SUMMER 2016 **ISSUE #1**

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Features…

Welcome to the North Coast Observer!

by Scott Carroll

Welcome to *The North Coast Observer*, the online newsletter of the National Weather Service (NWS) in Eureka, California. NWS Eureka serves northwest California including the counties of Del Norte, Humboldt, Mendocino, and Trinity. In this newsletter, you will find weather-related articles of local interest, as well as features such as a summary of the past season's weather conditions, an outlook for the next season, planned NWS events and activities, and SKYWARN storm spotter information. In addition, you will learn more about what your local NWS office does on a daily basis and how we work to provide you with forecasts and warnings for the northwest California area.

This web-based newsletter will usually be posted on a seasonal basis (by the tenth day of March, June, September, and December). Links to the newsletter will be available on our website as well as on Twitter and Facebook.

As always, we welcome your input as to how we can serve you better. If there is a topic that you would like to see featured in a future edition of *The North Coast Observer*, let us hear from you!

Follow Us on Social Media!

Website	weather.gov/eureka
Facebook	facebook.com/nwseureka
Twitter	twitter.com/nwseureka

The Importance of Social Media to the NWS

By Karleisa Rogacheski

When it comes to information, a quick way to distribute it is online. Here at the National Weather Service in Eureka, we have several ways of doing just that. As most of you know, all of our information can be found at weather.gov/eureka with additional (some more graphical) pieces being pushed out to Facebook and Twitter. We do this for a variety of events, such as record breaking temperatures, marine weather, sneaker waves, earthquakes, tsunami threats, and more. Our goal is to get the information out to you so that you are prepared when the weather strikes and that you are able to respond appropriately. This helps us perform our mission of protecting life and property and enhancing the national economy.

Enough about us, let's talk about you! Interacting with us on social media by posting photos of past or current weather is something that we are extremely grateful for. You are our eyes and ears in the field, which helps us immensely during a weather event and when we are conducting an analysis to see if our forecast verified. We can also use this data to help improve our forecasts in the future.

Our social media presence has grown over the last year, meaning that we have been posting more often and that we have gained more followers. This is important to us since it is a great way to reach out to all of you and for you all to reach out to us. Whether it is a fair weather day or a week of wet weather due to an atmospheric river, we love hearing from you. You all are our eyes in the field. Your reports mean a lot to us and help confirm what we can or cannot see via radar and satellite. ***Thank you!***

Climate Corner
by Matthew Kidwell & Scott Carroll

March

The weather switched back to a wetter pattern for the month of March after a drier than normal month in February. The rainfall came in numerous small systems and a few larger ones. Record rainfall was reported in a few locations on March 5th. Ukiah reported 2.63 inches of rainfall, breaking the old record of 2.23 inches set in 2006. Eureka also reported record rainfall with 1.88 inches, breaking the old record of 1.39 inches set in 2011. Rainfall ended the month around 2 to 4 inches above normal across NW California. Temperatures across the area remained above normal as well. At the coast, Fort Bragg, Eureka, and Crescent city were 1 to 3 degrees above normal. In the inland areas, temperatures were close to normal at Big Bar, Weaverville, and Ukiah.

April

Temperatures across the area were above normal for much of the month with several high temperature records set along the coast. In most areas, the warmest day of the month came on April 6th. At the coast, Eureka and Crescent City hit 78 degrees and Fort Bragg reached 80 degrees. Inland areas were around 90 degrees. For the month, most stations ended up 3 to 5 degrees above normal. Eureka hit 71 degrees on the 17th and set another high temperature record. Rainfall fell at regular intervals across the region throughout the month. However, most locations ended the month with 50 to 70 percent of normal rainfall.

May

The month of May saw below normal rainfall across much of the area. At the coast, temperatures were slightly above normal. The coastal areas saw their warmest day on the first of May when both Crescent City and Eureka reached 72 degrees. Fort Bragg reached 73 degrees on this date. The coast saw temperatures remain fairly steady around normal through the remainder of the month. Inland areas saw some temperature variations as expected, but the warmest day of the month was on the 31st. Rainfall amounts were well below normal across the area for the month.

