

Supplementary File

1. A *cold wave* is declared when the night temperature falls 5°C-6°C below the normal minimum temperature, which is 10°C or higher (averaged over 30 years). Conversely, if the normal minimum temperature is below 10°C, a cold wave is declared when the night temperature drops 4°C-5°C below the average.
2. A *heatwave* is declared if the departure from normal is 5°C-6°C below 40°C or lower (averaged over 30 years). For areas where the normal maximum temperature exceeds 40°C, a heatwave is declared when the departure from normal is 4°C-5°C.
3. *Snowfall* is a hydrological hazard where a large amount of snow can affect transport, crops and people. Annual Disaster Weather Report by IMD reports the snowfall cases over India that caused human deaths. The report has also considered only those snowfall events that caused human deaths.
4. *Heavy rainfall* happens when a region receives 64.5-115.5 mm rain in 24 hours. In the case of very heavy rainfall, the threshold increases to 115.6-204.4 mm and in extremely heavy rainfall it is 204.5 mm or more. The report has considered all very heavy and extremely heavy rainfall events, and heavy rainfall events only when they have caused damage.
5. *Lightning* is an electrical discharge caused by imbalances between storm clouds and the ground or within the clouds themselves. Storms include dust storms (caused by thunderstorms or strong pressure gradients associated with cyclones which increase wind speed over a wide area), hailstorms (an outgrowth of a severe thunderstorm in

which balls or irregularly shaped lumps of ice fall with the rain), thunderstorms and gales (a very strong wind).

6. *Cyclones* are intense vortex or whirls in the atmosphere with very strong winds circulating around them in an anti-clockwise direction in the Northern Hemisphere and in clockwise direction in the Southern Hemisphere.