NOAA's National Weather Service

The National Cooperative Observer

The National Cooperative Observer is an online newsletter.

https://www.weather.gov/coop/coopnewsletter

Fall-Winter 2021

Inside

In Memoriam: Weather Observer Jack Beach

Jack and his wife Martha and accepting a 10 year Length of Service award in 2006

On September 28, 2021, the COOP community lost Jack Beach. Jack Beach began as Winterville GA COOP observer for the Peachtree City GA WSFO on October 1, 1996. Throughout almost 25 years of service Jack provided temperature and precipitation data on a daily basis, serving as a backup for the Athens ASOS station. Jack also provided snow observations as well as Hourly Precipitation Data for not only his site but also the Jeffersonville and Monroe sites. Prior to the swap over to Fischer Porter data loggers, Jack and his wife Martha would make a loop between the three sites collecting the punch tapes and sending them into the Peachtree City office. Jack loved weather and was proud of his service throughout the years. He collected various weather equipment, including rain gauges, and had his own Cotton Region Shelter installed. Jack will be sorely missed by all who knew him.

El Niño and La Niña: Differences and Impacts on COOP Observations

As a COOP observer, are you aware of the changes you may see in your observations because of El Niño and La Niña?

We are currently in a La Niña Advisory for the 2021-22 Winter season, meaning that La Niña conditions are observed and expected to continue this year, affecting the weather observed in certain parts of the country. This article will help explain the difference between El Niño and La Niña and how each of them affects the climate.

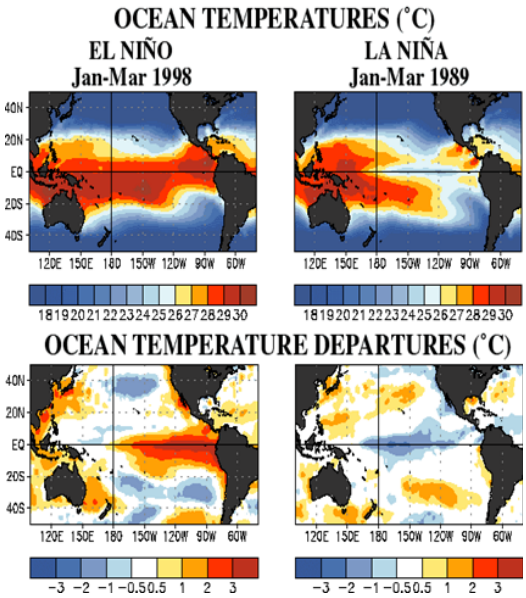
What is El Niño and La Niña?

El Niño and La Niña are events that affect the normal climate patterns as a result of the conditions in the Pacific Ocean. Normally, the Pacific Ocean easterly trade winds blow westward along the equator. The wind/sea surface friction from this wind flow moves the warm surface water away from South America and

El Niño and La Niña: Differences and Impacts

towards Asia. When warm surface seawater moves away from the South American coast, it is replaced by cold water that rises from the depths in a process called upwelling.

