Here are the results for the letter **t**

T
Thunderstorm

T Rolls
Transverse Rolls - elongated low-level clouds, arranged in parallel bands and aligned parallel to the low-level winds but perpendicular to the mid-level flow. Transverse rolls are one type of transverse band, and often indicate an environment favorable for the subsequent development of supercells. Since they are aligned parallel to the low-level inflow, they may point toward the region most likely for later storm development.

TAF
Terminal Aerodrome Forecast

TAFB
Tropical Analysis and Forecast Branch (of the TPC)

Tail Cloud
A horizontal, tail-shaped cloud (not a funnel cloud) at low levels extending from the precipitation cascade region of a supercell toward the wall cloud (i.e., it usually is observed extending from the wall cloud toward the north or northeast). The base of the tail cloud is about the same as that of the wall cloud. Cloud motion in the tail cloud is away from the precipitation and toward the wall cloud, with rapid upward motion often observed near the junction of the tail and wall clouds. Compare with beaver tail, which is a form of inflow band that normally attaches to the storm's main updraft (not to the wall cloud) and has a base at about the same level as the updraft base (not the wall cloud).

Tail-End Charlie
Slang for the thunderstorm at the southernmost end of a squall line or other line or band of thunderstorms. Since low-level southerly inflow of warm, moist air into this storm is relatively unimpeded, such a storm often has a higher probability of strengthening to severe levels than the other storms in the line.

Tailwater Height
In hydrologic terms, height of water immediately downstream of the dam.

Target
Precipitation or other phenomena which produces echoes on a radar display.

TCU
Towering cumulus clouds

TD
Tropical Depression

TDA
Today

TDWR
Terminal Doppler Weather Radar

Teleconnection
Linkage between changes in atmospheric circulation occurring in widely separated parts of the globe.

TEMP
Temperature- A measure of the internal energy that a substance contains. This is the most measured quantity in the atmosphere.

Temperature
(Abbrev. TEMP)- The temperature is a measure of the internal energy that a substance contains. This is the most measured quantity in the atmosphere.

Temperature Inversion
(surface-based or elevated) : a layer of the atmosphere in which air temperature increases with height. When the layer's base is at the surface, the layer is called a surface-based temperature inversion; when the base of the layer is above the surface, the layer is called an elevated temperature inversion.

Temperature Recovery
The change in temperature over a given period of time. Generally, the period between late evening and sunrise. Windy or cloudy conditions will tend to produce slow temperature recovery, while clear, calm weather can cause rapid recovery.

TEMPS
temperatures

Terminal Aerodrome Forecast
This NWS aviation product is a concise statement of the expected meteorological conditions at an airport during a specified period (usually 24 hours). Each country is allowed to make modifications or exceptions to the code for use in each particular country. TAFs use the same weather code found in METAR weather reports.

Terrain Forced Flow
An airflow that is modified or channeled as it passes over or around mountains or through gaps in a mountain barrier.

Texas Hooker
Same as 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.

Thalweg
In hydrologic terms, the line of maximum depth in a stream. The thalweg is the part that has the maximum velocity and causes cutbanks and channel migration.

Theodolite
An instrument used in surveying to measure horizontal and vertical angles with a small telescope that can move in the horizontal and vertical planes. It used to track the movements of either a ceiling balloon or a radiosonde.

Thermal
A relatively small-scale, rising air current produced when the Earth's surface is heated. Thermals are a common source of low level turbulence for aircraft.

Thermal Belt
A zone of high nighttime temperatures (and relatively low humidities) that is often experienced within a narrow altitude range on valley sidewalls, especially evident during clear weather with light winds.

Thermal High
Area of high pressure that is shallow in vertical extent and produced primarily by cold surface temperatures.

Thermal Low
Area of low pressure that is shallow in vertical extent and produced primarily by warm surface temperatures.

Thermal Wind
It is a theoretical wind that blows parallel to the thickness lines, for the layer considered, analogous to how the geostrophic wind blows parallel to the height contours. The closer the thickness isopleths, the stronger the thermal wind. Cold air is always located to the left of the thermal wind (as you face downstream) and the warm air is located on the right. Since thickness contours are tighter on the cold side of thermal wind, your lower thickness values will be found on the left side of the thermal wind. The speed and direction of the thermal wind are determined by vector geometry where the geostrophic wind at the upper level is subtracted from the geostrophic wind at the lower level.

