Daily Space Weather Summary (SUPARCO)



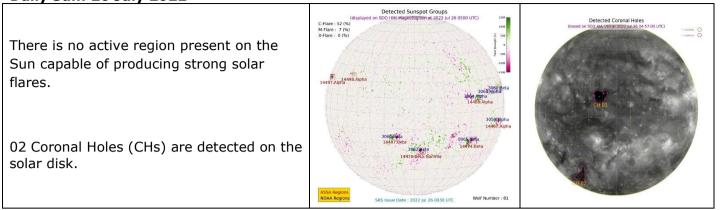
Tuesday, July 26, 2022, 12:15 PST

Virtual Height of F2 layer (h `F2) 335 km Total Electron Content (TEC) 28 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) 8.1 8.4 9.3 10.5 12.1 13.5 17.1 20.4 FOT (MHz) 6.9 7.1 7.9 8.9 10.3 11.5 14.5 17.3 Local HF conditions are normal as compared to the predicted monthly median MUF. LOCAL GEOMAGNETIC CONDITIONS K-Index 1 (quiet) Total Field (F) (SON/ISB) 45578 /50088 nT The local geomagnetic field is quiet at the moment. LATEST SOLAR CONDITIONS Sunspot Number (SN) 100 Solar radio flux (F10.7) 102 sfu Solar wind speed 537.4 km/s (varied in the past 24 hrs between 410 & 536 km/s) Solar so									
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Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances Distance (Km) 100 200 400 600 800 1000 1500 3000 MUF (MHz) 8.1 8.4 9.3 10.5 12.1 13.5 17.1 20.4 FOT (MHz) 6.9 7.1 7.9 8.9 10.3 11.5 14.5 17.3 LOCAL GEOMAGNETIC CONDITIONS LOCAL GEOMAGNETIC CONDITIONS K-Index 1 (quiet) 45578 /50088 nT Total Field (F) (SON/ISB) 45578 /50088 nT LATEST SOLAR CONDITIONS Sunspot Number (SN) 100 Solar vind speed 537.4 km/s (varied in the past 24 hrs between 410 & 536 km/s) Solar vind speed 537.4 km/s (varied in the past 24 hrs: C1, 0833) Solar vind speed 7.3 nT (varied in the past 12 hrs between 5.4 nT & 7.3 nT) Solar vind speed 7.3 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT) Solar Vinde field (Bt) 7.3 nT (varied in the past 12 hr	Virtual Height of F2 layer (h`F2)				335 km				
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(MHz) 8.1 8.4 9.3 10.5 12.1 13.5 17.1 20.4 FOT (MHz) 6.9 7.1 7.9 8.9 10.3 11.5 14.5 17.3 Local HF conditions are normal as compared to the predicted monthly median MUF. LOCAL GEOMAGNETIC CONDITIONS 14.5 17.3 K-Index 1 (quiet) 45578 /50088 nT 1 20.4 1 <th>Distance (Km)</th> <th>100</th> <th>200</th> <th>400</th> <th>600</th> <th>800</th> <th>1000</th> <th>1500</th> <th>3000</th>	Distance (Km)	100	200	400	600	800	1000	1500	3000
(MHz)6.97.17.98.910.311.514.517.3Local HF conditions are normal as compared to the predicted monthly median MUF.LOCAL GEOMAGNETIC CONDITIONSK-Index1 (quiet)Total Field (F) (SON/ISB)45578 /50088 nTThe local geomagnetic field is quiet at the moment.LATEST SOLAR CONDITIONSSunspot Number (SN)100Solar radio flux (F10.7)102 sfuSolar wind speedS37.4 km/s (varied in the past 24 hrs between 410 & 536 km/s)Solar x-ray flaresB2.4 (max flare in the past 24 hrs: C1, 0833)T.3T.3T.3T.3NUMBER (SN)100Solar radio flux (F10.7)102 sfuSolar wind speedSolar wind speedB2.4 (max flare in the past 24 hrs: C1, 0833)The past 12 hrs between 5.4 nT & 7.3 nT)-0.8 nT (varied in the past 12 hrs between 5.4 nT & 7.3 nT)-0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT)	MUF (MHz)	8.1	8.4	9.3	10.5	12.1	13.5	17.1	20.4
LOCAL GEOMAGNETIC CONDITIONSK-Index1 (quiet)Total Field (F) (SON/ISB)45578 /50088 nTThe local geomagnetic field is quiet at the moment.LATEST SOLAR CONDITIONSSunspot Number (SN)Solar radio flux (F10.7)100Solar vind speed537.4 km/s (varied in the past 24 hrs between 410 & 536 km/s)Solar x-ray flaresB2.4 (max flare in the past 24 hrs: C1, 0833)Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)7.3 nT (varied in the past 12 hrs between 5.4 nT & 7.3 nT) -0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT)	FOT (MHz)	6.9	7.1	7.9	8.9	10.3	11.5	14.5	17.3
K-Index1 (quiet)Total Field (F) (SON/ISB)45578 /50088 nTThe local geomagnetic field is quiet at the moment.LATEST SOLAR CONDITIONSSunspot Number (SN)100100Solar radio flux (F10.7)102 sfuSolar wind speed537.4 km/s (varied in the past 24 hrs between 410 & 536 km/s)Solar x-ray flaresB2.4 (max flare in the past 24 hrs: C1, 0833)Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)7.3 nT (varied in the past 12 hrs between 5.4 nT & 7.3 nT) -0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT)	Local HF con	ditions are no	ormal as comp	pared to the pre	edicted monthly	y median MUF.			
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Solar radio flux (F10.7)102 sfuSolar wind speed537.4 km/s (varied in the past 24 hrs between 410 & 536 km/s)Solar x-ray flaresB2.4 (max flare in the past 24 hrs: C1, 0833)Interplanetary Magnetic Field (IMF) Total Field (Bt)7.3 nT (varied in the past 12 hrs between 5.4 nT & 7.3 nT) -0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT)Z Component of Field (Bz)7.3 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT)				LATES	ST SOLAR CON	DITIONS			
Solar wind speed537.4 km/s (varied in the past 24 hrs between 410 & 536 km/s)Solar x-ray flaresB2.4 (max flare in the past 24 hrs: C1, 0833)Interplanetary Magnetic Field (IMF) Total Field (Bt)7.3 nT (varied in the past 12 hrs between 5.4 nT & 7.3 nT) -0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT)Z Component of Field (Bz)7.3 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT)	Sunspot Number (SN)				100				
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Interplanetary Magnetic Field (IMF) 7.3 nT (varied in the past 12 hrs between 5.4 nT & 7.3 nT) Total Field (Bt) -0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3 nT) Z Component of Field (Bz) nT)	Solar wind speed				537.4 km/s (varied in the past 24 hrs between 410 & 536 km/s)				
Total Field (Bt)-0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3Z Component of Field (Bz)nT)	Solar x-ray flares				B2.4 (max flare in the past 24 hrs: C1, 0833)				
Solar conditions are at low to moderate levels with background X-ray flux at B-class level.	Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)				-0.8 nT (varied in the past 12 hrs between -5.6 nT & 0.3				
	Solar condit	ions are at lov	w to moderate	e levels with ba	L ckground X-ray	flux at B-class lo	evel.		

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

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

Daily Sun: 26 July 2022



DISCUSSION:

Solar activity is expected to remain at low to moderate levels. Moderate solar wind speed is expected to prevail due to the presence of coronal holes. Quiet geomagnetic activity is expected. Local HF conditions are normal.