Daily Space Weather Summary (SUPARCO)

Monday, May 27, 2024, 12:08 PST

SUPARCO

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)	
Critical Frequency of F2 layer (foF2)	9.2 MHz
Virtual Height of F2 layer (h`F2)	286 km
Total Electron Content (TEC)	45 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)	9.3	9.7	11.0	12.9	15.1	17.1	21.9	26.7
FOT (MHz)	7.9	8.2	9.4	10.9	12.8	14.5	18.6	22.4

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

LOCAL GEOMAGNETIC CONDITIONS	
K-index	0 (Quiet)
Total Field (F) (Son/Isb)	45709/50809 nT

The local geomagnetic field is quiet at the moment.

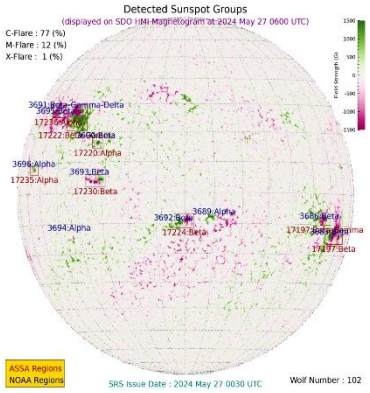
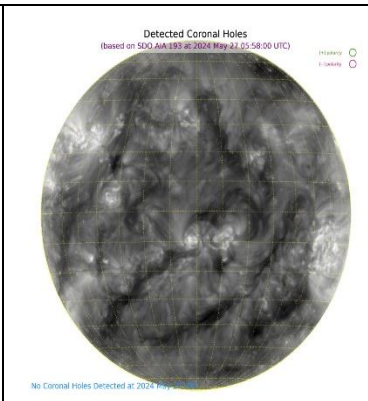
LATEST SOLAR CONDITIONS	
Sunspot Number (SN)	148
Solar radio flux (F10.7)	156 sfu
Solar wind speed	366.3 km/s (varied in the past 24 hrs between 320 & 453 km/s)
Solar x-ray flares	C2.9 (max flare in the past 24 hrs (C7, 1706 UT)
Interplanetary Magnetic Field (IMF) **Total Field (Bt)** **Z Component of Field (Bz)**	+7.9 nT (varied in the past 12 hrs between +5.5 nT & +8.3 nT) -0.1 nT (varied in the past 12 hrs between -4.8 nT & +4.3 nT)

Solar conditions are at low to 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: 27 May 2024

There is one active region AR3691 present on the Sun capable of producing strong M and X-class solar flares having chances of 12% and 1% respectively. No Coronal Hole (CH) is detected on the solar disk.		

DISCUSSION:

Solar activity is expected to be at low to moderate levels. In case of solar flares, minor to moderate radio blackouts may be observed. Low solar wind speed and quiet geomagnetic activity is expected. HF conditions are slightly enhanced.