



**Community Collaborative Rain, Hail and Snow  
Network**

# **CoCoRaHS Webinar Training**



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# Outline

- I. What is CoCoRaHS?
- II. Brief History and main mission of the organization
- III. Who uses the data
- IV. Setting up the Rain Gauge and measuring precipitation (briefly talk about hail and snow).
- V. Reporting Observation
- VI. FAQ/Questions

# What is CoCoRaHS?

CoCoRaHS is a grassroots,  
non profit ...

...made up of volunteers of  
all ages and backgrounds



...who take daily measurements of  
precipitation right in their own backyards





Once trained,  
our volunteer observers  
collect data using low-cost  
measurement tools ...



4-inch diameter  
high capacity rain gauges



Aluminum foil-wrapped  
Styrofoam hail pads



Training is important to assure  
accurate, high quality data

Things to know about...

- Rain**
  - Overview
  - Weather Radar
  - Measuring Rain
- Hail**
  - Overview
  - Hail Facts
  - Hail Figures
  - CoCoRaHS & Hail
  - Hail Pad Examples
  - Measuring Hail
- Snow**
  - Overview
  - Measuring Snow

# CoCoRaHS History



The network originated with the Colorado Climate Center at Colorado State University in 1998 thanks in part to the Fort Collins flood a year prior.

CoCoRaHS expanded with several years to all 50 States including Puerto Rico and the US Virgin Islands, plus Canada and the Bahamas.

North Carolina became part of the CoCoRaHS network in September 2007.



# CoCoRaHS's main focus is to provide:

**Quality Precipitation Data  
&  
Educational Opportunities**

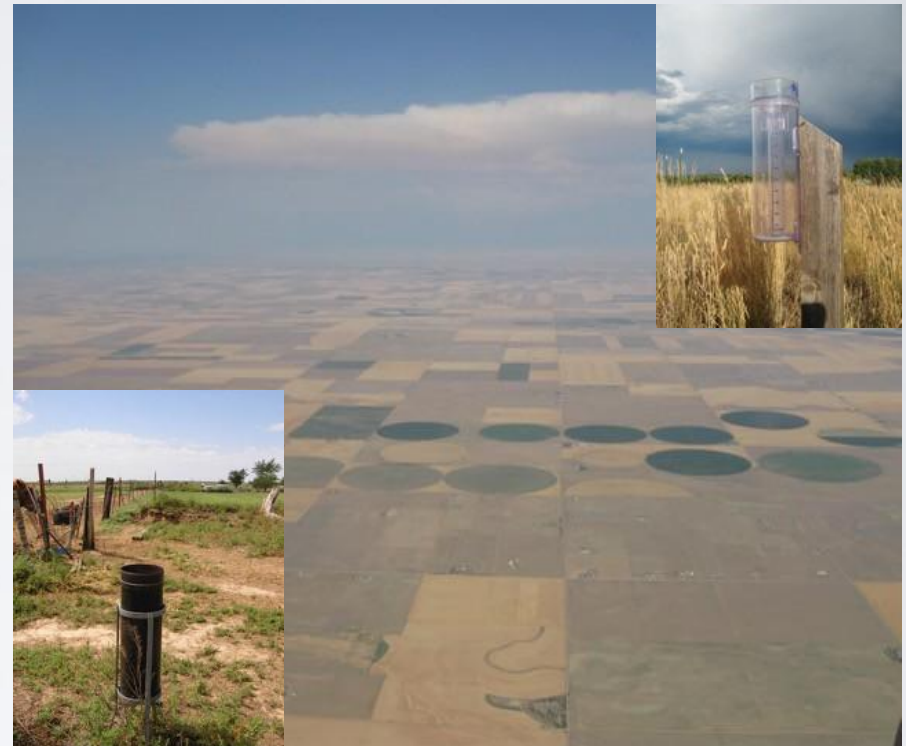
to help the public better  
understand weather and climate



# Why CoCoRaHS?



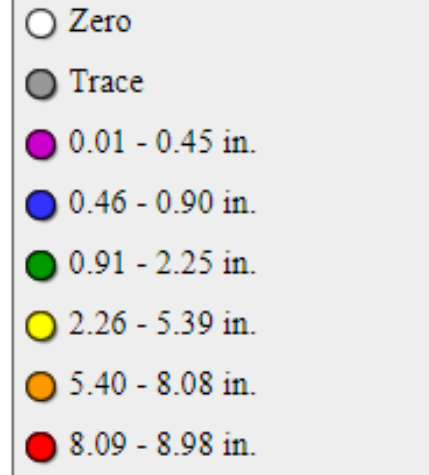
Precipitation is important  
and highly variable



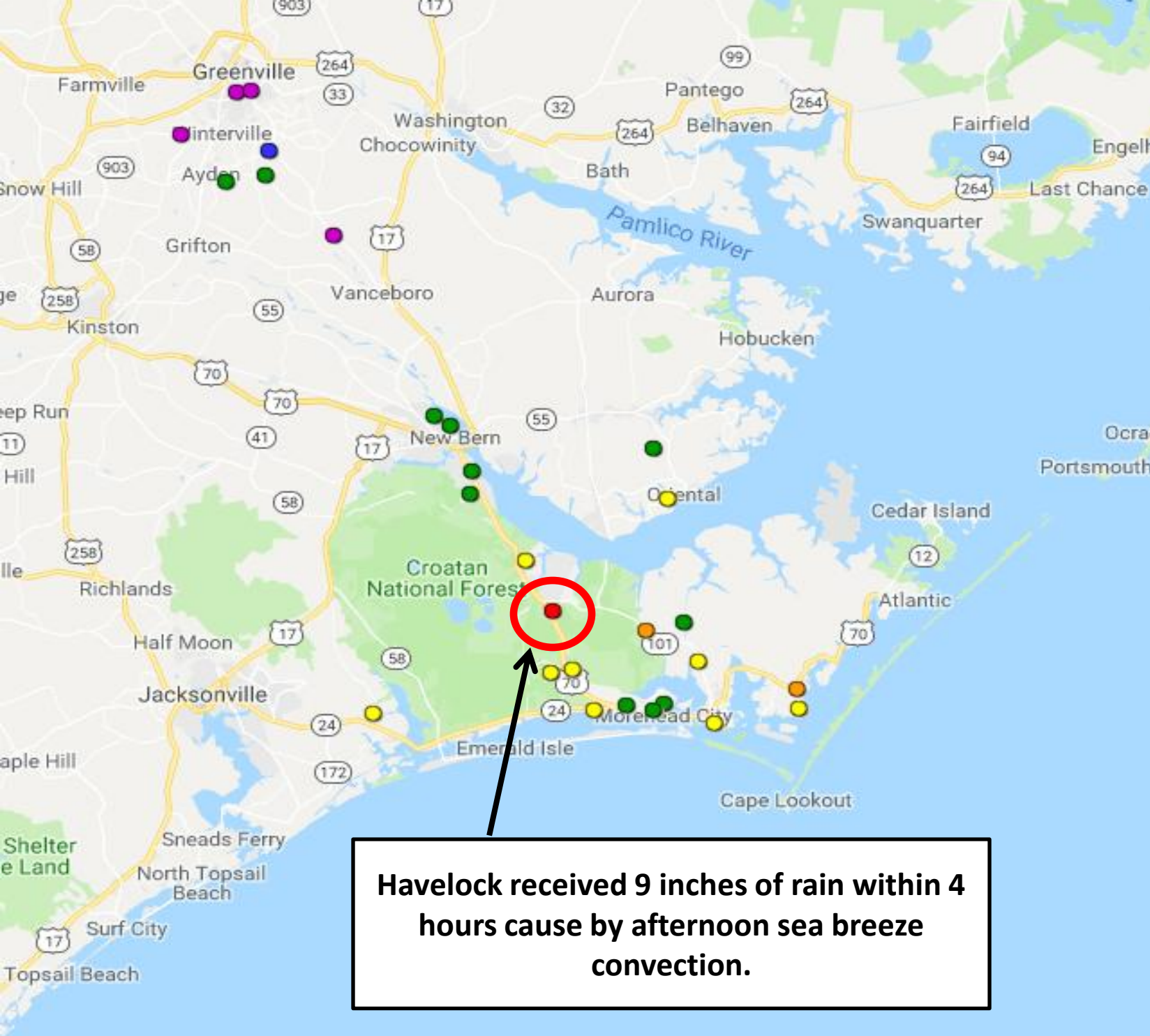
Data sources are few and  
rain gauges are far apart



Date: 08/13/2009  
Country: USA  
State: NC  
Units: US Units



Show US Active Fire Perimeters  
Source: [GEOMAC](#) GEOMAC wildfire data layers  
courtesy of the [U.S. Geological Survey](#).



