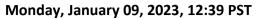
## **Daily Space Weather Summary (SUPARCO)**





								SOFARCO	
LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)									
Critical Frequency of F2 layer (foF2)				8.9 MHz					
Virtual Height of F2 layer (h`F2)				230 km					
Total Electron Content (TEC)				50 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)	9.1	9.7	11.7	14.3	17.2	19.9	25.9	27.7	
FOT (MHz)	7.7	8.2	9.9	12.2	14.6	16.9	22.0	23.5	

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

LOCAL GEOMAGNETIC CONDITIONS				
K-index	1 (Quiet)			
Total Field (F) (Son/Isb)	45520/50035 nT			

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS				
Sunspot Number (SN)	104			
Solar radio flux (F10.7)	172 sfu			
Solar wind speed	518 km/s (varied in the past 24 hrs between 338 & 538 km/s)			
Solar x-ray flares	C2.5 (max flare in the past 24 hrs: M 1.0, 1508 UT Jan 08)			
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	+5.4 nT (varied in the past 12 hrs between +1.9 nT & +20.0 nT) +3.1 nT (varied in the past 12 hrs between -13.1 nT & +15.2 nT)			
Solar conditions are at low to moderate levels with background X-ray flux at C-class level				

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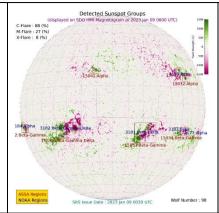
Sonmiani (SON): 25.20 N, 66.750 E, Islamabad (ISB): 33.70 N, 73.130 E

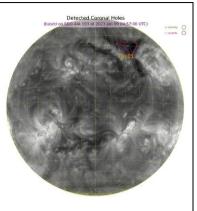
Notes: Credits: www.spaceweather.go.kr,www.sws.bom.gov.au,www.spaceweather.com,www.solen.info

Daily Sun: 9 January 2023

There is one active region AR3182 present on the Sun capable of producing strong C and M-class solar flares having chances of 88% and 27% respectively.

01 Coronal Hole (CH) is 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. Moderate to light solar wind speed and quiet to unsettled geomagnetic activity is expected. HF conditions are normal.