

Q. What is heat wave?

Qualitatively, heat wave is a condition of air temperature which becomes fatal to human body when exposed. Quantitatively, it is defined based on the temperature thresholds over a region in terms of actual temperature or its departure from normal. In certain countries it is defined in term of the heat index based on temperature and humidity or based on extreme percentile of the temperatures.

Q. What is criterion for declaring heat wave?

Heat wave is considered if maximum temperature of a station reaches at least 40°C or more for Plains and at least 30°C or more for Hilly regions.

a) Based on Departure from Normal

Heat Wave: Departure from normal is 4.5°C to 6.4°C

Severe Heat Wave: Departure from normal is >6.4°C

b) Based on Actual Maximum Temperature

Heat Wave: When actual maximum temperature $\geq 45^{\circ}\text{C}$

Severe Heat Wave: When actual maximum temperature $\geq 47^{\circ}\text{C}$

If above criteria met at least in 2 stations in a Meteorological sub-division for at least two consecutive days and it declared on the second day.

Q. What is a criterion for describing *Heat Wave* for coastal stations?

When maximum temperature departure is 4.5°C or more from normal, *Heat Wave* may be described provided actual maximum temperature is 37°C or more.

Q. What is warm night?

It is considered only when maximum temperature remains 40°C or more. It is defined based on departures or actual minimum temperatures as follows:

Warm night: minimum temperature departure is 4.5°C to 6.4°C

Very warm night: minimum temperature departure is >6.4°C