Messages of the Day
July 2012

Sunday, July 1, 2012

"There is plenty of drought gripping the nation this July!

Over many parts of the country there is a good deal of drought gripping communities at the moment. Many of you are experiencing that dryness firsthand and we'd love to hear how drought is impacting your community. Drought can impact us in many ways. Effects may be associated with agriculture, energy, public health, wildfire and recreation, just to name a few.

Please take a look around your community this week and think about how drought might be impacting it. Then, as a big favor to CoCoRaHS and the National Drought Mitigation Center, file a "CoCoRaHS Drought Impact Report". It should only take a minute or two. Report what you can, don't let the "monetary impacts" part scare you away. That part is highly desirable, but if you don't know a dollar amount, feel free to skip that part.

Your reports go directly to the National Drought Mitigation Center (NDMC) and they provide critical information on how drought is impacting the nation. Just like your precipitation reports, drought impact reports help fill in the gaps by providing important "eyewitness information" for your geographic area.

When you have some spare time, please re-visit our "Drought Impacts Reporting Resource Page" to get re-acquainted with drought impacts. In addition there is a short slideshow that everyone can benefit from reviewing.

Thursday, July 5, 2012

CoCoRaHS WxTalk Webinar for July 2012:
"Wind and Wildfire - A Dangerous Combination" . . . register today!

Wind and wildfire will be the focus for our next "WxTalk Webinar" on July 19th,"***Wind and Wildfire - A Dangerous Combination***" presented by Liz Page of UCAR/COMET, Boulder, Colorado.

Space is limited to the first 500 registrants, so register today! We will notify the first 500 who register of their acceptance to the Webinar. Those who aren't able to attend will be able to watch this episode on-line the following day.

REGISTRATION INFO

Title: "Webinar #8 - CoCoRaHS WxTalk: Wind and Wildfire - A Dangerous Combination"
Date: Thursday, July 19, 2012
Time: 1:00 PM Eastern, Noon Central, 11:00 AM Mountain, 10:00 AM Pacific

"Wildfire spread can be erratic and challenging to predict. Fire behavior is controlled by three components of the fire environment: weather, fuels, and topography. We will look how each of these components is inter-related when diagnosing fire behavior. Through examples of historic wildfires from locations across the country, we will explore what determines fire season and the critical fire weather patterns that contribute to extreme fire behavior.

We will also talk about the forecasters that provide weather information to the people fighting the fires. These Incident Meteorologists are highly trained and experienced forecasters who play a vital role in the decisions made to contain wildfires and protect people and property threatened by the fire."

Reserve your seat now by registering here: **WILDFIRE**

Our August CoCoRaHS WxTalk Webinar "Extreme Rainfall, How We Analyze It and How The Data is Used" by Bill Kappel of Applied Weather Associates will take place on August 23rd . Stay tuned for an upcoming announcement in late July on how to register.

Tuesday, July 10, 2012

"Significant Weather Reports" . . . Wow, look at that rain coming down!

We wish to thank many of you for your "Significant Weather Reports" during the past several months. They go directly to your local National Weather Service Office in real-time and provide critical information for the possible issuance of flash flood and severe weather warnings. They can really make a difference in your community.

Some of you who are new to CoCoRaHS may not be familiar with filing real-time "Significant Weather Reports". They are used to report significant weather occurring at your location any time of day or night such as heavy downpours, freezing rain or bursts of heavy snow or sleet. Any weather that you think may disrupt travel or outdoor work may warrant a "Significant Weather Report"

Here's the "Significant Weather Report Form" on our website.

How hard does it need to rain or snow to send in a "Significant Weather Report"? There is no universal definition. What it takes to cause flooding varies through the year and from place to place. In general, any rain of at least 0.30" in an hour could be considered "heavy rain". Use your own judgment, and if you feel it is raining very hard, go ahead and report it. It is better to be safe than sorry. Your local National Weather Service Office may set their own thresholds, so contact them for more information.

If you would like to view the reports of significant weather from other observers click here: "View Significant Weather Reports"

Also, remember that even if you submit a significant weather report, you still need to send in your normal daily "24-hour" report.

Thanks for helping!

Thursday, July 19, 2012

The four inch gauge -- how is it calibrated?

An observer 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.

Saturday, July 21, 2012

The CoCoRaHS Blog . . . it's back!

