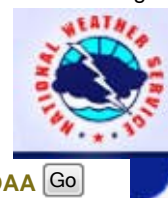


weather.gov



National Oceanic and Atmospheric Administration's

National Weather Service


[Site Map](#) [News](#) [Organization](#)

 Search NWS All NOAA

 Local forecast by
"City, St"

 [RSS Feeds](#)

Warnings

[Current](#)
[By State/County...](#)
[UV Alerts](#)

Observations

[Radar](#)
[Satellite](#)
[Snow Cover](#)
[Surface Weather...](#)
[Observed Precip](#)

Forecasts

[Local](#)
[Graphical](#)
[Aviation](#)
[Marine](#)
[Hurricanes](#)
[Severe Weather](#)
[Fire Weather](#)

Text Messages

[By State](#)
[By Message Type](#)
[National](#)

Forecast Models

[Numerical Models](#)
[Statistical Models...](#)
[MOS Prod](#)
[GFS-LAMP Prod](#)

Climate

[Past Weather](#)
[Predictions](#)

Weather Safety

[Weather Radio](#)
[Hazard Assmt...](#)
[StormReady /](#)
[TsunamiReady](#)
[Skywarn™](#)

Education/Outreach

Information Center

[Tsunamis](#)
[Publications...](#)

Contact Us

[FAQ](#)
[Comments...](#)


NWS on Facebook

[Home](#) > [Glossary](#)
Here are the results for the letter **p**

PAC

[Pacific](#)

Pacific Decadal Oscillation

(Abbrev. PDO) - a recently described pattern of climate variation similar to ENSO though on a timescale of decades and not seasons. It is characterized by SST anomalies of one sign in the north-central Pacific and SST anomalies of another sign to the north and east near the Aleutians and the Gulf of Alaska. It primarily affects weather patterns and sea surface temperatures in the Pacific Northwest, Alaska, and northern Pacific Islands.

Palmer Drought Severity Index

(Abbrev. PDSI) - an index used to gage the severity of drought conditions by using a water balance equation to track water supply and demand. This index is calculated weekly by the National Weather Service.

Pan Pan

A headline within National Weather Service high seas forecasts transmitted via the GMDSS to indicate that a hurricane or hurricane force winds are forecast.

Pancake Ice

In hydrologic terms, circular flat pieces of ice with a raised rim; the shape and rim are due to repeated collisions

Panhandle Hook

Low pressure systems that originate in the panhandle region of Texas and Oklahoma which initially move east and then "hook" or recurve more northeast toward the upper Midwest or Great Lakes region. In winter, these systems usually deposit heavy snows north of their surface track. Thunderstorms may be found south of the track.

Parameter

A subset of the group of evaluations that constitute each element of an observation.

Parapet Wall

In hydrologic terms, a solid wall built along the top of the dam for ornament, safety, or to prevent overtopping

Parcel

A volume of air small enough to contain uniform distribution of its meteorological properties and large enough to remain relatively self-contained and respond to all meteorological processes.

Parhelion

The scientific name for sun dogs. Either of two colored luminous spots that appear at roughly 22 degrees on both sides of the sun at the same elevation. They are caused by the refraction of sunlight passing through ice crystals. They are most commonly seen during winter in the middle latitudes and are exclusively associated with cirriform clouds. They are also known as mock suns.

Partial Beam Filling

A limitation of the rainfall estimation techniques used by NEXRAD. At far ranges from the radar, a storm may occupy only a portion of the radar beam (which may be several miles across). However, the radiation received by the radar antenna consists of the average reflectivity across the entire beam, so the reflectivity and associated rainfall rates are underestimated.

Partial-Duration Flood Series

In hydrologic terms, a list of all flood peaks that exceed a chosen base stage or discharge, regardless of the number of peaks occurring in a year.

Particle Trajectory Model

A computer sub-model that tracks the trajectories of multiple particles that are released into an atmospheric flow model.

Partly Cloudy

Between 3/8 and 5/8 of the sky is covered by clouds.

Partly Sunny

Between 3/8 and 5/8 of the sky is covered by clouds. The term "Partly Sunny" is used only during daylight hours.

