Daily Space Weather Summary (SUPARCO)

Monday, November 14, 2022, 12:43 PST

SUPARCO

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)	
Critical Frequency of F2 layer (foF2)	10.5 MHz
Virtual Height of F2 layer (h`F2)	270 km
Total Electron Content (TEC)	50 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)	10.7	11.2	13.0	15.5	18.2	20.9	27.1	29.9
FOT (MHz)	9.0	9.5	11.1	13.2	15.5	17.8	23.0	25.5

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

LOCAL GEOMAGNETIC CONDITIONS	
K-index	0 (Quiet)
Total Field (F) (Son/Isb)	45534/50050 nT

The local geomagnetic field is quiet at the moment.

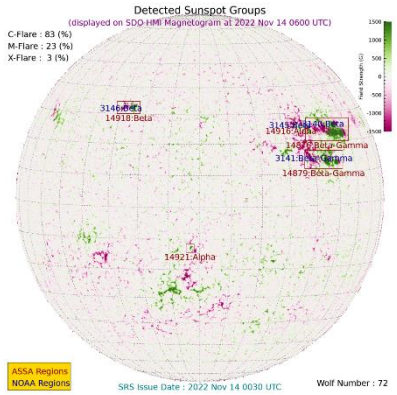
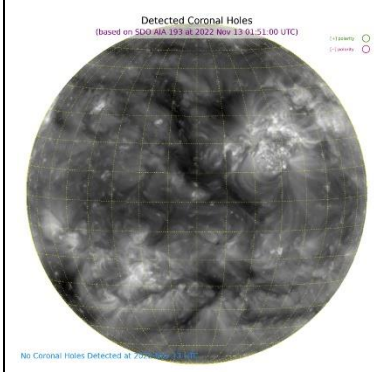
LATEST SOLAR CONDITIONS	
Sunspot Number (SN)	74
Solar radio flux (F10.7)	137 sfu
Solar wind speed	443 km/sec (varied in the past 24 hrs between 306 & 524 km/s)
Solar x-ray flares	C 2.9 (max flare in the past 24 hrs: (C 4.0, 0044 UT Nov 14)
Interplanetary Magnetic Field (IMF) **Total Field (Bt)** **Z Component of Field (Bz)**	6.0 nT (varied in the past 12 hrs between 4.9 nT & 15.0 nT) -4.0 nT (varied in the past 12 hrs between -14.0 nT & +9.0 nT)

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

Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

Notes: *Credits:* www.spaceweather.go.kr,www.sws.bom.gov.au,www.spaceweather.com,www.solen.info

Daily Sun: 14 November 2022

There is one active region AR3141 present on the Sun capable of producing strong C and M-class solar flares having chances of 83% and 23% respectively. No Coronal Hole (CH) is detected on the solar disk.		

DISCUSSION:

Solar activity is expected to be at moderate levels. In case of solar flares, shortwave fadeouts are possible. Moderate solar wind speed and quiet to unsettled geomagnetic activity is expected. HF conditions are enhanced.