

## Radiosonde

PisharotySonde system is an indigenous GPS Sonde (Radiosonde) system developed by VSSC/ ISRO using commercially off the shelf components (COTS) for high quality atmospheric parameter measurement.

The Sonde system consists of the balloon borne segment referred as PisharotySonde and the ground segment referred as PisharotySonde Ground Station. PisharotySonde uses sensors for measuring the atmospheric temperature & relative humidity and GPS receiver module for acquiring the wind parameters, altitude, date and time. Pressure information can be derived from the height and temperature information using software. Sensor and GPS data are processed and transmitted to ground station. PisharotySonde Ground Station consists of the Antenna Assembly & LNB, Receiver and Data Processing & Display unit. Sonde system

incorporates the software for solar radiation correction on temperature measurement.

The Sonde system also generates the WMO specified 'temp' messages for reporting the data. This indigenous low cost system is compact and light weight (125 grams). PisharotySonde system is validated by comparison ascents with various internationally available Sonde systems and the performance is confirmed. The system performance is evaluated independently by IMD and cleared for meteorological applications. More than 12000 Sondes have been already realized by ISRO.



Fig. Sonde on ascent

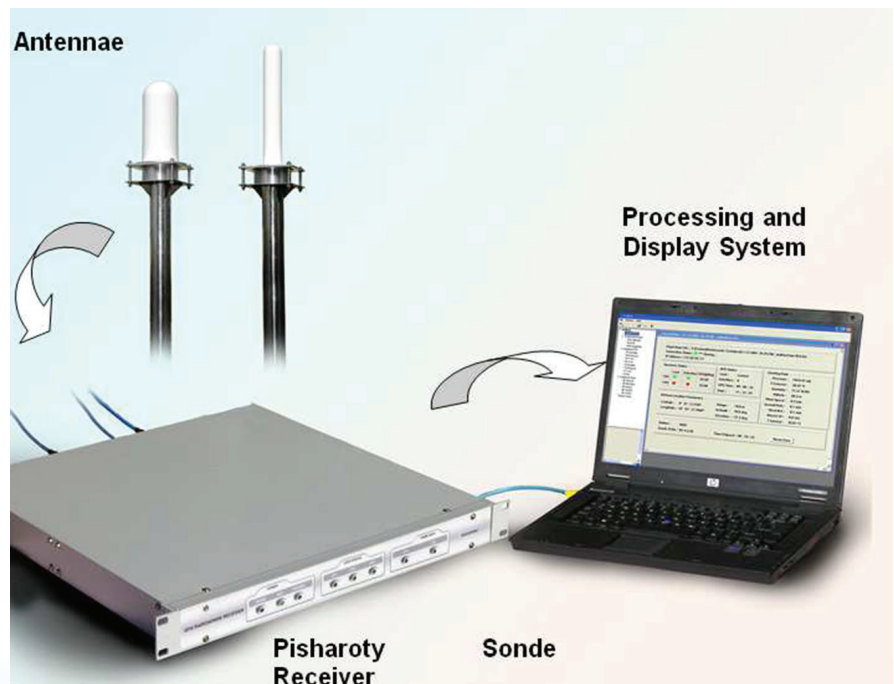


Fig. Sonde Ground Station