Pascal

- The unit of pressure produced when one newton acts on one square meter (1 N/m²). It is abbreviated Pa.
- PAT**
Pattern
- PBL**
Probable
- PC-GRIDDS**
PC-Gridded Interactive Display and Diagnostic System - Allows the forecaster to view fields of gridded model output in contour or vector format. By doing this, the forecaster can extract relevant information from the numerical model grid-point data.
- PCPN**
Precipitation
- PCT**
percent
- PD**
Period
- PDI**
Palmer Drought Index
- PDMT**
Predominant
- PDO**
Pacific Decadal Oscillation - a recently described pattern of climate variation similar to ENSO though on a timescale of decades and not seasons. It is characterized by SST anomalies of one sign in the north-central Pacific and SST anomalies of another sign to the north and east near the Aleutians and the Gulf of Alaska. It primarily affects weather patterns and sea surface temperatures in the Pacific Northwest, Alaska, and northern Pacific Islands. Two main characteristics distinguish PDO from El Niño/Southern Oscillation (ENSO): first, 20th century PDO "events" persisted for 20-to-30 years, while typical ENSO events persisted for 6 to 18 months; second, the climatic fingerprints of the PDO are most visible in the North Pacific/North American sector, while secondary signatures exist in the tropics- the opposite is true for ENSO. Several independent studies found evidence of just two full PDO cycles in the past century: cool" PDO regimes prevailed from 1890-1924 and again from 1947-1976, while "warm" PDO regimes dominated from 1925-1946 and from 1977 through (at least) the mid-1990's. Causes for the PDO are not currently known. Likewise, the potential predictability for this climate oscillation are not known.
- PDS**
Particularly Dangerous Situation (PDS) wording is used in rare situations when long-lived, strong and violent tornadoes are possible. This enhanced wording may also accompany severe thunderstorm watches for intense convective wind storms.
- PDS Watch**
The Particularly Dangerous Situation (PDS) wording is used in rare situations when long-lived, strong and violent tornadoes are possible. This enhanced wording may also accompany severe thunderstorm watches for intense convective wind storms.
- PDSI**
Palmer Drought Severity Index - an index used to gage the severity of drought conditions by using a water balance equation to track water supply and demand. This index is calculated weekly by the National Weather Service.
- PDT**
Pacific Daylight Time
- Peak Discharge**
In hydrologic terms, the rate of discharge of a volume of water passing a given location
- Peak Gust**
The highest instantaneous wind speed observed or recorded.
- Peak Pulse**
The amount of power transmitted by a radar during a given pulse. Note that because these pulses are widely spaced, the average power will be much smaller.
- Peak Wind Speed**
The maximum instantaneous wind speed since the last observation that exceeded 25 knots.
- Pendant Echo**
Radar signature generally similar to a hook echo, except that the hook shape is not as well defined.
- Penetrating Top**
Same as **Overshooting Top**; a dome-like protrusion above a thunderstorm anvil, representing a very strong updraft and hence a higher potential for severe weather with that storm. A persistent and/or large overshooting top (anvil dome) often is present on a supercell. A short-lived overshooting top, or one that forms and dissipates in cycles, may indicate the presence of a pulse storm.
- Penumbra**

- In solar-terrestrial terms, the sunspot area that may surround the darker umbra or umbrae. It consists of linear bright and dark elements radial from the sunspot umbra.
- Perched Groundwater**
In hydrologic terms, local saturated zones above the water table which exist above an impervious layer of limited extent.
- Percolation**
In hydrologic terms, the movement of water, under hydrostatic pressure, through the interstices of a rock or soil, except the movement through large openings such as caves
- Percolation Path**
In hydrologic terms, the course followed by water moving or percolating through any other permeable material, or under a dam which rests upon a permeable foundation.
- Perennial Stream**
In hydrologic terms, a stream that flows all year round.
- Perigee**
The closest distance between moon and earth or the earth and sun.
- Perihelion**
The point on the annual orbit of a body (about the sun) that is closest to the sun; at present, the earth reaches this point on about 5 January. Opposite of aphelion.
- Permafrost**
A layer of soil at varying depths below the surface in which the temperature has remained below freezing continuously from a few to several thousands of years.
- Permeability**
In hydrologic terms, the ability of a material to transmit fluid through its pores when subjected to a difference in head.
- Permeability Coefficient**
In hydrologic terms, the rate of flow of a fluid through a cross section of a porous mass under a unit hydraulic gradient, at a temperature of 60 degrees Fahrenheit.
- Permeameter**
In hydrologic terms, a laboratory instrument for determining permeability by measuring the discharge through a sample of the material when a known hydraulic head is applied.
- Persistence**
Continuation of existing conditions. When a physical parameter varies slowly, the best prediction is often persistence
- Persistence Forecast**
A forecast that the current weather condition will persist and that future weather will be the same as the present (e.g., if it is raining today, a forecast predicting rain tonight).
- Perturbation Model**
A computer model used to calculate air pollution concentrations. A perturbation model produces a wind field from solutions to a simplified set of equations that describe atmospheric motions.
- Pervious Zone**
In hydrologic terms, a part of the cross section of an embankment dam comprising material of high permeability
- PFD**
QPF Discussion (issued by the HPC)
- Phenomenological Model**
A computer model used to calculate air pollution concentrations. A phenomenological model focuses on an individual phenomenon, such as plume impingement or fumigation.
- Piezometer**
In hydrologic terms, an instrument used to measure pressure head in a conduit, tank, soil, etc. They are used in dams to measure the level of saturation.
- Photochemical Smog**
Air pollution containing ozone and other reactive chemical compounds formed by the reaction of nitrogen oxides and hydrocarbons in the presence of sunlight.
- Photosphere**
The intensely bright portion of the sun visible to the unaided eye; the "surface" of the sun. Reaching temperatures estimated at about 11,000 degrees Fahrenheit, it is the portion of the sun's atmosphere which emits continuous electromagnetic radiation.
- Phreatic water**
In hydrologic terms, water within the earth that supplies wells and springs; water in the zone of saturation where all openings in rocks and soil are filled, the upper surface of which forms the water table. Also termed Groundwater.
- PIBAL**
Pilot balloon. A small helium-filled meteorological balloon that is tracked as it rises through the atmosphere to determine how wind speed and direction change with altitude.
- Pilot Balloon**
(Abbrev. PIBAL)- A small helium-filled meteorological balloon that is tracked as it rises through the atmosphere to determine how wind speed and direction change with altitude.