Thermally Driven Circulation
A diurnally reversing closed cellular wind current resulting from horizontal temperature contrasts caused by different rates of heating or cooling over adjacent surfaces; includes along-slope, cross-valley, along-valley, mountain-plain and sea breeze circulations.

Thermistor
A resistor whose resistance changes with temperature. Because of the known dependence of resistance on temperature, the resistor can be used as a temperature sensor.

Thermocline
As one descends from the surface of the ocean, the temperature remains nearly the same as it was at the surface, but at a certain depth temperature starts decreasing rapidly with depth. This boundary is called the thermocline. In studying the tropical Pacific Ocean, the depth of 20ºC water ("the 20ºC isotherm") is often used as a proxy for the depth of the thermocline. Along the equator, the 20ºC isotherm is typically located at about 50 m depth in the eastern Pacific, sloping downwards to about 150 m in the western Pacific.

Thermodynamic Chart
A chart containing contours of pressure, temperature, moisture, and potential temperature, all drawn relative to each other such that basic thermodynamic laws are satisfied. Such a chart typically is used to plot atmospheric soundings, and to estimate potential changes in temperature, moisture, etc. if air were displaced vertically from a given level. A thermodynamic chart thus is a useful tool in diagnosing atmospheric instability.

Thermodynamic Diagram
Used interchangably with **Thermodynamic Chart**; a chart containing contours of

pressure, temperature, moisture, and potential temperature, all drawn relative to each other such that basic thermodynamic laws are satisfied. Such a chart typically is used to plot atmospheric soundings, and to estimate potential changes in temperature, moisture, etc. if air were displaced vertically from a given level. A thermodynamic chart thus is a useful tool in diagnosing atmospheric instability.

Thermodynamics

In general, the relationships between heat and other properties (such as temperature, pressure, density, etc.) In forecast discussions, thermodynamics usually refers to the distribution of temperature and moisture (both vertical and horizontal) as related to the diagnosis of atmospheric instability.

Thermograph

An instrument that measures and records air temperature.

Thermometer

An instrument for measuring air temperature.

Thermosphere

The atmospheric shell extending from the top of the mesosphere to outer space. It is a region of more or less steadily increasing temperature with height, starting at 70 or 80 km.

Theta-e

(or Equivalent Potential Temperature) - The temperature a parcel of air would have if
a) it was lifted until it became saturated,
b) all water vapor was condensed out, and
c) it was returned adiabatically (i.e., without transfer of heat or mass) to a pressure of 1000 millibars.
Theta-e, which typically is expressed in degrees Kelvin, is directly related to the amount of heat present in an air parcel. Thus, it is useful in diagnosing atmospheric instability.

Theta-e Ridge

An axis of relatively high values of theta-e. Severe weather and excessive rainfall often occur near or just upstream from a theta-e ridge.

THETAE

Abbreviation for **Theta-e**; the temperature a parcel of air would have if
a) it was lifted until it became saturated,
b) all water vapor was condensed out, and
c) it was returned adiabatically (i.e., without transfer of heat or mass) to a pressure of 1000 millibars.
Theta-e, which typically is expressed in degrees Kelvin, is directly related to the amount of heat present in an air parcel. Thus, it is useful in diagnosing atmospheric instability.

Thin Line Echo

A narrow, elongated, non-precipitating echo. It is usually associated with thunderstorm outflows, fronts, or other density discontinuities. It is also known as a Fine Line.

THK

Thick/Thickness

THN

Thin

Three-Hour Rainfall Rate

This WSR-88D Radar product displays precipitation total (in inches) of the current and past two clock hours as a graphical image. It displays hourly precipitation total (in inches) as a graphical image (polar format with resolution 1.1 nm by 1 degree). It is updated once an hour. It is used to:
1) Assess rainfall intensities and amounts over a longer viewing interval; and
2) Possibly adjust flash flood guidance values since the product corresponds to the timing of Flash Flood Guidance values.

Threshold Runoff

In hydrologic terms, the runoff in inches from a rain of specified duration that causes a small stream to slightly exceed bankfull. When available, flood stage is used instead of slightly over bankfull.