**Havelock received 9 inches of rain within 4 hours cause by afternoon sea breeze convection.**



# Who uses CoCoRaHS data?

National Weather Service  
Other Meteorologists  
Hydrologists  
Emergency Managers  
City Utilities

- Water supply
- Water conservation
- Storm water

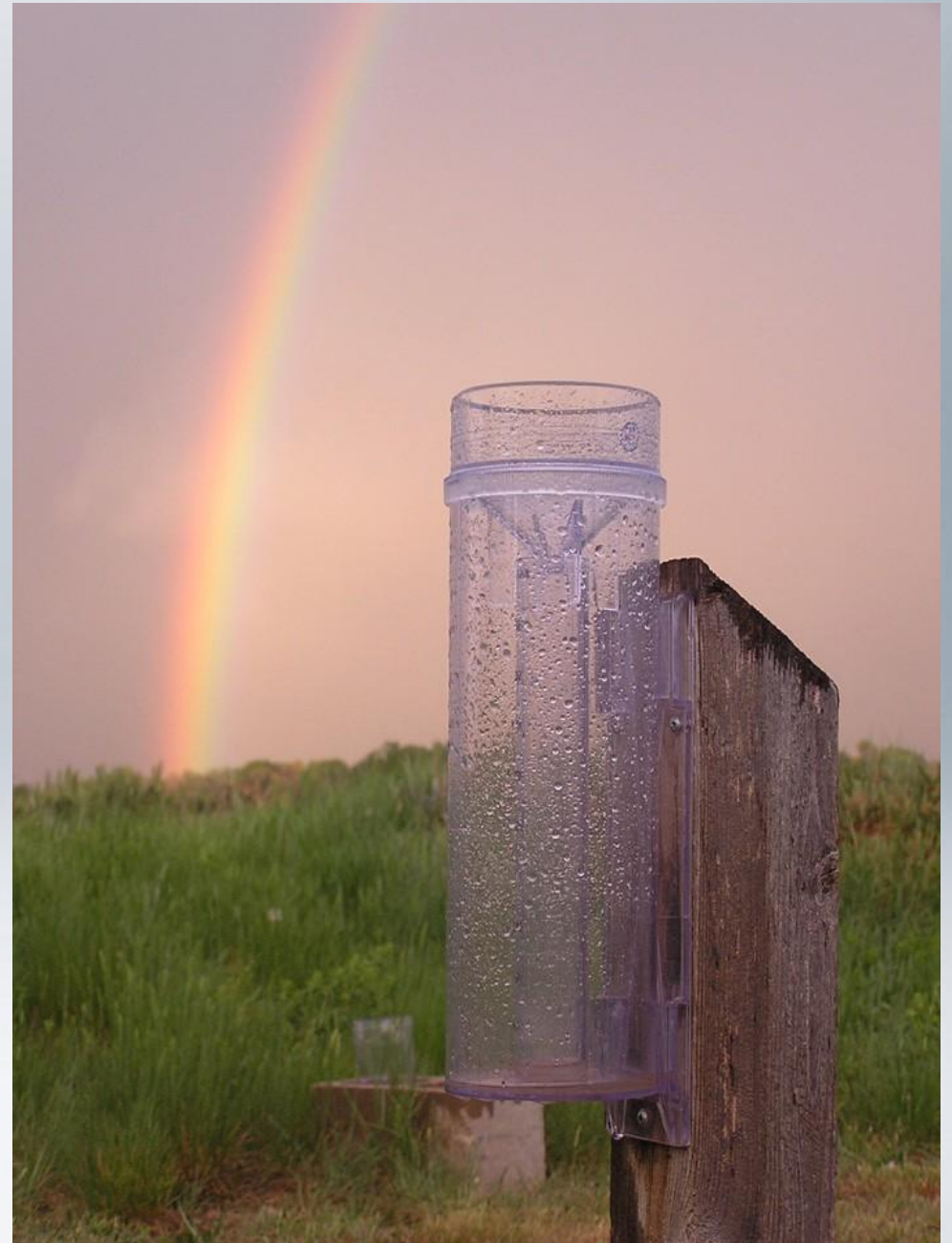
Insurance adjusters  
USDA—Crop production  
Engineers  
Scientists studying storms  
Mosquito control  
Farm Service Agency  
Ranchers and Farmers  
Outdoor & Recreation





# Section I

## Setting up your rain gauge and measuring precipitation



# Placement of your gauge

*“Location is the  
key to good data”*





# Places **not** to place your gauge



The #1, all time worst place to put your rain gauge is to leave it in the box!

Using your gauge to hold up your gutter downspout is not a wise choice either!

Although convenient, the deck is still too close to the house



Avoid placing it under trees or any structure



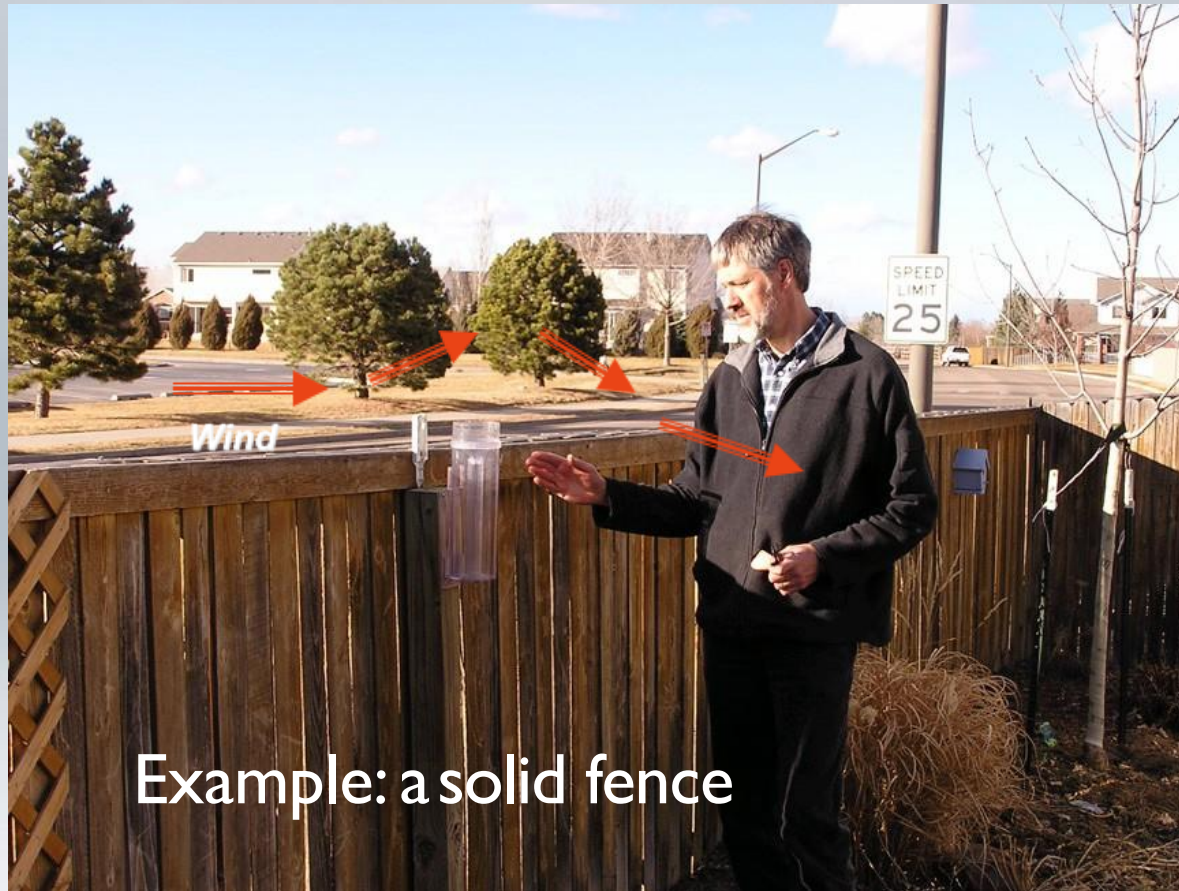
Animals (dogs, birds . . .)



Sprinklers both big and small



Avoid anything that would artificially increase or decrease your catch gauge



Example: a solid fence

This can cause updrafting during strong winds, which may reduce your gauge catch.



# Ideal placements for your gauge

residential



rural



urban



# Distance from Obstacles

In open areas strive to be **twice as far** from obstacles as they are high.

In developed areas strive to be **as far** from obstacles as they are high.

