

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
STARRED QUESTION No.*167
ANSWERED ON 16/03/2023

ACCURACY OF DATA GENERATED BY AUTOMATIC WEATHER STATIONS

*167. DR. C.M. RAMESH:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether lack of accuracy of data generated Automatic Weather Stations (AWSs) is due to lack of maintenance and calibration of machines, if so, the details thereof; and
- (b) whether any step has been taken by Government in this regard as most of the AWS sensors are set up in the open, if so, the details thereof, and if not, the reasons therefor?

ANSWER
THE MINISTER FOR STATE (INDEPENDENT CHARGE) FOR
MINISTRY OF SCIENCE AND TECHNOLOGY
ANDEARTH SCIENCES
(DR. JITENDRA SINGH)

(a) to (b): A statement is laid on the table of the House.

**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (b) OF RAJYA SABHA
STARRED QUESTION No.*167 REGARDING 'ACCURACY OF DATA GENERATED
BY AUTOMATIC WEATHER STATIONS' FOR ANSWER ON 16 MARCH 2023**

- (a) No Sir. IMD has established a network of Automatic Weather Stations (AWS) with Sensors for the meteorological parameters viz. Atmospheric pressure, Air temperature, Relative humidity, Rainfall, Wind speed and Wind direction. The servicing/routine preventive maintenance of the AWS and all its components are being done at regular intervals by trained manpower available at IMD office to ensure the quality of data from the system.

The Preventive Maintenance also includes necessary exposure conditions at AWS sites. The technical team during preventative maintenance/servicing, carry out grass cutting, cleaning of solar panels, equipments and general upkeep of the observatory site to ensure the quality of data from the system.

While doing the calibration of sensors, the atmospheric parameters are compared with the travelling standards of sensors during preventative maintenance/Servicing. If any sensor's accuracy of AWS is not performing as per the World Meteorological Organization (WMO) criteria, the sensor is replaced with new sensors.

The reception of AWS data and its quality is being monitored round the clock at IMD Pune Central Receiving Servers and all IMD State Meteorological Centres.

- (b) Yes Sir. As per WMO Guidelines, AWS are required to be installed in the open field only where there are no physical obstacles like bushes and trees etc. for getting accurate weather data.