THRFTR

Thereafter

THRU

Through

THRUT

Throughout

THSD

Thousand

Thunder

The sound caused by rapidly expanding gases in a lightning discharge.

Thunderstorm

A local storm produced by a cumulonimbus cloud and accompanied by lightning and thunder.

Tidal Cycle

The periodic changes in the intensity of tides caused primarily by the varying relations between the earth, moon, and sun.

Tidal Piling
Occurs when unusually high water levels occur as the result of an accumulation of successive incoming tides that do not completely drain due to opposing strong winds and/or waves.

Tidal Wave
See TSUNAMI

TIDE
On a buoy report, the water level in feet above or below Mean Lower Low Water (MLLW).

Tide Anomaly
Actual water level minus the prediction.

Tide Prediction
The computation of tidal highs and lows at a given location resulting from the gravitational interactions between the earth and primarily the moon and sun.

Tides
The periodic (occurring at regular intervals) variations in the surface water level of the oceans, bays, gulfs, and inlets. Tides are the result of the gravitiational attraction of the sun and the moon on the earth. The attraction of the moon is far greater than the attraction of the sun due to the close proximity of the earth and the moon. The sun is 360 times further from the earth than the moon. Therefore, the moon plays a larger role than the sun in producing tides. Every 27.3 days, the earth and the moon revolve around a common point. This means that the oceans and other water bodies which are affected by the earth-moon system experience a new tidal cycle every 27.3 days. Because of the physical processes which occur to produce the tidal system, there are two high tides and two low tides each day. Because of the angle of the moon with respect to the earth, the two high tides each day do not have to be of equal height. The same holds true for the two low tides each day. Tides also differ in height on a daily basis. The daily differences between tidal heights is due to the changing distance between the earth and the moon. Scientists use measurements of the height of the water level to examine tides and the various phenomena which influence tides, such as hurricanes and winter storms.

TIL
Until

Tilt
It describes a storm in which a line connecting the centroid of a mid level storm component to the centroid of the lowest storm component is to the right or the rear of the direction of motion

Tilt Sequence
Radar term indicating that the radar antenna is scanning through a series of antenna elevations in order to obtain a volume scan.

Tilted Storm
A thunderstorm or cloud tower which is not purely vertical but instead exhibits a slanted or tilted character. It is a sign of vertical wind shear, a favorable condition for severe storm development.

Tilted Updraft
A thunderstorm updraft which is not purely vertical but instead exhibits a slanted or tilted character. It is a sign of vertical wind shear, a favorable condition for severe storm development.

Tipping-Bucket Rain Gage
A precipitation gage where collected water is funneled into a two compartment bucket; 0.01, 0.1 mm, or some other designed quantity of rain will fill one compartment and overbalance the bucket so that it tips, emptying into a reservoir and moving the second compartment into place beneath the funnel. As the bucket is tipped, it actuates an electric circuit.

TKE
Turbulent Kinetic Energy

TMW
Tomorrow

TNDCY
Tendency

TNGT
Tonight

Toe of Dam
(Upstream and Downstream) : The junction of the face of a dam with the ground surface

TOP
Cloud Top

Topography
The shape of the land.

TOR

Tornado (or) Tornado Warning

Tornado

A violently rotating column of air, usually pendant to a cumulonimbus, with circulation reaching the ground. It nearly always starts as a funnel cloud and may be accompanied by a loud roaring noise. On a local scale, it is the most destructive of all atmospheric phenomena.

Tornado Family

A series of tornadoes produced by a single supercell, resulting in damage path segments along the same general line.

Tornado Vortex Signature

An image of a tornado on the Doppler radar screen that shows up as a small region of rapidly changing wind speeds inside a mesocyclone. The following velocity criteria is normally required for recognition: velocity difference between maximum inbound and outbound (shear) is greater than or equal to 90 knots at less than 30 nmi and is greater than or equal to 70 knots between 30 and 55 nmi. It shows up as a red upside down triangle on the Storm Relative Velocity Display. Existence of a TVS strongly increases the probability of tornado occurrence, but does not guarantee it; therefore, the feature triggering it must be examined closely by the radar operator. A TVS is not a visually observable feature.