# Distance between Trees

Ideally, place your gauge equidistant from the nearest trees



# Height above the ground

In open areas place the gauge top approx. 2 feet off the ground



In developed areas place the gauge top approx. 5 feet off the ground



# Level and Bevel

Make sure that your gauge is level



Bevel the top of the post to reduce rain splashing into the gauge



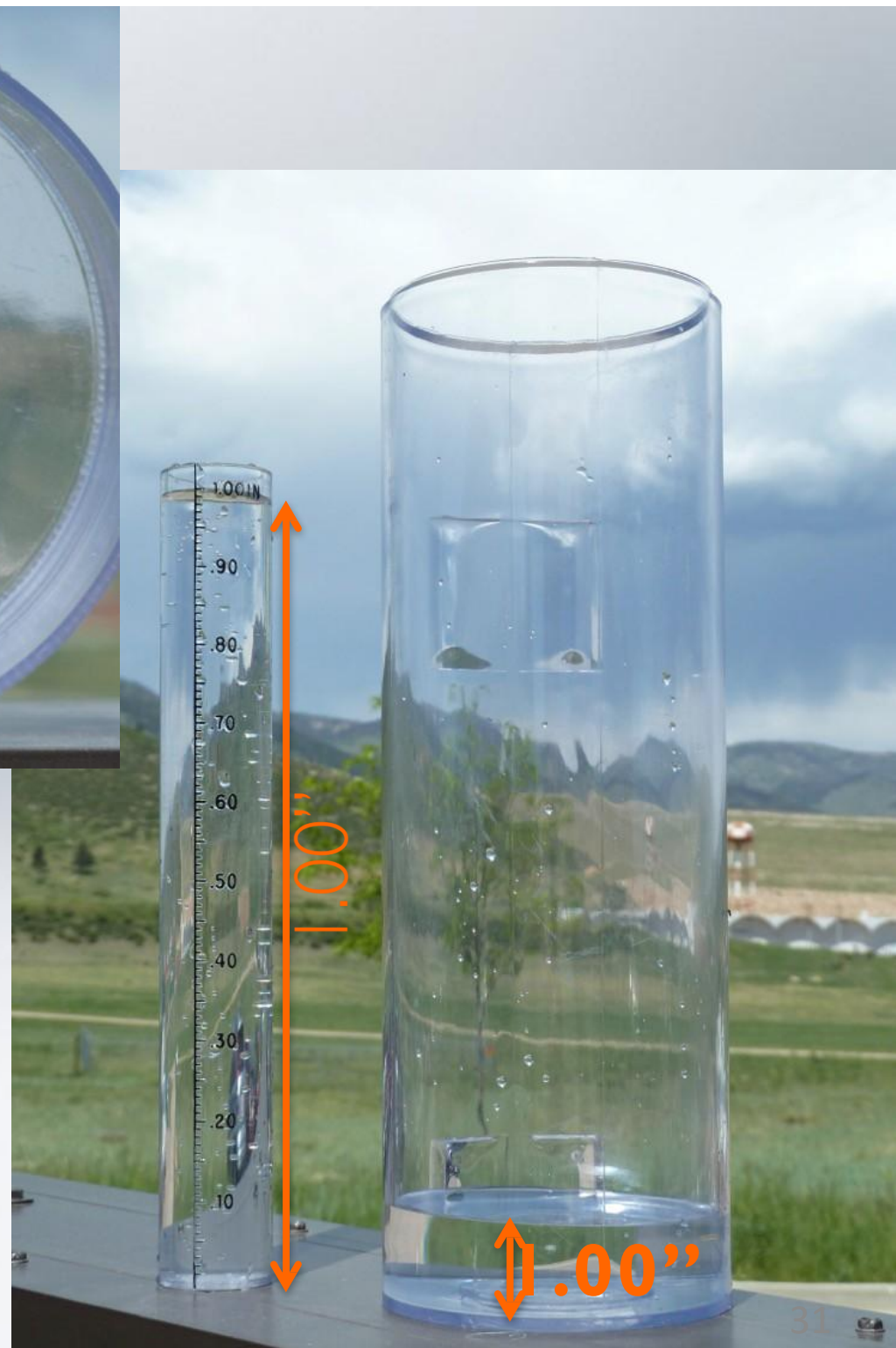
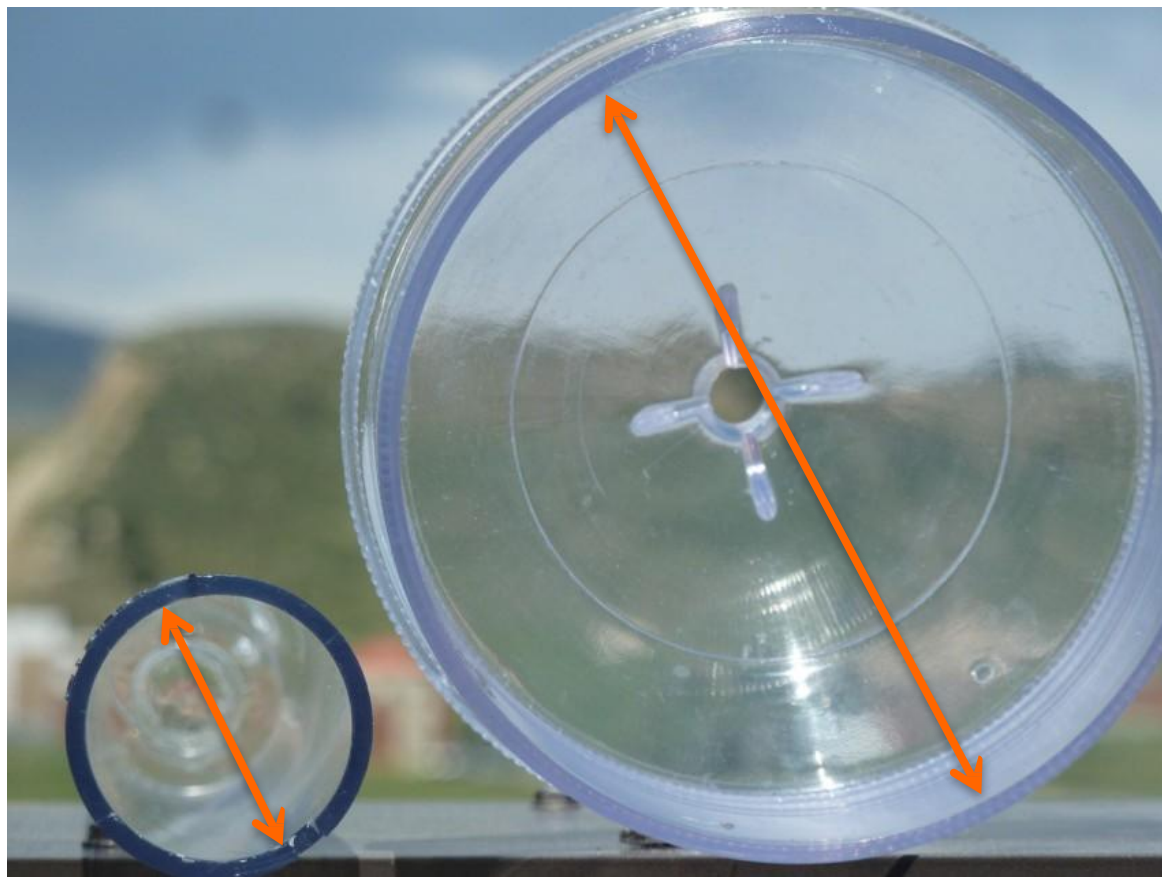
# Measuring Rainfall with your Gauge

*“Accuracy and consistency  
are very important”*



Photo: Steve Camp





*One inch of rain in the inner tube looks different than one inch of rain in the outer tube*

# A Word about Decimals

*Please be careful when recording your measurement. Getting the decimal point correct is essential!*

*0.40"*

*There is a large water difference between 0.40 inches and 4.00 inches*

Photo: Denny Barnes

# Please do not round up

*It is very important to record as accurately to the nearest hundredth of an inch.*

*Please do not round up to the nearest tenth!*

*If you measured **0.98"** please record that amount.  
Do not record it as **1.00"***



# When should we take our observations?



**7:00AM is preferred**

**Between 4:30AM and 9:30AM is OK**

**Other times are accepted.**



# Reading your Gauge

*Here are the most common situations you will encounter*



# YOUR MOST COMMON OBSERVATION WILL BE ...

**ZERO 0.00"**

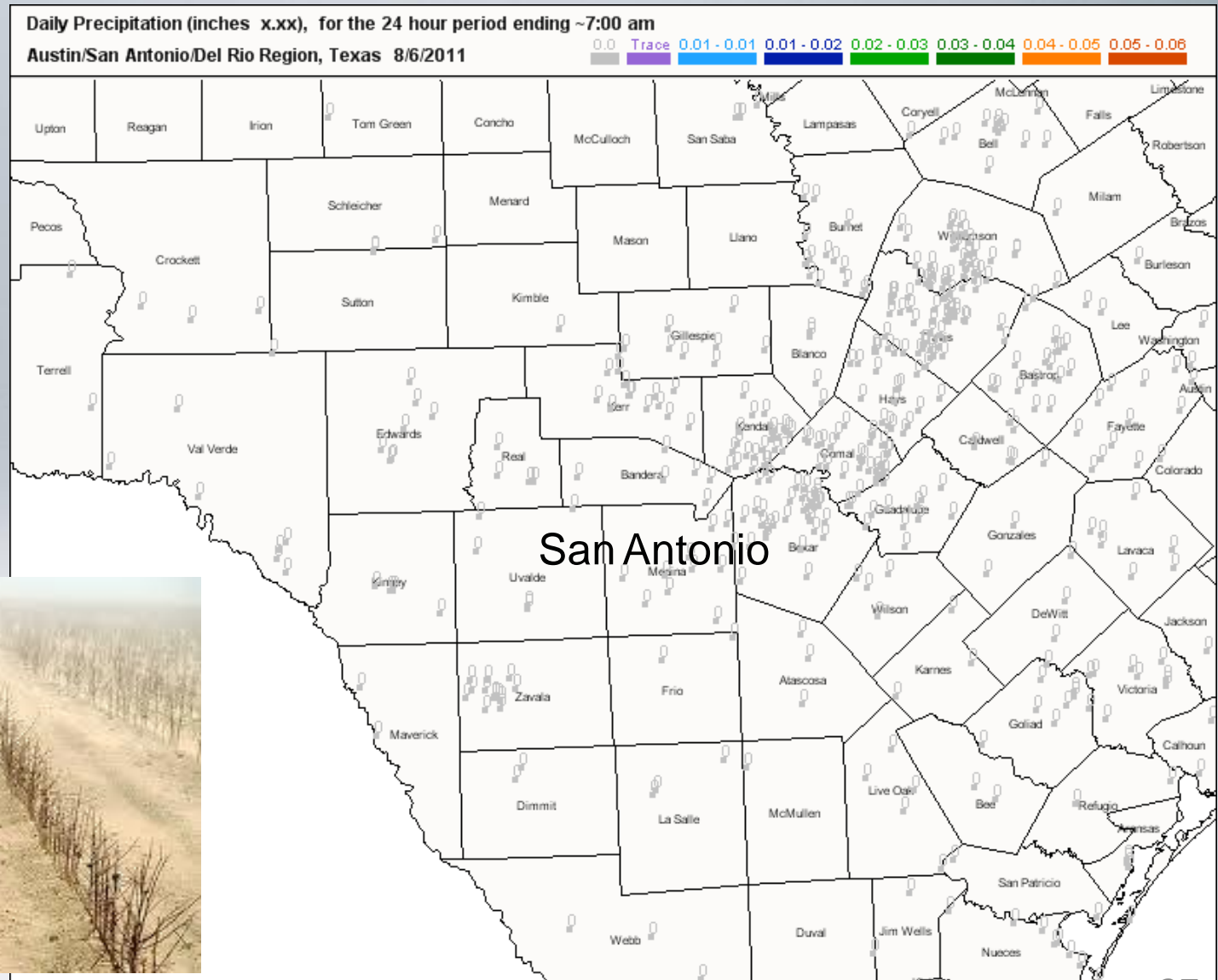
*It is important to know  
where it did NOT rain.*