After a short hiatus, the CoCoRaHS Blog is back.

The CoCoRaHS blog, redesigned and recently revived by Illinois state coordinator Steve Hilberg, covers a wide range of topics on weather and climate. Steve, the former director of the Midwest Regional Climate Center, brings his expertise and passion for the earth's atmosphere to the blog by highlighting interesting current events.

The blog is interactive, meaning you can leave comments or messages for Steve and all our CoCoRaHS blog readers by clicking on comments below each post. This is located after the time stamp for each posting.

Please check out the blog and don't be shy if you wanna talk weather and climate! To visit the blog please click here: "CoCoRaHS Blog".

We hope you'll visit the blog this week!

Tuesday, July 24, 2012

View past WxTalk Webinars from our website!

Many of you have asked us if past WxTalk Webinars are availabe to watch on-line. Indeed they are and all eight are now available by visiting the CoCoRaHS WxTalk Page.

What are CoCoRaHS WxTalk Webinars? CoCoRaHS WxTalk consists of a series of monthly one-hour interactive Webinars featuring engaging experts in the fields of atmospheric science, climatology and other pertinent disciplines. These easy to follow presentations are live and approximately sixty minutes long.

Past Webinars include:

- ***Snow, love it, hate it . . . it still falls on us all"***
- ***Remote Sensing: How weather satellites sense the earth***
- ***Who uses weather and climate data and how do they do it?***
- ***Understanding and Identifying Clouds"***
- ***Lightning and Its Impacts***
- ***Hurricane Analysis and Prediction at National Hurricane Center"***
- ***Wind and Wildfire - A Dangerous Combination"***

To register and participate in next month's Webinar, see the announcement below.

CoCoRaHS WxTalk Webinar for August 2012: "Extreme Rainfall, How We Analyze It and How The Data is Used"

Extreme Rainfall will be the focus for our next "WxTalk Webinar" on August 23rd,"***Extreme Rainfall, How We Analyze It and How The Data is Used***" presented by meteorologist Bill Kappel of Applied Weather Associates, Monument, Colorado.

Space is limited to the first 500 registrants, so register today! We will notify the first 500 who register of their acceptance to the Webinar. Those who aren't able to attend will be able to watch this episode on-line the following day.

REGISTRATION INFO

Title: "Webinar #9 - CoCoRaHS WxTalk: Extreme Rainfall, How We Analyze It and How The Data is Used"
Date: Thursday, August 23, 2012
Time: 1:00 PM Eastern, Noon Central, 11:00 AM Mountain, 10:00 AM Pacific

This webinar will detail the 200 plus extreme rainfall analyses we have completed over the past 10 years. This will include how the storm analyses are completed, how rainfall data is gathered and used, and what the results of the analyses look like. Further, information about who uses this information and how it is used will be discussed. Special topics to be discussed include: Probable Maximum Precipitation-what is it, how is it derived-who uses it; Hurricane Irene bucket survey process and results, unique characteristics of rainfall during the Southwest Monsoon, Atmospheric River storms along the West Coast, differences in rainfall characteristics of extreme storms along the Front Range versus the Midwest, and the importance of accurate COCORAHS data.

Reserve your seat now by registering here: **EXTREME RAINFALL**

Our September CoCoRaHS WxTalk Webinar "So you want to become a meteorologist" by Dave Changnon of Northern Illinois University will take place on September 20th . Stay tuned for an upcoming announcement in August on how to register.

Sunday, July 29, 2012

The North American Monsoon

The word “monsoon” comes from the Arabic word mausim, meaning season. Basically, it describes a seasonal wind shift over a region that is usually accompanied by a dramatic increase in precipitation. Many of us are familiar with the Indian-Asian monsoon that brings heavy rains during the summer months over widespread areas of India and SE Asia. Although these rains often produce major flooding, they are vital to agriculture and the economy. Because so much of the world's population live in this region, a delayed or reduced rainfall season can have a devastating effect on the livelihood of a significant fraction of the world's population.

Many other parts of the world experience monsoons, including North America. Our North American monsoon (also known as the Mexican monsoon) typically occurs between July-September and is relatively small compared to the Asian monsoon. However, in parts of NW Mexico, over 50% of the annual rainfall comes in this 3-month period. The rains provide a critical source of replenishment for water resources of Mexico and the SW United States.

To learn more about the North American monsoon, check out: “Monsoon”