Tornado Warning

This is issued when a tornado is indicated by the WSR-88D radar or sighted by spotters; therefore, people in the affected area should seek safe shelter immediately. They can be issued without a Tornado Watch being already in effect. They are usually issued for a duration of around 30 minutes.

A Tornado Warning is issued by your local National Weather Service office (NWFO). It will include where the tornado was located and what towns will be in its path. If the tornado will affect the nearshore or coastal waters, it will be issued as the combined product--Tornado Warning and Special Marine Warning. If the thunderstorm which is causing the tornado is also producing torrential rains, this warning may also be combined with a Flash Flood Warning. If there is an ampersand (&) symbol at the bottom of the warning, it indicates that the warning was issued as a result of a severe weather report.

After it has been issued, the affected NWFO will followed it up periodically with Severe Weather Statements. These statements will contain updated information on the tornado and they will also let the public know when warning is no longer in effect.

Tornado Watch

This is issued by the National Weather Service when conditions are favorable for the development of tornadoes in and close to the watch area. Their size can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They normally are issued well in advance of the actual occurrence of severe weather. During the watch, people should review tornado safety rules and be prepared to move a place of safety if threatening weather approaches.

A Tornado Watch is issued by the Storm Prediction Center (SPC) in Norman, Oklahoma. Prior to the issuance of a Tornado Watch, SPC will usually contact the affected local National Weather Forecast Office (NWFO) and they will discuss what their current thinking is on the weather situation. Afterwards, SPC will issue a preliminary Tornado Watch and then the affected NWFO will then adjust the watch (adding or eliminating counties/parishes) and then issue it to the public. After adjusting the watch, the NWFO will let the public know which counties are included by way of a Watch Redefining Statement. During the watch, the NWFO will keep the public informed on what is happening in the watch area and also let the public know when the watch has expired or been cancelled.

Total-Totals Index

A stability index and severe weather forecast tool, equal to the temperature at 850 mb plus the dew point at 850 mb, minus twice the temperature at 500 mb. The total-totals index is the arithmetic sum of two other indices: the Vertical Totals Index (temperature at 850 mb minus temperature at 500 mb) and the Cross Totals Index (dew point at 850 mb minus temperature at 500 mb). As with all stability indices there are no magic threshold values, but in general, values of less than 50 or greater than 55 are considered weak and strong indicators, respectively, of potential severe storm development.

Towering Cumulus

A large cumulus cloud with great vertical development, usually with a cauliflower-like appearance, but lacking the characteristic anvil of a Cb. (Often shortened to "towering cu," and abbreviated TCU.)

TPC

(Tropical Prediction Center) - An NCEP center which produces marine offshore and high seas forecasts south of 30N in the Eastern Pacific, Gulf of Mexico and Caribbean.

Trace
In hydrologic terms, a hydrograph or similar plot for an extended-range time horizon showing one of many scenarios generated through an ensemble forecast process.

Track
The path that a storm or weather system follows.

Trade Winds
Persistent tropical winds that blow from the subtropical high pressure centers towards the equatorial low.

Training
Repeated areas of rain, typically associated with thunderstorms, that move over the same region in a relatively short period of time and are capable of producing excessive rainfall totals. Train(ing) echoes can frequently be a source of flash flooding.

Transmitter
The radar equipment used for generating and amplifying a radio frequency (RF) carrier signal, modulating the carrier signal with intelligence, and feeding the modulated carrier to an antenna for radiation into space as electromagnetic waves. Weather radar transmitters are usually magnetrons or klystrons.

Transpiration
Water discharged into the atmosphere from plant surfaces.

Transport Wind
The average wind over a specified period of time within a mixed layer near the surface of the earth.

Transverse Bands
Bands of clouds oriented perpendicular to the flow in which they are embedded. They often are seen best on satellite photographs. When observed at high levels (i.e., in cirrus formations), they may indicate severe or extreme turbulence. Transverse bands observed at low levels (called transverse rolls or T rolls) often indicate the presence of a temperature inversion (or cap) as well as directional shear in the low- to mid-level winds. These conditions often favor the development of strong to severe thunderstorms.

Transverse Rolls
Elongated low-level clouds, arranged in parallel bands and aligned parallel to the low-level winds but perpendicular to the mid-level flow. Transverse rolls are one type of transverse band, and often indicate an environment favorable for the subsequent development of supercells. Since they are aligned parallel to the low-level inflow, they may point toward the region most likely for later storm development.