***Please report zeros!***



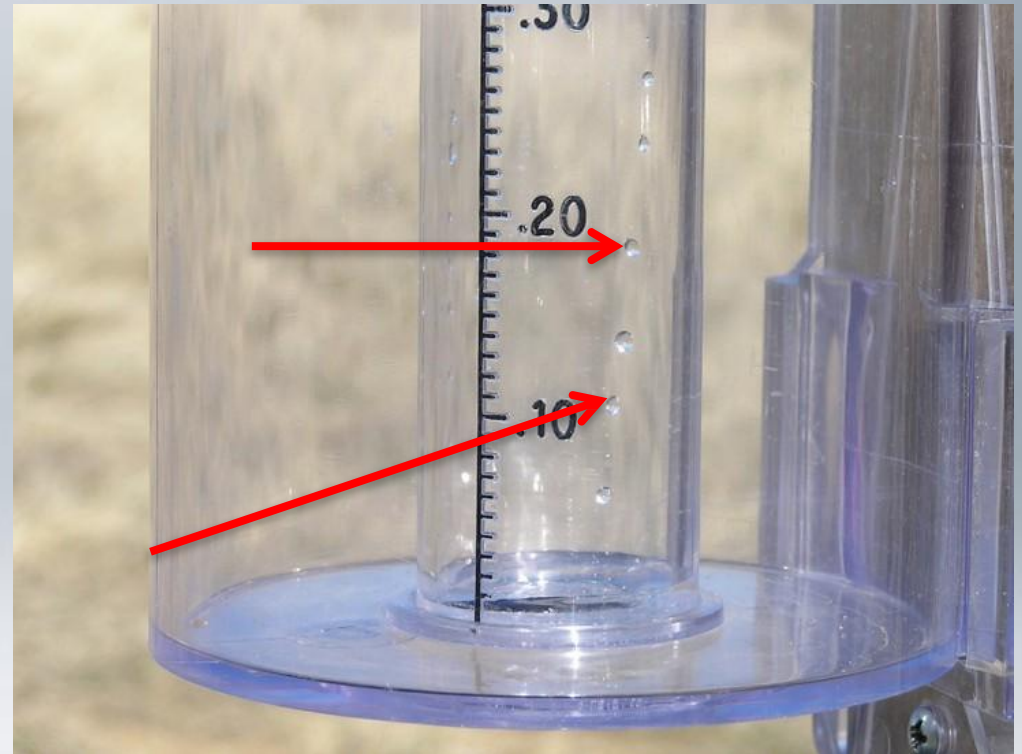
# Texas Drought 2011

Reporting  
Zeros



# Trace “T”

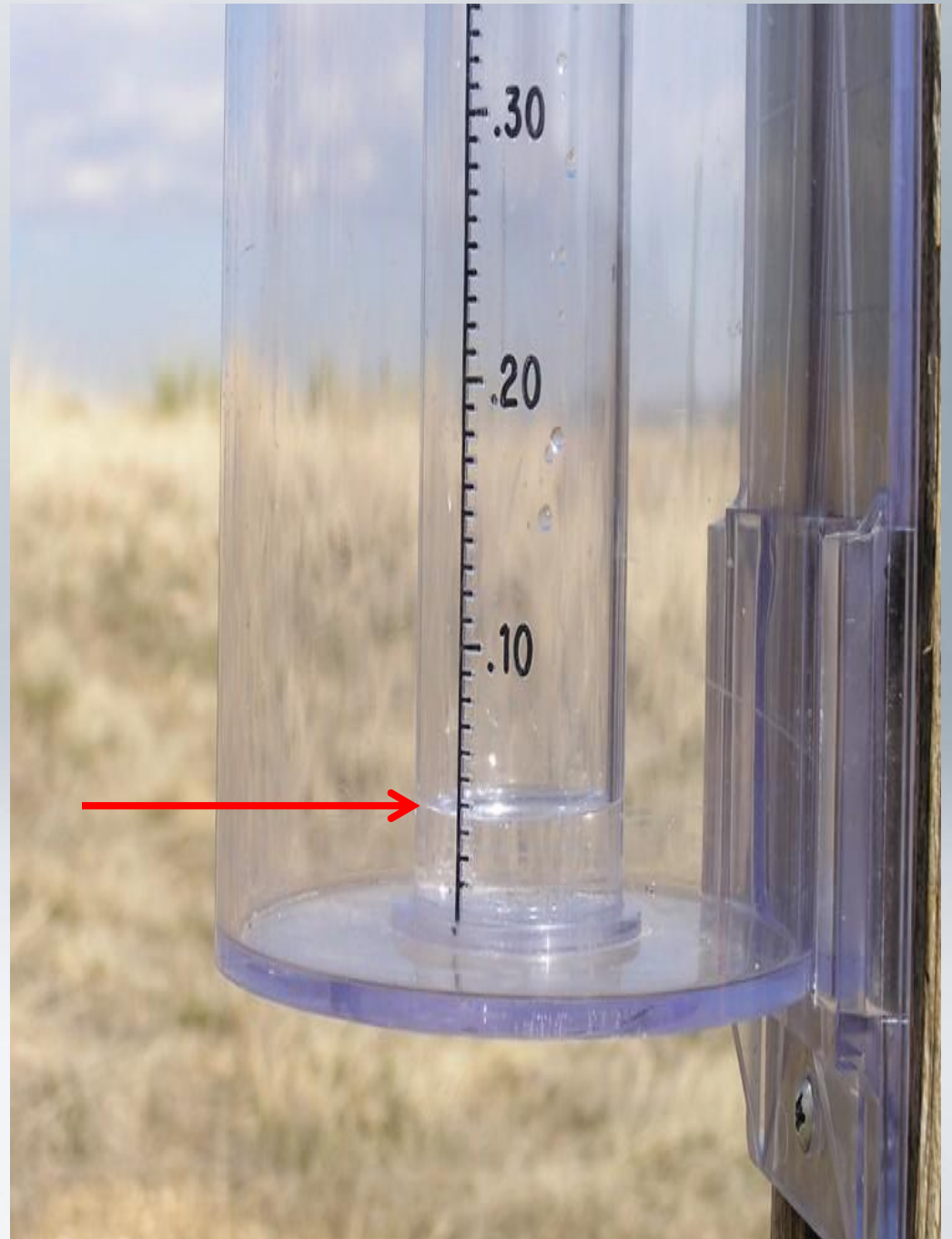
*“When only a drop or two wet the gauge record “T” for Trace*





Between “*T*” and  
“*one tenth*” of  
an inch

“That’s **0.04**” or *four  
hundredths*



# The Meniscus

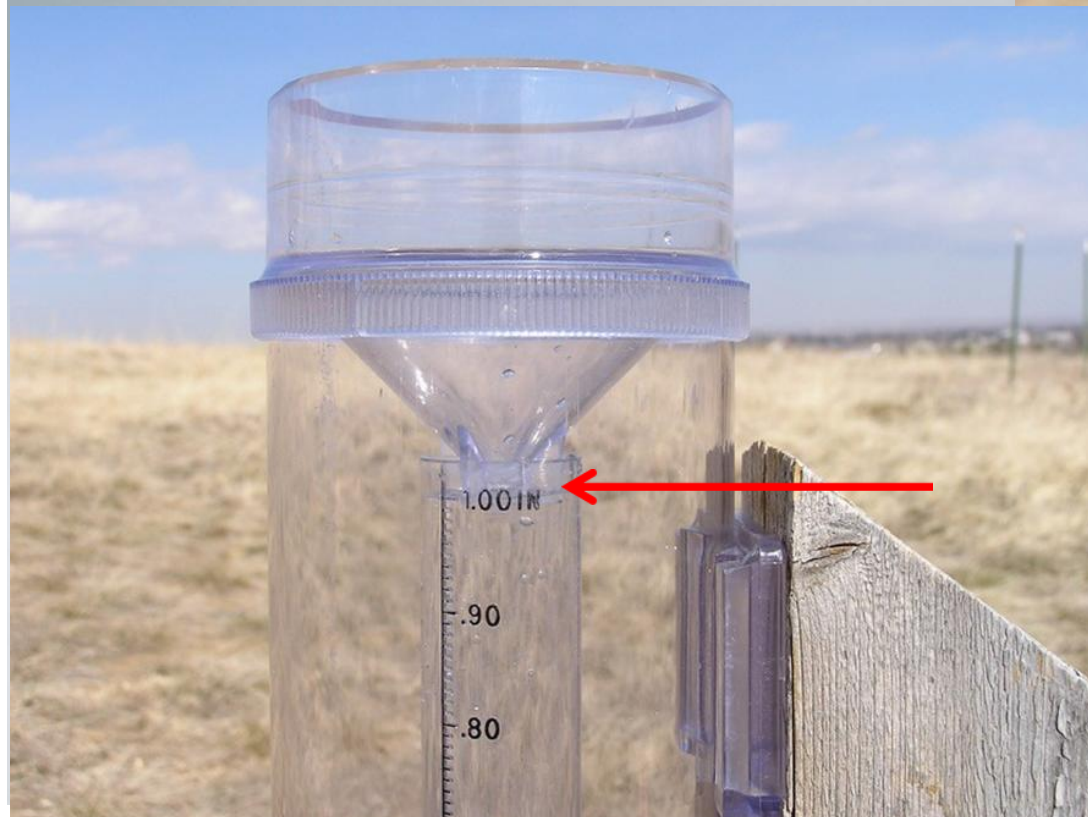
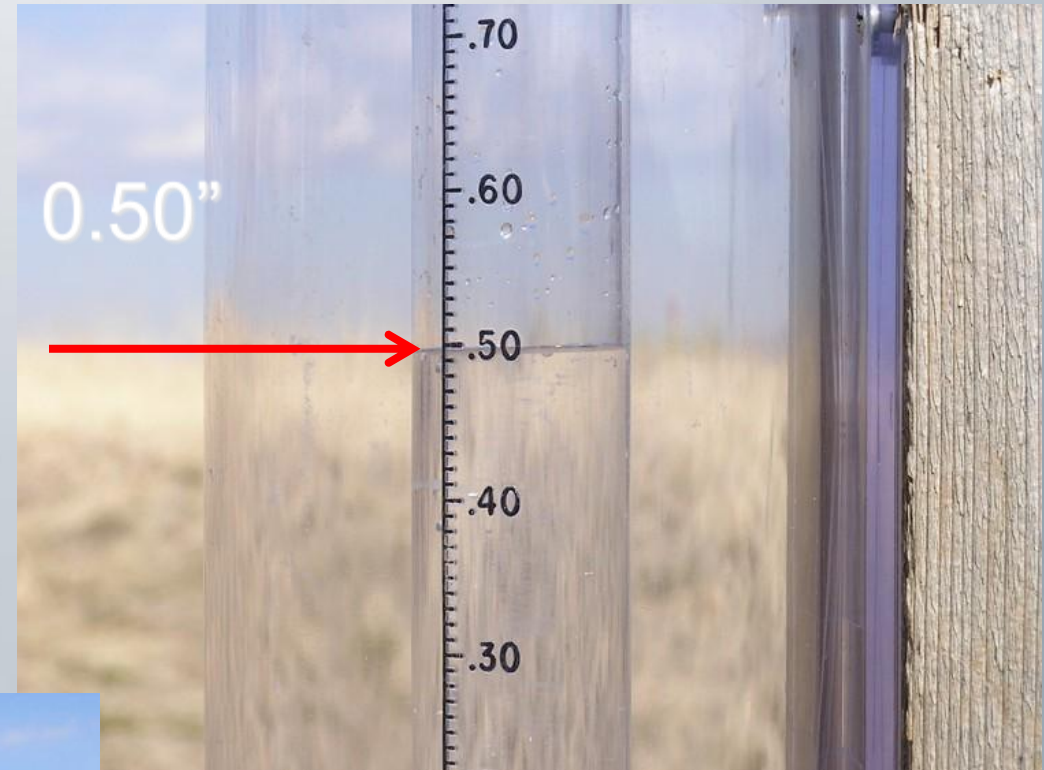
*The surface of the water in the gauge looks curved.  
How do I know where to read?*