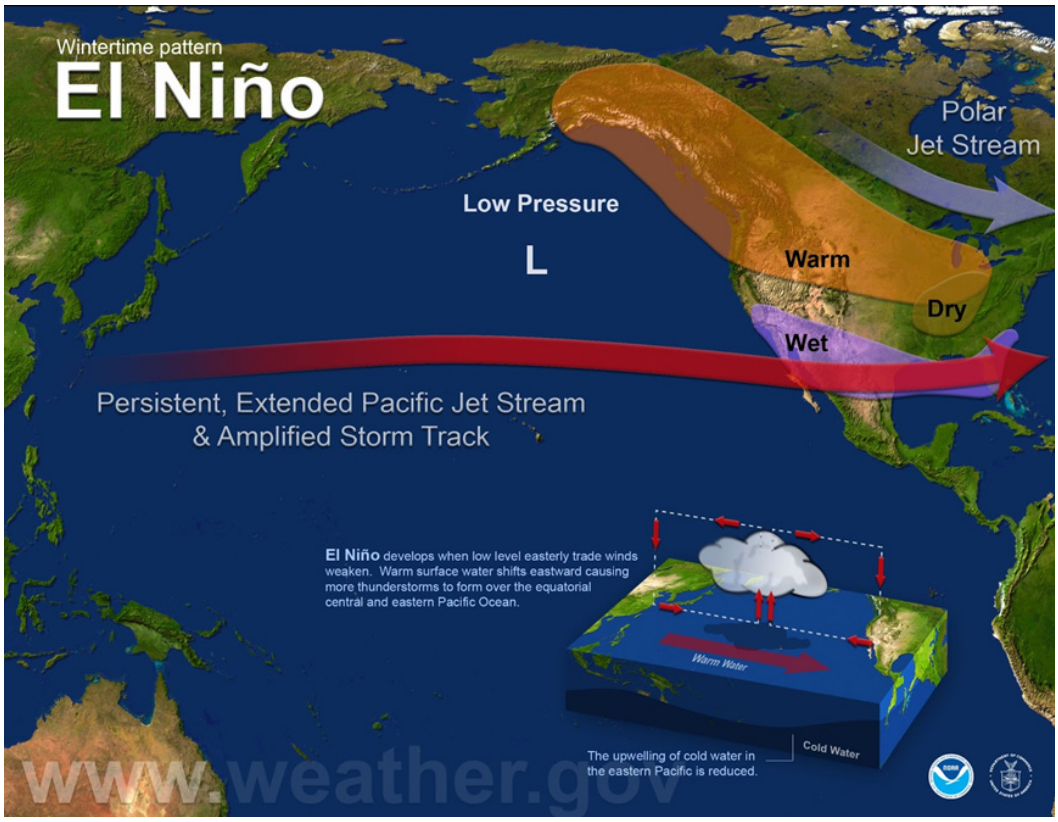
During El Niño, the trade winds over the Pacific weaken, allowing normally westward-moving warm water to stall and start pushing eastward towards the west coast of the Americas. This disrupts the normal upwelling along the South American Coast. By contrast, during La Niña, the trade winds are stronger than usual, resulting in more warm water moving toward Asia than usual. This increases the upwelling off the west coast of the Americas, bringing colder, nutrient-rich water to the surface. The colder sea surface temperature in turn affects the weather pattern, causing seasonal changes that normally last nine to twelve months.



When warm surface seawater moves away from the South American coast, it is replaced by cold water that rises from the depths in a process called upwelling.

Observations expected during El Niño:

An El Niño weather pattern causes the Pacific jet stream to move south of its neutral position during the winter. During this shift, observers living in the northern U.S. can expect warmer and drier than normal conditions, whereas observers living along the U.S.



El Niño causes the Pacific jet stream to move south and spread further east. During winter, this leads to wetter conditions than usual in the Southern U.S. and warmer and drier conditions in the North.

El Niño and La Niña: Differences and Impacts (cont.)

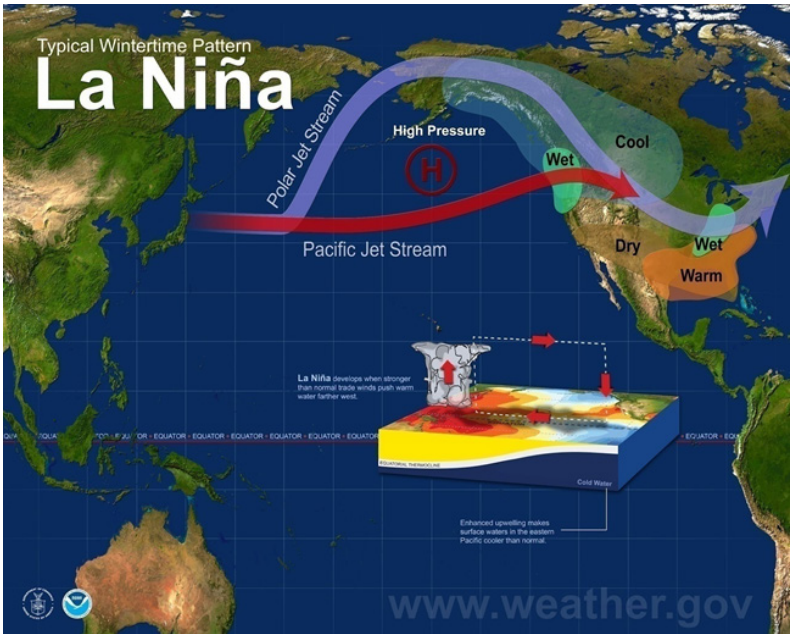
Gulf Coast and Southeast part of the country will see wetter than normal conditions. El Niño causes the Pacific jet stream to move south and spread further east. During winter, this leads to warmer and drier conditions in the northern U.S. and wetter conditions than usual in the south.