Trapper
A valley or basin in which cold air becomes trapped or pooled.

Travel Time
In hydrologic terms, the time required for a flood wave to travel from one location to a subsequent location downstream.

Triple Doppler
Since any wind has three components (say, in the x, y and z directions), and a single radar measures in only one direction (radial), a single radar cannot give the 3D winds everywhere it samples. However, if three different radars view a storm from three different locations, the 3 measured radial velocities can be transformed into the actual 3D wind field.

Triple Point
The intersection point between two boundaries (dry line, outflow boundary, cold front, etc.), often a focus for thunderstorm development. Triple point also may refer to a point on the gust front of a supercell, where the warm moist inflow, the rain-cooled outflow from the forward flank downdraft, and the rear flank downdraft all intersect; this point is a favored location for tornado development (or redevelopment).

TROF
Trough

TROP
Tropopause

Tropical Advisory
Official information issued by tropical cyclone warning centers describing all tropical cyclone watches and warnings in effect along with details concerning tropical cyclone locations, intensity and movement, and precautions that should be taken. Advisories are also issued to describe: (a) tropical cyclones prior to issuance of watches and warnings and (b) subtropical cyclones.

Tropical Analysis and Forecast Branch
One of three branches of the Tropical Prediction Center (TPC). It provides year-round products involving marine forecasting, aviation forecasts and warnings (SIGMETs), and surface analyses. The unit also provides satellite interpretation and satellite rainfall estimates for the international community. In addition, TAFB provides support to NHC through manpower and tropical cyclone intensity estimates from the Dvorak technique.

Tropical Cyclone
A warm-core, non-frontal synoptic-scale cyclone, originating over tropical or subtropical

waters with organized deep convection and a closed surface wind circulation about a well-defined center.

Tropical Cyclone Associated High Winds

High winds that occur a few hundred miles or so inland from the coast of a landfalling tropical cyclone.

Tropical Cyclone Plan of the Day

A coordinated mission plan that tasks operational weather reconnaissance requirements during the next 1100 to 1100 UTC day or as required, describes reconnaissance flights committed to satisfy both operational and research requirements, and identifies possible reconnaissance requirements for the succeeding 24-hour period.

Tropical Cyclone Position Estimate

The National Hurricane Center issues a position estimate between scheduled advisories whenever the storm center is within 200 nautical miles of U.S. land-based weather radar and if sufficient and regular radar reports are available to the hurricane center. As far as is possible, the position estimate is issued hourly near the beginning of the hour. The location of the eye or storm center is given in map coordinates and distance and direction from a well-known point.

Tropical Cyclone Update

This brief statement is issued by the National Hurricane Center in lieu of or preceding special advisories to inform of significant changes in a tropical cyclone or the posting or cancellation of watches and warnings.

Tropical Depression

A tropical cyclone in which the maximum 1-minute sustained surface wind is 33 knots (38 mph) or less.

Tropical Disturbance

A discrete tropical weather system of apparently organized convection--generally 100 to 300 mi in diameter--originating in the tropics or subtropics, having a nonfrontal migratory character and maintaining its identity for 24 hours or more. It may or may not be associated with a detectable perturbation of the wind field.

Tropical Storm

A tropical cyclone in which the maximum 1-minute sustained surface wind ranges from 34 to 63 knots (39 to 73 mph) inclusive.

Tropical Storm Summary

Written by the Hydrometeorological Prediction Center* (HPC) after subtropical and names tropical cyclones have moved inland and advisories have been discontinued. These advisories will be terminated when the threat of flash flooding has ended or when the remnants of these storms can no longer be distinguished from other synoptic features capable of producing flash floods. Storm summaries will not be issued for storms that enter the coast of Mexico and do not pose an immediate flash flood threat to the coterminous United States. They will be initiated when and if flash flood watches are posted in the United States because of an approaching system. Storm summaries will continue to be numbered in sequence with tropical cyclone advisories and will reference the former storm's name in the text. Summaries will be issued at 0100, 0700, 1300, and 1900 Eastern Daylight Time (EDT). The only exception will be the first one in the series may be issued at a nonscheduled time.

