

Glossary of Weather Terms

Flood Terms:

Bankfull – The maximum height of the river before it overflows its banks.

Flash Flood – A flood that occurs suddenly during or shortly following heavy rains or from a sudden release of water as in a dam break. Small streams and creeks usually react the fastest to heavy rains and rise several feet in hours or even minutes.

Flood Crest – The highest level a river reaches during a flood event.

Flood Stage - the point at which the surface of a river, creek, or other body of water has risen to a sufficient level to cause damage or affects use of man-made structures.

River Flood – A flood on a large river takes a tremendous amount of rain and usually develops over a period of 1-2 days. Rain water first runs into small streams that flow into the larger tributaries and eventually end up in the main stem of the river.

Urban Flood – Rapid runoff and poor drainage can lead to flooded roadways and underpasses and even become deadly.

Thunderstorm Terms:

Anvil – The spreading out (by strong winds) of the upper portion of the thunderstorm. It usually has a fibrous or smooth appearance. With long-lasting thunderstorms, the anvil may spread over 100 miles or more downwind.

Convection – The transfer of heat or other atmospheric properties by mass motion within the atmosphere directed in an upward motion.

Cumulus Cloud – A cauliflower-shaped cloud with a flat base and sharp edges.

Downburst – A sudden rush of cool air toward the ground that can impact with speeds more than 70 mph and produce damage similar to that of a tornado. It usually occurs near the leading edge of the storm or may occur in heavy rain.

Downdraft – A column of cool air that sinks toward the ground. It is most often accompanied by rain.

Flanking Line – A line of cumulus clouds connected and extending outward from the most active portion of a parent cumulonimbus, usually found on the southwest quadrant side of a storm. The cloud line usually has a rough stair-step appearance with the taller clouds adjacent to the parent clouds. It is most frequently associated with strong or severe thunderstorms.

Funnel Cloud – A funnel-shaped cloud extending from beneath the base of a towering cumulus or thunderstorm. It is associated with a rotating column of air that has not touched the ground, yet.

Gust Front – The leading edge of the thunderstorm's downdraft of air as it spreads out away from the storm. It is usually felt as a change to gusty cool winds and often precedes the thunderstorm's rain by several minutes.

Hail – Precipitation in the form of balls or clumps of ice.

Hook Echo – A radar pattern sometimes observed in the southwest quadrant of a tornadic thunderstorm.

Macroburst – A larger downburst affecting an area greater than 2 miles in diameter.

Mammatus – Clouds that appear to be hanging, rounded protuberances or pouches on the underside of a larger cloud. With thunderstorms, they are seen under the anvil.

Microburst – A small downburst affecting an area less than 2 miles in diameter.

Precipitation Shaft – A visible column of rain or hail falling from the base of a cloud.

Rain-free base – The dark underside of a cloud (it's base) that has no visible precipitation falling from it. This marks the updraft of the thunderstorm.

Roll Cloud – On rare occasions, a shelf cloud may turn into a roll cloud. The cloud takes on the shape of a horizontal tube that appears to be rolling. It is detached from the thunderstorm on its leading edge.

Scud Clouds – Low cloud fragments often seen in association with and behind thunderstorm gust front or in association with the updraft. These clouds are ragged and wind torn and not usually attached to the thunderstorm.

Severe Thunderstorm – A thunderstorm producing damaging winds or winds greater than 58 mph and/or hail 1" or greater in diameter.

Shelf Cloud – A low-level, wedge shaped cloud attached to the thunderstorm. It forms above the gust front as warm air ahead of the storm.

Squall Line – A solid line or band of active thunderstorms.

Thunderstorm (Cumulonimbus) – The weather event of rain and lightning. The storm may extend 5-10 miles high into the atmosphere and 5-25 miles across. Heavy rains and gusty winds often accompany the storms.

Tornado – A violently rotating column of air ***in contact with the ground.***

Towering Cumulus – A cumulus cloud that continues to grow so that its height is taller than or equal to its width.

Updraft – Warm, moist rising air.

Wall Cloud – The cloud appears as an abrupt lowering from the relatively flat rain-free base. It is attached to a thunderstorm and may be rotating. This is the portion of the thunderstorm from which the tornado usually descends.

Winter Weather Terms:

Blizzard – Strong winds (sustained at greater than 35 mph) and heavy or blowing snow combine to produce very poor visibility and dangerous conditions.

Blowing Snow – Wind-driven snow that causes reduced visibility and sometimes significant drifting.

Drifting Snow – Winds are strong enough to blow falling snow or loose snow on the ground into mounds causing uneven snow depths.

Freeze – Used when temperatures at or near the surface (ground) are expected to be 32 degrees Fahrenheit or below.

Freezing Drizzle – Drizzle that falls onto a surface with a temperature below freezing, causing it to freeze to the surface forming a thin coating of ice.

Freezing Rain – Rain that falls onto a surface with a temperature below freezing, causing it to freeze to the surface, forming a coating of ice or glaze.

Frost – The formation of ice crystals that develop under conditions similar to dew, except that the minimum temperature has dropped to at least 32 degrees Fahrenheit.

Frost Bite – Frozen body tissue.

Heavy Snow – Snow accumulating to at least 4 inches in 12 hours or 6 inches in 24 hours.

Hypothermia – When the body temperature drops below 95 degrees Fahrenheit.

Ice Storm – Significant and possibly damaging accumulations of ice associated with freezing rain situations.

Sleet – Ice pellets or granules of frozen rain. Sleet usually bounces when it hits a surface and does not stick, but can accumulate on roadways causing a hazard.

Snow – A steady fall of snow for several hours or more.

Snow Flurries – Light snow falling for short durations.

Snow Showers – Snow falling at varying intensities for brief time periods.

Wind Chill (Wind Chill Factor) – Combines the rate of heat loss caused by wind and lowering temperatures.