

## **Messages of the Day** **June 2014**

Friday, June 6, 2014

### **The PRISM-CoCoRaHS Climate Portal!**

The PRISM-CoCoRaHS Climate Portal. What is that you might ask? The PRISM portal is a CoCoRaHS data analysis tool developed in collaboration with the PRISM Climate Group at Oregon State University. This is an exclusive feature available only to CoCoRaHS participants. It helps connect our daily precipitation measurements (weather) to seasonal patterns, long term averages and year to year precipitation variations (climate). This portal provides access to estimates of "normal" precipitation for any location in the contiguous United States. PRISM also provides estimates of total precipitation for each month and year since 1895. View the ["PRISM Portal Reference page"](#)

You can access the portal by going to the CoCoRaHS home page and clicking on "My Account" at the top of the page. From there you have two choices. One is to select the PRISM Portal section and click on on the "blue" words PRISM PORTAL to get access to the Continental United States or under the My Station heading click on the "blue" words PRISM DATA to get access to your specific station's PRISM estimates.

Once there you'll be able to find the estimated precipitation for any location in the continental United States or create a historical time series for monthly and annual precipitation.

We recommend watching the PRISM Portal Guide YouTube instructional video on how to use the portal by clicking here: ["PRISM PORTAL VIDEO"](#)

Please enjoy and use this great feature to explore the climate of the U.S.

Tuesday, June 10, 2014

### **The four inch gauge -- how is it calibrated?**

An observer from Alabama writes: "I've always tried to figure out how rain gauges are calibrated and I read somewhere that the principle is how much water falls on one square inch of ground. In that case, a gauge with a one inch square opening would need to be six inches tall to measure six inches of rain. Trying to reconcile this knowledge with my new gauge, I figured that a 4" opening represents 12.56 square inches ( $A=\pi*r*r$ ), and that the tube should be 12.5" tall to measure an inch of water. However, from the bottom of the tube to the inch mark it isn't that tall. Could you help me understand the principle?"

Great Question! Here is our answer:

Rainfall is a DEPTH measurement and not a "volume" measurement. In other words, it's not "an inch per square inch" but it's an inch for any area in your immediate vicinity that the rain happens to land on. In the case of your new rain gauge, the "inch" of rain is falling into a cylinder that has an inside diameter of slightly less than 4" is then being funneled into a calibrated cylinder of a much smaller diameter (just greater than 1.2 inside diameter). The area of the opening of the inner cylinder is exactly 1/10th the area of

the funnel and outer cylinder. This means, the inner tube will magnify the depth of rain by a factor of exactly 10. What this means is that 1.00" of rain will fill that inner cylinder to a depth of 10.0". It is then scaled accordingly.

Thursday, June 12, 2014

## **The 'ups and downs' of the water cycle - Reference Evapotranspiration (ET) in 2014 . . . 'the up side'**

In 2012 CoCoRaHS launched a new opportunity for our observers to track the water cycle -- the literal "ups and downs" of water so to speak (over 100 observers participated). We are at it again for our third consecutive year. Since our observers already measure precipitation as it arrives at their locations (the down), we thought many would be interested to see how much of this water returns to the atmosphere? This is called evapotranspiration (going back up). For certain CoCoRaHS observers participating in 2014 will be a great opportunity to provide data for a whole new set of applications used in drought monitoring, irrigation and yard watering, remote sensing (satellite) and weather forecasting to name just a few.

There are several qualifications needed to become a CoCoRaHS observer for Reference ET, so don't feel bad if you are unable to participate. There will also be several things to consider on your part as you apply:

- 1) We are looking for "ideal" locations (open exposures with surrounding vegetation that is representative of your area) and highly motivated observers (you have reported on a consistent daily basis for CoCoRaHS over time).
- 2) You are up to the challenge of taking on a more complex daily observation.
- 3) You, or a sponsoring organization are willing to make the substantial investment in purchasing this delicate instrument, the ETgage (which sells for around \$222 at [www.weatheryourway.com](http://www.weatheryourway.com), plus tax and shipping).

Some of you have already signed up, we thank you for your interest. If you have yet to do so and are up for this challenge, please contact Zach at [Info@cocorahs.org](mailto:Info@cocorahs.org) with a photo of the site where you will place your gauge and he will follow up with you.

For those of you who want to learn more about Evapotranspiration and the "up side" of the water cycle, please check out the CoCoRaHS ET page at: ["ETo"](#)

Monday, June 16, 2014

## **June 17th -- CoCoRaHS Day! ... Happy Sweet Sixteenth Anniversary!**

Tuesday is CoCoRaHS Day. The CoCoRaHS website was launched June 17, 1998 -- officially marking the beginning of this volunteer rain gauge network. One hundred beginner weather observers reported that day. We now have nearly 20,000 rain gauge observers who send in reports regularly or occasionally. Let's celebrate our sixteenth anniversary with everyone sending in their CoCoRaHS daily precipitation reports and setting a new all-time record for most CoCoRaHS reports in one day. Let's shoot for 12,500+ reports and break the record!

For those of you who did not know, the number of reports received each day is listed just above the national map on our home page.

Thanks very much!

Thursday, June 19, 2014

## **Fire Weather . . . Information and Outlooks for 2014!**

Another zero in the rain gauge? Hot, dry weather during the late spring and summer can create ideal conditions for wildfires in many parts of the country. To see where current wildfire activity is taking place across the country click here: [ACTIVE FIRES](#).

Most NWS Weather Forecast Offices provide fire forecasts twice a day and provide warnings in close partnership with local, state and federal fire control agencies. Learn more about [Fire Weather](#) and the NOAA Storm Prediction Center's latest [Fire Weather Outlooks](#) for your part of the county by clicking on the underlined text.