Tropical Storm Warning

A warning for sustained surface winds, associated with a tropical cyclone, within the range of 34 to 63 knots (39 to 73 mph), expected in a specified coastal area within 24 hours.

Tropical Storm Watch

An announcement that a tropical storm poses or tropical storm conditions pose a threat to coastal areas generally within 36 hours. A tropical storm watch should normally not be issued if the system is forecast to attain hurricane strength.

Tropical Wave

(formerly known as inverted trough) - A trough or cyclonic curvature maximum in the trade wind easterlies. The wave may reach maximum amplitude in the lower middle troposphere or may be the reflection of an upper tropospheric cold low or an equatorward extension of a mid-latitude trough.

Tropical Weather Discussion

These messages are issued 4 times daily by the Tropical Analysis and Forecast Branch (TAFB) to describe significant synoptic weather features in the tropics. One message will cover the Gulf of Mexico, the Caribbean, and the Atlantic between the equator and 32 degrees North and east of 140 degrees West. Plain language is used in these discussions.

Tropical Weather Outlook

This outlook normally covers the tropical and subtropical waters, discussing the weather conditions, emphasizing any disturbed and suspicious areas which may become favorable for tropical cyclone development within the next day to two. In the Atlantic, the outlook is transmitted daily at 0530, 1130, 1730, and 2230 Eastern local time. In the eastern Pacific, it is transmitted daily at 0100, 0700, 1300, and 1900 Eastern local time.

For the Central Pacific, transmission times are 1000 and 2200 UTC. Existing tropical and subtropical cyclones are mentioned, as are depressions not threatening land. Given for each system are its location, size, intensity, and movement. For the first 24 hours of a depression or tropical cyclone, the outlook includes a statement identifying the AFOS and World Meteorological Organization (WMO) headers for the advisory on it.

Tropical Weather Summary

The National Hurricane Center issues a monthly summary of tropical weather is included at the end of the month or as soon as feasible thereafter, to describe briefly the past activity or lack thereof and the reasons why.

Tropics

Areas of the Earth within 20° North and South of the equator.

Tropopause

The upper boundary of the troposphere, usually characterized by an abrupt change in lapse rate from positive (decreasing temperature with height) to neutral or negative (temperature constant or increasing with height).

Tropopause Jet

Type of jet stream found near the tropopause. Examples of this type of jet are the subtropical and polar fronts.

Troposphere

The layer of the atmosphere from the earth's surface up to the tropopause, characterized by decreasing temperature with height (except, perhaps, in thin layers - see inversion, cap), vertical wind motion, appreciable water vapor content, and sensible weather (clouds, rain, etc.).

Trough

An elongated area of relatively low atmospheric pressure, usually not associated with a closed circulation, and thus used to distinguish from a closed low. The opposite of ridge.

TROWAL

TROugh of Warm Air ALoft. Typically used during winter weather, it is a "tongue" of relatively warm/moist air aloft that wraps around to the north and west of a mature cyclone. It is best analyzed between 750-550 milibars using equivalent potential temperature (theta-e). Areas of intense lift and frontogenesis are commonly associated with TROWALs, hence they are favored regions for heavy and/or prolonged precipitation. During a winter storm, the heaviest snowfall amounts frequently occur along and north of the TROWAL axis.

TRPCL

Tropical

TRRN

Terrain

True Wind

Wind relative to a fixed point on the earth. Wind relative to a moving point is called APPARENT or RELATIVE WIND.

TS

Tropical Storm

TSRA

Thunderstorms with rain

TSTM

Thunderstorm

Tsunami

A series of long-period waves (on the order of tens of minutes) that are usually generated by an impulsive disturbance that displaces massive amounts of water, such as an earthquake occurring on or near the sea floor. Underwater volcanic eruptions and landslides can also cause tsunami. The resultant waves much the same as waves propagating in a calm pond after a rock is tossed. While traveling in the deep oceans, tsunami have extremely long wavelengths, often exceeding 50 nm, with small amplitudes (a few tens of centimeters) and negligible wave steepness, which in the open ocean would cause nothing more than a gentle rise and fall for most vessels, and possibly go unnoticed. Tsunami travel at very high speeds, sometimes in excess of 400 knots. Across the open oceans, these high-speed waves lose very little energy. As tsunami reach the shallow waters near the coast, they begin to slow down while gradually growing steeper, due to the decreasing water depth. The building walls of destruction can become extremely large in height, reaching tens of meters 30 feet or more as they reach the shoreline. The effects can be further amplified where a bay, harbor, or lagoon funnels the waves as they move inland. Large tsunami have been known to rise to over 100 feet! The amount of water and energy contained in tsunami can have devastating effects on coastal areas.

