

Training Slide-Show



"Because every drop counts!"



What Is CoCoRaHS??

“CoCoRaHS is a grassroots, non-profit, community-based, high-density precipitation network



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



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



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



4-inch diameter
high capacity rain gauges



Aluminum foil-wrapped
Styrofoam hail pads



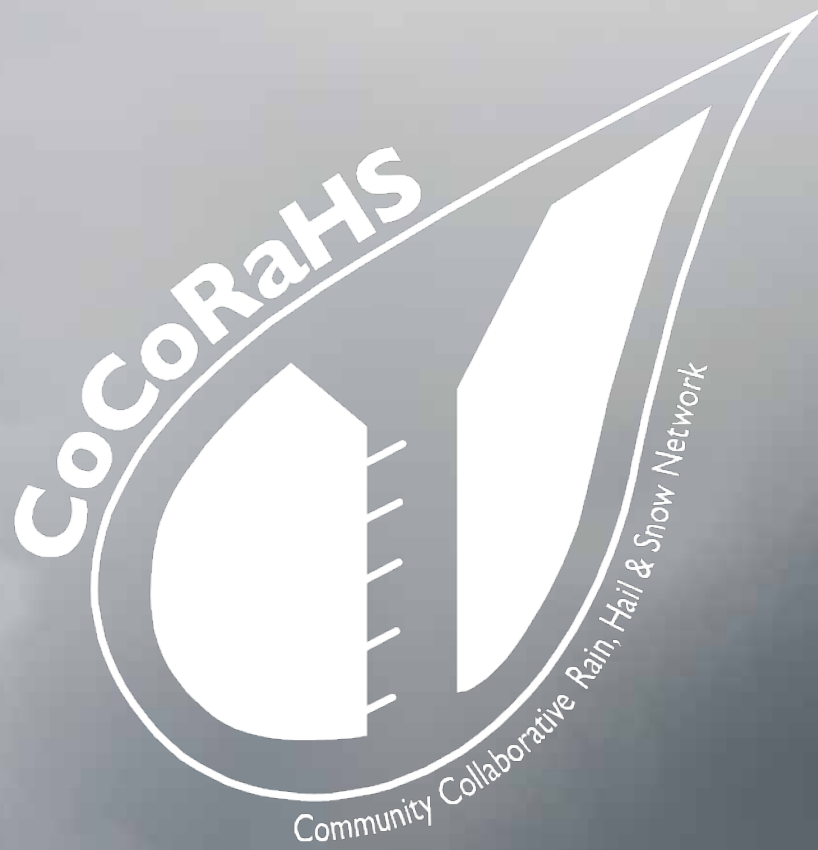
TRAINING SLIDE-SHOW

Things to know about...

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

Training is important to assure accurate, high quality data

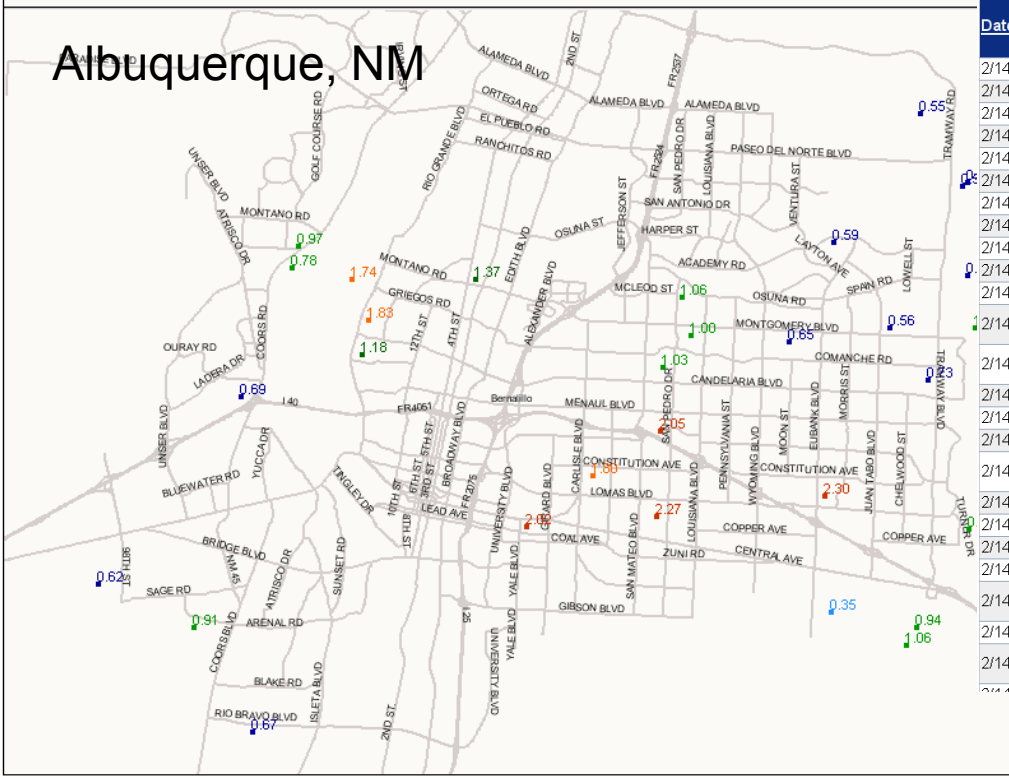
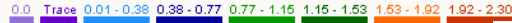
CoCoRaHS



CoCoRaHS's main focus is to provide:

quality precipitation data . . .

Daily Precipitation (inches x.xx), for the 24 hour period ending ~7:00 am
 Albuquerque, New Mexico 8/1/2006



Date	Time	Station Number	Station Name	Total Precip .in	New Snow .in	Total Snow .in	State	County	View
2/14/2007	7:00 AM	MD-GR-1	Mc Henry 4.0 SSE	2.85	6.7	12.5	MD	Garrett	View
2/14/2007	11:59 PM	MD-MG-8	Gaithersburg 2 WNW	2.80	4.2	4.0	MD	Montgomery	View
2/14/2007	10:00 AM	MD-CR-7	Westminster 1.0 W	2.10	5.5	5.5	MD	Carroll	View
2/14/2007	7:40 AM	MD-MG-1	Montgomery Village 1.3 SSW	2.05	4.1	3.0	MD	Montgomery	View
2/14/2007	5:44 AM	MD-WH-1	Williamsport 2.8 ENE	1.92	2.6	5.0	MD	Washington	View
2/14/2007	7:15 AM	MD-CR-3	Mount Airy 0.2 SE	1.90	5.1	5.0	MD	Carroll	View
2/14/2007	7:00 AM	MD-CR-6	Taneytown 3.2 NE	1.83	5.0	NA	MD	Carroll	View
2/14/2007	7:00 AM	MD-HW-2	Sykesville 1.7 SSE	1.78	5.0	5.0	MD	Howard	View
2/14/2007	7:00 AM	MD-HW-12	Sykesville 2.6 SE	1.61	0.0	NA	MD	Howard	View
2/14/2007	8:00 AM	MD-MG-3	Potomac 0.9 NNW	1.54	3.2	NA	MD	Montgomery	View
2/14/2007	7:00 AM	MD-MG-2	Redland 0.8 NNE	1.52	4.5	4.5	MD	Montgomery	View
2/14/2007	7:00 AM	MD-PG-37	Brandywine 6.7 ESE	1.49	T	T	MD	Prince George's	View
2/14/2007	7:00 AM	MD-PG-1	Bowie 0.5 E	1.47	1.0	1.5	MD	Prince George's	View
2/14/2007	7:00 AM	MD-SM-3	Leonardtown 0.6 NE	1.42	0.0	NA	MD	St. Mary's	View
2/14/2007	7:00 AM	MD-CH-7	Waldorf 3.2 SW	1.40	0.8	0.7	MD	Charles	View
2/14/2007	7:00 AM	MD-HW-11	Columbia 1.7 W	1.40	3.2	3.5	MD	Howard	View
2/14/2007	7:00 AM	MD-PG-7	Camp Springs 1.6 NNW	1.38	1.8	NA	MD	Prince George's	View
2/14/2007	4:00 PM	MD-BL-7	White Hall 3.5 NE	1.38	NA	NA	MD	Baltimore	View
2/14/2007	7:00 AM	MD-CV-1	Marlton 6.0 E	1.37	0.3	0.0	MD	Calvert	View
2/14/2007	7:00 AM	MD-SM-4	Charlotte Hall 3.6 ENE	1.37	0.3	T	MD	St. Mary's	View
2/14/2007	7:00 AM	MD-MG-24	White Oak 1.2 N	1.35	2.5	2.0	MD	Montgomery	View
2/14/2007	7:00 AM	MD-PG-35	Brandywine 2.5 NNW	1.35	1.0	1.4	MD	Prince George's	View
2/14/2007	7:00 AM	MD-WC-1	Vienna 11.3 SSW	1.35	0.0	NA	MD	Wicomico	View
2/14/2007	7:00 AM	MD-PG-6	Friendly 1.0 N	1.32	2.4	1.8	MD	Prince George's	View
2/14/2007	7:00 AM	MD-MG-5	North Laurel 1.0 SE	1.31	3.4	2.5	MD	Montgomery	View

Daily data
 in table form

Daily precipitation maps:
 Rainfall, Hail and Snowfall

This data allows CoCoRaHS to supplement existing networks and provide many useful results to scientists, resource managers, decision makers and other end users on a timely basis.

