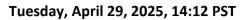
Daily Space Weather Summary (SUPARCO)





Radio Blackouts			Solar Radiation Storms			Geomagnetic Storms		
-24 Hr	Current	Predicted	-24 Hr	Current	Predicted	-24 Hr	Current	Predicted
R0 - R1	R0	R1 – R2	SO	S0	S0	G0	G0	G0 - G1

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)								
Critical Frequency of F2 layer (foF2)			13.2 MHz					
Virtual Height of F2 layer (h`F2)			313 km					
Total Electron Content (TEC)				28 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)	13.4	15.2	17.2	19.8	22.9	25.4	28.0	30.8
FOT (MHz)	11.4	13.2	14.9	16.9	19.6	22.1	24.4	26.4

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

LOCAL GEOMAGNETIC CONDITIONS				
K-index	2 (Quiet)			
Total Field (F) (Son/Isb)	45775/50710 nT			

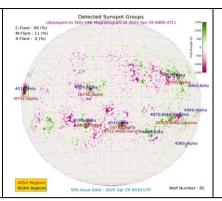
The local geomagnetic field is quiet at the moment.

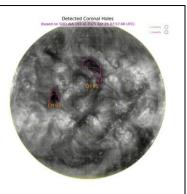
LATEST SOLAR CONDITIONS					
Sunspot Number (SN)	134				
Solar radio flux (F10.7)	154 sfu				
Solar wind speed	416.6 km/s (varied in the past 24 hrs between 401 & 620 km/s)				
Solar x-ray flares	C1.0 (max flare in the past 24 hrs (M1, 1837 UT)				
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	+6.62 nT (varied in the past 12 hrs between +5.97 nT & +9.05 nT) +1.54 nT (varied in the past 12 hrs between -6.56 nT & +5.09 nT)				
Solar conditions are at low to moderate levels with background X-ray flux at C-class level.					

Daily Sun: 29 April 2025

There is one active region AR4070 present on the Sun capable of producing strong C and M-class solar flares having chances of 66% and 11% respectively.

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





DISCUSSION:

Solar activity is expected to be at low to moderate levels. In case of M/X-class solar flares, minor to moderate levels radio blackouts may be observed. Low to moderate solar wind is expected to prevail due to the presence of coronal holes. 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

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