Pilot Report

(Abbrev. PIREP)- A report of inflight weather by an aircraft pilot or crew member. A complete coded report includes the following information in this order: location and/or extent of reported weather phenomenon: type of aircraft (only with reports turbulence or icing).

Pingo

A large frost mound of more than one-year duration.

PIREP

Pilot Report. A report of inflight weather by an aircraft pilot or crew member. A complete coded report includes the following information in this order: location and/or extent of reported weather phenomenon: type of aircraft (only with reports turbulence or icing).

Pitot Tube

In hydrologic terms, a device for measuring the velocity of flowing water using the velocity head of the stream as an index of velocity. It consists essentially of an orifice held to a point upstream in the water, connected with a tube in which the rise of water due to velocity head may be observed and measured. It also may be constructed with an upstream and downstream orifice, with two water columns, in which case the difference in height of water column in the tubes is the index of velocity.

PIX

picture

PK

Peak

PL

Sleet (Ice Pellets)- defined as pellets of ice composed of frozen or mostly frozen raindrops or refrozen partially melted snowflakes. These pellets of ice usually bounce after hitting the ground or other hard surfaces. Heavy sleet is a relatively rare event defined as an accumulation of ice pellets covering the ground to a depth of ½" or more.

PL

Ice pellets (sleet)

Plage

In solar-terrestrial terms, an extended emission feature of an active region that exists from the emergence of the first magnetic flux until the widely scattered remnant magnetic fields merge with the background.

Plage Corridor

In solar-terrestrial terms, a space in chromospheric plage lacking plage intensity, coinciding with polarity inversion line.

Plagenil

In solar-terrestrial terms, spotless disc free of calcium plage.

Plan Position Indicator

An acronym for Plan Position Indicator. A PPI displays radar data horizontally using a map projection. In PPI mode, the radar makes a 360-degree sweep with the antenna at a specific elevation angle. A PPI display is the familiar radar display shown on the television weather programs.

Planetary Boundary Layer

The layer within the atmosphere between 1 km and the earth's surface where friction affects wind speed and wind direction.

Plasma

Any ionized gas; that is, any gas containing ions and electrons.

Platform

A generic radar term, often used to encompass the pedestal and antenna assembly; sometimes including the radar control, display and analysis hardware and software as well.

Plow Wind

A term used in the midwestern United States to describe strong, straight-line winds associated with the downdrafts spreading out in advance of squall lines and thunderstorms. Resulting damage is usually confined to narrow zones like that caused by tornadoes; however, the winds are all in one direction (straight-line winds).

Plume Blight

Visibility impairment caused by air pollution plumes aggregated from individual sources.

Plume Impingement

The collision of a plume with topography that rises above the plume altitude; often a temporary condition that occurs as the plume sweeps by the face of a hill as the wind shifts.

Plume-dominated Fire

A fire whose behavior is governed primarily by the local wind circulation produced in response to the strong convection above the fire rather than by the general wind.

Pluvial

In hydrology, anything that is brought about directly by precipitation.

