## Daily Space Weather Summary (SUPARCO) <br> Monday, March 06, 2023, 12:14 PST

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Critical Frequency of F2 layer (foF2)} \& \multicolumn{5}{|l|}{12.1 MHz} <br>
\hline \multicolumn{4}{|l|}{Virtual Height of F2 layer (h`F2)} \& \multicolumn{5}{|l|}{318 km} <br>
\hline \multicolumn{4}{|l|}{Total Electron Content (TEC)} \& \multicolumn{5}{|l|}{50 TECU} <br>
\hline \multicolumn{9}{|l|}{Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances} <br>
\hline Distance (Km) \& 100 \& 200 \& 400 \& 600 \& 800 \& 1000 \& 1500 \& 3000 <br>

\hline | MUF |
| :--- |
| (MHz) | \& 12.2 \& 12.4 \& 13.7 \& 15.5 \& 17.6 \& 19.8 \& 24.9 \& 31.6 <br>


\hline | FOT |
| :--- |
| (MHz) | \& 10.4 \& 10.5 \& 11.6 \& 13.2 \& 15.0 \& 16.8 \& 21.2 \& 26.7 <br>

\hline
\end{tabular}

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

| LOCAL GEOMAGNETIC CONDITIONS |  |
| :--- | :--- |
| K-index | 2 (Quiet) |
| Total Field (F) (Son/Isb) | $45525 / 50035 \mathrm{nT}$ |

The local geomagnetic field is quiet at the moment.

| LATEST SOLAR CONDITIONS |  |
| :---: | :---: |
| Sunspot Number (SN) | 137 |
| Solar radio flux (F10.7) | 182 sfu |
| Solar wind speed | $589.1 \mathrm{~km} / \mathrm{s}$ (varied in the past 24 hrs between 552 \& 611 km/s) |
| Solar x-ray flares | C2.3 (max flare in the past 24 hrs: M5, 0228 UT) |
| ```Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)``` | $\begin{aligned} & +5.5 \mathrm{nT} \text { (varied in the past } 12 \mathrm{hrs} \text { between }+9.2 \mathrm{nT} \& \\ & +19.6 \mathrm{nT} \text { ) } \\ & +1.0 \mathrm{nT} \text { (varied in the past } 12 \mathrm{hrs} \text { between }-14.1 \mathrm{nT} \& \\ & +5.3 \mathrm{nT} \text { ) } \end{aligned}$ |

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

Sonmiani (SON): $\mathbf{2 5 . 2 ^ { \circ }} \mathbf{N}, 66.75^{\circ} \mathrm{E}$, Islamabad (ISB): $33.7^{\circ} \mathrm{N}, 73.13^{\circ} \mathrm{E}$
Notes: Credits: www.spaceweather.go.kr,www.sws.bom.gov.au,www.spaceweather.com,www.solen.info

Daily Sun: 6 March 2023

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

No Coronal Hole (CH) is detected on the solar disk.


## DISCUSSION:

Solar activity is expected to be at low levels. In case of solar flares, shortwave fadeouts may be observed. Moderate solar wind speed and quiet geomagnetic activity is expected to prevail. HF conditions are enhanced.