Tsunami Advisory

For products of the Pacific Tsunami Warning Center (PTWC - Pacific (except Alaska, British Columbia and Western States) Hawaii, Caribbean (except Puerto Rico, Virgin Is.), Indian Ocean): The third highest level of tsunami alert. Advisories are issued to coastal populations within areas not currently in either warning or watch status when a tsunami

warning has been issued for another region of the same ocean. An Advisory indicates that an area is either outside the current warning and watch regions or that the tsunami poses no danger to that area. The Center will continue to monitor the event, issuing updates at least hourly. As conditions warrant, the Advisory will either be continued, upgraded to a watch or warning, or ended. For products of the West Coast/Alaska Tsunami Warning Center (WC/ATWC - Alaska, British Columbia and Western States, Canada, Eastern and Gulf States, Puerto Rico, U.S Virgin Islands): A tsunami advisory is issued due to the threat of a potential tsunami which may produce strong currents or waves dangerous to those in or near the water. Coastal regions historically prone to damage due to strong currents induced by tsunamis are at the greatest risk. The threat may continue for several hours after the arrival of the initial wave, but significant widespread inundation is not expected for areas under an advisory. Appropriate actions to be taken by local officials may include closing beaches, evacuating harbors and marinas, and the repositioning of ships to deep waters when there is time to safely do so. Advisories are normally updated to continue the advisory, expand/contract affected areas, upgrade to a warning, or cancel the advisory.

Tsunami Information Statement

A tsunami information statement is issued to inform emergency management officials and the public that an earthquake has occurred, or that a tsunami warning, watch or advisory has been issued for another section of the ocean. In most cases, information statements are issued to indicate there is no threat of a destructive tsunami and to prevent unnecessary evacuations as the earthquake may have been felt in coastal areas. An information statement may, in appropriate situations, caution about the possibility of destructive local tsunamis. Information statements may be re-issued with additional information, though normally these messages are not updated. However, a watch, advisory or warning may be issued for the area, if necessary, after analysis and/or updated information becomes available.

Tsunami Warning

For products of the Pacific Tsunami Warning Center (PTWC - Pacific (except Alaska, British Columbia and Western States) Hawaii, Caribbean (except Puerto Rico, Virgin Is.), Indian Ocean): The highest level of tsunami alert. Warnings are issued due to the imminent threat of a tsunami from a large undersea earthquake or following confirmation that a potentially destructive tsunami is underway. They may initially be based only on seismic information as a means of providing the earliest possible alert. Warnings advise that appropriate actions be taken in response to the tsunami threat. Such actions could include the evacuation of low-lying coastal areas and the movement of boats and ships out of harbors to deep water. Warnings are updated at least hourly or as conditions warrant to continue, expand, restrict, or end the warning. For products of the West Coast/Alaska Tsunami Warning Center (WC/ATWC - Alaska, British Columbia and Western States, Canada, Eastern and Gulf States, Puerto Rico, U.S Virgin Islands): A tsunami warning is issued when a potential tsunami with significant widespread inundation is imminent or expected. Warnings alert the public that widespread, dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after arrival of the initial wave. Warnings also alert emergency management officials to take action for the entire tsunami hazard zone. Appropriate actions to be taken by local officials may include the evacuation of low-lying coastal areas, and the repositioning of ships to deep waters when there is time to safely do so. Warnings may be updated, adjusted geographically, downgraded, or canceled. To provide the earliest possible alert, initial warnings are normally based only on seismic information.