. . . as well as educational opportunities



Volume 1, Issue 2 October 2004

THE GAUGE

The CoCoRaHS Network Newsletter

A New Look, A New Web site! by Henry Rogers

Those of us who have been active in CoCoRaHS before 2000, know all too well the look and feel of our site. It was first developed back in 1998 primarily by high school students. The evolution of the site improved steadily until 1999 with the help of our volunteers. Mostly steady, but the look changed very little. Our something needed the way we liked, but it was a bit like a good head-to-toe haircut and a new look.

Then along came 2000. There were a lot of new ideas and hundreds of new volunteers joining CoCoRaHS. We were quickly improving our old friend. Furthermore, our sponsors and donors were strongly urged to develop a more modern website. John Turner, our Web developer took the project. The result of this effort and display is a look, user interface, and content that we are proud to show. Our staff has spent hundreds of hours looking, volunteers have had to find and use their own usernames and passwords and try the new

site looks. We can see approximately thousands of new volunteers, and it is really easy to add new sites. We not only have an efficient data storage and retrieval data base, rating in the background, but we also have an extensive volunteer status for background checks.

"Because Every Drop Counts!" by Nolan Desobas

Water is a hot topic. It has become one of our most popular newsletters. The CoCoRaHS. It really continues to grow and get older, but it's recognized its second anniversary. Five hundred more stations. Two sponsors have joined our efforts. We've had some staff changes. But one thing has not changed: The rain, snow and hail that we measure and report

continues to be critically important to us. Even in our communities. That is why we have adopted the motto "Because Every Drop Counts!"

Some people shudder when they hear that we measure rainfall in the nearest 0.01 inches, rounded to the nearest 0.1 inches, and we even count every hail stone that falls on our special hail measurement pads. But the fact is it does matter. Only by measuring carefully and accurately are we able to track the devastating storm patterns that

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

Home | Station | View Data | Map | My Data | My Account | Admin | Logout

Hail Pad Examples

Rain Drops


Soft Hail Stones


Small Hail Stones





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

Home | Station | View Data | Map | My Data | My Account | Admin | Logout

My Data Entry : View Daily Precipitation Report

Message of the Day:

Don't forget to remove the funnel and inner tube from your rain gauge if freezing weather is expected.

We realize that many of you have had to reenter your log's information to get into our system recently. Apparently, the server configuration changed with it caused a change in our cookies, which caused your saved login information to be lost. We apologize for the inconvenience and would like to thank everyone for the patience.

Now would be a good time to print out and save your login information in case this ever happens again. You can always have your user name and password sent to your e-mail address by clicking on the "Find your login info" link on the Login page.

Confirmation:

- The Daily Precipitation Report was saved.

Daily Precipitation Report

Station Number: CO-LR-410 Station Name: Fort Collins 2.8.04
 Observation Date: 10/21/2006 7:30 AM
 Submitted: 10/27/2006 9:43 AM
 Total 24-hour Amount: 0.00 inches

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

"Helping to provide the public with a better understanding of weather"

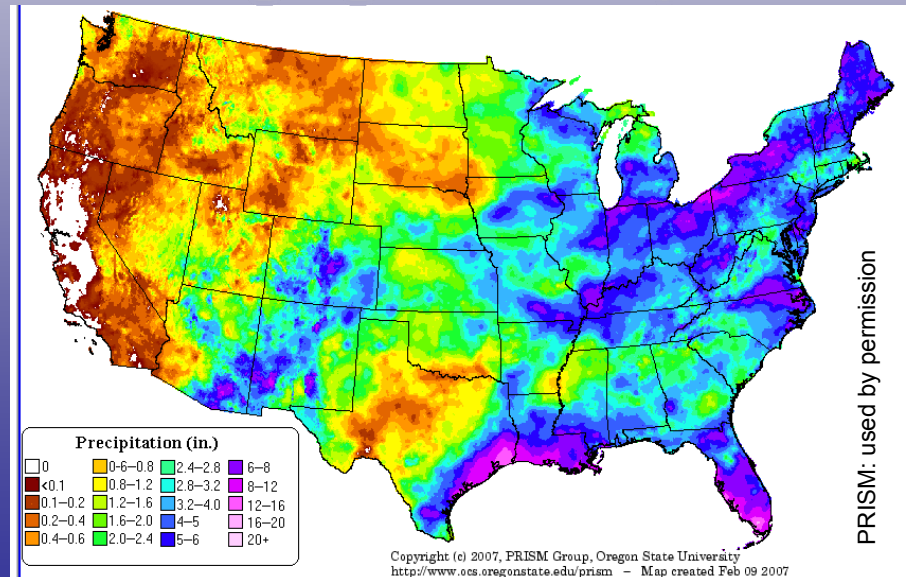
Why CoCoRaHS ??



1) Precipitation is important and highly variable

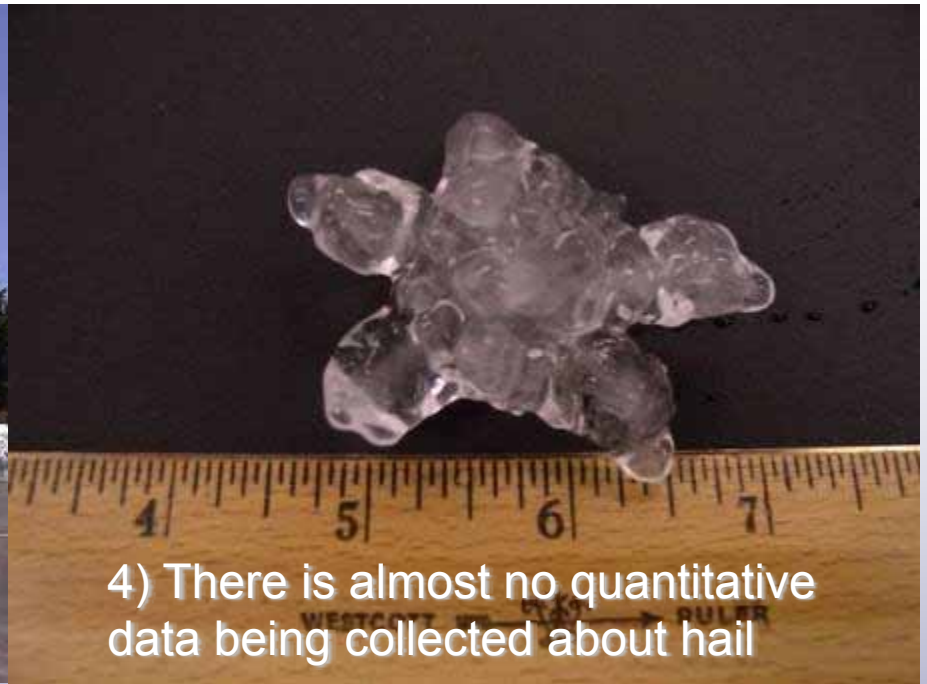


2) Data sources are few and rain gauges are far apart





3) Measurements from many sources are not always accurate (especially snow)



4) There is almost no quantitative data being collected about hail

5) Storm reports can save lives

STORM TOLL
Deaths - 5 confirmed
Injuries - 40
Missing - 18
Rescued - 160
Damages - Tens of millions of dollars at Colorado State University, \$1.5 million to \$2 million to city roads and bridges; \$1 million to city parks and trails; no estimate for private property.

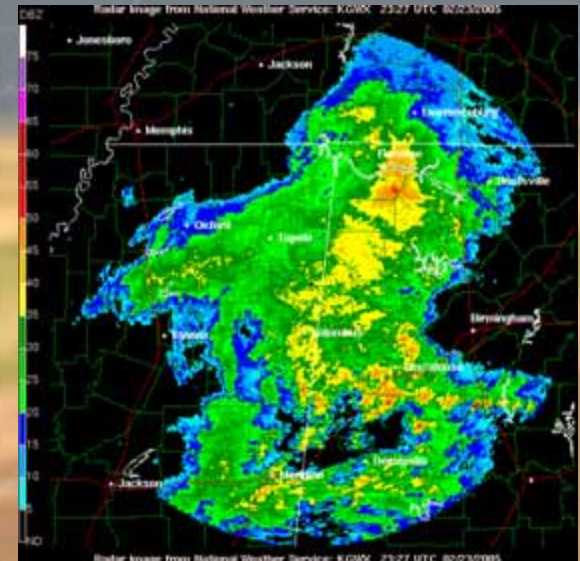
Wednesday
REPORT COLLINS
COLORADOAN
City death toll at 5; damage in millions
CSU's book losses speak volumes
Rained breaks 20-year record

July 30th
1997



CoCoRaHS data is used by many

- 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
- Teachers and Students
 - Geoscience education tool
 - Taking measurements
 - Analyzing data
 - Organizing results
 - Conducting research
 - Helping the community



Who Sponsors CoCoRaHS?

The National Oceanic and Atmospheric Administration

Colorado State University and other universities

USDA, BLM, Cooperative Extension

US Bureau of Reclamation

National Weather Service Local Offices

Individual Contributors

As well as many others

How Can you become part of the network?

A photograph of a rain gauge mounted on a wooden post in a grassy field with a rainbow in the background. The rain gauge is a clear plastic cylinder with a metal frame, and it is covered in water droplets. The background shows a green field and a rainbow in a hazy sky.

