Weather Acronyms

By Mark D. Schneider

New weather acronyms are being created all the time and it’s important to know what some of them mean so that people understand the information being conveyed to them. Whether watching a newscast on television or surfing the Internet, there are useful acronyms people should add to their vocabularies.

“WX” is simply an abbreviation for the word “weather” and “NWS” is short for “National Weather Service,” the government organization under the Department of Commerce that issues weather forecasts and warnings to the public.

“WFO” isn’t a type of UFO, but instead stands for “Weather Forecast Office,” the place where NWS meteorologists work. A “CWA” is a “County Warning Area” for which each NWS WFO is responsible.

“NWA” is the acronym for “National Weather Association” and “AMS” stands for “American Meteorological Society,” which is commonly referenced by broadcast meteorologists on television with regard to professional seals they earn through certification processes. Both the NWA and AMS are national meteorological organizations with more than 16,000 combined members.

On television, there are many acronyms used to describe weather radar features. If “NEXRAD” or “Next Generation Weather Radar” products are being shown, these radars are able to measure atmospheric winds, in addition to rain, snow, and hail. The term “88-D” just refers to the year that the radar was originally manufactured (1988) and the type of radar (Doppler). When a meteorologist says that a particular storm contains a “TVS” or “Tornado Vortex Signature” they are referring to rotation within the storm that indicates a possible tornado. If a storm contains a “MESO,” that’s short for “Meso-cyclone,” or the circular rotating structure of a particular storm that can indicate damaging hail and the development of tornados.

Besides radar features, various types of weather satellite images have their acronyms. An “IR” or “Infrared” satellite uses radiation emitted from the earth and atmosphere to display images of earth, its oceans, and clouds day or night. A “VIS” or “Visible” satellite shows earth, oceans, and clouds during daylight hours using reflected, visible light.

When precipitation forecasts are conveyed, meteorologists often use the term “POPS” or “Probability of Precipitation” to describe the percentage chance of occurrence. If measurable amounts of precipitation are expected, then a “QPF” or “Quantitative Precipitation Forecast” is interpolated from weather models.

A weather station commonly seen at airports that reports features such as temperature, dew point, wind speed, etc. is called an “ASOS” or “Automated Surface Observing System.” If spotted next to a road or highway, these weather stations would likely be “RWIS” or “Road Weather Information System” sites. Exclusive to North Dakota is the “NDAWN” or “North Dakota Agricultural Weather Network” made up of 72 weather stations statewide, providing both the weather and soil conditions so vital to farmers and ranchers.

Looking at climate related acronyms, “ENSO” or “El Nino/Southern Oscillation” makes frequent news headlines. The southern oscillation is simply an index of atmospheric pressure in the Pacific Ocean that relates to warming (El Nino) or cooling (La Nina) waters. The “PDSI” or “Palmer Drought Severity Index” compares the amount of precipitation an area receives during a specified period of time to its average or normal amount.

So people shouldn’t let weather acronyms intimidate them; instead, they should recognize that their purpose is to keep things from becoming “LW” or “long-winded.”

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