Spring Summary

Most of the region saw above normal rainfall for the 3 month period with the bulk of the rain falling in March. The temperatures were mostly 2 to 4 degrees above normal for the period.

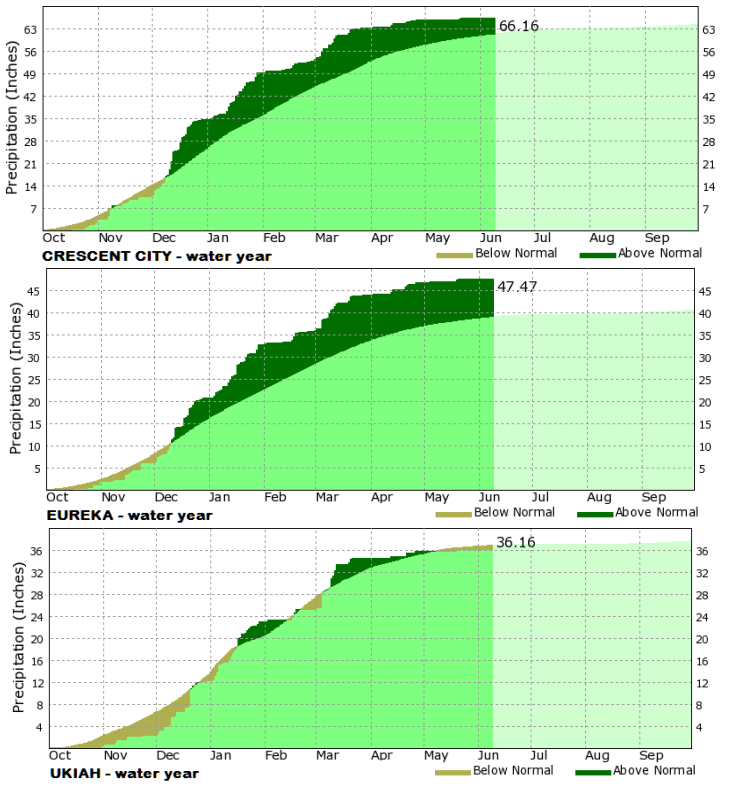
Climate Corner *(continued)*
by Matthew Kidwell & Scott Carroll

Spring Monthly Climate Comparison

	Crescent City			Eureka			Ukiah		
	Ave Hi	Ave Lo	Rain	Ave Hi	Ave Lo	Rain	Ave Hi	Ave Lo	Rain
Mar	57.2	45.3	10.11	59.1	45.1	8.11	64.0	43.6	9.20
Apr	60.4	47.1	2.74	61.1	47.8	2.84	72.7	44.9	1.27
May	59.2	48.2	0.38	60.7	49.6	0.76	78.7	50.4	0.45

temperatures in °F, rainfall in inches

Water Year-to-Date Comparison click images for links



data through June 8th

Summer Outlook (Jun-Aug 2016) click images for links

The Climate Prediction Center's summer outlook for NW California is calling for good chances of above normal temperatures (fig. 1) and nearly equal chances for above or below normal precipitation (fig. 2).

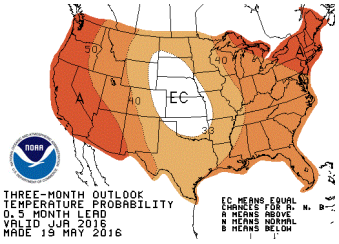


Figure 1

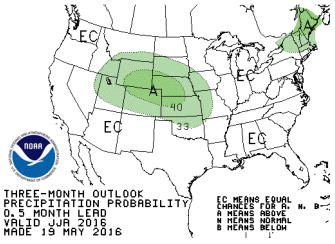


Figure 2

NOAA Weather Radio Upgrade Coming Soon

by Scott Carroll

In late June, NWS Eureka will be upgrading the computer and software that control our NOAA Weather Radio broadcast. This is a much needed upgrade which should help us bring even more reliable forecast and warning broadcasts to the area. ***Other than a brief broadcast interruption or two during the transition, broadcast services will be unaffected by this change.***