Five easy steps

*Simply sign-up on the
CoCoRaHS web page
www.cocorahs.org*

*Obtain a 4" plastic rain gauge
(info available on web site)*

*View the "training slide show" or
attend a training session*

*Set-up the gauge in a "good"
location in your backyard*

*Start observing precipitation
and report on-line daily*

SECTION ONE:

Setting Up Your Equipment and Observing Precipitation

In this section we will:

- a) Show how/where to place your gauge and hail pad*
- b) Explain how to measure rainfall*
- c) Illustrate how to observe hail*
- d) Show how to measure snow depth and water content*

CoCoRaHS

The logo for CoCoRaHS (Community Collaborative Rain, Hail, and Snow Network) is located in the bottom right corner. It features the text "CoCoRaHS" in a bold, blue, sans-serif font, slanted upwards. Below the text is a stylized graphic of a rain gauge, also in blue, with a white interior and a scale on the right side.

a) Placement of your rain gauge



**Location! Location!
Location!**

CoCoRaHS

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!



Avoid placing it
under trees or
any structure



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

Also avoid placing your gauge near:



Sprinklers (both big and small)



Steep slopes (a bit exaggerated)



Animals (dogs, birds, etc)



mountain lions?

CoCoRaHS

Show Notes

Avoid anything that would artificially increase or decrease your gauge catch



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

Ideal placement of your gauge



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

This is to improve gauge catch by reducing wind speed



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

This is to improve gauge catch by reducing the impact of nearby obstacles



LEVEL and BEVEL

Make sure your gauge is level



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

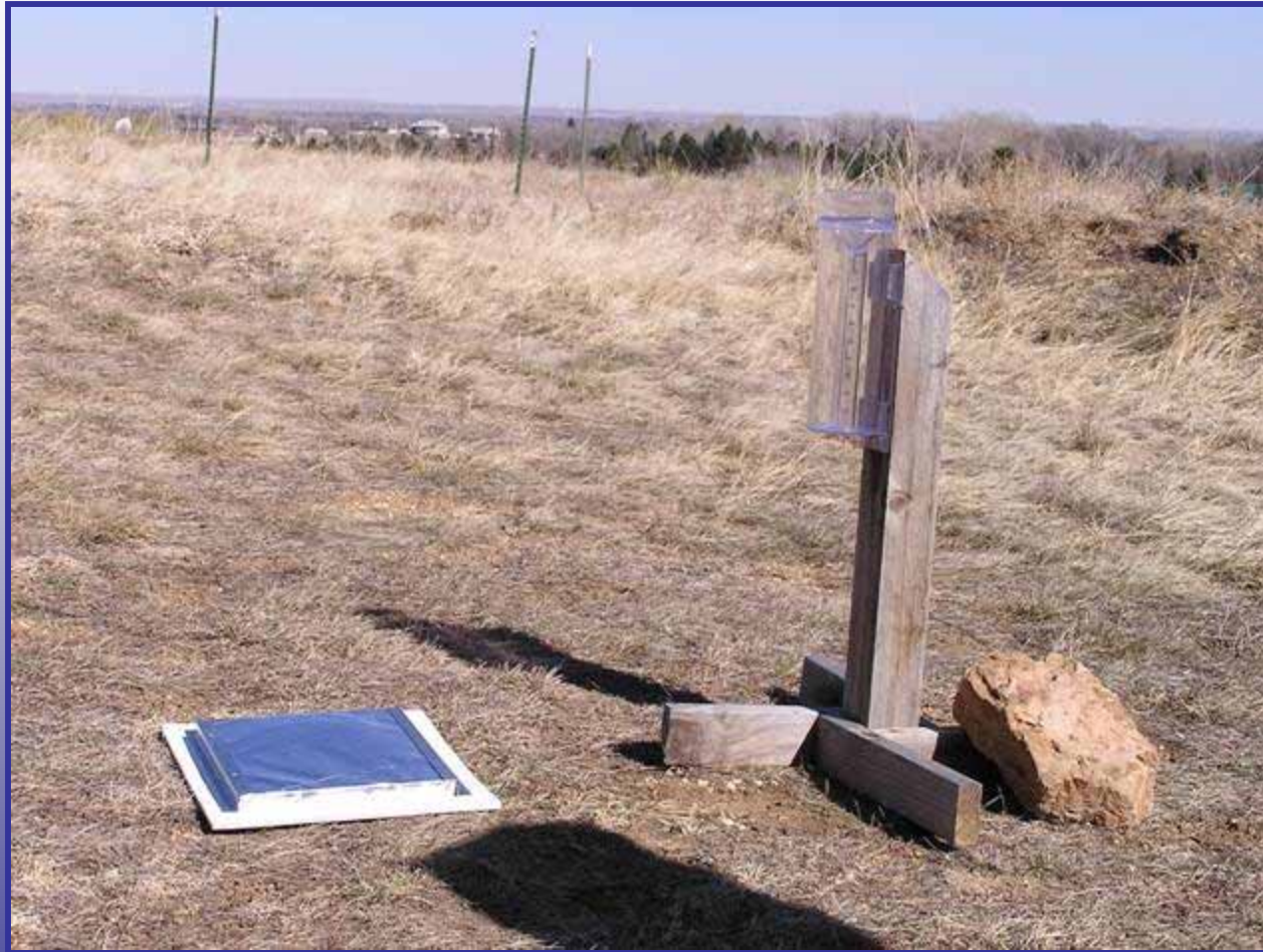
Hail Pad Placement



CoCoRaHS

Show Notes

Where should I place my hail pad?



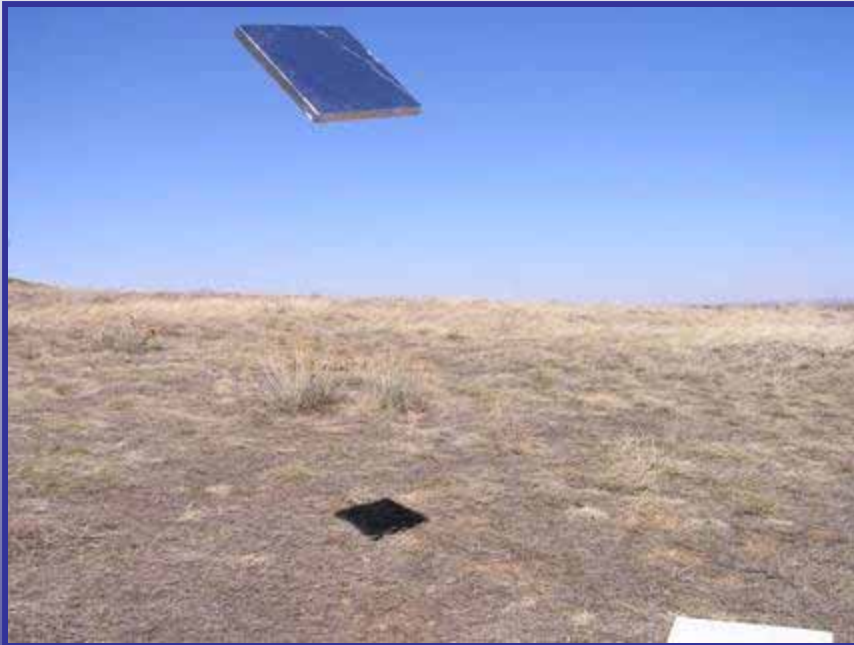
When you've found a good place for your rain gauge, that should be good enough for your hail pad as well.

Elevate and Attach



The pad must be horizontal.
It is best, but not necessary, to elevate the hail pad.
It should also be firmly attached so that . . .

. . . it doesn't blow away!



“When last seen, our hail pad was headed north at 3rd and Elm”

Write the direction the pad is facing on the pad's back



This example shows an "N" for North

b) Measuring Rainfall



CoCoRaHS

& Snow Network

When should we read our gauges?



7:00AM is preferred

Between 5:00AM and 9:00AM is OK

Other times are accepted, but they will not appear on CoCoRaHS Maps

Reading your rain gauge

- Reading the rain gauge is easy but accuracy & consistency are important.
- Here are the most common situations you may encounter when reading your gauge.