PMD

Prognostic Discussion

- PMO**
Port Meteorological Officer.
- PNA**
Pacific North American teleconnection
- PNHDL**
Panhandle
- PNS**
Public Information Statement - a narrative statement issued by a National Weather Service Forecast Office that can be used for:
- 1) A current or expected nonhazardous event of general interest to the public that can usually be covered with a single message (e.g., unusual atmospheric phenomena such as sun dogs, halos, rainbows, aurora borealis, lenticular clouds, and stories about a long-term dry/cold/wet/warm spell).
 - 2) Public educational information and activities, such as storm safety rules, awareness activities, storm drills, etc.
 - 3) Information regarding service changes, service limitations, interruptions due to reduced or lost power or equipment outages, or special information clarifying interpretation of NWS data. For example, this product may be used to inform users of radar equipment outages or special information clarifying interpretation of radar data originating from an unusual source which may be mistaken for precipitation (such as chaff drops, smoke plumes, etc., that produces echoes on the radar display).
- POH**
Probability of Hail - a product from the NEXRAD hail detection algorithm that estimates the likelihood that hail is present in a storm.
- Point Precipitation**
Precipitation at a particular site, in contrast to the mean precipitation over an area.
- Point Source**
A pollutant source that can be treated in a dispersion model as though pollutants were emitted from a single point that is fixed in space. Example: the mouth of a smokestack. Compare area source and line source.
- Polar Cap Absorption (PCA)**
In solar-terrestrial terms, an anomalous condition of the polar ionosphere whereby HF and VHF (3 - 300 MHz) radiowaves are absorbed, and LF and VLF (3 - 300 kHz) radiowaves are reflected at lower altitudes than normal. In practice, the absorption is inferred from the proton flux at energies greater than 10 MeV, so that PCAs and proton events are simultaneous. Transpolar radio paths may still be disturbed for days, up to weeks, following the end of a proton event.
- Polar Front**
A semipermanent, semicontinuous front that separates tropical air masses from polar air masses.
- Polar Jet**
Marked by a concentration of isotherms and strong vertical shear, this jet is the boundary between the polar air and the subtropical air. It often divides into two branches, the north and the south, and marks the high speed core of the prevailing westerlies. It is associated with the location and motion of the high and low pressure areas of the middle latitudes, and therefore, is variable in position, elevation, and wind speed. Its position tends to migrate south in the Northern Hemispheric winter and north in the summer, and its core winds increase during the winter and become less strong in the summer.
- Polar Jet Stream**
Used interchangeably with **Polar Jet**; a jet stream marked by a concentration of isotherms and strong vertical shear, this jet is the boundary between the polar air and the subtropical air. It often divides into two branches, the north and the south, and marks the high speed core of the prevailing westerlies. It is associated with the location and motion of the high and low pressure areas of the middle latitudes, and therefore, is variable in position, elevation, and wind speed. Its position tends to migrate south in the Northern Hemispheric winter and north in the summer, and its core winds increase during the winter and become less strong in the summer.
- Polar Orbiting Satellite**
A weather satellite which travels over both poles each time it orbits the Earth. It orbits about 530 miles (850 km) above the Earth's surface. A satellite with an orbit nearly parallel to the earth's meridian lines which crosses the polar regions on each orbit.
- Polarization Radar**
A radar which takes advantage of ways in which the transmitted waves' polarization affect the backscattering. Such radars may alternately transmit horizontal and vertically polarized beams, and measure differential reflectivity.
- Pollutant**

Particles, gases, or liquid aerosols in the atmosphere which have an undesirable effect on humans or their surroundings. Something unfavorable to health and life that has been added to the environment.

Pondage

In hydrologic terms,

(1) The holding back of water for later release for power development above the dam of a hydroelectric plant to

(a) equalize daily or weekly fluctuations of streamflow or

(b) to permit irregular hourly use of water by the wheels to care for fluctuations in the load demand.

(2) In general the holding back of water for later releases.

(3) The storage capacity available for the use of such water.

Ponding

In hydrologic terms, in flat areas, runoff collects, or ponds in depression and cannot drain out. Flood waters must infiltrate slowly into the soil, evaporate, or be pumped out.

Pool

The elevation of the surface of a body of water such as a lake. Specifically, the pool at a lock and dam or a reservoir is the elevation of the water surface immediately upstream from the dam.

Pool Height

In hydrologic terms, the height of the water behind a dam. (Various datums may be used and various pool height may be used, e.g., conservation pool, flood control pool, etc.)

POP

Probability of Precipitation

Popcorn Convection

Slang for showers and thunderstorms that form on a scattered basis with little or no apparent organization, usually during the afternoon in response to diurnal heating.

Individual thunderstorms typically are of the type sometimes referred to as air-mass thunderstorms: they are small, short-lived, very rarely severe, and they almost always dissipate near or just after sunset.

POPS

Probability of Precipitation

Porosity

In hydrologic terms,

(1) The ratio of pore volume to total volume of the formation. Sandy soils have large pores and a higher porosity than clays and other fine-grained soils.

(2) An index of the void characteristics of a soil or stream as pertaining to percolation; degree of previousness.

POS

Positive

Positive Area

The area on a sounding representing the layer in which a lifted parcel would be warmer than the environment; thus, the area between the environmental temperature profile and the path of the lifted parcel. Positive area is a measure of the energy available for convection; see CAPE.

Positive Cloud to Ground Lightning

A CG flash that delivers positive charge to the ground, as opposed to the more common negative charge. Positive CGs have been found to occur more frequently in some severe thunderstorms. Their occurrence is detectable by most lightning detection networks, but visually it is not considered possible to distinguish between a positive CG and a negative CG. (Some claim to have observed a relationship between staccato lightning and positive CGs, but this relationship is as yet unproven.)