Area NOAA Weather Transmitters		
Transmitter coverage map	**Frequency (MHz)**	**Coverage Area**
Crescent City/Brookings	162.55	Del Norte, S Curry, adjacent waters
Eureka	162.40	Humboldt (w/ waters), Del Norte waters
Pt. Arena	162.55	Mendocino, Sonoma, adjacent waters
Ukiah	162.525	Mendocino (w/ waters), W Lake
Willow Creek/Hoopa	162.45	Humboldt (land areas), W Trinity

Area SAME Codes	
County	**SAME Code**
Curry	041015
Del Norte	006015
Humboldt	006023
Lake	006033
Mendocino	006045
Sonoma	006097
Trinity	006105

NWS Eureka conducts tests of the NOAA Weather Radio warning alarm tone on Wednesdays between 11 AM and noon *(weather permitting)*

Upcoming Events

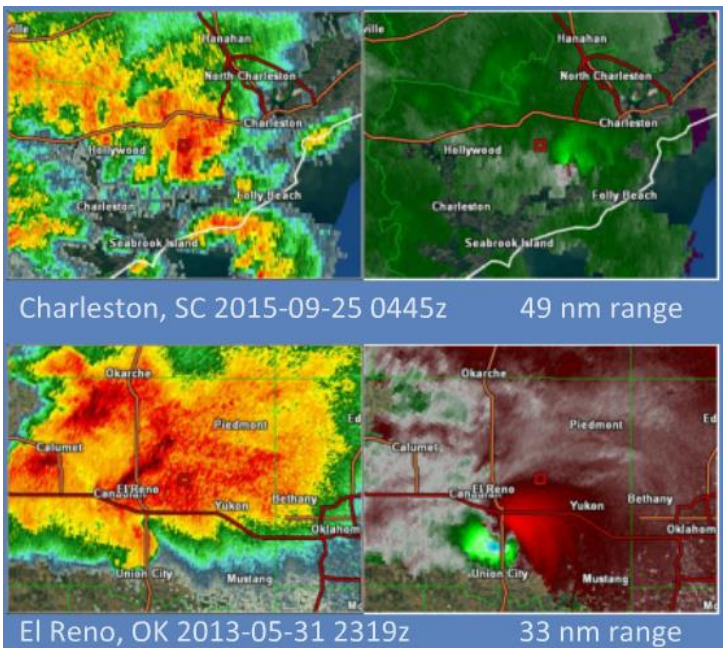
Date	Event
Summer	Weather Safety Summer
Jun 16	New forecast zones begin
Jun 27	NOAA Weather Radio upgrade begins

What Does It Take to Analyze the Radar?

by Karleisa Rogacheski

The short answer is the Radar Applications Course (RAC) that all new-hire forecasters of the National Weather Service (NWS) must complete. This course is comprised of a plethora of online courses and corresponding quizzes, online instructor lead training, and a weeklong in-house training and simulation session that is conducted in Norman, Oklahoma. After the completion of RAC, meteorologists then move on to the Warning Operations Course (WOC), which is divided into four separate parts: severe weather, winter weather, flash flooding, and core operations. Once a meteorologist completes both RAC and WOC, they are officially certified to monitor the radar and issue severe thunderstorm, tornado, and flash flood warnings.

Some of you may be wondering why we have to go through all of this intense training since it appears to be easy to pick out radar signatures. The answer is that even though the radar may be showing a strong storm, it takes a trained eye to determine whether or not hail is present, if the storm is rotating, if it supports tornadic activity, or if flash flooding is possible. Additionally, meteorologists need to be able to analyze the environment and determine what the nature of the storm is likely to be. By honing their skill sets of atmospheric analysis and learning the various radar signatures related to severe weather, NWS meteorologists are well prepared to protect your lives and property.