Your most common observation

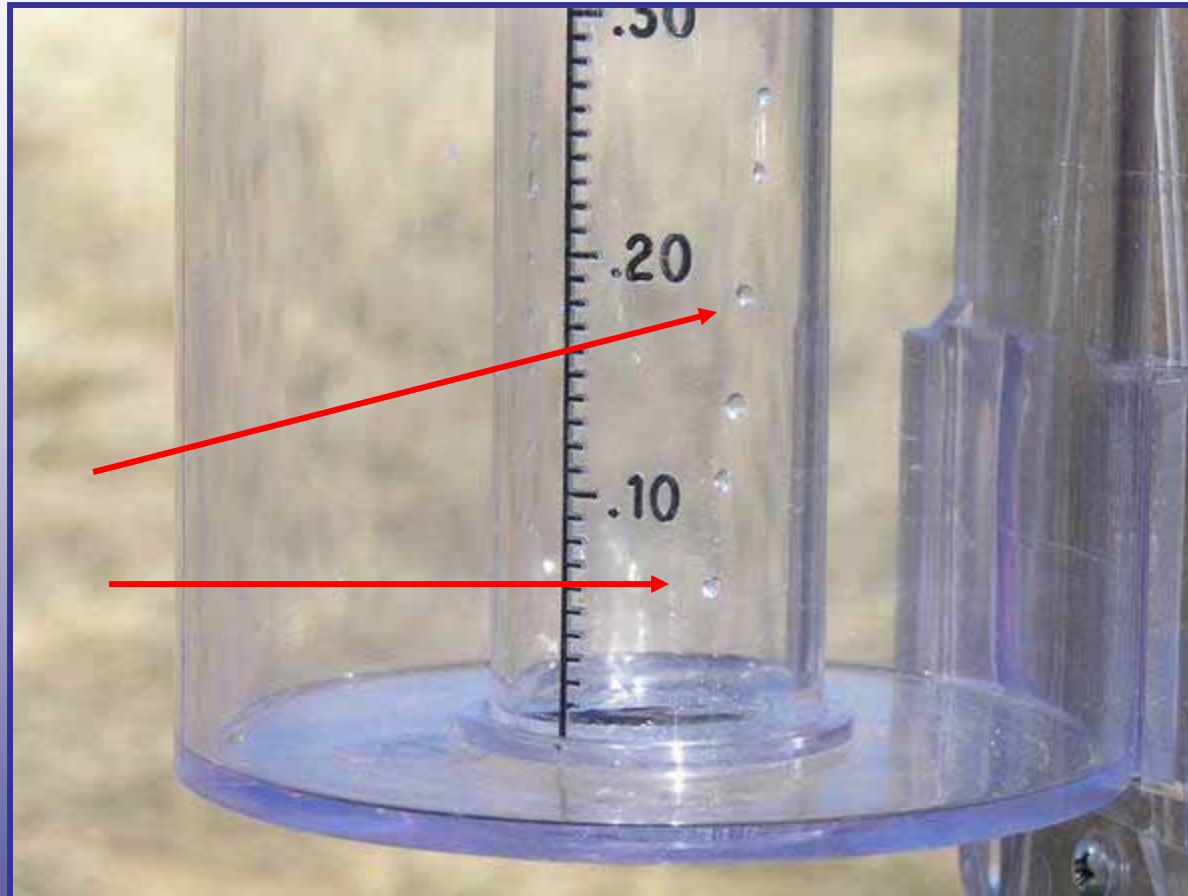


... will be zero, (0.00), nada, nothing, zilch!

It is important to know that it did NOT rain. Please report zeros!

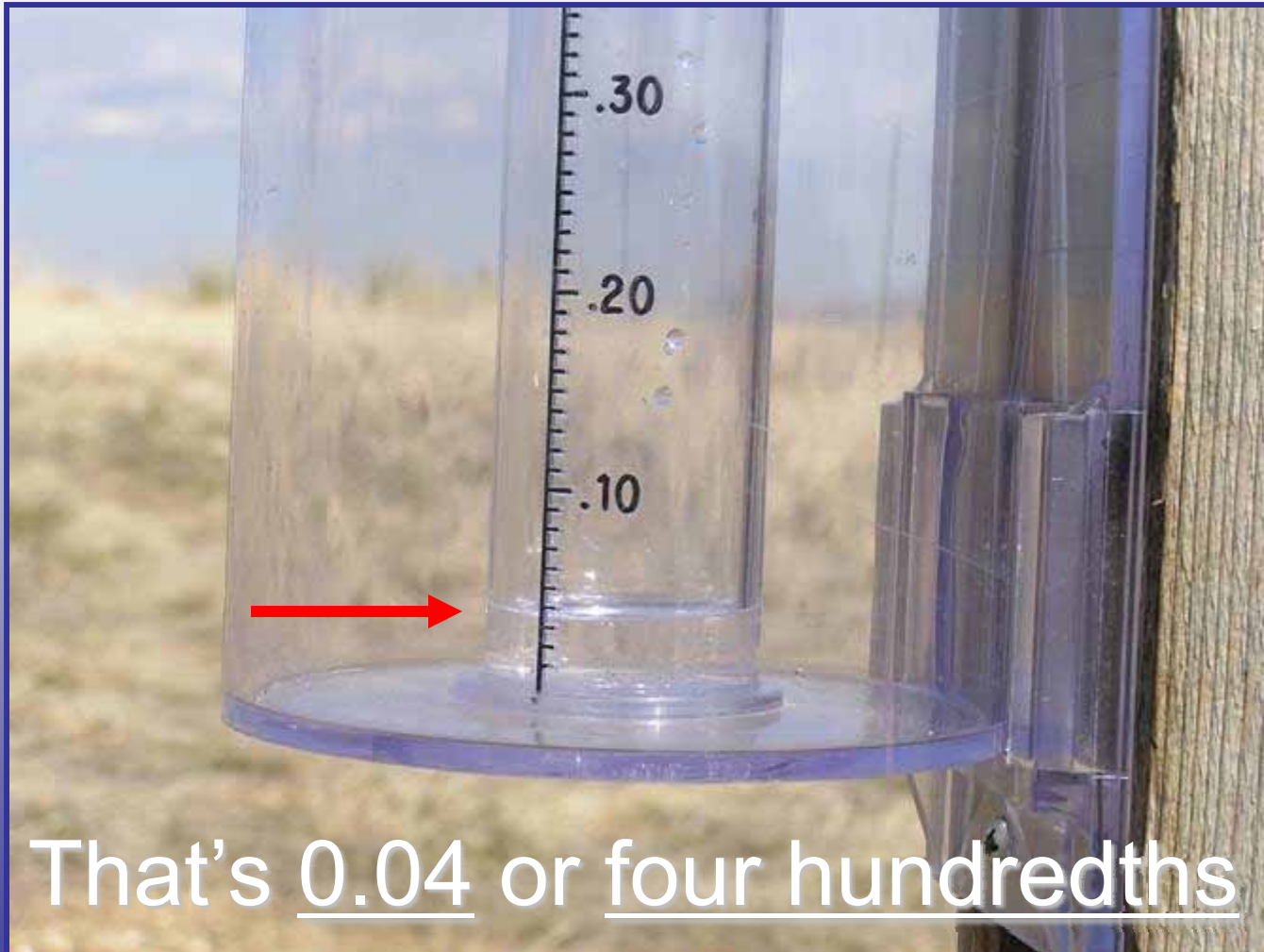
Trace “T”

T



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

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



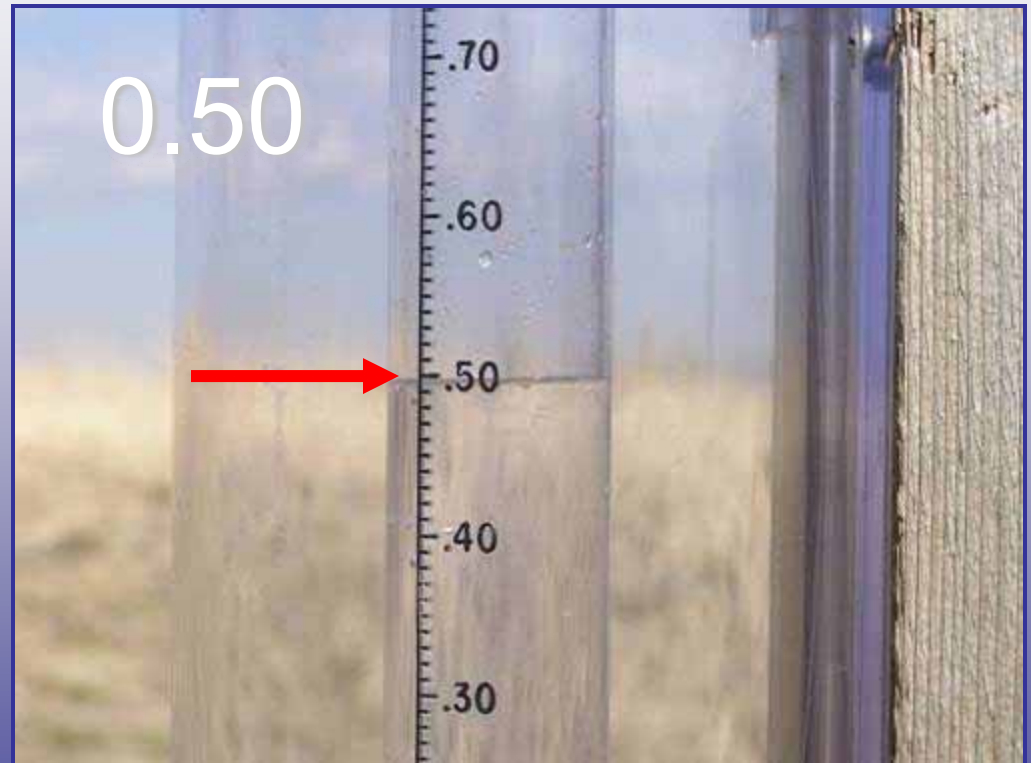
The surface of the water in the gauge looks curved. How do I know where to read?