Positive Vorticity Advection

(Abbrev. PVA) - Advection of higher values of vorticity into an area, which often is associated with upward motion (lifting) of the air. PVA typically is found in advance of disturbances aloft (i.e., shortwaves), and is a property which often enhances the potential for thunderstorm development.

Positive-tilt Trough

An upper level system which is tilted to the east with increasing latitude (i.e., from southwest to northeast). A positive-tilt trough often is a sign of a weakening weather system, and generally is less likely to result in severe weather than a negative-tilt trough if all other factors are equal.

Post-Flare Loops

In solar-terrestrial terms, a loop prominence system often seen after a major two-ribbon flare, which bridges the ribbons.

Post-storm Report

A report issued by a local National Weather Service office summarizing the impact of a tropical cyclone on it's forecast area. These reports include information on observed winds, pressures, storm surges, rainfall, tornadoes, damage and casualties.

Potential Temperature

The temperature a parcel of dry air would have if brought adiabatically (i.e., without transfer of heat or mass) to a standard pressure level of 1000 mb.

Potential Vorticity

This plays an important role in the generation of vorticity in cyclogenesis, especially along the polar front. It is also very useful in tracing intrusions of stratospheric air deep into the troposphere in the vicinity of jet streaks.

Powder Snow

Dry, loose, unconsolidated snow.

Power

A radar equation to describe the amount of power that a radar emits.

$$P = I * V \text{ (or)}$$

$$P = V^2 / R \text{ (or)}$$

$$P = I^2 / R$$

where I is current (amps), V is voltage (volts), R is resistance (ohms), P is power (watts).

PPI

Plan Position Indicator

PPINE

Plan Position Indicates No Echoes, referring to the fact that a radar detects no precipitation within its range. An intensity-modulated display on which echo signals are shown in plain view with range and azimuth angle displayed in polar coordinates, forming a map-like display. Each PPI is taken at a single, fixed elevation angle, and thus forms a cone of coverage in space. PPIs may be run in sequence, creating a "volume scan".

PQPF

Probabilistic QPF; a form of QPF (see below) that includes an assigned probability of occurrence for each numerical value in the forecast product.

PRBLTY

Probability

PRBLY

probably

PRCP

Precipitation

Pre-Frontal Squall Line

A line of thunderstorms that precedes an advancing cold front.

Pre-Frontal Trough

An elongated area of relatively low pressure preceding a cold front that is usually associated with a shift in wind direction.

Pre-Hurricane Squall Line

It is often the first serious indication that a hurricane is approaching. It is a generally a straight line and resembles a squall-line that occurs with a mid-latitude cold front. It is as much as 50 miles or even more before the first ragged rain echoes of the hurricane's bands and is usually about 100 to 200 miles ahead of the eye, but it has been observed to be as much as 500 miles ahead of the eye in the largest hurricanes.

PRECD

Precede

Precipitable Water

Measure of the depth of liquid water at the surface that would result after precipitating all of the water vapor in a vertical column over a given location, usually extending from the surface to 300 mb.

Precipitation

The process where water vapor condenses in the atmosphere to form water droplets that fall to the Earth as rain, sleet, snow, hail, etc.

Precipitation Attenuation

The loss of energy that radar beam experiences as it passes through an area of precipitation.

Precipitation Mode

The standard, or default, operational mode of the WSR-88D. The radar automatically switches into precipitation mode from clear-air mode if the measured reflectivity exceeds a specific threshold value. The precipitation mode of NEXRAD is more sensitive than previous weather radars. The minimum detectable reflectivity in NEXRAD's precipitation mode is 5 dBZ, compared to 28 dBZ with the old WSR-57.

Precipitation Processing System

The WSR-88D system that generates 1-hour running, 3-hourly, and running storm total precipitation accumulations. Five functional steps are performed to calculate the best estimate of precipitation: 1) development of a sectorized hybrid scan, 2) conversion to precipitation rate, 3) precipitation accumulation, 4) adjustment using rain gages, 5) product update.

Precision

The accuracy with which a number can be represented, i.e., the number of digits used to represent a number.

Predominant Wind

The wind that prevails and generates the local component of the significant sea conditions across the forecast area. This is the wind included in all marine forecast products and is defined as a 10-meter wind, except over the nearshore marine zones where it is defined to be the wind at a 3-meter height.

Preliminary Report

Now known as the "Tropical Cyclone Report". A report summarizing the life history and effects of an Atlantic or eastern Pacific tropical cyclone. It contains a summary of the cyclone life cycle and pertinent meteorological data, including the post-analysis best track (six-hourly positions and intensities) and other meteorological statistics. It also contains a description of damage and casualties the system produced, as well as information on forecasts and warnings associated with the cyclone. NHC writes a report on every tropical cyclone in its area of responsibility.