The [Incident Information System Website](#) is another great resource for finding out where wildfires are currently burning. This site gives a vast amount of information that many of you will find very informative.

For additional info on wildfire prevention and other wildfire topics, visit the National Interagency Fire Center's web site by clicking here: [NIFC](#)

Want to learn more about Fire Weather? View the CoCoRaHS WxTalk Webinar presented by Liz Page of UCAR/COMET. You can do so by clicking here: [WILDFIRE](#)

Sunday, June 22, 2014

## **Lightning Safety Awareness Week "When Thunder Roars, Go Indoors!" June 22-28, 2014**

The nation will focus on lightning safety this week during National Lightning Safety Awareness Week, June 22-28, 2014.

NOAA states that summer is the peak season for one of the nation's deadliest weather phenomena—lightning. But don't be fooled, lightning strikes year round. The goal of their website is to safeguard U.S. residents from lightning. In the United States, an average of 53 people are killed each year by lightning.

Hundreds of people are permanently injured each year. People struck by lightning suffer from a variety of long-term, debilitating symptoms, including memory loss, attention deficits, sleep disorders, chronic pain, numbness, dizziness, stiffness in joints, irritability, fatigue, weakness, muscle spasms, depression, and more.

Lightning is a serious danger. Through their site we hope you'll learn more about lightning risks and how to protect yourself, your loved ones and your belongings. As a start, you can get an overview of Lightning Safety or stop by NOAA's comprehensive page of handouts, brochures, links and more.

To find out more visit: [Lightning Safety Awareness Week](#)

Wednesday, June 25, 2014

## **Summer photos of your gauge for potential “2016 and beyond CoCoRaHS Rain Gauge Calendars” . . . Keep shooting!**

The deadline for the 2015 CoCoRaHS Rain Gauge Calendar has come and gone, but that doesn't mean that you should put your camera away. Since our photo deadline is usually early in the year, we forget that some of the best calendar photos come during the summer. So in looking ahead to 2016 and beyond, we need a good selection of summer shots of your gauge to choose from. As we mentioned in the past, we are looking for artistic close-ups of your gauge in natural settings, such as beach-coastal backgrounds, farm backgrounds, mountain backgrounds, lake and pond backgrounds, interesting cloud backgrounds, animals near the gauge, close-ups of droplets on the gauge, etc. All natural photos (no photo shopping please).

These artistic photos should be high-resolution (greater than 1MB and jpeg format). Too many great shots were of low resolution, which we could not use this year. The photos should be of "the gauge" only and should not include people in them. Close-up shots of the gauge are best. Also make sure that they are well lit . . . better in sunlight than in a shadow. They can be creative. You may email in more than one set of photos. We will archive your shots and put them into the pool for our next calendar. We'll let you know if your photo is chosen.

Please e-mail your photos to Henry Reges at: [hreges@atmos.colostate.edu](mailto:hreges@atmos.colostate.edu) with the words “Summer Rain Gauge Photos” in the subject line. Please include the name of the photographer for credit purposes, as well as the location - city, state - of the gauge (ex- Sam Robinson: Tampa, FL). Finally be sure to include in the text of your message that “I give CoCoRaHS permission to publish the photo and use it for other possible CoCoRaHS promotions”.

Don't forget to keep your camera handy and continue shooting throughout the year! Our volunteers take some amazing shots! Thanks . . . the CoCoRaHS headquarters team.

Saturday, June 28, 2014

## **The American Meteorological Society's (AMS) Associate Membership . . . a great opportunity for you!**

As we mentioned before, CoCoRaHS tries to make our observers aware of great meteorological organizations out there. Here is a chance to become involved with some would say is the "grand-daddy" of them all -- the American Meteorological Society (AMS).

The American Meteorological Society, founded in 1919, is the largest U.S. membership organization devoted to advancing the atmospheric and related sciences. More than 14,000 members worldwide are currently enjoying the substantial benefits associated with AMS membership.

What can AMS membership offer YOU? How about:

A complimentary subscription to the Bulletin of the AMS (BAMS)!

BAMS, the flagship AMS publication, contains news on Society activities and programs, interdisciplinary peer-reviewed articles, membership news, conference information and summaries, book reviews, and more. Best of all, members now have exclusive cover-to-cover ONLINE access to each issue! Visit the [Bulletin of the AMS](#) to view a sample issue and to learn more.

A great price on Weatherwise magazine!

By agreement with Taylor and Francis Group, the publishers of Weatherwise, AMS members can subscribe to this exciting magazine for just \$24.95, that's more than 50% off the list price! Written for a general audience, Weatherwise offers a non-technical look at the latest discoveries in meteorology and climatology. Check out the [Weatherwise Web site](#) to view the latest table of contents.

Great benefits for weather enthusiasts!

AMS's Associate Member benefits package includes a subscription to either BAMS or Weatherwise, substantial discounts on journal subscriptions and meeting registration fees, access to information for members only, and much more. Annual dues are just \$64 per year. Learn more about the benefits of [Associate Membership](#).

We invite you to give AMS membership a try. The Associate Member category is open to any person regardless of educational or professional background and is an excellent way for weather enthusiasts to become involved with the Society. The full Member category is intended for persons having demonstrable professional or scholarly expertise in the atmospheric or related sciences, technologies, applications, or services. Full Members enjoy full voting privileges and the highest member discount on journal subscriptions and meeting registration rates.

To apply for membership, simply visit the [AMS Membership Web Site](#) to complete an application online or to download an application that you can fill out and return by fax or by mail. We hope that once you consider all that the AMS has to offer, you'll complete an application today!

If you have any questions regarding membership or the application process, please feel free to contact the AMS Member Services department at [amsmem@ametsoc.org](mailto:amsmem@ametsoc.org)