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



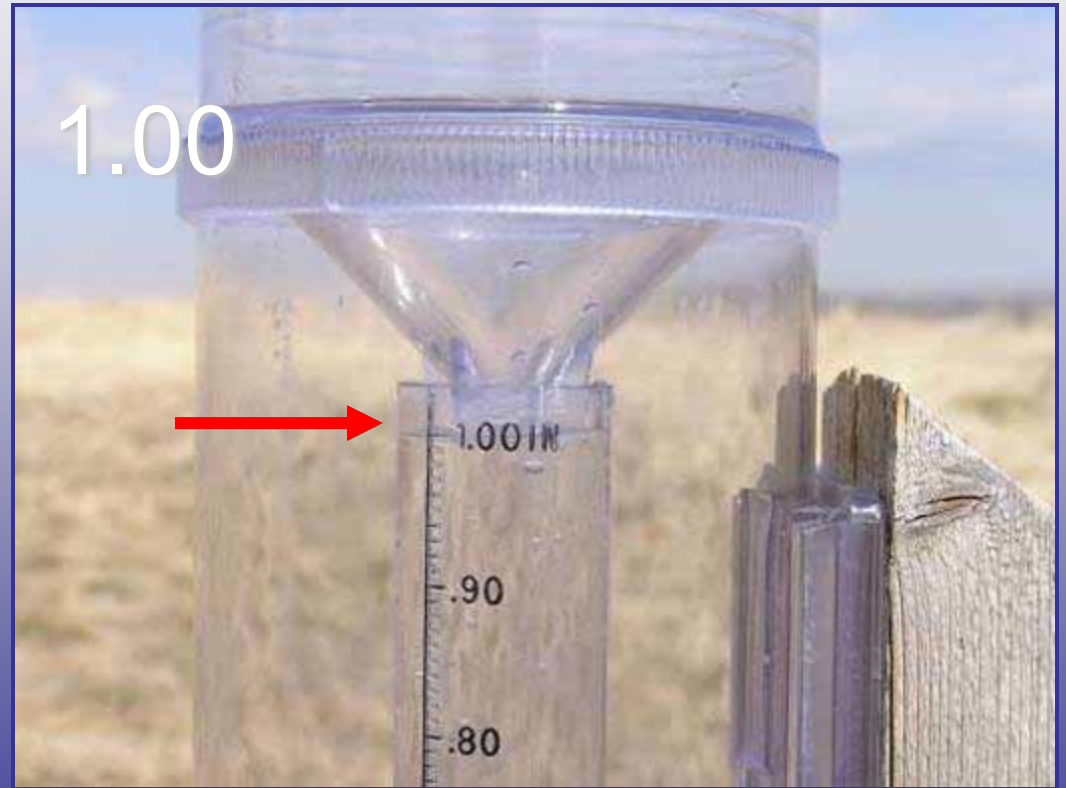
Always read the bottom of the **meniscus**, when the making your daily rain measurements.

A nice soaking rain



This is “one half” inch it’s . . . NOT 5.0, nor 0.05, but 0.50
(kind of like 50 cents out of a dollar)

A good rain



The inner tube holds 1.00 inch

DECIMALS

Getting the decimal point correct is ESSENTIAL

0.40"

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

Water! Water! Everywhere!



When more than an inch of rain falls the precipitation will overflow into the outer cylinder. The whole gauge has a capacity to hold 11 inches.

To measure greater than one inch . . .



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



Now pour the remaining water into the funnel & measure using the inner tube.



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

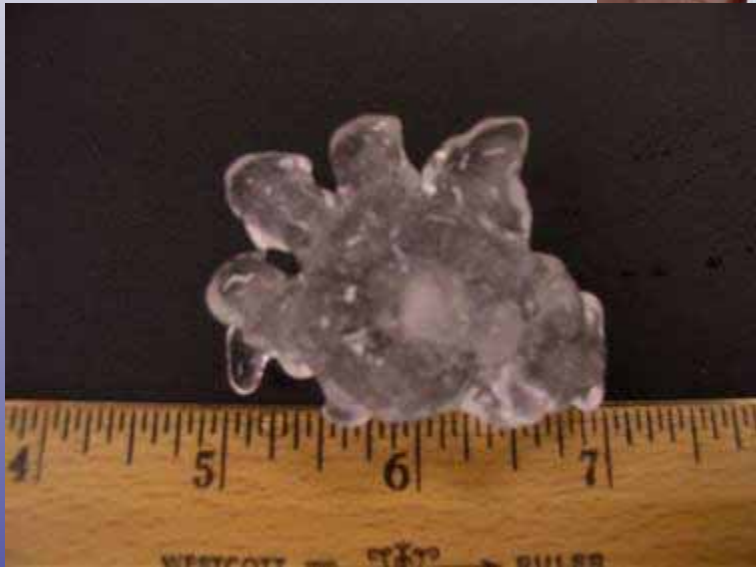


Then add up all of your measurements

$$1.00 \text{ inch} + 0.97 \text{ inches} + 0.88 \text{ inches} + 0.92 \text{ inches} = 3.77 \text{ inches}$$

Total = 3.77"

c) Observing Hail



CoCoRaHS

& Snow Network

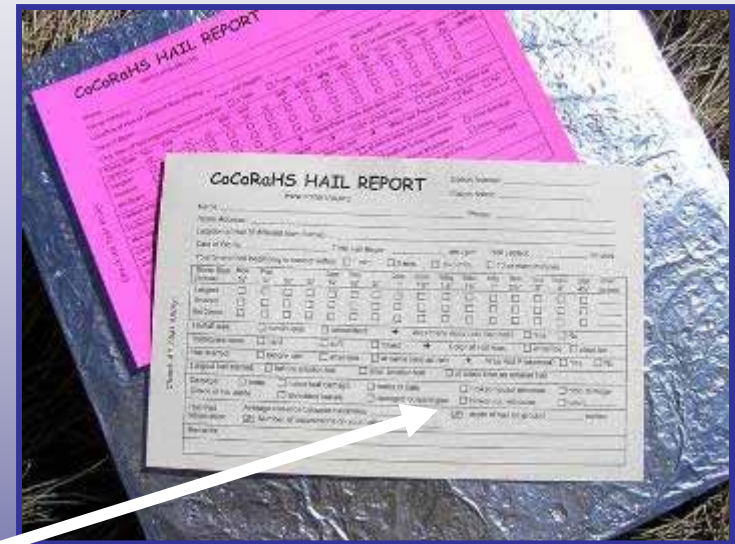


Three steps in Observing hail

#1

As hail is falling

Fill out your CoCoRaHS Hail Report Card.
After the storm is over attach it the back of the pad.



CoCoRaHS

Snow News

#2 Fill out an on-line hail report

Submit an on-line hail report as soon as you can →

Your report goes right to the the National Weather Service and it may help them in issuing a “Severe Thunderstorm Warning”. →



The screenshot shows the 'My Data Entry: Hail Report Form' on the CoCoHS website. The form includes fields for Station Number (CO-LR-610), Station Name (Fort Collins 3.5 SW), Date of Hail Storm (6/13/2006), and Time Hail Storm Began. It also has sections for 'Size of hailstones' (Smallest, Average, Largest) and 'Hail Lasted' (Minutes). There are checkboxes for 'Report was taken at registered location?' and 'Hailfall was:' (Continuous or Intermittent). A section for 'Hailstones were:' includes checkboxes for Hard, Soft, Mixed (Hard & Soft), Clear Ice, and White Ice. Other sections include 'Was there more rain than hail?' and 'Hail Started:' (Before, After, or Same time as rain).



The screenshot shows a 'Severe Thunderstorm Warning' from the National Weather Service for the Wind River Basin, WY. The warning is issued at 3:46 PM MDT on Tuesday, July 25, 2006. It includes a 'SEVERE WEATHER STATEMENT' and a 'Hazardous weather conditions for Wind River Basin, WY' header. The text of the warning states: '...A SEVERE THUNDERSTORM WARNING REMAINS IN EFFECT FOR SOUTH CENTRAL FREMONT COUNTY UNTIL 4:30 PM MDT... AT 3:46 PM MDT... NATIONAL WEATHER SERVICE DODDIER RADAR CONTINUED TO INDICATE A SEVERE THUNDERSTORM CAPABLE OF PRODUCING GOLF BALL SIZE HAIL... AND DAMAGING WINDS IN EXCESS OF 60 MPH. THIS STORM WAS LOCATED OVER SOUTH CENTRAL FREMONT COUNTY... OR ABOUT 27 MILES SOUTHEAST OF LANDER... MOVING SOUTHEAST AT 15 MPH.'

#3

Drop off or send in your hail pad



Drop off your hail pad and pick up a new one at one of our drop off locations in your community (see the Web site for locations)

d) Measuring Snow



CoCoRaHS

If snow is anticipated . . .



Remove the funnel AND inner tube, otherwise snow will clog the funnel

There are two ways in which snow is measured:

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

CoCoRaHS

Snow Network

Measuring liquid water content from your gauge



CoCoRaHS

Snow Network

If you live in a protected area many times you will have an accumulation of snow on the rim of your gauge



How do I know what to measure and what not to??



Take your snow-swatter and tap gently on the rim of the gauge

What falls in gauge we measure

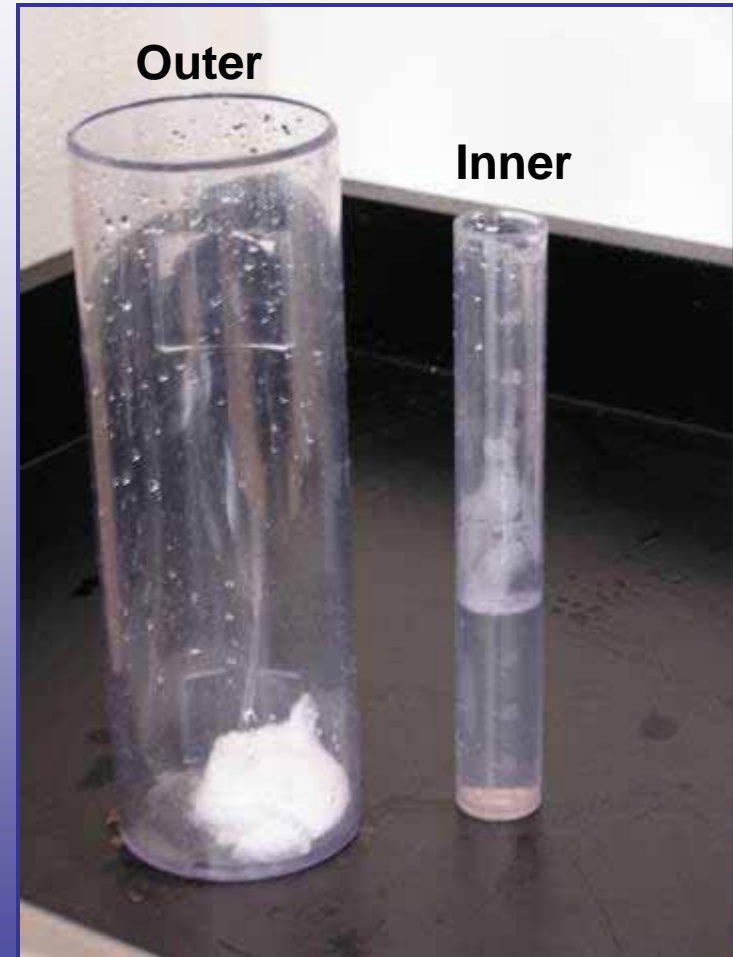


We will disregard the snow that lands outside the gauge.



