इलेक्ट्रॉनिकी एवं
सूचना प्रौद्योगिकी मंत्रालय
MINISTRY OF
ELECTRONICS AND
INFORMATION TECHNOLOGY
सत्यमेव जयते

SAMEER

MESOSPHERE-STRATOSPHERE-TROPOSPHERE RADAR

DESCRIPTION:

- The Indian MST radar is a highly sensitive pulse coded, coherent VHF phased array radar operating at 53 MHz with an average power aperture product of 7 x 108 Wm2
- Capable of detecting and measuring wind velocities, wind shear and other atmospheric turbulences up-to a height of 100 kms into the sky.

SYSTEM SPECIFICATION:

- Frequency: 53 MHz
- Average Power Aperture Product: 7 X 103 Wm2 (4.8 X 106 Wm2 in ST mode)
- Peak Power: 2.5 MW (180kW in ST mode)
- Maximum Duty Ratio : 2.5%
- Number of Yagi Antennas: 1024 (256 in ST mode)
- Beam Width: 3° (4.6° in ST mode)
- Number of Beams for Automatic Scanning : 7

APPLICATION:

- Prevailing Winds
- Waves (including gravity waves) turbulence
- Atmospheric Stability
- Mesoscale meteorology

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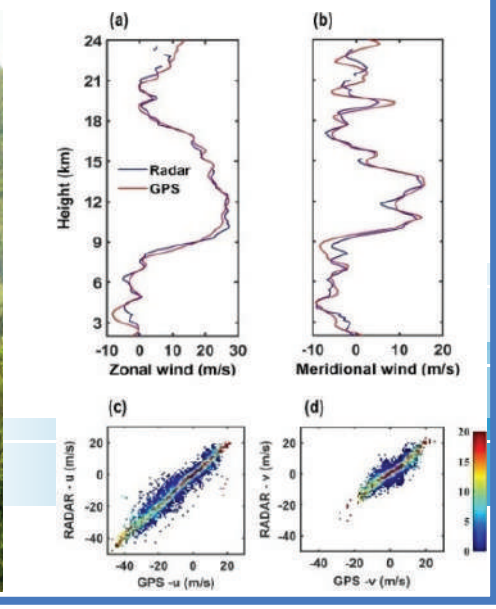
INSTALLATION SITE:

- A state of the art atmospheric radar system, MST Radar has been designed, developed and installed at Gadanki village, near Tirupati.



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