

Cloudburst: Meaning, Causes, IMD Definition & Effects

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Prelim - Geography

GS Paper II - Important Geophysical phenomena

- A cloudburst is a sudden and intense rainfall event.
- Weather conditions change suddenly and intensively before cloudburst.
- Cloudburst is localised in nature, and pours an extraordinary amount of water.
- Generally cloudbursts are associated with thunderstorms.
- Caused by Convective Mechanism.
- They occur most often in desert and mountainous regions, and in interior regions of continental landmasses.
- Cloudburst lead to flash floods and landslides, especially in mountain areas.

How does it happen?

- Intense vortices on small scale that generate strong convection currents, which lift the moisture laden air with sufficient rapidity to form cumulonimbus clouds shedding water load with great strength and ferocity.

How IMD defines it?

- The Indian Meteorological Department defines a cloudburst as rainfall of more than 100mm in one hour over an area of about 2030 sq km. this benchmark widely used in India to identify cloudburst.



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