*As water fills up the measuring tube, a curved surface is formed called a meniscus. It is formed by the surface tension of a liquid in contact with the sides of the tube.*

Always read the bottom of the **meniscus**, when the making your daily rain measurements.



*“This is “one half” inch and is recorded as 0.50”*



“This is “one inch” and is recorded as 1.00”



# Lots of rain !!

*When more than an inch of rain falls the precipitation will overflow into the outer cylinder.*

*The whole gauge has a capacity to hold eleven inches.*



# To measure greater than one inch . . .



*Pour out the first inch from the inner tube and write it down.*



*Pour the remaining water into the funnel and measure the inner tube.*



*Continue until all of the water has been measured. Make sure you keep track of your measurements along the way.*



Finally add up all of your measurements

*1.00 inch*  
*0.97 inches*  
*0.88 inches*  
+ *0.92 inches*  
**Total = 3.77"**









# IF THERE IS VERY HEAVY RAIN OR SNOW FALLING

PLEASE submit a

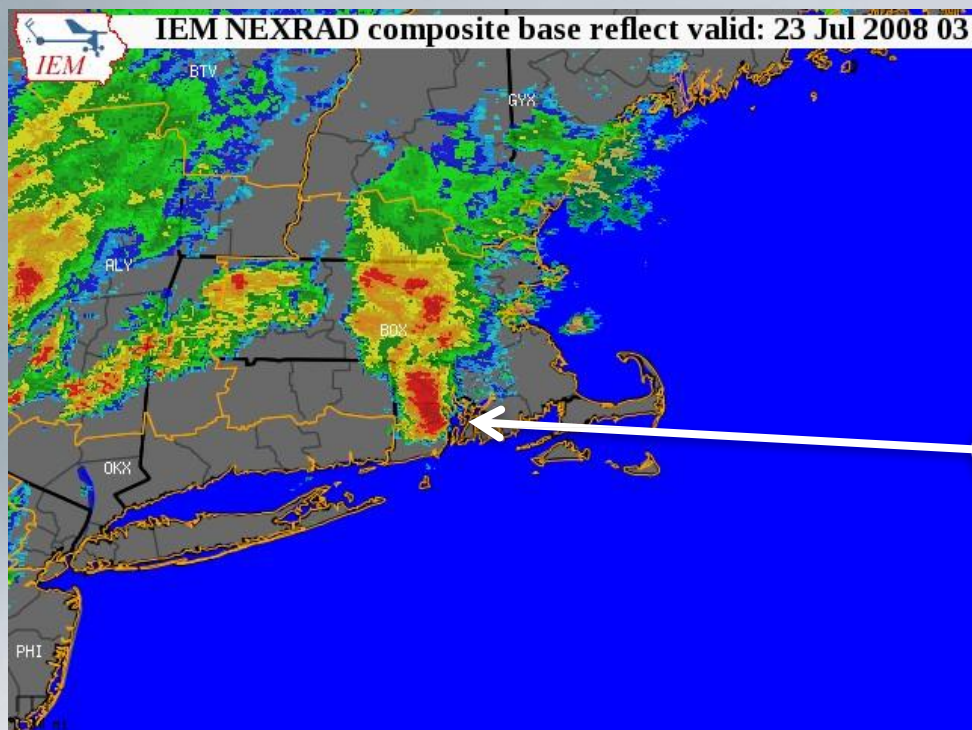
**“Significant Weather Report”**  
via the CoCoRaHS website -- ASAP

*Your report immediately goes to your  
National Weather Service Office*

*Your report provides them with much  
needed information to issue severe  
weather statements such as flash flood  
warnings and these can save lives!*

Significant Weather Report		Submit Data	Reset
Station Number :	CO-LR-610		
Station Name :	Fort Collins 3.5 SW		
	* Denotes Required Field		
<input type="text" value="8/4/2014"/>	*Observation Date		
<input type="text" value="4:25"/> <input type="text" value="PM"/>	*Observation Time		
<input type="text" value="35"/> Minutes	Time duration that the report covers		
	Rain		
<input type="text" value="2.45"/> in.	New Rain and Melted Snow that has fallen during the report duration, in inches to the nearest <b>hundredth</b>		
<input type="text" value="2.45"/> in.	Total Precipitation, rain and melted snow, since storm began, in inches to the nearest <b>hundredth</b>		
	Snow		
<input type="text" value=""/> in.	Depth of New Snow that has fallen during the report duration, in inches to the nearest <b>tenth</b>		
<input type="text" value=""/> in.	Total depth of snow and ice on ground at the time of this observation to nearest <b>half inch</b>		
Additional Information			

# Significant Weather Reports



## View Data : View Significant Weather Report

### Significant Weather Report

Station Number:	RI-WS-1
Station Name:	Hope Valley 3.7 S
Date:	7/23/2008 3:15 PM
Submitted	7/23/2008 3:23 PM
Notes:	
Taken at Registered Location:	True
Precip Duration Minutes:	15
New Precip Amount:	1.00
Total Precip Amount:	NA
New Snow Depth:	NA
Total Snow Depth:	NA
Flooding:	No

July 23, 2008 – “A CoCoRaHS observer in Hope Valley, RI provided an intense rainfall report which led to the issuance of a timely Flash Flood Warning. Life threatening urban flooding was reported in Warwick and Providence at the start of the evening rush hour, where several cars were stranded in more than 2 feet of water, requiring people to be rescued. Lead time would have been much less without the CoCoRaHS report.” - Joe Dellicarpini, NWS Taunton, MA

# Observing Hail





If possible submit an

# “On-Line Hail Report”

as soon as possible

(a hail pad is not required to submit a report)



*Your report goes right to the  
National Weather Service.*

*It provides them with much  
needed information to issue  
severe weather statements.*

**National Weather Service**  
**Watches, Warnings & Advisories**  
Local weather forecast by "City, St" or zip code

**Special Weather Statement**

SPECIAL WEATHER STATEMENT  
NATIONAL WEATHER SERVICE HOUSTON/GALVESTON TX  
225 PM CDT SAT OCT 3 2009

TXZ226-235-032015-  
JACKSON-WHARTON-  
225 PM CDT SAT OCT 3 2009

...SPECIAL WEATHER STATEMENT...

AT 222 PM CDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A STRONG THUNDERSTORM OVER EXTREME NORTHWESTERN JACKSON COUNTY...MOVING EAST SOUTHEAST AT 15 MPH.

HAIL UP TO ONE HALF INCH IN DIAMETER...BRIEF HEAVY DOWNPOURS...ARE POSSIBLE WITH THIS STORM.

# Measuring Snow

*“ Snow is good ”*

- Nolan Doesken



# Two ways in which snow is measured

Our observers measure:

1. Liquid water content of snow
  - from the gauge
  - from a core sample
2. Depth of snow
  - 24 hour snowfall accumulation
  - existing snow depths

