

Daily Space Weather Summary (SUPARCO)

Monday, April 27, 2026, 14:47 PST



Radio Blackouts			Solar Radiation Storms			Geomagnetic Storms		
-24 Hr	Current	Predicted	-24 Hr	Current	Predicted	-24 Hr	Current	Predicted
R2 – R3	R1	R1 – R2	S0	S0	S0	G0	G0	G0

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)	14.3 MHz							
Virtual Height of F2 layer (h`F2)	300 km							
Total Electron Content (TEC)	78 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)	14.6	16.5	19.1	21.9	24.8	31.6	34.4	41.6
FOT (MHz)	12.1	14.0	16.2	18.6	21.1	26.9	29.2	35.4

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

LOCAL GEOMAGNETIC CONDITIONS

K-index	0 (Quiet)
Total Field (F) (Son/Isb)	45710/50705 nT

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

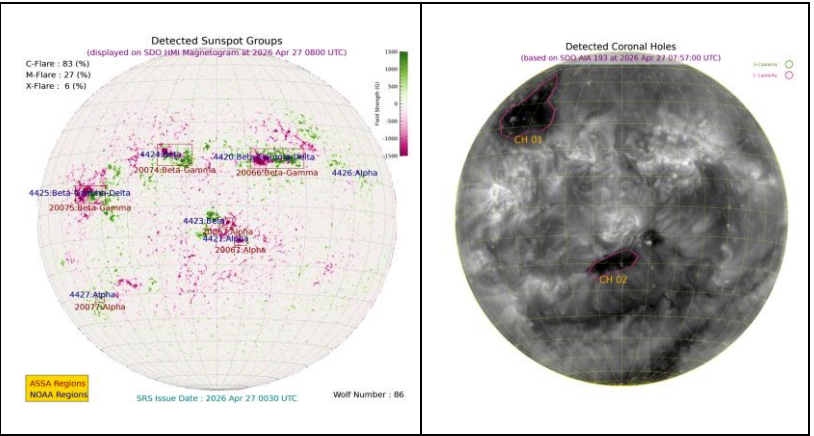
Sunspot Number (SN)	137
Solar radio flux (F10.7)	156 sfu
Solar wind speed	433.4 km/s (varied in the past 24 hrs between 407 & 496 km/s)
Solar x-ray flares	C1.1 (max flare in the past 24 hrs (M6, 2257 UT))
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	+2.87 nT (varied in the past 12 hrs between +2.19 nT & +5.94 nT) +2.65 nT (varied in the past 12 hrs between -3.95 nT & +3.41 nT)

Solar conditions are at moderate to high levels with background X-ray flux at C-class level.

Daily Sun: 27 April 2026

There are two active regions AR4420 and AR4425 present on the Sun capable of producing strong M and X-class solar flares having chances of 55% and 15% respectively.

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



DISCUSSION:

Solar activity is expected to be at moderate to high levels. Multiple M/X-class solar flares, occurred from the regions present on the solar disk causing R2-R3 level radio blackouts. In case of more M/X-class solar flares, R1-R2 level radio blackouts may be observed. Low to moderate levels of solar wind speed and quite level of geomagnetic activity is expected. HF conditions are expected to be normal.

Credits:

*Solar conditions courtesy to SOHO, DSCOVR and GOES-16 missions.
NOAA SWPC is acknowledged for solar radio flux conditions.
Korean Space Weather Centre is acknowledged for solar disk and coronal hole images.*

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

RSG SCALES

<u>Radio Blackouts</u>				
Minor	Moderate	Strong	Severe	Extreme
R1	R2	R3	R4	R5
<u>Solar Radiation Storms</u>				
Minor	Moderate	Strong	Severe	Extreme
S1	S2	S3	S4	S5
<u>Geomagnetic Storms</u>				
Minor	Moderate	Strong	Severe	Extreme
G1	G2	G3	G4	G5