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

SAMEER

LIGHTNING DETECTION NETWORK

DESCRIPTION:

- Lighting Detection network system detects the cloud to Ground lighting. Indigenous LDN in North India will help in understanding the Lightning climatology and it's linkage with climate change.
- LDN system gives the Accurate location of lighting with the accuracy in several meters.
- Total 6 nodes are required to cover North East area of India. Base line of each node is 100-200 Kms

SPECIFICATIONS:

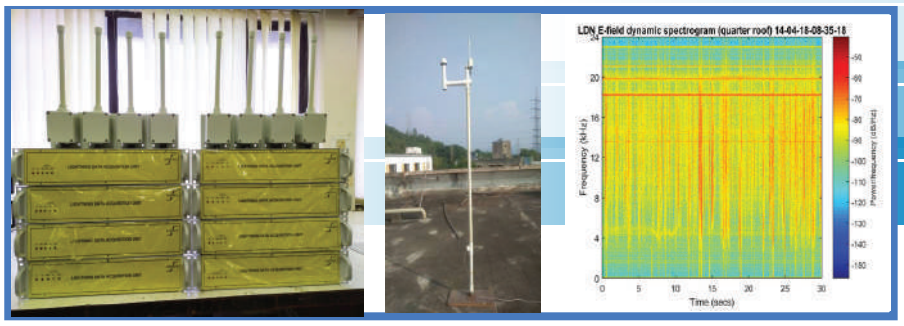
Lightning Type	Cloud to ground(flashes & strokes)
Time Synchronization	GPS receiver with few tens of nanoseconds accuracy..
Network Detection Efficiency	>80% (for C-C)
Location Accuracy	<1KM for CG
Nominal Baseline Between Sensors	100 –200KM
VLF Band	1- 30KHz
Remote monitoring	Remote monitoring of nodes and central station.

FEATURES:

Eight Lightning Detection nodes to be installed in North East region of India for Cloud to Ground Lighting detection. VLF receiver at 1-30 KHz. FPGA based data acquisition system .GPS time stamping for accurate location finding Single board computer based node controlling software for data decimation to server on Ethernet Data collection from all the nodes on the Processing server. Sophisticated software for the lighting data visualization.

END USERS:

Indian Meteorological Department
Local Authorities for data distribution



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