Observations expected during La Niña:

During a La Niña weather pattern, observers in the northern U.S. can expect cooler than normal temperatures due to La Niña pushing the jet stream northward. Observers living along the U.S. Gulf Coast and Southeast part of the country can expect drought trends due to warmer than normal winter temperatures. La Niña can also lead to a more severe hurricane season.

Observations needed:

The observations collected by our Volunteer weather observers is vital information that plays a critical role in efforts to recognize and evaluate the extent of human impacts on climate from local to global scales. In the case of El Niño or La Niña, which happens on average once per decade, observations are critical for this research.



La Niña causes the jet stream to move northward and to weaken over the eastern Pacific. During La Niña winters, the northern U.S. and Canada tend to be wetter and colder, while the southern U.S. sees warmer and drier conditions than usual.

John Campanius Holm Award

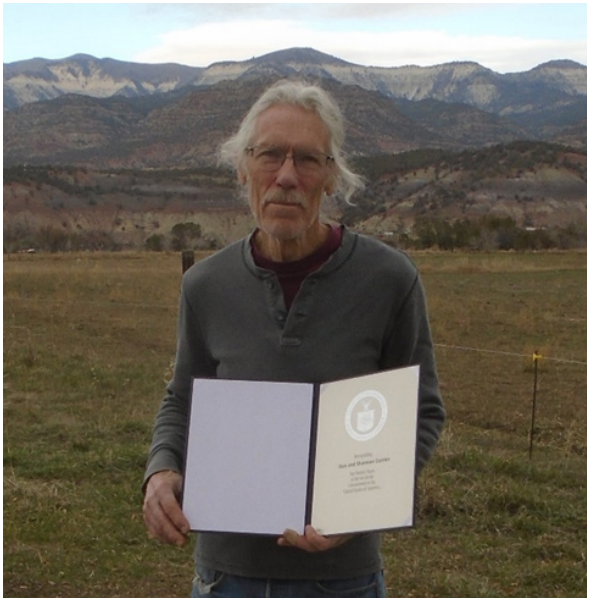
Dwayne Lagrou receiving the John Campanius Holm Award (Photo by NWS Detroit OPL Sara Schultz)

NWS Detroit, MI presented Dwayne Lagrou of Lapeer, MI, with the prestigious John Campanius Holm Award. Dwayne has dedicated over 20 years to the Cooperative Weather Observer Program. He has not only gone above and beyond with his weather observations, but has also dedicated his time to helping resolve any issues that had arose with the equipment. The staff at the NWS Detroit/Pontiac would like to extend a very special thank you to Dwayne for his many years of observations.

30 and 25 Year Length of Service Awards

Congratulations to Bill Niehoff of Marshall, Indiana, who received his 30 year Length of Service Award. Thank you for your many years of perseverance, Bill!

