

Daily Space Weather Summary (SUPARCO)

Thursday, April 02, 2026, 14:21 PST



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

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

| | | | | | | | | |
|---|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| Critical Frequency of F2 layer (foF2) | 14.0 MHz | | | | | | | |
| Virtual Height of F2 layer (h`F2) | 275 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) | 14.2 | 14.8 | 17.0 | 20.1 | 23.4 | 26.9 | 34.8 | 39.6 |
| FOT (MHz) | 12.1 | 12.6 | 14.5 | 17.1 | 19.9 | 22.9 | 29.6 | 33.7 |

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

LOCAL GEOMAGNETIC CONDITIONS

| | |
|----------------------------------|----------------|
| K-index | 3 (Quiet) |
| Total Field (F) (Son/Isb) | 45710/50705 nT |

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

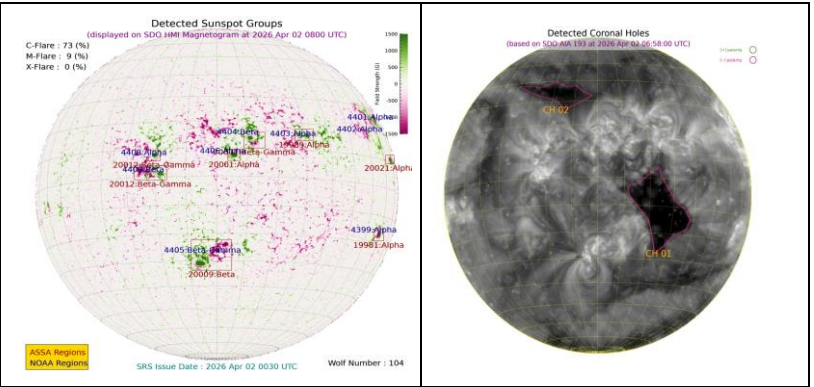
| | |
|---|--|
| Sunspot Number (SN) | 130 |
| Solar radio flux (F10.7) | 142 sfu |
| Solar wind speed | 602.5 km/s (varied in the past 24 hrs between 371 & 659 km/s) |
| Solar x-ray flares | C1.0 (max flare in the past 24 hrs (C8, 1958 UT) |
| Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz) | +12.35 nT (varied in the past 12 hrs between +8.2 nT & +17.18 nT) -1.98 nT (varied in the past 12 hrs between -10.27 nT & +8.55 nT) |

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

Daily Sun: 2 April 2026

There is one active region AR4405 present on the Sun capable of producing strong M and X-class solar flares having chances of 40% and 10% 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, R1-R2 level HF radio blackouts may be observed. Moderate to slightly elevated levels of solar wind are expected due to the presence of coronal holes. Geomagnetic activity is expected to be at quiet to unsettled levels. 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 |