Mixed-Case Text Products
NWS Press Release

New forecast software is allowing the National Weather Service to break out of the days when weather reports were sent by teletype machines. These machines only allowed the use of upper case letters, and while the hardware and software used for weather forecasting has advanced over the last century, this holdover was carried into modern times since some customers still used the old equipment.

Recent software upgrades to the computer system that forecasters use to produce weather forecasts, called AWIPS (the Advanced Weather Interactive Processing System), are allowing for the change to mixed-case letters. The switch took place on May 11th, after the required 30-day notification period to give customers adequate time to prepare for the change.

Three forecast products transitioned to mixed-case use on May 11th, including the area forecast discussion, public information statement, and regional weather summary. Severe weather warnings will transition this summer, with other forecasts and warnings transitioning to the new system through early next year.

Upper case letters in forecasts will not become obsolete – forecasters will have the option to use all capital letters in weather warnings to emphasize threats during extremely dangerous situations. Certain forecast products with international implications, such as aviation and shipping, will continue to use upper case letters per international agreements that standardize weather product formats across national borders.

Observer's Corner
by Scott Carroll

Storm Spotters & Rain Observers Needed!

At NWS Eureka, we're always looking for people willing to help us improve our forecasts and warnings by becoming Skywarn Storm Spotters and/or precipitation observers. For information on becoming a Eureka Skywarn Storm Spotter, email Tony Ashford. For information on the Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS), click here. ***Join our team!***

New Forecast Zones Starting June 16
by Ryan Aylward

The Eureka forecast office is always looking for ways to improve our forecast services. Recent advances include additional partner emails with county emergency managers and a more robust frost-freeze program for agricultural interests. Now it is time to take another step forward and improve the weather forecast zones across the four counties we serve. Currently, we have five forecast zones in our area of responsibility (fig. 3). These zones are quite vast, stretching over 100 miles and covering portions of three counties in some cases. With technology advancing and modeling improving, this broad-based forecast service has become obsolete. Thus, we have taken on an effort to improve our forecast zones. Effective Thursday, June 16, 2016, at 10:00 AM PDT, we will be implementing the new forecast zones for Del Norte, Humboldt, Trinity, and Mendocino counties.

Through an extensive review of climatology and collaboration efforts with county emergency services, new forecast zones have been designed to support more specific forecasts and warnings (fig. 4). If strong winds are forecast to impact the Del Norte County coastline but not Humboldt County, for instance, we will soon be able to issue a wind advisory for the Del Norte coast and refrain from doing so along the Humboldt coastline. The old zone configuration required the wind advisory to be issued for both coastlines. The new zones will reduce these false alerts and improve forecast detail. A detailed description of the new Eureka public weather forecast zones is online here.

New Forecast Zone Codes (effective 6/16/16)		
Zone #	**Location**	**Old Zone(s)**
101	Coastal Del Norte	001
102	Del Norte Interior	003
103	Northern Humboldt Coast	001
104	Southwestern Humboldt	001
105	Northern Humboldt Interior	003,004
106	Southern Humboldt Interior	003
107	Northern Trinity	004
108	Southern Trinity	003,004
109	Mendocino Coast	002
110	NW Mendocino Interior	076
111	NE Mendocino Interior	004,076
112	SW Mendocino Interior	002
113	SE Mendocino Interior	076

