

Daily Space Weather Summary (SUPARCO)

Wednesday, January 13, 2021, 12:25 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS OVER PAKISTAN ^a								
Critical Frequency of F2 layer (foF2)		7.2 MHz						
Virtual Height of F2 layer (h ^o F2)		253 km						
Total Electron Content (TEC)		13 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)	7.3	7.7	9.1	11.0	13.0	15.0	19.5	26.0
FOT (MHz)	6.2	6.6	7.8	9.3	11.1	12.8	16.6	22.1
Local ionospheric conditions are normal with normal MUF conditions.								
LOCAL GEOMAGNETIC CONDITIONS OVER PAKISTAN ^{ab}								
K-index		1						
Total Field Value (F)		45433/50010 nT						
Declination (D)		0.98/1.61 degrees						
The local geomagnetic field is quiet at the moment.								
LATEST SOLAR CONDITIONS								
Sunspot Number (SN)		0						
Solar radio flux (F10.7)		73 sfu						
Solar wind speed		418 km/sec (varied in the past 12 hrs between 401 & 479 km/s)						
Solar x-ray flares		A 1.3 (max flare in the past 24 hrs: A 1.0 1023 UT Jan 12)						
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)		5.8 nT (varied in the past 24 hrs between 3.5 nT & 6.9 nT) -1.4 nT (varied in the past 24 hrs between -2.0 nT & +2.4 nT)						
Solar conditions are at low levels with background X-ray flux at A-class level. Local HF working frequencies are nominal as compared to monthly average predicted values.								

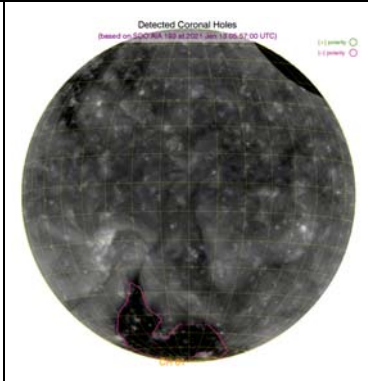
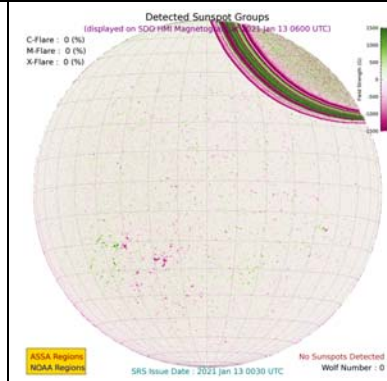
^aSonmiani (SON): 25.2° N, 66.75 E° ^bIslamabad (ISB): 33.7° N, 73.13 E°

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

Daily Sun: 13 January 2021

There are no active regions capable of producing strong solar flares as the Sun is currently spotless.

01 Coronal Holes (CH) is detected on the southern solar limb.



DISCUSSION:

Solar activity is expected to remain at very low levels. The solar wind is expected to return to nominal levels and quiet geomagnetic activity expected. Local HF conditions are normal.