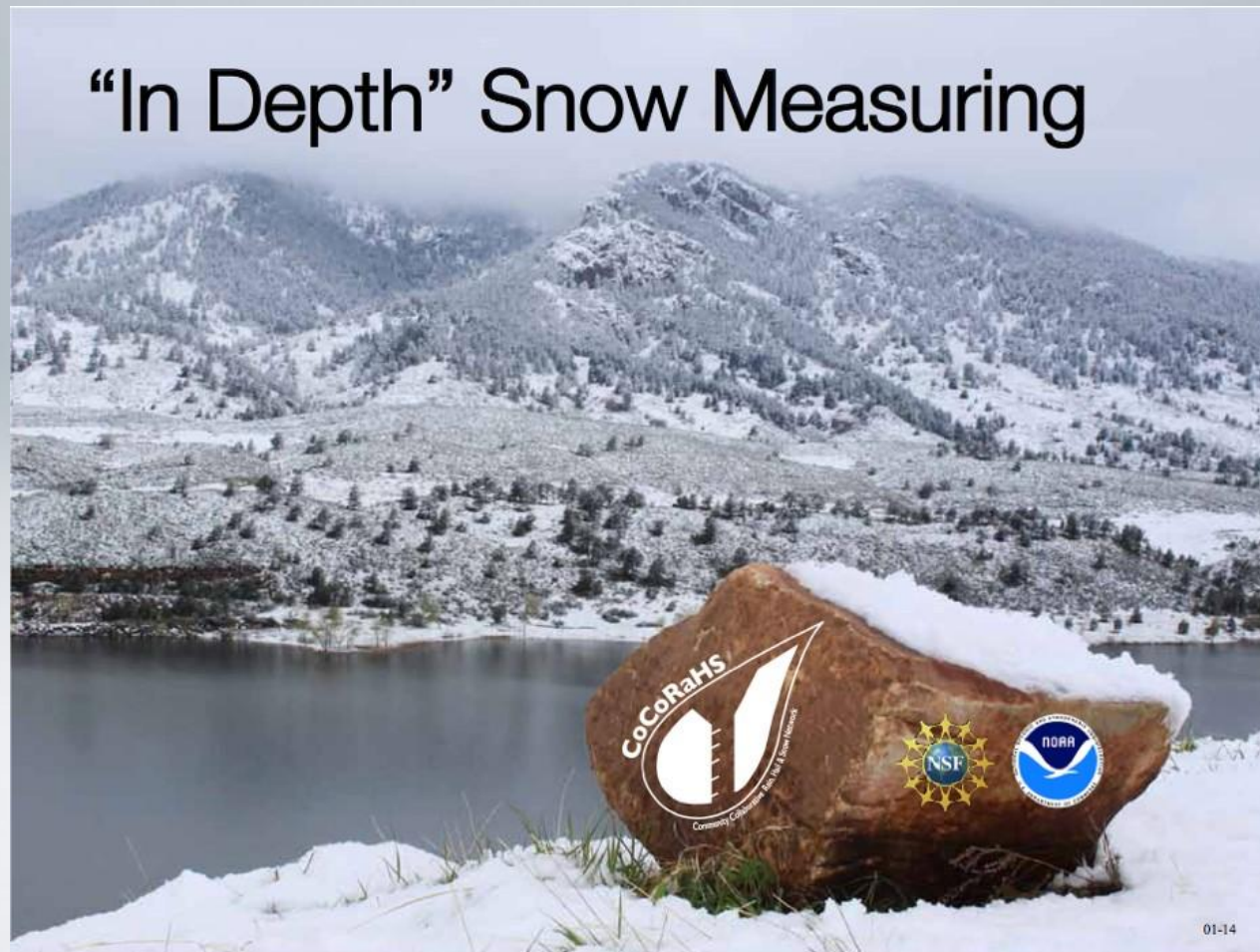




You can learn more about Snow Measurement  
under the Training Slide Shows on  
CoCoRaHS website.

[www.cocorahs.org](http://www.cocorahs.org)

## “In Depth” Snow Measuring



# Section II

## Reporting Observations

**My Data Entry : Daily Precipitation Report Form**

**Precipitation Report Form**

**Station Number :** CO-LR-610

**Station Name :** Fort Collins 3.5 SW

\* Denotes Required Field

\***Observation Date** ?

\***Observation Time** ?

in. \***Rain and Melted Snow to the nearest hundredth inch that has fallen in the gauge during the past 24 hours, or T for trace, or NA for unknown.** ?

**Observation Notes:** (This will be available to the public) ?

Quick thunderstorm dumped over a half of inch of rain.  
Tree branches down do to windy conditions.

**New Snowfall**

in. **Accumulation of new snow in inches to the nearest tenth** ?

in. **Melted value from core to the nearest hundredth** ?

**Total Snow and Ice on Ground at Observation Time**

in. **Depth of total snow and ice (new and old) in inches to the nearest half inch** ?

in. **Melted value from core to the nearest hundredth** ?

## The CoCoRaHS Web site

**CoCoRaHS** COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
*"Because every drop counts"*

Home | Countries | States | View Data | Maps My Data | My Account | Admin | Logout

Welcome to CoCoRaHS! "Volunteers working together to measure precipitation across the nations."

**Main Menu**

- Home
- About Us
- Join CoCoRaHS
- Contact Us
- Donate

**Resources**

- [FAQ / Help](#)
- [Education](#)
- [Training Slide-Shows](#)
- [Videos](#)
- [Drought Impacts](#)
- [Evapotranspiration](#)
- [Volunteer Coordinators](#)
- [Hail Pad](#)
- [Distribution/Drop-off](#)
- [Help Needed](#)
- [Printable Forms](#)
- [The Catch](#)
- [Message of the Day](#)

**Who uses CoCoRaHS Observations?**

9,362 daily precipitation reports received today as of 5/10/2016 5:03 PM EDT

Daily Precipitation (inches x.xx)  
USA  
5/10/2016

0.0
Trace
0.00 - 0.25
0.26 - 0.50
0.51 - 1.26
1.27 - 3.02
3.03 - 4.53
4.54 - 5.04

**JOIN COCORAHHS**

**TRAINING SLIDE-SHOWS**

**Things to know about...**

- **Rain**
- **Hail**
- **Snow**

Canada



# YOUR DAILY "24 HOUR" OBSERVATION

Click on "My data" from the top menu bar

The screenshot shows the CoCoRaHS website interface. At the top, the logo is on the left, and the text 'COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK' is in the center, with the tagline 'Because every drop counts' below it. Social media icons for Blogger, Facebook, Twitter, and YouTube are on the right. A navigation bar below contains links for 'Home', 'States', 'View Data', 'Maps', 'My Data', 'My Account', 'Admin', and 'Logout'. The 'My Data' link is circled in red. Below the navigation bar is the title 'My Data Entry : Daily Precipitation Report Form'. On the left side, there are two sections: 'Enter My New Reports' and 'List/Edit My Reports', each with a list of report types including Daily Precipitation, Multi-Day Accumulation, Hail, Significant Weather, Monthly Zeros, Drought Impact Report, Evapotranspiration, and FROST Reports (Frost, Optics, Snowflake, Thunder). The main content area is titled 'Precipitation Report Form' and includes a 'Submit Data' button and a 'Reset' button. The form fields are: Station Number: CO-LR-610; Station Name: Fort Collins 3.5 SW; Observation Date: 5/17/2014; Observation Time: 7:00 AM; Rain and Melted Snow: 0.59 in. Below these fields is an 'Observation Notes' section with a text area containing the text: 'Quick thunderstorm dumped over a half of inch of rain. Tree branches down do to windy conditions.' The form also includes sections for 'New Snowfall' (Accumulation of new snow in inches to the nearest tenth and Melted value from core to the nearest hundredth) and 'Total Snow and Ice on Ground at Observation Time' (Depth of total snow and ice in inches to the nearest half inch and Melted value from core to the nearest hundredth). The 'Duration Information' section is partially visible at the bottom.

**CoCoRaHS** COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
"Because every drop counts"

Home | States | View Data | Maps | **My Data** | My Account | Admin | Logout

### My Data Entry : Daily Precipitation Report Form

**Precipitation Report Form** Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

\* Denotes Required Field

5/17/2014 \* **Observation Date** ?

7:00 AM \* **Observation Time** ?

0.59 in. \* **Rain and Melted Snow to the nearest hundredth inch that has fallen in the gauge during the past 24 hours, or T for trace, or NA for unknown.** ?

**Observation Notes:** (This will be available to the public) ?

Quick thunderstorm dumped over a half of inch of rain.  
Tree branches down do to windy conditions.

**New Snowfall**

NA in. **Accumulation of new snow in inches to the nearest tenth** ?

NA in. **Melted value from core to the nearest hundredth** ?

**Total Snow and Ice on Ground at Observation Time**

NA in. **Depth of total snow and ice (new and old) in inches to the nearest half inch** ?

NA in. **Melted value from core to the nearest hundredth** ?

**Duration Information**

Enter the total precipitation measured in your gauge.  
Record your measurement in hundredths (0.00")

**CoCoRaHS** COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
"Because every drop counts"

Home | States | View Data | Maps My Data | My Account | Admin | Logout

### My Data Entry : Daily Precipitation Report Form

Submit Data Reset

**Precipitation Report Form**

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

\* Denotes Required Field

5/17/2014 \*Observation Date ?

7:00 AM \*Observation Time ?

**Record your measurement in hundredths (0.00)**

**0.59** in. \*Rain and Melted Snow to the nearest hundredth inch that has fallen in the gauge during the past 24 hours, or T for trace, or NA for unknown. ?

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Tree branches down do to windy conditions.

**New Snowfall**

NA in. Accumulation of new snow in inches to the nearest tenth ?

NA in. Melted value from core to the nearest hundredth ?

**Total Snow and Ice on Ground at Observation Time**

NA in. Depth of total snow and ice (new and old) in inches to the nearest half inch ?

NA in. Melted value from core to the nearest hundredth ?

**Duration Information**

**Enter My New Reports**

- Daily Precipitation
- Multi-Day Accumulation
- Hail
- Significant Weather
- Monthly Zeros
- Drought Impact Report
- Evapotranspiration

**FROST Reports**

- Frost
- Optics
- Snowflake
- Thunder

**List/Edit My Reports**

- Daily Precipitation
- Multi-Day Accumulation
- Hail
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**FROST Reports**

- Optics
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# You can enter comments under “notes”

These are very helpful to augment your observation

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"Because every drop counts"

Home | States | View Data | Maps My Data | My Account | Admin | Logout

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\* Denotes Required Field

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  \***Observation Time** ?  
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**Total Snow and Ice on Ground at Observation Time**

in. **Depth of total snow and ice (new and old) in inches to the nearest half inch** ?  
 in. **Melted value from core to the nearest hundredth** ?