PRES

Pressure

Prescribed Fire

A management ignited or natural wildland fire that burns under specified conditions where the fire is confined to a predetermined area and produces the fire behavior and fire characteristics required to attain planned fire treatment and resource management objectives.

Present Movement

The best estimate of the movement of the center of a tropical cyclone at a given time and given position. This estimate does not reflect the short-period, small scale oscillations of the cyclone center.

Present Weather

The type of weather observed at the reporting time. These conditions may include types and intensity of precipitation such as light rain or heavy snow, as well as the condition of the air environment such as foggy, hazy or blowing dust.

Pressure

The exertion of force upon a surface by a fluid (e.g., the atmosphere) in contact with it.

Pressure Altimeter

An aneroid barometer calibrated to indicate altitude in feet instead of units of pressure. It is read accurately only in a standard atmosphere and when the correct altimeter setting is used.

Pressure Altitude

The altitude in standard atmosphere at which a given pressure will be observed. It is the indicated altitude of a pressure altimeter at an altitude setting of 29.92 inches of mercury, and is therefore the indicated altitude above the 29.92 constant pressure surface.

Pressure Change

The net difference between the barometric pressure at the beginning and ending of a specified interval of time, usually the three hour period preceding an observation.

Pressure Characteristic

The pattern of the pressure change during the specified period of time, usually the three hour period preceding an observation. This is recorded in three categories: falling, rising, or steady.

Pressure Couplet

It is an area where you have a high pressure area located adjacent to a low pressure area.

Pressure Falling Rapidly

A decrease in station pressure at a rate of 0.06 inch of mercury or more per hour which totals 0.02 inch or more.

Pressure Gage

A device for registering the pressure of solids, liquids, or gases. It may be graduated to register pressure in any units desired.

Pressure Gradient

The amount of pressure change occurring over a given distance.

Pressure Gradient Force

A three-dimensional force vector operating in the atmosphere that accelerates air parcels away from regions of high pressure and toward regions of low pressure in response to an air pressure gradient. Usually resolved into vertical and horizontal components.

Pressure Head

Energy contained by fluid because of its pressure, usually expressed in feet of fluid (foot pounds per pound).

Pressure Ice

Floating sea, river, or lake ice that has been deformed, altered, or forced upward in pressure ridges by the lateral stresses of any combination of wind, water currents, tides,

- waves, and surf.
- Pressure Induced Wave**
A rare type of wave that does not develop from wind or seismic activity. Instead, these waves develop as a pressure perturbation moves over the water surface. The water surface adjusts to account for the atmospheric pressure change. As atmospheric pressure decreases, the force exerted upward by the water increases, creating a pressure induced wave.
- Pressure Jump**
A sudden, sharp increase in atmospheric pressure, typically occurring along an active front and preceding a storm.
- Pressure Rising Rapidly**
An increase in station pressure at a rate of 0.06 inch of mercury or more per hour which totals 0.02 inch or more.
- Pressure Tendency**
The character and amount of atmospheric pressure change during a specified period of time, usually 3-hour period preceding an observation.
- Pressure Unsteady**
A pressure that fluctuates by 0.03 inch of mercury or more from the mean pressure during the period of measurement.
- Pressure-driven Channeling**
Channeling of wind in a valley by synoptic-scale pressure gradients superimposed along the valley's axis. Compare forced channeling.
- Prevailing Visibility**
The visibility that is considered representative of conditions at the station; the greatest distance that can be seen throughout at least half the horizon circle, not necessarily continuous.
- Prevailing Westerlies**
The westerly winds that dominant in middle latitudes.
- Prevailing Winds**
A wind that consistently blows from one direction more than from any other.
- Prevention of Significant Deterioration**
A program, specified in the Clean Air Act, whose goal is to prevent air quality from deteriorating significantly in areas of the country that are presently meeting the ambient air quality standards.
- PRIM**
Primary
- Primary Ambient Air Quality Standards**
Air quality standards designed to protect human health.
- Primary Control Tide Station**
A tide station where continuous observations have been made for a minimum of 19 years. Its purpose is to provide data for computing accepted values essential to tide predictions and for determining tidal datums for coastal and marine boundaries. The data series from primary control tide stations serves as a primary control for the reduction of tidal datum for subordinate tide stations with a shorter period of record. The 19 year period is the official tidal epoch for calculating tidal datums.
- Primary Pollutant**
Substances that are pollutants immediately on entering the atmosphere. Compare secondary pollutant.
- Primary Swell Direction**
Prevailing direction of swell propagation.
- PRIN**
Principal
- Probability**
A chance, or likelihood, that a certain event might happen.
- Probability Forecast**
A forecast of the probability that one or more of a mutually exclusive set of weather conditions will occur.
- Probability of Hail**
(Abbrev. POH) - a product from the NEXRAD hail detection algorithm that estimates the likelihood that hail is present in a storm.
- Probability of Precipitation**
(Abbrev. PoP)- The probability that precipitation will be reported at a certain location during a specified period of time.
- Probability of Thunderstorms**
The probability based on climatology that a thunderstorm will be reported at that location during a specified period of time.
- Probability of Tropical Cyclone Conditio**
The probability, in percent, that the cyclone center will pass within 50 miles to the right or 75 miles to the left of the listed location within the indicated time period when looking at the coast in the direction of the cyclone's movement.