Go ahead and clear away the snow from the gauge

Melting snowfall



Add some warm water to the inner cylinder Notice that you have two cylinders

Carefully measure your tap water before adding to outer cylinder



Be sure to measure to nearest hundredth of an inch

Add the warm water to the snow sample



Pour water directly into sample

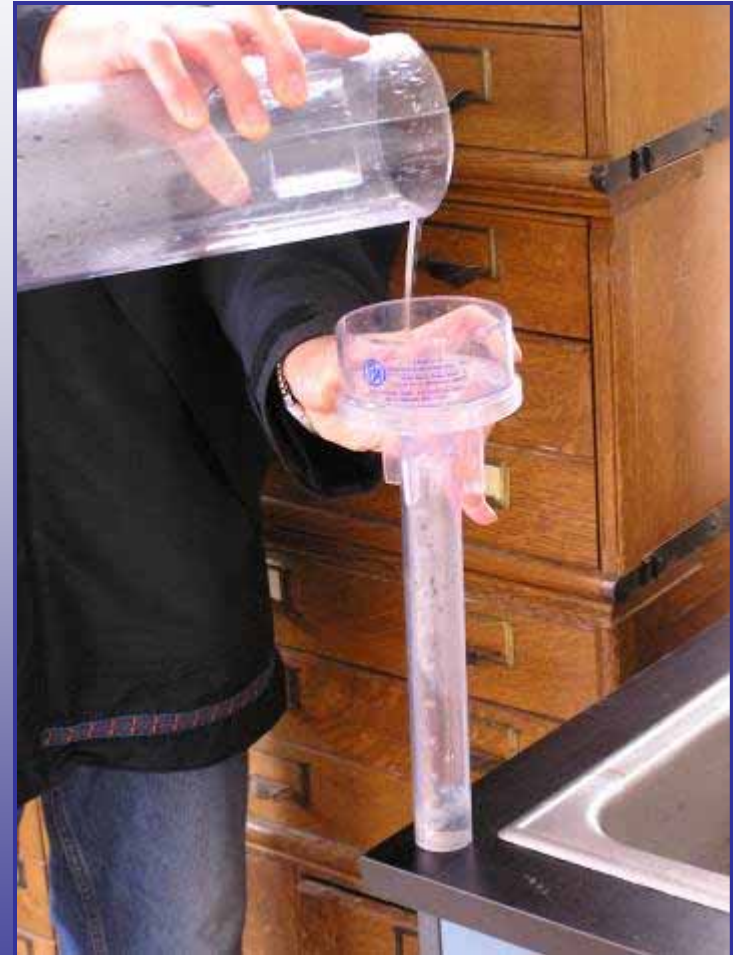


Allow sample to completely melt

Measure the liquefied snowfall sample



Pour snow sample into smaller tube



Remember "Every drop counts!"

Carefully read to the nearest one hundredth of an inch



Remember to subtract the amount of warm water that you've added to the tube

Reading of 0.79 inches of water
minus 0.50 inches of water added
gives a final reading of 0.29 inches

Tube full	0.79
- Water added	0.50

Final reading	0.29

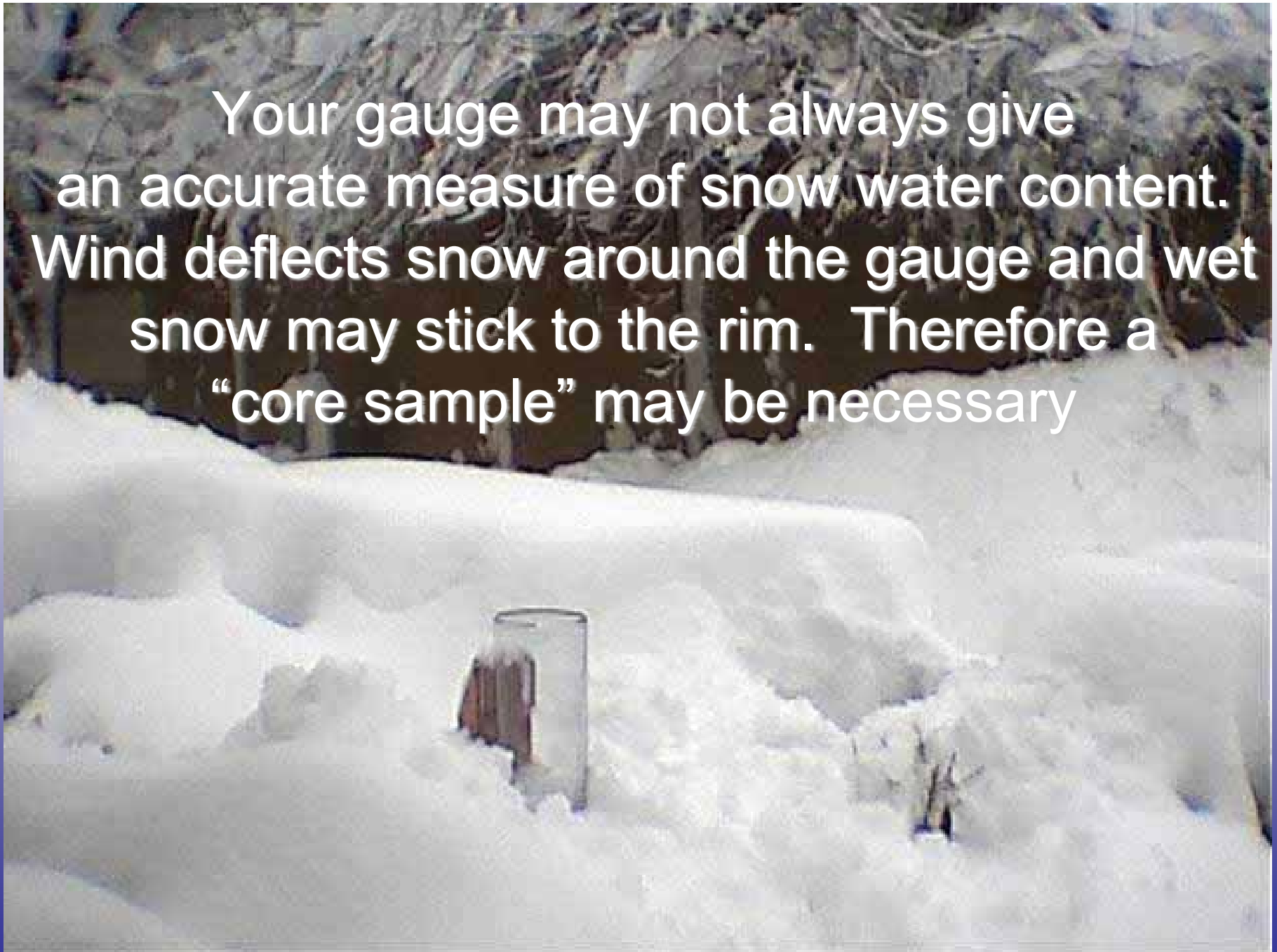
Measuring liquid water content from a core sample



CoCoRaHS

Snow Network

Your gauge may not always give an accurate measure of snow water content. Wind deflects snow around the gauge and wet snow may stick to the rim. Therefore a “core sample” may be necessary



First find a representative location



The location should have not drifted, melted, or blown clear

Steps to cutting a sample



Place gauge upside down and push down into the snow



Clear snow from around the gauge

Capturing the core

Slide



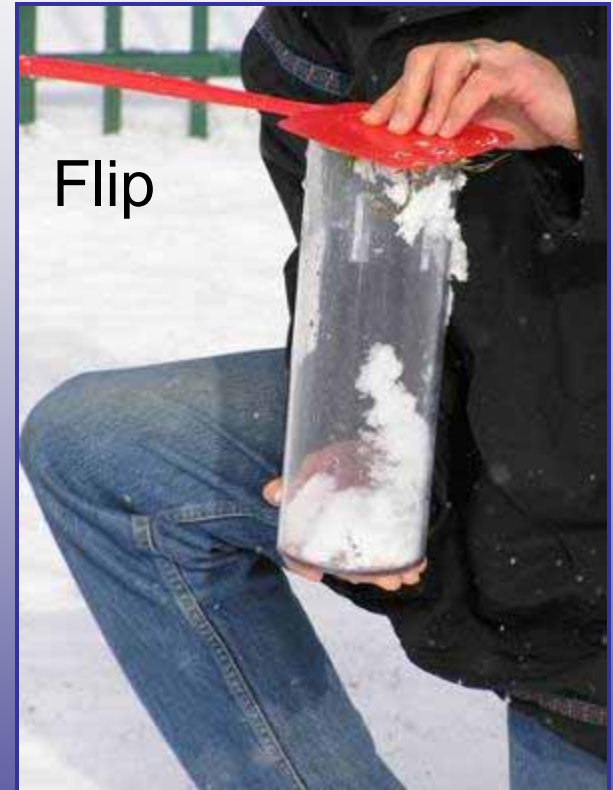
Slide snow-swatter
under gauge

Lift



Carefully lift and get
ready to flip the gauge

Flip



Bring the sample
inside to melt

Snow Cores in deeper snow

Push
down



Turn



Pull



In wetter snow, the core will come out as one piece



Record your measurement



Enter your data on the precip sheet . . .

or using the CoCoRaHS Web site
www.cocorahs.org

Again, there are two ways in which snow is measured:

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

Now let's look at the second way — Depth of Snow

What is Snowfall ?



