

Daily Space Weather Summary (SUPARCO)

Wednesday, November 19, 2025, 02:22 PST



Radio Blackouts			Solar Radiation Storms			Geomagnetic Storms		
-24 Hr	Current	Predicted	-24 Hr	Current	Predicted	-24 Hr	Current	Predicted
R0	R0 / R1	R0 – R1	S0	S0	S0	G0	G0	G0

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

Critical Frequency of F2 layer (foF2)				14.5 MHz				
Virtual Height of F2 layer (h` F2)				350 km				
Total Electron Content (TEC)				88 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)	14.8	15.2	16.5	18.4	20.6	22.9	28.5	35.7
FOT (MHz)	12.6	12.9	14.0	15.6	17.5	19.5	24.2	30.3

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)		45725/50720 nT						

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

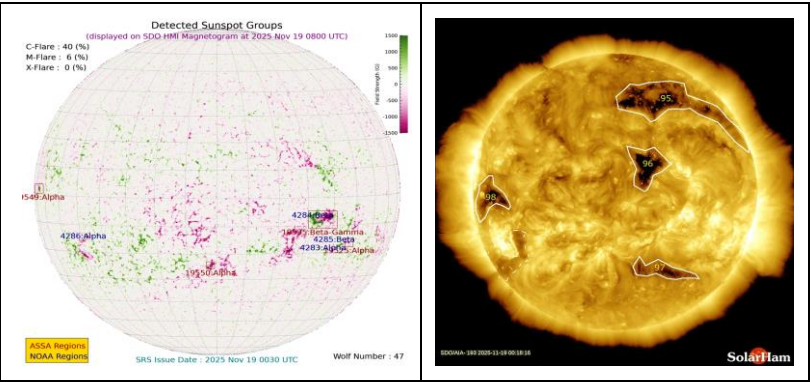
Sunspot Number (SN)		66						
Solar radio flux (F10.7)		120 sfu						
Solar wind speed		397.6 km/s (varied in the past 24 hrs between 370 & 586 km/s)						
Solar x-ray flares		B6.6 (max flare in the past 24 hrs (C1, 1033 UT)						
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)		+7.58 nT (varied in the past 12 hrs between +5.53 nT & +7.45 nT) +3.61 nT (varied in the past 12 hrs between +0.23 nT & +1.35 nT)						

Solar conditions are at low levels with background X-ray flux at upper B-class level.

Daily Sun: 19 November 2025

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

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



DISCUSSION:

Solar activity is expected to be at low levels. In case of M/X-class solar flares, minor HF radio blackouts may be observed. Moderate to slightly elevated levels of solar wind speed is expected to prevail due to effect of coronal hole high speed stream (CH HSS). Geomagnetic activity is expected to be at quiet levels. HF conditions are 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

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