Tsunami Watch

For products of the Pacific Tsunami Warning Center (PTWC - Pacific (except Alaska, British Columbia and Western States) Hawaii, Caribbean (except Puerto Rico, Virgin Is.), Indian Ocean): The second highest level of tsunami alert. Watches are issued based on seismic information without confirmation that a destructive tsunami is underway. It is issued as a means of providing an advance alert to areas that could be impacted by destructive tsunami waves. Watches are updated at least hourly to continue them, expand their coverage, upgrade them to a Warning, or end the alert. A Watch for a particular area may be included in the text of the message that disseminates a Warning for another area. For products of the West Coast/Alaska Tsunami Warning Center (WC/ATWC - Alaska, British Columbia and Western States, Canada, Eastern and Gulf States, Puerto Rico, U.S Virgin Islands): A tsunami watch is issued to alert emergency management officials and the public of an event which may later impact the watch area. The watch area may be upgraded to a warning or advisory - or canceled - based on updated information and analysis. Therefore, emergency management officials and the public should prepare to take action. Watches are normally issued based on seismic information without confirmation that a destructive tsunami is underway.

Tule Fog

Radiation fog in the Central Valley of California. It forms during night and morning hours in late fall and winter months following the first significant rainfall. A leading cause of

weather related casualties in California.

Turbidity
The thickness or opaqueness of water caused by the suspension of matter. The turbidity of rivers and lakes increases after a rainfall.

Turbulence
Irregular motion of the atmosphere, as indicated by gusts and lulls in the wind.

Turkey Tower
Slang for a narrow, individual cloud tower that develops and falls apart rapidly. The sudden development of turkey towers from small cumulus clouds may signify the breaking of a cap.

Turning Point
In hydrologic terms, a temporary point whose elevation is determined by additions and subtractions of backsights and foresights respectively.

TUTT Low
Tropical Upper-Tropospheric Trough or TUTT Low - A semipermanent trough extending east-northeast to west-southwest from about 35N in the eastern Pacific to about 15 to 20N in the central west Pacific. A similar structure exists over the Atlantic Ocean, where the mean trough typically extends from Cuba toward Spain.

TVL
Travel

TVS
Tornado Vortex Signature- Doppler radar signature in the radial velocity field indicating intense, concentrated rotation - more so than a mesocyclone. Like the mesocyclone, specific criteria involving strength, vertical depth, and time continuity must be met in order for a signature to become a TVS. Existence of a TVS strongly increases the probability of tornado occurrence, but does not guarantee it. A TVS is not a visually observable feature.

TWD
Toward

TWEB
Transcribed Weather Broadcasts - This NWS aviation product is similar to the Area Forecast (AF) except information is contained in a route format. Forecast sky cover (height and amount of cloud bases), cloud tops, visibility (including vertical visibility), weather, and obstructions to vision are described for a corridor 25 miles either side of the route. Cloud bases and tops are always Mean Sea Level (MSL) unless noted. Ceilings are always above ground level.

Twilight
The average time of civil twilight, which is the time between civil dawn and sunrise in the morning, and between sunset and civil dusk in the evening.

Twister
In the United States, a colloquial term for a tornado.

Two-Ribbon Flare
In solar-terrestrial terms, a flare that has developed as a pair of bright strands (ribbons) on both sides of the main inversion ("neutral") line of the magnetic field of the active region.

Type I, II, III, IV
(In solar-terrestrial terms) -Emissions of the sun in radio wavelengths from centimeters to dekameters, under both quiet and disturbed conditions. Type I. A noise storm composed of many short, narrow-band bursts in the metric range (300 - 50 MHz). Type II. Narrow-band emission that begins in the meter range (300 MHz) and sweeps slowly (tens of minutes) toward deka- meter wavelengths (10 MHz). Type II emissions occur in loose association with major FLAREs and are indicative of a shock wave moving through the solar atmosphere. Type III. Narrow-band bursts that sweep rapidly (seconds) from decimeter to dekameter wavelengths (500 - 0.5 MHz). They often occur in groups and are an occasional feature of complex solar ACTIVE REGIONs. Type IV. A smooth continuum of broad-band bursts primarily in the meter range (300 - 30 MHz). These bursts are associated with some major flare events beginning 10 to 20 minutes after the flare maximum, and can last for hours

Typhoon
A tropical cyclone in the Western Pacific Ocean in which the maximum 1-minute sustained surface wind is 64 knots (74 mph) or greater.

Typhoon Season
The part of the year having a relatively high incidence of tropical cyclones. In the western North Pacific, the typhoon season is from July 1 to December 15. Tropical cyclones can occur year-round in any basin.

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

Search:

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