Snowfall is the accumulation of new snow and sleet in the past 24 hours prior to melting or settling

When do I measure new snowfall?



Your observation is normally around 7AM. Because snow melts settles and drifts it is wise to measure when the snow first stops.

The goal of reporting new snowfall is to report the maximum accumulation prior to melting and settling

Measuring snowfall



CoCoRaHS

Snow Network

Where to measure new snowfall

Measure newly fallen snow your snowboard if the snow has fallen and accumulated uniformly.



Snow measured under a tree



Notice that only 3.0 inches of snow has accumulated here

Snow measured in the open



Where as 6.5 inches has fallen in the open

Angle of Measurement



Measure at eye level, as an angle will give you an inaccurate measurement

Replace the Board



After you have measured the snow on your board, clean it off and replace it on top of the newly fallen snow. Be sure to mark its location. Now you are ready for the next snowstorm.

In Windy Locations

If there have been strong winds and drifting you may have to take several measurements and compute the average



Snow depth is the average depth of snow (including old snow as well as new) that remains on the ground at a particular time of year.



Reporting snow on the ground



On some days snow will only partially cover the ground. To record this take an average of both covered and bare areas.



If half the ground has 2.0" and half the ground is bare, report 1.0" as your total depth.



If more than half the ground is bare report "T" (trace) and mention the range of depths in your comments.



How do I measure Freezing Rain?



“Freezing rain” is rain that falls in liquid form but freezes on contact with a surface.

Do NOT report freezing rain as "Snow". Melt and measure the moisture that has accumulated inside your gauge and report that as your daily precipitation amount.

Report ZERO for your new snow amount (assuming that it all fell as rain, and no sleet or snow accumulated).

Report the total depth of freezing rain remaining on the ground at time of observation and enter that in the "Total Snow on Ground" column. Make a note in your comments section so that we know it's freezing rain.

SECTION TWO:

Reporting Observations

In this section we will introduce you to the Web-site and show you how to record your observations

CoCoRaHS

Rail & Snow Network

The CoCoRaHS Web site

www.cocorahs.org

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

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

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

Main Menu

- Home
- About Us
- Join Cocorahs
- Contact Us
- Donate

Resources

- FAQ / Help
- Education
- Training Slide-Shows
- Volunteer Coordinators
- Mail Pad
- Distribution/Drop-off
- Help Needed
- Printable Forms
- Calendar
- The Catch
- Message of the Day
- CoCoRaHS Blog
- Sponsors
- Presentations
- Links

Key

- CoCoRaHS State
- State Joining During 2008-9

Daily Precipitation (inches x.xx) USA 11/3/2008

0.0
Trace
0.00 - 0.11
0.12 - 0.22
0.23 - 0.56
0.57 - 1.34
1.35 - 2.01
2.02 - 2.24

Things to know about...

- Rain
- Hail
- Snow

weatherwise

Read the "CoCoRaHS Article" and find out more about Weatherwise Magazine

Purchase an official

Our Web site is informative and easy to use. Here's how to begin →

Login to CoCoRaHS

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

Home | States | View Data | Maps | My Data Entry | **Login**

Login

Log In:

UserName:

Password:

Save Login

- [Find your login info.](#)
- [Apply to be a Cocorahs observer.](#)

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First, Click to Login

Recording your Daily Precipitation

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

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My Data Entry : Daily Precipitation Report Form

Enter My New Reports

- Daily Precipitation**
- Intense Precipitation
- Multi-Day Accumulation
- Monthly Zeros

List/Edit My Reports

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- Hail
- Intense Precipitation
- Multi-Day Accumulation

Precipitation Report Form

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

* Denotes Required Field

10/1/2008 *Observation Date ?

7:00 AM *Observation Time ?

0.55 *Total Rain and Melted Snow in gauge in inches to the nearest hundredth ?

Yes No Report was taken at registered location?

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

New Snow

0.0 Depth of new snow in inches to the nearest tenth ?

NA Melted value from core to the nearest hundredth ?

Total Snow on Ground

NA Depth of total snow in inches to the nearest half inch ?

NA Melted value from core to the nearest hundredth ?

After you login, the screen will automatically take you to the Daily Precip. Report

Enter Your Report

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- Hail
- Intense Precipitation
- Multi-Day Accumulation

Precipitation Report Form Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

* Denotes Required Field

10/1/2008 *Observation Date ?

7:00 AM *Observation Time ?

0.55 *Total Rain and Melted Snow in gauge in inches to the nearest hundredth ?

Yes No Report was taken at registered location? Record your measurement in hundredths (0.00)

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

New Snow

0.0 Depth of new snow in inches to the nearest tenth ?

NA Melted value from core to the nearest hundredth ?

Total Snow on Ground

NA Depth of total snow in inches to the nearest half inch ?

NA Melted value from core to the nearest hundredth ?

Here you will enter the total precipitation measured in your gauge

Recording Comments

The screenshot shows a web browser window with the CoCoRaHS website. The page title is 'My Data Entry : Daily Precipitation Report Form'. The form is for station CO-LR-610, Fort Collins 3.5 SW, on 6/12/2006 at 7:00 AM. The total rain is 0.05 inches. The 'Report was taken at registered location?' is checked 'Yes'. The 'Observation Notes' field contains the text: 'Brief, but intense thunderstorm at 8PM last night. Several branches broken on tree due to gusty winds.' This field is circled in red, and a red arrow points from the bottom of the page to it. Below the notes are sections for 'New Snow' and 'Total Snow on Ground', both with 'NA' values. The 'Duration Information' section has empty fields for 'Precipitation Began', 'Precipitation Ended', 'Heaviest Precipitation Began', and 'Heaviest Precipitation Lasted'.

CoCoRaHS COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK
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My Data Entry : Daily Precipitation Report Form

Precipitation Report Form

Station Number : CO-LR-610
Station Name : Fort Collins 3.5 SW
6/12/2006 * Denotes Required Field
7:00 AM * Observation Date
0.05 * Observation Time
* Total Rain and Melted Snow in gauge in inches to the nearest hundredth
 Yes No * Report was taken at registered location?
Observation Notes: (This will be available to the public)
Brief, but intense thunderstorm at 8PM last night.
Several branches broken on tree due to gusty winds.

New Snow
0.0 * Depth of new snow in inches to the nearest tenth
NA * Melted value from core to the nearest hundredth

Total Snow on Ground
NA * Depth of total snow in inches to the nearest half Inch
NA * Melted value from core to the nearest hundredth

Duration Information
If a time is unknown or the storm has not ended leave it blank.
Precipitation Began AM PM
Precipitation Ended AM PM
Heaviest Precipitation Began AM PM
Heaviest Precipitation Lasted minutes
These times are:

Feel free to enter comments about the day's weather under "notes"

Submit your Report

Customize Links | Free Hotmail | Windows Marketplace | Windows Media | Windows

CoCoRaHS COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK
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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

6/12/2006 *Observation Date
7:00 AM *Observation Time
0.05 *Total Rain and Melted Snow in gauge in inches to the nearest hundredth
 Yes No Report was taken at registered location?

Observation Notes: (This will be available to the public)
Brief, but intense thunderstorm at 8PM last night. Several branches broken on tree due to gusty winds.