**Duration Information**

**Enter My New Reports**

- [Daily Precipitation](#)
- [Multi-Day Accumulation](#)
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**List/Edit My Reports**

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- [Snowflake](#)
- [Thunder](#)



# Submit your report

Click "Submit Data" and your observation is recorded on our site

**CoCoRaHS** COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
"Because every drop counts"

Home | States | View Data | Maps My Data | My Account | Admin | Logout

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**Duration Information**

**Enter My New Reports**

- [Daily Precipitation](#)
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**FROST Reports**

- [Frost](#)
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- [Thunder](#)

**List/Edit My Reports**

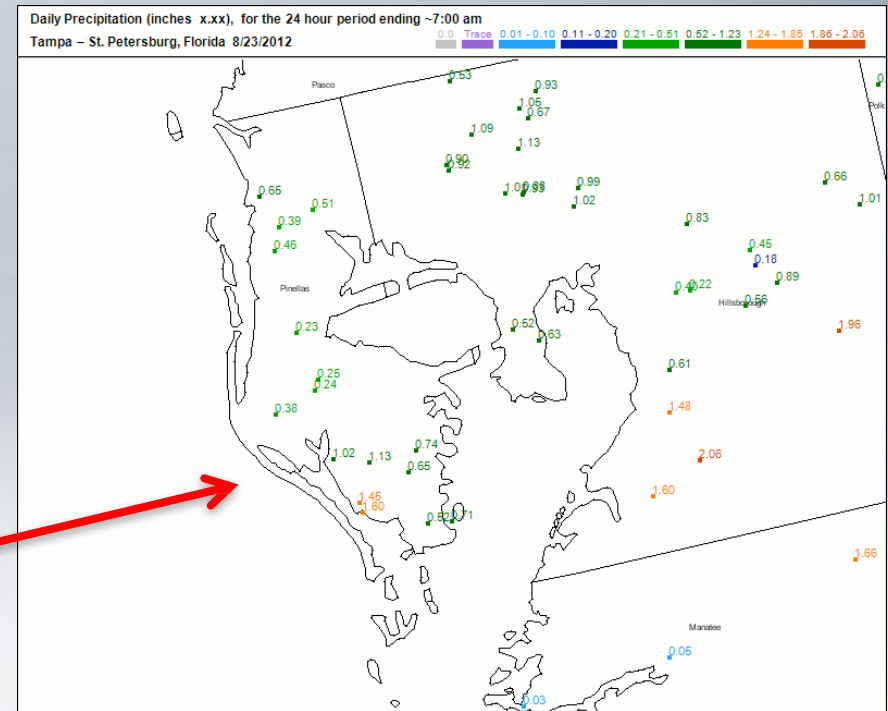
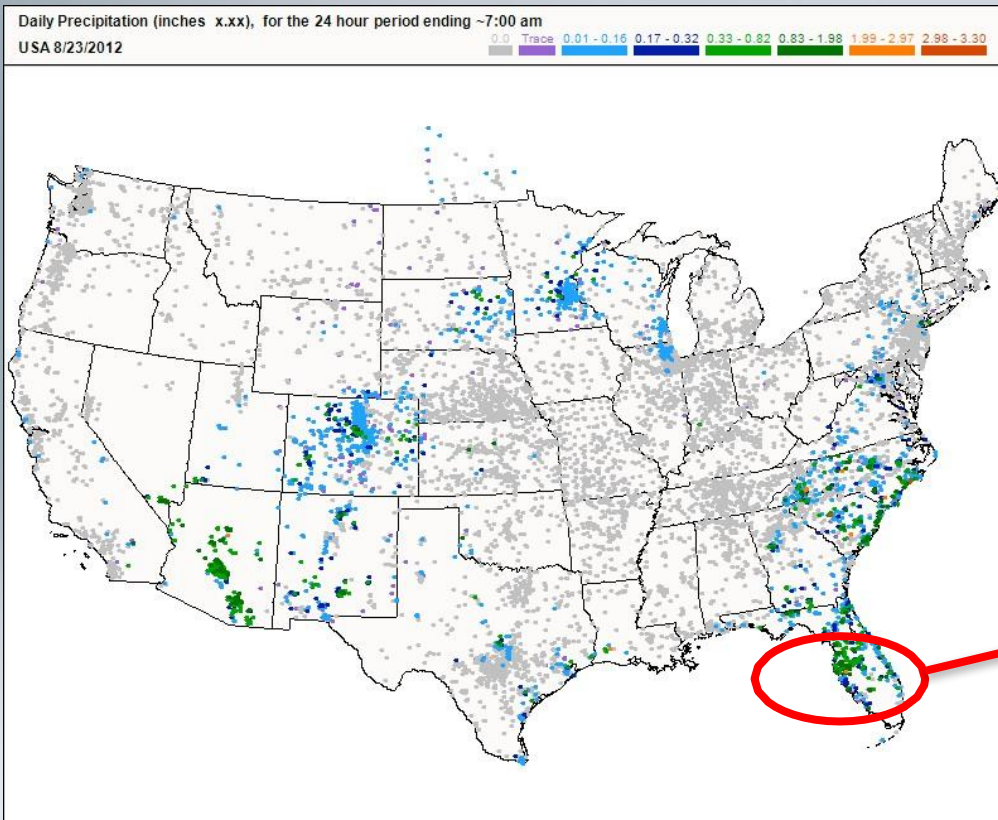
- [Daily Precipitation](#)
- [Multi-Day Accumulation](#)
- [Hail](#)
- [Significant Weather](#)
- [Drought Impact Report](#)
- [Evapotranspiration](#)

**FROST Reports**

- [Optics](#)
- [Frost](#)
- [Snowflake](#)
- [Thunder](#)

# To see your Observation on our maps


Click on your state from our main page and then click on your county



Observations are available (and sortable) in table form by clicking on “View Data” from the main menu.




# Re-entering an erroneous report



**COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK**  
*"Because every drop counts"*

Home | States | View Data | Maps      My Data | My Account | Admin | Logout



**My Data Entry : List My Daily Precipitation Reports** US Units ▾

Showing 1 - 50 of 2079 Records.      <Back Page 1 ▾ Next>

Date ▲	Time	Station Number	Station Name	Total Precip in.	New Snow in.	Total Snow in.	State	County	Actions
5/28/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.11	NA	NA	CO	Larimer	
5/27/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.02	NA	NA	CO	Larimer	
5/26/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.10	NA	NA	CO	Larimer	
5/25/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	T	NA	NA	CO	Larimer	
5/24/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.66	NA	NA	CO	Larimer	
5/22/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.36	NA	NA	CO	Larimer	
5/18/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	T	NA	NA	CO	Larimer	
5/17/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.10	NA	NA	CO	Larimer	
5/13/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.00	NA	NA	CO	Larimer	
5/12/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.82	NA	NA	CO	Larimer	
5/11/2014	8:00 AM	CO-LR-610	Fort Collins 3.5 SW	1.20	1.0	NA	CO	Larimer	
5/9/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.17	NA	NA	CO	Larimer	
5/8/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	1.08	NA	NA	CO	Larimer	
5/7/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.03	NA	NA	CO	Larimer	
5/6/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.00	0.0	NA	CO	Larimer	
5/5/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.00	0.0	NA	CO	Larimer	
5/4/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.00	0.0	NA	CO	Larimer	
5/3/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.00	0.0	NA	CO	Larimer	
5/2/2014	7:00 AM	CO-LR-610	Fort Collins 3.5 SW	0.00	0.0	NA	CO	Larimer	

**Enter My New Reports**

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- [Multi-Day Accumulation](#)
- [Hail](#)
- [Significant Weather](#)
- [Monthly Zeros](#)
- [Drought Impact Report](#)
- [Evapotranspiration](#)
- FROST Reports**
- [Frost](#)
- [Optics](#)
- [Snowflake](#)
- [Thunder](#)

**List/Edit My Reports**

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- [Thunder](#)



# Other Important Reports

Hail Report

Significant Weather Report (Rain and Snow)

Monthly Zeros

Multi-Day Precipitation Report

# Hail Report

**CoCoRaHS** COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
*"Because every drop counts"*

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### My Data Entry : Hail Report Form

#### Enter My New Reports

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- [Significant Weather](#)
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- [Evapotranspiration](#)

#### FROST Reports

- [Optics](#)
- [Frost](#)
- [Snowflake](#)
- [Thunder](#)

#### Hail Report Form

Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

\* Denotes Required Field

4/26/2014 \*Date of Hail Storm ?

4:50 PM Time Hail Storm Began ?

Yes  No Report was taken at registered location?

#### Size of hailstones

Smallest: 1/4" Pea Size

Average: 1/2" Grape

Largest: 3/4" Penny Size

#### Hail Lasted

15 Minutes This time is accurate within 2 min.

Hailfall was:  Continuous  Intermittent

#### Hailstones were:

(Check all that apply)

Hard  Soft  Mixed (Hard & Soft)  Clear Ice  White Ice

Was there more rain than hail?  Yes  No


#### Hail Started:

Before rain  After rain  Same time as rain

#### Largest Hail Started

Before smaller hail  After smaller hail  Same time as smaller hail

# Monthly Zeros Report



COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
"Because every drop counts"

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## My Data Entry : Monthly Zeros Form

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  - [Multi-Day Accumulation](#)
  - [Hail](#)
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  - [Evapotranspiration](#)

**Monthly Zeros**      Submit      Reset

Station Number : CO-LR-610      Station Name : Fort Collins 3.5 SW

≤      **May 2014**      ≥

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	1	2	3
				Precip: 0	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip
4	5	6	7	8	9	10
<input checked="" type="checkbox"/> 0.0 Precip	Precip: 0	Precip: 0	Precip: 0.03	Precip: 1.08		
11	12	13	14	15		
Precip: 1.20	Precip: 0.82	Precip: 0	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip		
18	19	20	21	22		
Precip: T	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	Precip: 0.36		
25	26	27	28	29		
Precip: T	Precip: 0.10	Precip: 0.02	Precip: 0.11	<input type="checkbox"/> 0.0 Precip		
1	2	3	4	5		

**Monthly Zeros**      Submit      Reset

Station Number : CO-LR-610      Station Name : Fort Collins 3.5 SW

≤      **May 2014**      ≥

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	1	2	3
				Precip: 0	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip
4	5	6	7	8	9	10
<input checked="" type="checkbox"/> 0.0 Precip	Precip: 0	Precip: 0	Precip: 0.03	Precip: 1.08	Precip: 0.17	<input type="checkbox"/> 0.0 Precip
11	12	13	14	15	16	17
Precip: 1.20	Precip: 0.82	Precip: 0	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	Precip: 0.10
18	19	20	21	22	23	24
Precip: T	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	Precip: 0.36	<input type="checkbox"/> 0.0 Precip	Precip: 0.66
25	26	27	28	29	30	31
Precip: T	Precip: 0.10	Precip: 0.02	Precip: 0.11	<input type="checkbox"/> 0.0 Precip		
1	2	3	4	5	6	7


Click a empty box and it will automatically fill in a zero (0.00") for that day.

