 nT & +6.01 nT)				
Solar condit	ions are at lov	w to moderate	e levels with ba	ckground X-ray	flux at C-class le	evel.		

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

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

## Daily Sun: 19 August 2024

There are two active regions AR3784 and AR3790 present on the Sun capable of producing strong M and X-class solar flares having chances of 22% and 3% respectively.



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

## **DISCUSSION:**

Solar activity is expected to be at low to moderate levels. Few M-class solar flares, have already occurred from the region mentioned above. In case of more M/X-class solar flares, shortwave fadeouts may be observed. Low to moderate solar wind speed and quiet geomagnetic activity is expected. HF conditions are enhanced.