

Weather Words

GLOSSARY

air mass - a body of air hundreds or thousands of miles across with the same temperature and moisture.

air pressure - the weight of the atmosphere pressing down on the earth's surface.

altitude - the elevation above or below sea level.

altocumulus - middle clouds, usually white or gray. Often occur in layers or patches.

anemometer - instrument used to measure wind speed.

atmosphere - the blanket of air around the earth.

atmospheric pressure - (see air pressure) also known as barometric pressure.

barometer - instrument used to measure air pressure.

Beaufort Scale - a measure of wind strength.

Celsius - a temperature scale in which 0 degrees is the melting point of ice and 100 degrees is the boiling point of water. (Also called centigrade.)

cirrus - a high cloud made of ice crystals. Often thin, white, and in narrow bands.

climate - the general weather conditions in a specific place over a long period of time.

cloud - a mass of tiny water droplets or ice crystals.

cold front - boundary between two different air masses where cold air pushes warm air away. Usually means cold weather.

condensation - the change of a substance from a gas or vapor to a liquid.

convections - atmospheric motions that result in warm air rising and cool air sinking.

Coriolis effect - the apparent force that as a result of the earth's rotation deflects air currents to the right in the Northern Hemisphere and to the left in the Southern Hemisphere.

cumulonimbus - a dense and vertically developed cloud, often with an anvil shape at the top. Frequently brings thunderstorms and hail.

cumulus - a flat-based cloud with a bulging upper part that may resemble a cauliflower. Usually brings fair weather, but if it exhibits extreme vertical growth, showers can occur.

current - the flow of water or air in a definite direction.

dew - water that has condensed onto objects near the ground when their temperatures have fallen below the dew point of the air.

dew point - the temperature to which air must be cooled for saturation to occur. (The temperature at which air is saturated with water and water vapor condenses.)

evaporation - the process of liquid changing into a gas or vapor.

eye of a hurricane - area of relative calm at the center of a hurricane.

Fahrenheit - a temperature scale that uses 32 degrees as the melting point of ice and 212 degrees as the boiling point of water.

fog - of or like a cloud; differing from a cloud only by being near the ground.

forecast - to predict the weather. (Or, a weather prediction.)

front - boundary between cold and warm air masses, usually represented on a weather map with an "L," because it forms a low pressure center.

greenhouse effect - the warming of the lower layers of the atmosphere caused by heat being trapped by increased carbon dioxide in the air.

hail - particles of ice, usually falling from a cumulonimbus cloud, that range from the size of a pea to the size of a golf ball.

high - higher than normal air pressure, such as surface pressure at the center of an air mass. Represented by an "H" on a weather map. Brings dry weather.

humidity - the amount of moisture (in the form of water vapor) in the air.

hurricane - a severe tropical cyclonic storm containing winds above 74 miles per hour. Called cyclone in the Indian Ocean, typhoon in the Pacific, and willy-willy in Australia.

hygrometer - an instrument for measuring the air's water vapor content, or humidity.

isobars - lines drawn on a weather map, joining places of equal pressure.

jet stream - high speed winds above the stratosphere usually blowing in a westerly direction.

latitude - distance north or south from the equator, measured in degrees.

lightning rod - a metal rod placed high on a building and grounded to divert lightning from the structure.

low - lower than normal air pressure, such as the boundary between air masses. Represented by "L" on a weather map. Usually means bad or wet weather.

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mammatus cloud - a cloud that looks like pouches hanging from the bottom of another cloud.

marine influence - the effect of ocean temperature on the weather of nearby land.

maximum-minimum thermometer - a device that automatically measures the daily high and low temperatures.

meteorology - the scientific study of the atmosphere and weather.

meteorologists - scientists who study weather and the atmosphere's interaction with the earth's surface.

microclimate - the climate or weather within a small space or area.

millibar - a unit (mb) used to measure air pressure (1 inch = 33.87 millibars).

occluded front - combination of warm and cold fronts as cold air overtakes a warm front.

ozone - a special form of oxygen (with 3 atoms) that forms naturally in the upper air and filters out the sun's harmful ultraviolet rays. At ground level it is a pollutant contributing to smog.

precipitation - any form of water, liquid or solid, that falls from the atmosphere and reaches the ground (usually in the form of rain, snow, sleet, or hail).

prevailing winds - winds that usually blow from the same direction.

radiosonde - instruments attached to a balloon for measuring the weather in the upper atmosphere.

rain - liquid precipitation with drops larger than .02 inches in diameter.

rain gauge - a device for measuring rainfall amounts.

relative humidity - the amount of moisture in the air compared to the moisture that the air can hold at that particular temperature.

satellite picture - a photograph of the earth from a satellite in orbit. It can show cloud, wind, and precipitation patterns.

sea level - the position of the sea's surface at the average level between high and low tide.

sleet - a type of precipitation that is small ice pellets. Usually occurs when rain freezes on its way to the ground.

snow - precipitation consisting of clumps of ice crystals.

solar - of or having to do with the sun.

solar radiation - the transferring of energy from the sun through electromagnetic waves.

stationary front - a front that is not distinctly moving in any direction.

storm - a violent disturbance of the atmosphere causing high wind, often accompanied by rain, snow, or hail.

stratosphere - the upper part of the lower atmosphere, where most weather forms.

stratus - a low, gray cloud layer that often brings drizzle.

synoptic chart - weather map using isobars to show highs, lows, and fronts.

temperature - a measure of the warmth or coldness of an object or substance.

temperature-humidity index - a chart that measures the discomfort we feel based on a combination of temperature and moisture in the air.

thermometer - an instrument used to measure temperature.

tornado - an intense, rotating funnel or rope of air that descends from a cumulonimbus cloud and touches the ground in the form of a violent storm. Also known as a twister.

trade winds - winds that blow regularly toward the equator, coming from the northeast in the Northern Hemisphere and from the southeast in the Southern Hemisphere.

troposphere - the lowest level of the atmosphere, directly above the ground, and just below the stratosphere, where weather happens.

warm front - a front where warm air overrides and replaces cold air.

water cycle - the process by which oceans and smaller bodies of water evaporate into the air and then condense and return in the form of rain or snow.

water vapor - water in gas form which is in the atmosphere and helps to make weather.

weather - the conditions in the atmosphere at any given time. The state of the air at a certain time and place. Temperature, humidity, wind, clouds, and precipitation.

wind - air in motion that moves relatively horizontally in relationship to the surface of the earth.

wind chill - the cooling effect of a combination of temperature and wind. Loss of body heat is the result.

wind chill factor - a measure of the discomfort we feel based on a combination of temperature and wind speed.

wind vane - an instrument for measuring wind direction.