

Installation of Automatic Weather Station

IMD is the apex body for monitoring of weather and publishing information related to daily weather conditions. In case of any impending natural disaster being created due to adverse weather condition in parts of Indian mainland or surrounding atmosphere, IMD issues timely advisories to the concerned departments to provide them specific lead time for adoption of disaster preparedness and disaster response measures. As it is a well-known fact that lesser is the domain of area being studied, better is the understanding of the area being studied. Gorakhpur district in its past suffered a lot due to unprecise weather predictions and adverse weather conditions such as Cyclone- Hudhud (2014), Unprecedented rainfall of 2014, Floods, 2017. After considering the previous chain of the events and getting into the depth for exploring the solution for accurate weather predictions, Automatic Weather Stations (AWS) is installed in the collectorate of Gorakhpur to monitor the weather-related events in & around the periphery of Gorakhpur.

Pictogram showing mechanism of AWS



Features of AWS

- Preconfigured set of sensors for measurement of Dry Bulb, Temperature, Relative Humidity, Barometric Pressure, Wind Speed, Wind Direction, Rainfall, and Solar Radiation.
- Uses real-time in field data for assessing the climatic variables.
- An update after every 2.5 seconds for issuing advisories for weather parameters.

Application of AWS

- Field monitoring of an area of the confined domain to measure weather related parameters with high precision & accuracy.
- Hydrological Management
- Site-management concerned with mining, land-filling, roads & railways
- Forecasting adverse weather conditions