Don't forget to hit submit.



# Significant Weather Report

(both rain and snow)



COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
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- Evapotranspiration

### FROST Reports

- Frost
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- Snowflake
- Thunder

### List/Edit My Reports

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### FROST Reports

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- Thunder

### My Data Entry : Significant Weather Report Form

**Notification:**

- Use this form to report heavy rain or snow that has just fallen, or is still falling.

### Significant Weather Report

Submit Data    Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

\* Denotes Required Field

9/6/2013 \*Observation Date

5:45 PM \*Observation Time

20 Minutes Time duration that the report covers

#### Rain

in. New Rain and Melted Snow that has fallen during the report duration, in inches to the nearest **hundredth**

in. Total Precipitation, rain and melted snow, since storm began, in inches to the nearest **hundredth**

#### Snow

in. Depth of New Snow that has fallen during the report duration, in inches to the nearest **tenth**

in. Total depth of snow and ice on ground at the time of this observation to nearest **half inch**

# Multi-Day Precipitation Form

If you are away on vacation or out of town this is the form for you.

Just put in the dates that you were gone and record what you found in the gauge.

There is no need to file an additional daily report.

**CoCoRaHS** COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK  
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### My Data Entry : Multi-Day Precipitation Report Form

#### Multiple Day Accumulation Form

Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

5/20/2014 First day of accumulation period. This day should be one day after your last report.

5/27/2014 Date the rain gauge was emptied.

8:00 AM Time the rain gauge was emptied.

Yes  No Report was taken at registered location?

2.15 in. Multi Day Precipitation (in inches), or T for trace, or NA for unknown.

in. Total Depth of Snow on Ground (in inches)

in. Core Precipitation (in inches)

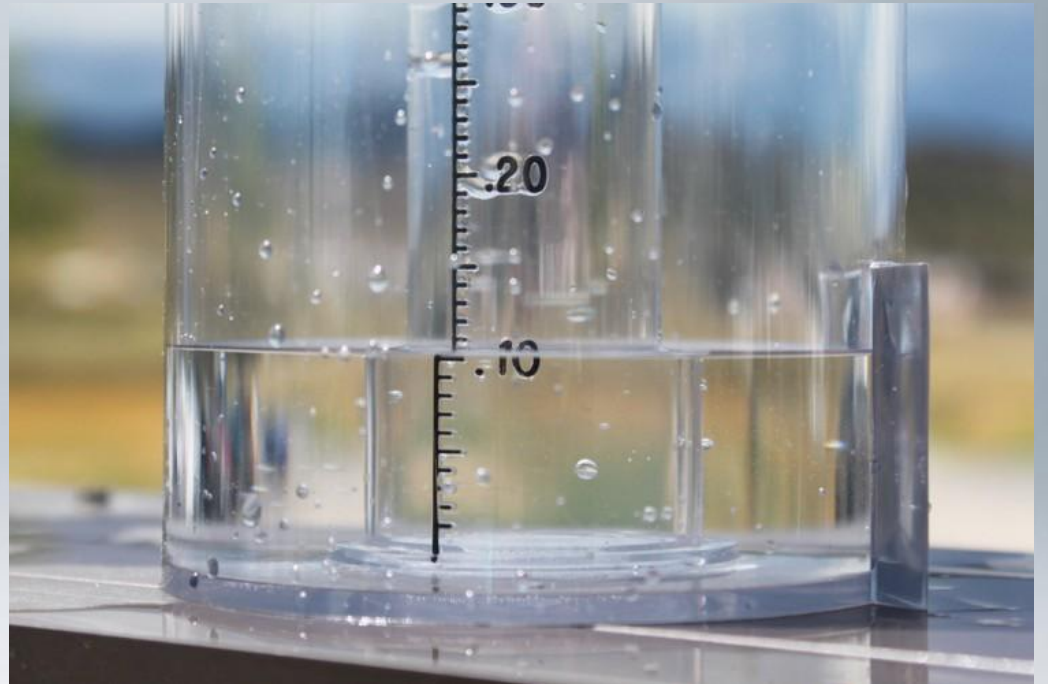
Notes

Was away for a week. Looks like we had some beneficial rain while we were on vacation!

Submit Data Reset

# Section III

Frequently asked questions





Do I have to be home everyday  
to participate in CoCoRaHS?



Photo: Fred Naess

**Answer:** *No. Report when you are able. If you are gone, you may leave your gauge outside and report a multi-day total when you return*

What if it hails when I'm not home ?



**Answer:** *We still would like your hail pad. Report as much info as you can find out from friends and neighbors.*

Do I report morning dew that has collected in my rain gauge?



Photo: TanyaPhillips

**Answer:** *No. Dew is not precipitation, but you may note the dew in the comments*



How long is my commitment to CoCoRaHS ?



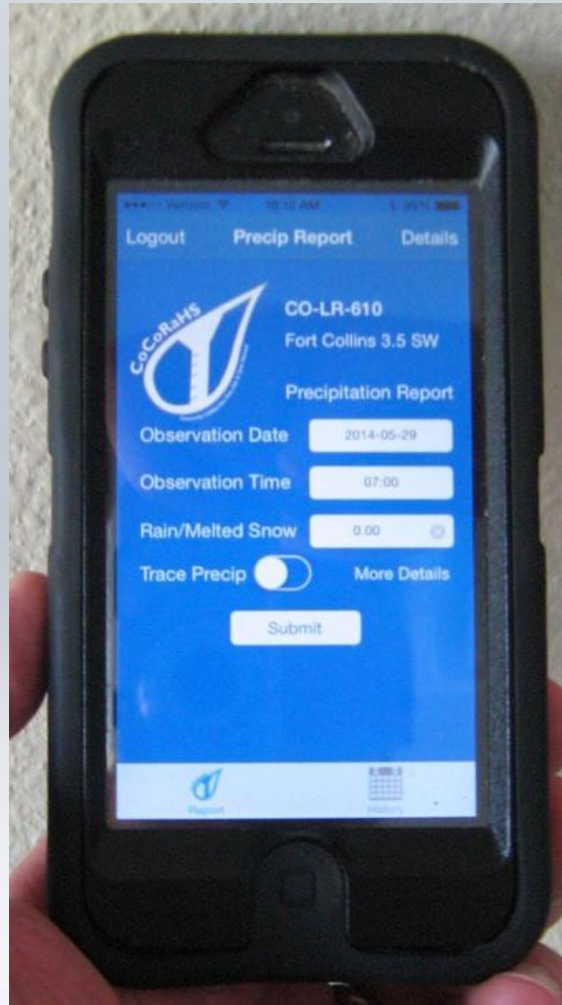
**Answer:** *Ideally, at least one season, but the longer you contribute, the more valuable the data become.*

I have an automated weather station with a rain gauge. Can I use that instead of the CoCoRaHS gauge?



**Answer:** *In order to accurately compare CoCoRaHS reports, all observers must use the 4-inch CoCoRaHS gauge. Automated rain gauges tend to underestimate a heavy rainfall and do not accurately measure water content of snow. You are welcome to place the automated gauge beside the 4-inch gauge to compare measurements, but report what falls in the 4-inch gauge.*

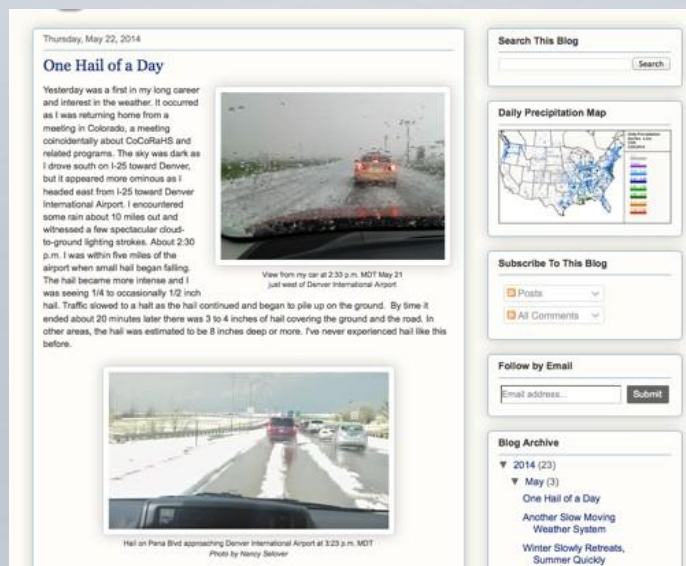
Can I file my observations on my mobile device?



**Answer:** Yes, a CoCoRaHS app is available for both the iPhone and Android Phone



# Where can I go for additional resources?



**Answer:** CoCoRaHS has a variety of resources to connect to from its homepage. There are educational YouTube videos, the CoCoRaHS Blog, Messages of the Day, State Newsletters, Measuring Evapotranspiration and a climate guide for Master Gardeners just to name a few. You can also connect to CoCoRaHS via social media such as Facebook and Twitter.

You are now ready to measure precipitation  
for the CoCoRaHS Network



**Thanks for joining this evening!**

**Bel Melendez**  
**[Belkys.Melendez@noaa.gov](mailto:Belkys.Melendez@noaa.gov)**