

Daily Space Weather Summary (SUPARCO)

Thursday, February 09, 2023, 12:32 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)								
Critical Frequency of F2 layer (foF2)			10.5 MHz					
Virtual Height of F2 layer (h` F2)			270 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)	10.7	11.2	13.0	15.5	18.2	20.9	27.1	29.9
FOT (MHz)	9.0	9.5	11.1	13.2	15.5	17.8	23.0	25.5
Local HF conditions are slightly enhanced as compared to the predicted monthly median MUF.								
LOCAL GEOMAGNETIC CONDITIONS								
K-index			2 (Quiet)					
Total Field (F) (Son/Isb)			45510/50015 nT					
The local geomagnetic field is quiet at the moment.								
LATEST SOLAR CONDITIONS								
Sunspot Number (SN)			142					
Solar radio flux (F10.7)			192 sfu					
Solar wind speed			518.7 km/s (varied in the past 24 hrs between 490.5 & 635.2 km/s)					
Solar x-ray flares			C5.3 (max flare in the past 24 hrs (M3.0, 0310 UT Feb 09)					
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)			5.5 nT (varied in the past 12 hrs between 1.9 nT & 10.2 nT) +1.7 nT (varied in the past 12 hrs between -8.4 nT & +7.5 nT)					
Solar conditions are moderate levels with background X-ray flux at C-class level.								

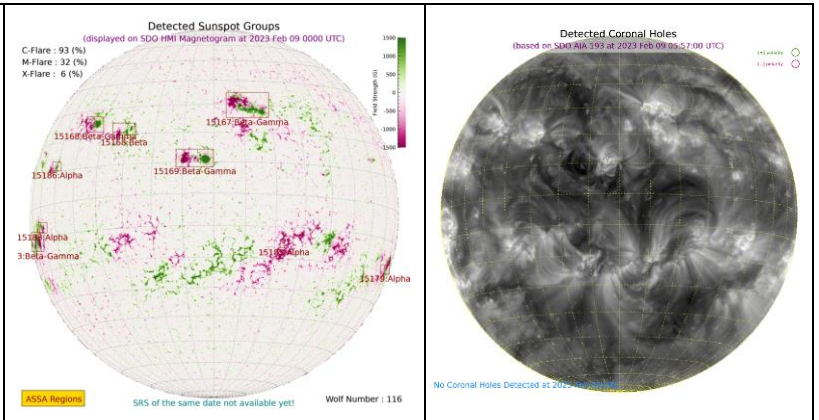
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

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

Daily Sun: 9 February 2023

There is no active region present on the Sun capable of producing strong solar flares.

No Coronal Hole (CH) is detected on the solar disk.



DISCUSSION:

Solar activity is expected to be at moderate levels. Strong to moderate solar wind speed and unsettled to active geomagnetic activity is expected due to negative polarity CH HSS effects. HF conditions are slightly enhanced.