Product Resolution

The smallest spatial increment or data element that is distinguishable in a given Doppler radar product.

Profiler

An instrument designed to measure horizontal winds directly above its location, and thus measure the vertical wind profile. Profilers operate on the same principles as Doppler radar.

PROG

Forecast (prognostication)

PROGGED

Forecasted

Prognostic Discussion

This Hydrometeorological Prediction Center (HPC) discussion may include analysis of numerical and statistical models, meteorological circulation patterns and trends, and confidence factors. Reference is usually made to the manually produced 6- to 10-day Northern Hemisphere prognoses for mean 500 millibar heights and mean 500 millibar height anomalies. Discussions may also refer to the method of operational ensemble predictions.

Progressive Derecho

Derecho characterized by a short curved squall line oriented nearly perpendicular to the mean wind direction with a bulge in the general direction of the mean flow. Downburst activity occurs along the bulging portion of the line. This type of derecho typically occurs in the warm season (May through August) and is most frequent in a zone extending from eastern South Dakota to the upper Ohio Valley. The severe wind storms typically begin during the afternoon and continue into the evening hours. Several hours typically pass between initial convection and the first wind damage report.

Prominence

A term identifying cloud-like features in the solar atmosphere. The features appear as bright structures in the CORONA above the solar LIMB and as dark FILAMENTS when seen projected against the solar DISK

PROPA

Propagation (movement)

Propagation

1. The movement of an atmospheric phenomenon. This term is frequently applied to the motion of thunderstorms into regions favorable for their continued development (into a maritime tropical airmass).
2. The transmission of electromagnetic energy as waves through or along a medium.

Property Protection

Measures that are undertaken usually by property owners in order to prevent, or reduce flood damage. Property protection measures are often inexpensive for the community because they are implemented by or cost-shared with property owners. In many cases the buildings' appearance or use is unaffected, so these measurements are particularly appropriate for historical sites and landmarks. These measures include relocation and acquisition, flood proofing, and buying flood insurance.

Proton

Solar activity levels with at least one high energy event (Class X Flares).

Proton Event

In solar-terrestrial terms, the measurement of at least 10 protons/cm²/sec/steradian at energies greater than 10 MeV.

Proton Flare

In solar-terrestrial terms, any flare producing significant fluxes of greater-than-10 MeV protons in the vicinity of the earth.

PRST

Persist

PRVD

Provide

PSBL

Possible

PSBLY

possibly

Pseudo-Cold Front

A boundary between a supercell's inflow region and the rear-flank downdraft (or RFD). It extends outward from the mesocyclone center, usually toward the south or southwest (but occasionally bows outward to the east or southeast in the case of an occluded mesocyclone), and is characterized by advancing of the downdraft air toward the inflow region. It is a particular form of gust front.

Pseudo-Warm Front

A boundary between a supercell's inflow region and the forward-flank downdraft (or FFD). It extends outward from at or near the mesocyclone center, usually toward the

east or southeast, and normally is either nearly stationary or moves northward or northeastward ahead of the mesocyclone.

PSG

Passage

PST

Pacific Standard Time

Psychrometer

An instrument used to measure the water vapor content of the air; a hygrometer consisting essentially of two similar thermometers with the bulb of one being kept wet so that the cooling that results from evaporation makes it register a lower temperature than the dry one and with the difference between the readings constituting a measure of the dryness of the atmosphere

PTCHY

Patchy

PTCLDY

Partly Cloudy

PTDY

On a buoy report, Pressure Tendency is the sign (plus or minus) and the amount of pressure change (hPa) for a three hour period ending at the time of observation.

PTLY

Partly

PTN

Portion

PTTN

pattern

PTWC

(Pacific Tsunami Warning Center) - The Pacific Tsunami Warning Center in Ewa Beach (pronounced Eva Beach), HI has an international warning responsibility for the entire Pacific and a regional warning responsibility for the State of Hawaii. See also WC/ATWC.

PTYPE

precipitation type

Public Information Statement

A narrative statement issued by a National Weather Service Forecast Office that can be used for:

1) A current or expected nonhazardous event of general interest to the public that can usually be covered with a single message (e.g., unusual atmospheric phenomena such as sun dogs, halos, rainbows, aurora borealis, lenticular clouds, and stories about a long-term dry/cold/wet/warm spell).