zone maps on page 5…

New Forecast Zones *(continued)*
by Ryan Aylward

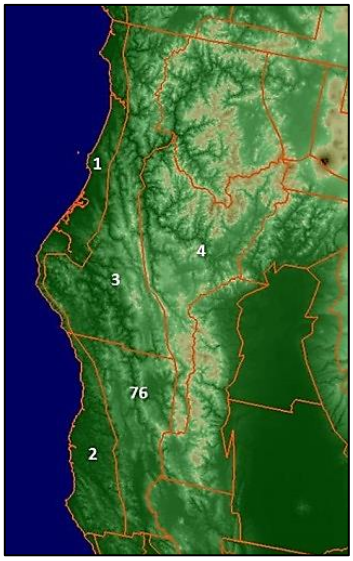


Figure 3

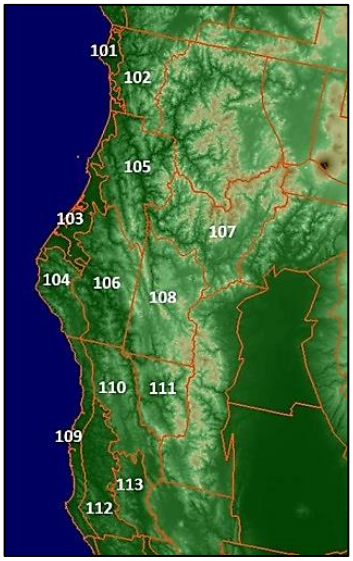


Figure 4

Stay Weather Safe This Summer!
NWS Public Information Statement

Summer means vacation, outdoor activities, and fun in the sun! It's a time when families hit the road to visit national parks or distant relatives. The warm months and long days mean that there is plenty of time for baseball games and barbecues. The sultry temperatures practically invite you to take a dip in the pool or ocean.

But don't let the sunny days and warm nights fool you. Summer also holds significant weather hazards. Beach hazards such as sneaker waves and rip currents can catch the unprepared. Heat waves can be lengthy and deadly. National lightning deaths are at their peak during the summer.

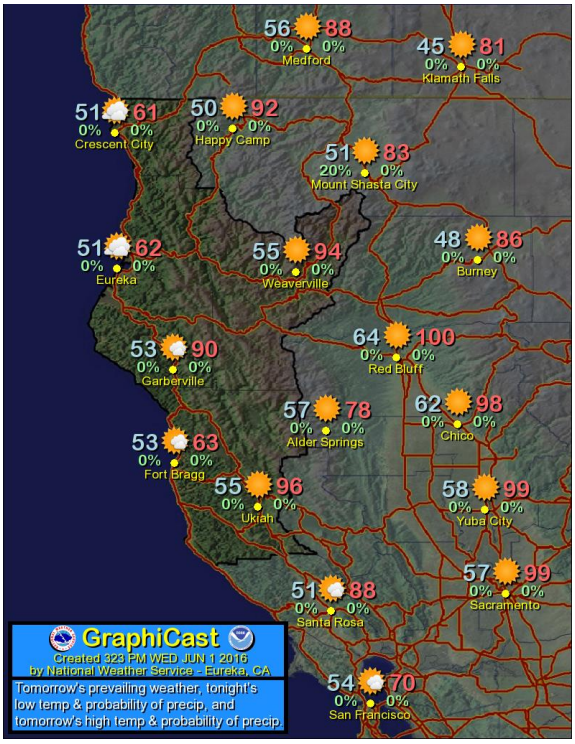
This summer, the National Weather Service wants you to be prepared for the following weather hazards wherever you go:

- Rip Currents & Other Beach Hazards
- Wildfires
- Tsunamis
- Severe Weather & Lightning
- Heat
- Floods
- Drought
- Poor Air Quality
- Hurricanes

You're not powerless in the face of these hazards. With just a few simple steps, you can become weather-ready. Stay safe this summer: **know your risk, take action, and be a force of nature.** For more information, click here.

Better Know a Product: The GraphiCast
by Scott Carroll

NWS Eureka sends a graphical forecast (GraphiCast) to Facebook twice daily. These graphics are usually posted by around 4 AM and 4 PM. The graphics are based on point forecast data produced locally, along with other forecast data from our surrounding forecast offices (Medford, Sacramento, and Monterey). Maximum and minimum temperatures and precipitation chances for the next 2 twelve-hour periods are displayed along with a weather icon for the next daytime period. **Remember to follow us on Facebook at facebook.com/nwseureka!**



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