## **Daily Space Weather Summary (SUPARCO)**



Thursday, March 03, 2022, 12:27 PST

LOCAL CURRENT IONOSPHERIC CONDITIONS (SON)									
Critical Frequency of F2 layer (foF2)				13.4 MHz					
Virtual Height of F2 layer (h`F2)				253 km					
Total Electron Content (TEC)				48 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)	13.7	14.3	16.7	19.7	23.1	26.4	33.9	40.5	
FOT (MHz)	11.6	12.2	14.2	16.7	19.6	22.4	28.8	34.5	

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)	45573/50074 nT			

The local geomagnetic field is quite at the moment.

LATEST SOLAR CONDITIONS				
Sunspot Number (SN)	66			
Solar radio flux (F10.7)	110 sfu			
Solar wind speed	397.1 km/s (varied in the past 24 hrs between 483 & 395 km/s)			
Solar x-ray flares	B5.0 (max flare in the past 24 hrs: M2 1739 UT Mar 02)			
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	2.2 nT (varied in the past 12 hrs between 2.9 nT & 3.6 nT) 0.4 nT (varied in the past 12 hrs between -0.9 nT & 1.5 nT)			
Solar conditions are at moderate levels with background X-ray flux at B-class level.				

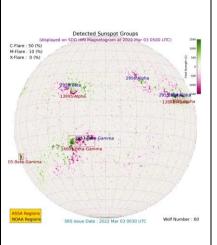
Sonmiani (SON): 25.2° N, 66.75° E, Islamabad (ISB): 33.7° N, 73.13° E

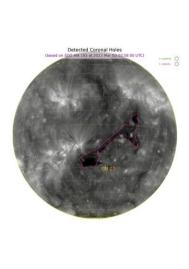
Notes: Credits: www.spaceweather.go.kr,www.sws.bom.gov.au,www.spaceweather.com,www.solen.info

## Daily Sun: 3 March 2022

There is one active region AR2957 present on the Sun along with two more active regions in magnetically complex states. They are capable of producing strong C-and M-Class solar flares having 50% and 10% chances respectively in the next 24-hrs.

01 Coronal Hole (CH) is detected on the solar disk.





## **DISCUSSION:**

Solar activity is expected to remain at moderate levels. Low solar wind speed and quiet geomagnetic activity is expected. Local HF conditions are enhanced.