

# Daily Space Weather Summary (SUPARCO)

Wednesday, March 18, 2026, 13:38 PST



| Radio Blackouts |         |           | Solar Radiation Storms |         |           | Geomagnetic Storms |         |           |
|-----------------|---------|-----------|------------------------|---------|-----------|--------------------|---------|-----------|
| -24 Hr          | Current | Predicted | -24 Hr                 | Current | Predicted | -24 Hr             | Current | Predicted |
| R0 / R1         | R0      | R1 – R2   | S0                     | S0      | S0        | G0                 | G0      | G1 – G2   |

## LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

|   |            |            |            |            |            |             |             |             |
|---|------------|------------|------------|------------|------------|-------------|-------------|-------------|
| <b>Critical Frequency of F2 layer (foF2)</b>  | 14.0 MHz   |            |            |            |            |             |             |             |
| <b>Virtual Height of F2 layer (h`F2)</b>  | 275 km     |            |            |            |            |             |             |             |
| <b>Total Electron Content (TEC)</b>   | 70 TECU    |            |            |            |            |             |             |             |
| <b>Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances</b> |            |            |            |            |            |             |             |             |
| <b>Distance (Km)</b>  | <b>100</b> | <b>200</b> | <b>400</b> | <b>600</b> | <b>800</b> | <b>1000</b> | <b>1500</b> | <b>3000</b> |
| <b>MUF (MHz)</b>  | 14.2       | 14.8       | 17.0       | 20.1       | 23.4       | 26.9        | 34.8        | 39.6        |
| <b>FOT (MHz)</b>  | 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

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

The local geomagnetic field is quiet at the moment.

## LATEST SOLAR CONDITIONS

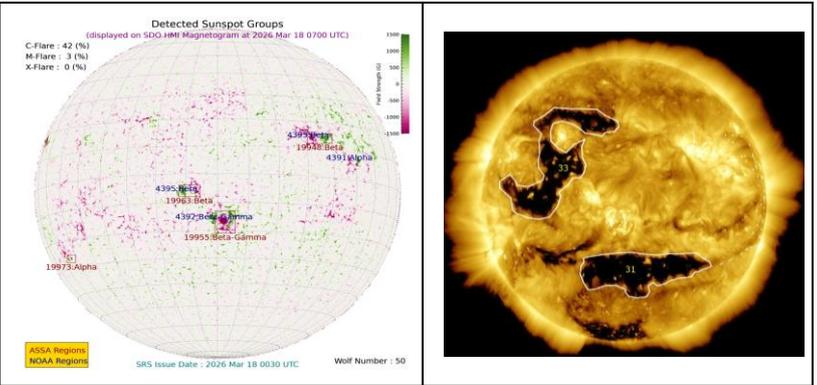
|   |   |
|---|---|
| <b>Sunspot Number (SN)</b>  | 72  |
| <b>Solar radio flux (F10.7)</b>   | 111 sfu   |
| <b>Solar wind speed</b>   | 424.6 km/s (varied in the past 24 hrs between 388 & 499 km/s)   |
| <b>Solar x-ray flares</b>   | B5.0 (max flare in the past 24 hrs (M1, 0904 UT))   |
| <b>Interplanetary Magnetic Field (IMF)<br/>Total Field (Bt)<br/>Z Component of Field (Bz)</b> | +4.37 nT (varied in the past 12 hrs between +4.06 nT & +5.67 nT)<br>-3.46 nT (varied in the past 12 hrs between -3.8 nT & +3.23 nT) |

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

**Daily Sun: 18 March 2026**

There is one active region AR4392 present on the Sun capable of producing strong M and X-class solar flares having chances of 30% and 5% respectively.

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



**DISCUSSION:**

Solar activity is expected to be at moderate levels. Few M-class solar flares occurred, causing minor level HF radio blackouts. In case of more M/X-class solar flares, R1-R2 level HF radio blackouts may be observed. Slightly elevated levels of solar wind speed are expected due to the combined effect of coronal mass ejection (CME) and coronal holes. Geomagnetic activity is expected to be at unsettled to disturbed 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**

| <b><u>Radio Blackouts</u></b> |          |        |        |         |
|-------------------------------|----------|--------|--------|---------|
| Minor                         | Moderate | Strong | Severe | Extreme |
| R1                            | R2       | R3     | R4     | R5      |

| <b><u>Solar Radiation Storms</u></b> |          |        |        |         |
|--------------------------------------|----------|--------|--------|---------|
| Minor                                | Moderate | Strong | Severe | Extreme |
| S1                                   | S2       | S3     | S4     | S5      |

| <b><u>Geomagnetic Storms</u></b> |          |        |        |         |
|----------------------------------|----------|--------|--------|---------|
| Minor                            | Moderate | Strong | Severe | Extreme |
| G1                               | G2       | G3     | G4     | G5      |