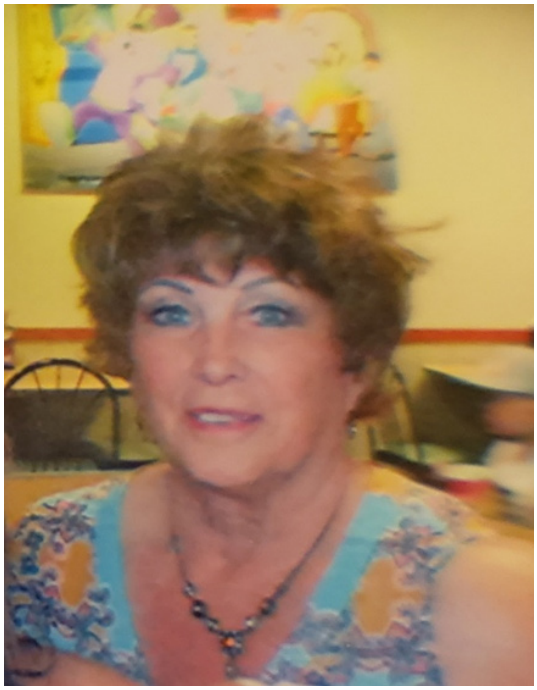
Long time observer Cletus Martin received his 30 year Length of Service Award from NWS Pueblo. Cletus has routinely sent in his weather data from his FPR every month during this period, providing valuable rain gauge data in a dry and desolate part of Colorado. Thank you for your dedication, Cletus!



Dan Currier and Shannon Currier (not pictured) have been volunteers in taking daily weather observations for the NWS from Collbran, CO, since December 1999. Thank you, Dan and Shannon! Presenting the award was John Kyle, DAPM at WFO Grand Junction.

Margie Connolly and Fred Harden celebrated years of dedication to the Cooperative Observer Program with their 25 year Length of Service Award. Presenting the award was John Kyle, DAPM at WFO Grand Junction.

25 and 20 Year Length of Service Awards



Dian is very diligent and takes her COOP duties seriously. She has been a cooperative observer for over 20 years, taking more than 7,300 accurate daily observations. The Bridger area of Montana experiences extreme weather ranging from late Spring/early Summer severe thunderstorms with large hail and tornadoes to hot, dry, and often smoky summers to winters that are often snowy and frigid. Dian, along with her husband and son, keep a well-maintained and clean cattle and crop ranch. Dian is a well-known and respected member of her community. In addition to farming and ranching, she has been a bus driver for schools, school activities, and sporting events for 27 years. She is also a substitute teacher and the Clark's Fork Valley TV District Board Chairman. Dian and her family are members of their local church and do whatever they can to help.

John Piquette has received his 25 year Length of Service Award. John has been taking daily weather reports for NWS Pueblo since November of 1995. Living in the data sparse Wet Mountains Valley of Colorado, John has meticulously recorded temperature, precipitation and snowfall data every morning since he began taking observations.

Steve and Maxine Deeter receiving their 20 year Length of Service award

Steve and Maxine Deeter received their 20 year Length of Service Award for taking daily weather observations from La Sal, Utah. Presenting the award was DAPM John Kyle (not pictured). Thank you, Steve and Maxine, for your years of dedication!

20 Year Length of Service Awards

Stan Neufeld received a 20 year Length of Service Award for providing daily observations southwest of Inman, Kansas. Stan enjoys observing the variety of weather conditions in Kansas and plans to continue observing for the National Weather Service for a long time to come.

Congratulations to George Minton on his 20 year Length of Service Award! George became a NWS COOP Weather Observer during the summer of 2001. Since then, he has faithfully sent in his weather data from his FPR rain gauge every month in a timely manner.

Graham Roberts, engineer at Trapper Mine near Craig, Colorado, received his 15 year Length of Service Award from DAPM John Kyle of NWS Grand Junction. Staff at Trapper Mine just outside of Craig, Colorado have been taking daily weather observations since 1977.

20 Year Length of Service Awards

The dedicated staff at the Iola Water Plant were presented with a 20 year Service Award. The institution itself has provided observations since 1905, with the current observer taking over in 2001. Pictured are Brandon Thomas, Toby Ross, Lyndon Kern.

Loren Curtis, observer (left), and Roxie (right);
(Photo by NWS Detroit OPL Sara Schultz)

Loren Curtis of Auburn, Michigan was presented with a 15 year Length of Service Award. Loren has gone above and beyond with his weather observations, including going out in all types of Michigan weather to read the thermometers housed inside the Cotton Region Shelter. Thank you for your years of observations!

