## Daily Space Weather Summary (SUPARCO)

Monday, February 28, 2022, 12:24 PST

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

| Critical Frequency of F2 layer (foF2) |  |  |  | 8.5 MHz |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Virtual Height of F2 layer (h` ${ }^{\text {2 }}$ ) |  |  |  | 265 km |  |  |  |  |
| Total Electron Content (TEC) |  |  |  | 20 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) | 8.6 | 9.0 | 10.3 | 12.0 | 13.8 | 15.7 | 19.9 | 24.4 |
| $\begin{array}{\|l\|} \hline \text { FOT } \\ (\mathrm{MHz}) \end{array}$ | 7.3 | 7.7 | 8.8 | 10.2 | 11.7 | 13.3 | 16.9 | 20.8 |

Local HF conditions are normal with MUF values near to the predicted monthly median.

| LOCAL GEOMAGNETIC CONDITIONS |  |
| :--- | :--- |
| K-index | 2 (Quiet) |
| Total Field (F) (SON/ISB) | $45583 / 50084 \mathrm{nT}$ |
| The local geomagnetic field is quite at the moment. |  |


| LATEST SOLAR CONDITIONS |  |
| :---: | :---: |
| Sunspot Number (SN) | 48 |
| Solar radio flux (F10.7) | 97 sfu |
| Solar wind speed | $507.2 \mathrm{~km} / \mathrm{s}$ (varied in the past 24 hrs between 404 \& 533 km/s) |
| Solar x-ray flares | B1.8 (max flare in the past 24 hrs : C1 0626 UT Feb 27) |
| Interplanetary Magnetic Field (IMF) <br> Total Field (Bt) <br> Z Component of Field (Bz) | 5.6 nT (varied in the past 12 hrs between $7.0 \mathrm{nT} \& 10.0$ nT) <br> 5.0 nT (varied in the past 12 hrs between $-2.7 \mathrm{nT} \& 5.8$ nT) |

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

Sonmiani (SON): $\mathbf{2 5 . 2 ^ { \circ }} \mathbf{N}, 66.75^{\circ} \mathrm{E}$, Islamabad (ISB): $33.7^{\circ} \mathrm{N}, 73 . \mathbf{1 3}^{\circ} \mathrm{E}$
Notes: Credits: www.spaceweather.go.kr,www.sws.bom.gov.au,www.spaceweather.com,www.solen.info

Daily Sun: 28 February 2022

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

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


## DISCUSSION:

Solar activity is expected to remain at low levels. Moderate solar wind speed is expected due to the presence of a coronal hole. Geomagnetic activity is expected to be quiet. Local HF conditions are normal.

