

## Improve Your Climate Vocabulary!

Courtesy of NOAA Climate Diagnostic Center

**Forecast** 1) A statement predicting how or when an event or condition will occur drawing on a collection of guidance tools or predictions. 2) To estimate or calculate in advance, especially to predict (weather conditions) by analysis of meteorological data.

**Outlook** A forecast provided with considerable lead time that certain conditions may develop. Often depicted as the likelihood, through probabilities, that the average temperature and total precipitation for the outlook's valid period will be above, below, or near normal (median for precipitation).

**Guidance** Forecast models and tools (either statistical or numerical) used by forecasters in creating "official" forecast products.

**Prediction** An objective forecast of the future state of the atmosphere generated by running a climate/weather forecast model or a simpler empirical model based on data analysis.

**Experimental Product** A product that is tentative or under development; an informal, unrecognized, unvetted model for future prediction. The National Weather Service (NWS) makes experimental products available for testing and evaluation for a specified, limited time period for the explicit purpose of obtaining customer feedback.

**Operational Product** A product that provides consistent timely delivery of sanctioned data, products or services; produced on a reliable and continuous basis.

**Official Product** A product issued

by an organization as a sanctioned expert opinion of position. For example, real-time current *official* weather observations, forecasts, and warnings are issued by the NWS for use by the national and international community.

**Average or Climate normal** A number computed as an arithmetic mean of some climate variable (e.g. temperature, precipitation, snowpack level) over a long time period, usually 30 consecutive years. This number may or may not be the expected or most likely occurrence at any given time. This is especially true with precipitation in dry climates, such as the desert in the U.S. Southwest, and temperatures at continental locations which frequently experience large swings from cold to warm temperatures.

**Climatology** The expected values of temperature, precipitation or other climate variables for a given location and time of year.

**Anomaly** The deviation of a climate variable (usually temperature or precipitation) in a given region over a specified period from the long-term average value for the same region. The current standard is to calculate anomalies as the departure from a 30-year average.

**Tercile** A way to divide a climate variable's historic occurrence into three categories: below normal, near normal, and above normal. Terciles divide data into three categories that have the same chance of occurring. For example, in a 30-year climatology of precipitation/temperature the 10 driest/coldest years belong in the below-normal tercile, the

10 wettest/warmest years belong in the above-normal tercile, and the other 10 years belong in the near-normal tercile. These numbers translate into the probability of a randomly chosen year in that set as having a 33.3% chance of being in the below-normal tercile, 33.3% chance of being in the near-normal tercile, and 33.3% chance of being in the above-normal tercile. Seasonal climate outlooks are often given in terms of the chances of being in one of the tercile categories, based on the historic climate data from the past, which is usually the past 30 years.

**Climate Variability** Fluctuations in time about the average conditions.

**Climate Change** A sustained departure from the previous climate conditions.

**Climate information** The data, products and services that can be used for decision support by policy makers and resource managers from all levels of government, all sectors of the economy and society, all levels of major corporations, small businesses, and individual users. Examples of climate information include current conditions, climatology, forecasts, outlooks and guidance.

### On the Web

<http://www.cpc.ncep.noaa.gov/products/outreach/glossary.shtml>  
<http://www.srh.noaa.gov/oun/severewx/glossary.php>  
<http://k12.ocs.ou.edu/teachers/glossary/>  
<http://iri.columbia.edu/outreach/meeting/MediaWS2001/Glossary.html>  
<http://amsglossary.allenpress.com/glossary>  
<http://www.bom.gov.au/lam/glossary/>  
<http://www.bom.gov.au/climate/glossary/>