15 Year Length of Service Awards

Josh Halasy of Wyandotte, Michigan was presented with a 15 year Length of Service Award. Josh has not only continued his weather observations, but has also dedicated his time to being the paid snow observer for Detroit Metro Airport. The staff at the NWS Detroit/Pontiac would like to extend their thanks to Josh and his family for their dedication over the years, and we look forward to many more.

Brian Sharon of Flint, Michigan, was presented with a 15 year Length of Service Award for his long years of dedication to the Cooperative Weather Observer Program. In addition to his weather observations, he is the paid snow observer for Flint Bishop Airport. The staff at the NWS Detroit/Pontiac would like to extend a special thank you to Brian for his many years of observations.

15 and 10 Year Length of Service Awards

NWS Grand Junction DAPM John Kyle (left); Alantha Garrison (right)

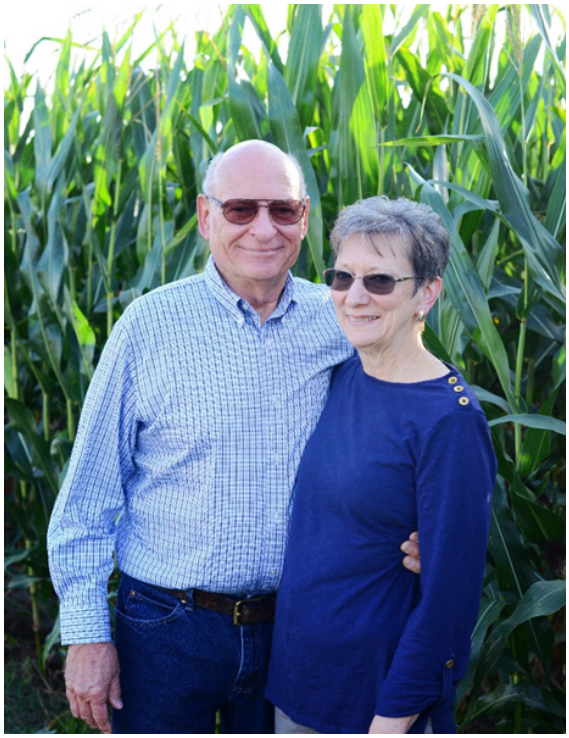
Alantha Garrison of the Gunnison County Electric Association received her 10 year Length of Service Award for taking daily weather observations for the NWS. This year actually marks Alantha's 11th year of service, as a visit couldn't be made last year. Thanks, Alantha!

Andy Nicholas receives his 15 year Length of Service Award at his home near Paradox, Colorado.

Scott and Cassie Boyle received their 10 year Length of Service Award for their hard work as dedicated daily weather observers from their home in Monticello, Utah. Presenting the award was DAPM John Kyle (not pictured) of NWS Grand Junction.

15 and 10 Year Length of Service Awards

Bob and Karen Risch (and dog Katie) received their 15 year Length of Service Award. Bob and Karen Risch have been taking daily weather observations from Ouray, CO since July 26, 2006. Presenting the award was DAPM John Kyle (not pictured) of NWS Grand Junction.



John and Frieda Pickering of east central Indiana celebrated their 15-year anniversary in the COOP on September 1st. The photograph of them here in front of a field of corn represents their life's work of farming. Because of agriculture's high dependency on the weather, John and Frieda started observations of rainfall on their own, then after many years, joined the COOP and CoCoRaHS. Frieda feels a good way to sum up their lives is faith, family, and farming.

Tommy Rodriguez began recording monthly rainfall data using the FPR at his institutional site 10 years ago, and with the help of his office staff has jumped through multiple hurdles to get his data to NWS Pueblo in a timely manner. Thank you, Tommy and staff, for all your tireless efforts and congratuations on 10 years of service!

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Fall-Winter 2021

National Weather Service
Silver Spring, MD

March, April, May Temperature and Precipitation Outlooks From the Climate Prediction Center