2) Public educational information and activities, such as storm safety rules, awareness activities, storm drills, etc.

3) Information regarding service changes, service limitations, interruptions due to reduced or lost power or equipment outages, or special information clarifying interpretation of NWS data. For example, this product may be used to inform users of radar equipment outages or special information clarifying interpretation of radar data originating from an unusual source which may be mistaken for precipitation (such as chaff drops, smoke plumes, etc., that produces echoes on the radar display).

Public Severe Weather Outlook

These are issued when the Storm Prediction Center (SPC) in Norman, Oklahoma anticipates an especially significant and/or widespread outbreak of severe weather. This outlook will stress the seriousness of the situation, defines the threat area, and provides information on the timing of the outbreak. The lead time on this outlook is normally less than 36 hours prior to the severe weather event.

Puddle

In hydrologic terms,

(1) The act of compacting earth, soil clay, etc., by mixing them with water and rolling or tamping the mixture.

(2) A compact mass of earth, soil, clay, or a mixture of material, which has been compacted through the addition of water, rolling and tamping. This makes the material less permeable.

(3) A small pool of water, usually a few inches in depth and from several inches to several feet in its greatest dimension.

Puget Sound Convergence Zone

A situation where wind forced around the Olympic Mountains converges over the Puget Sound. Causes extreme variability in weather conditions around Seattle, Washington with some areas of sunshine and others in clouds and rain.

Pulse

A short burst of electromagnetic energy that a radar sends out in a straight line to detect a precipitation target. The straight line that this pulse travels along is called a radar beam.

Pulse Duration

The time over which a radar pulse lasts. The pulse duration can be multiplied by the speed of light to determine the pulse length or pulse width.

Pulse Length

The linear distance in range occupied by an individual pulse from a radar. $h = c * t$, where t is the duration of the transmitted pulse, c is the speed of light, h is the length of the pulse in space. Note, in the radar equation, the length $h/2$ is actually used for calculating pulse volume because we are only interested in signals that arrive back at the radar simultaneously. This is also called a pulse width.

Pulse Radar

A type of radar, designed to facilitate range (distance) measurements, in which are transmitted energy emitted in periodic, brief transmission.

Pulse Repetition Frequency (PRF)

The amount of time between successive pulses, or bursts, of electromagnetic energy that is transmitted by a radar. The PRF determines the maximum range at which echoes can be detected and also the maximum radial velocity that can be detected by a Doppler radar.

Pulse Repetition Time (PRT)

The time elapsed between pulses by the radar. This is also called the pulse interval.

Pulse Resolution Volume

A discrete radar sampling volume, of dimensions (horizontal beamwidth * vertical beamwidth * 1 range gate).

Pulse Severe Thunderstorms

Single cell thunderstorms which produce brief periods of severe weather (3/4 inch hail, wind gusts in the excess of 58 miles an hour, or a tornado).

Pulse Storm

A thunderstorm within which a brief period (pulse) of strong updraft occurs, during and immediately after which the storm produces a short episode of severe weather. These storms generally are not tornado producers, but often produce large hail and/or damaging winds. See also overshooting top.

Pulse Width

Same as **Pulse Length**; the linear distance in range occupied by an individual pulse from a radar. $h = c * t$, where t is the duration of the transmitted pulse, c is the speed of light, h is the length of the pulse in space. Note, in the radar equation, the length $h/2$ is actually used for calculating pulse volume because we are only interested in signals that arrive back at the radar simultaneously.

Pulse-Pair Processing

Nickname for the technique of mean velocity estimation by calculation of the signal complex covariance argument. The calculation requires two consecutive pulses, hence "pulse-pair".

PVA

Positive Vorticity Advection - the advection of higher values of vorticity into an area.

PVL

Prevail

PW

Precipitable Water - measure of the depth of liquid water at the surface that would result after precipitating all of the water vapor in a vertical column over a given location, usually extending from the surface to 300 mb.

PWAT

Precipitable Water - measure of the depth of liquid water at the surface that would result after precipitating all of the water vapor in a vertical column over a given location, usually extending from the surface to 300 mb.

PWO

Public Severe Weather Outlook

You can either type in the word you are looking for in the box below or browse by letter.

Search:

Browse by letter:

<#> [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

US Dept of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
1325 East West Highway
Silver Spring, MD 20910
Page Author: NWS Internet Services Team
Page last Modified: 25 June, 2009 1:01 PM

[Disclaimer](#)
[Information Quality](#)
[Credits](#)
[Glossary](#)

[Privacy Policy](#)
[Freedom of Information Act \(FOIA\)](#)
[About Us](#)
[Career Opportunities](#)