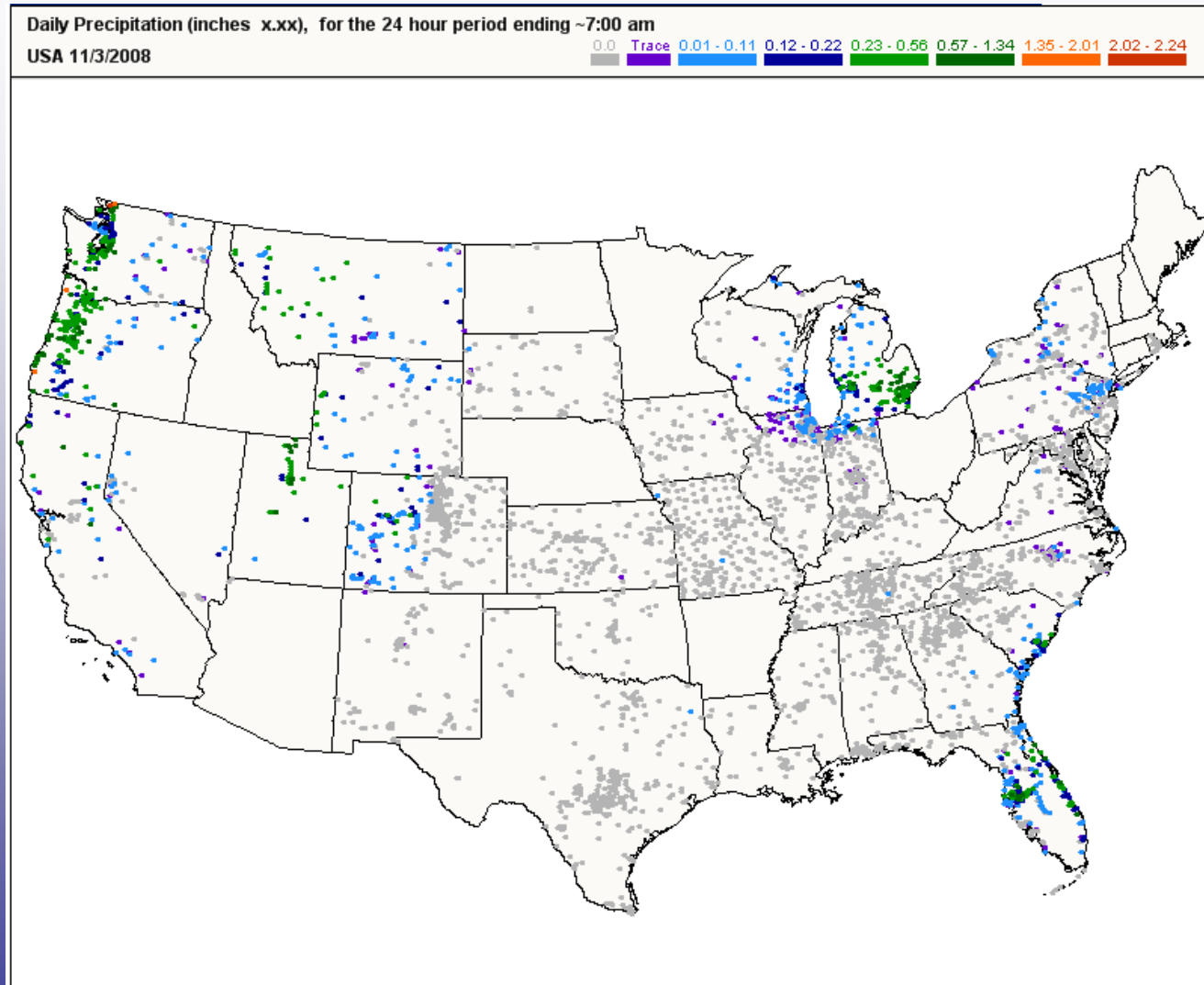
New Snow
0.00 Depth of new snow in inches to the nearest tenth
NA Melted value from core to the nearest hundredth

Total Snow on Ground
NA Depth of total snow in inches to the nearest half Inch
NA Melted value from core to the nearest hundredth

Duration Information
If a time is unknown or the storm has not ended leave it blank.
Precipitation Began [] AM PM
Precipitation Ended [] AM PM
Heaviest Precipitation Began [] AM PM
Heaviest Precipitation Lasted [] minutes
These times are: Select Time Accuracy []

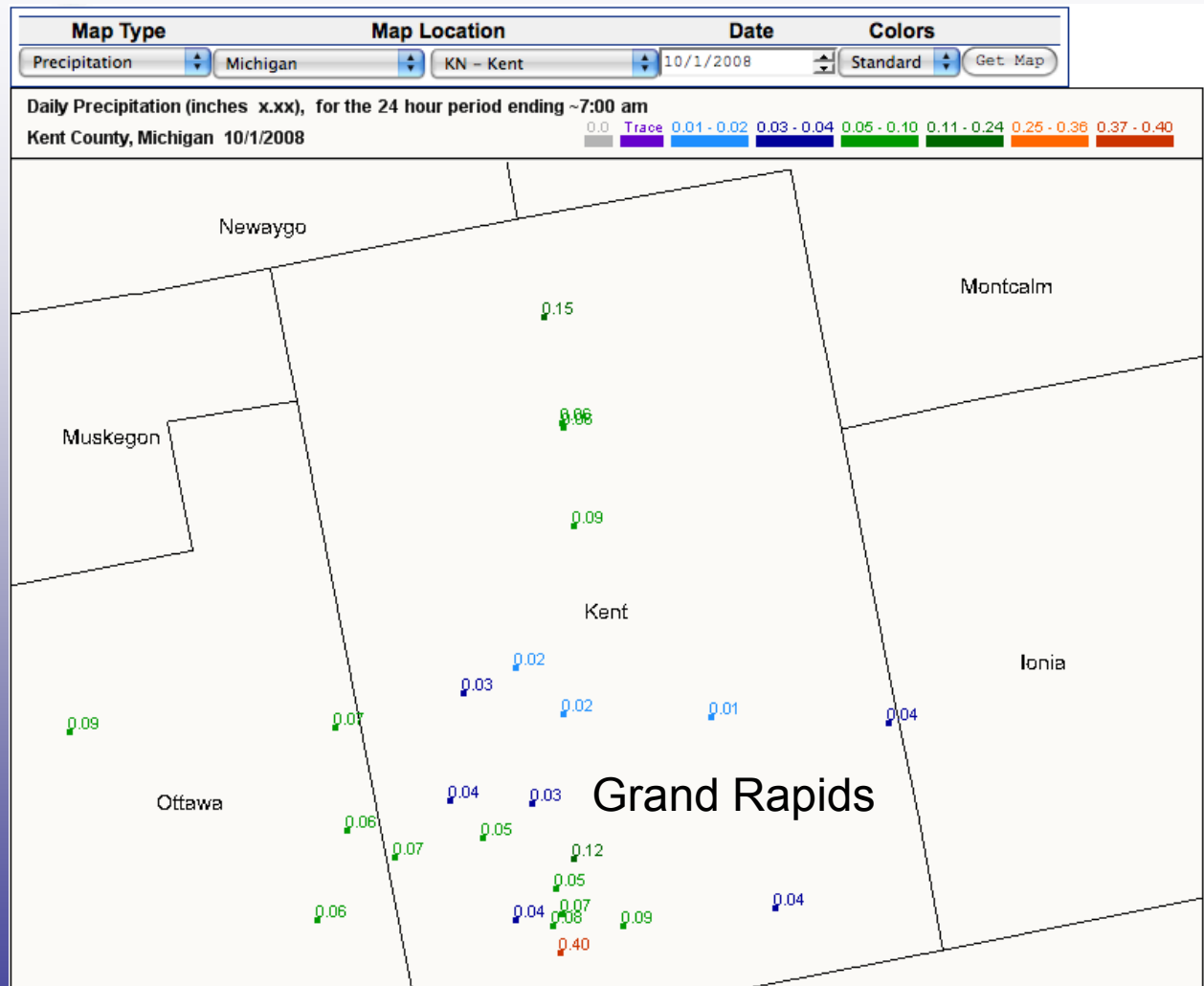
Click "Submit" and your data is recorded on our site

To See Your Report on our Maps




Click on your state and then click on your county

Your Report on our Daily Map




The amount of precipitation you entered shows up at your location on the map

Your state's Page



COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK
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 **Illinois**

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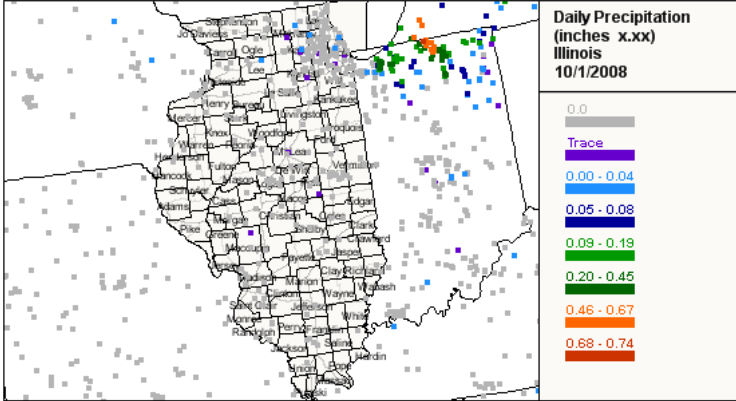
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Daily Precipitation (inches x.xx) Illinois 10/1/2008



[View Large Map](#)

Welcome to CoCoRaHS in Illinois!

Background	Find Your Local Coordinator
What do I need	Training Session Schedule
How do I join	Illinois Participation Map
How do I obtain a rain gauge	Illinois Sponsors
Measurement Tube Support plans	Illinois CoCoRaHS Forum
Observer's Guide	Illinois Newsletter Archive

[Map of Rainfall in Midwest Sept. 12-15, 2008](#)

[Map of Rainfall in Midwest with Remnants of Hurricane Gustav Sept. 4-7, 2008](#)

[Map of June 2008 Rainfall](#)

[Pocket Hail Size Guide](#)

Each CoCoRaHS State has it's own page

Other Reports

- Hail Report
- Intense Precipitation Report
- Monthly Zeros
- Multi-Day Precipitation Report
- Daily Precipitation Report

Hail Report

CoCoRaHS COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK
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My Data Entry : Hail Report Form

Enter My New Reports

- Daily Precipitation
- **Hail**
- Intense Precipitation
- Multi-Day Accumulation
- Monthly Zeros

List/Edit My Reports

- Daily Precipitation
- Hail
- Intense Precipitation
- Multi-Day Accumulation

Hail Report Form

Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

* Denotes Required Field

10/1/2008 *Date of Hail Storm ?

AM Time Hail Storm Began ?

Yes No Report was taken at registered location?

Size of hailstones

Smallest: Not Selected

Average: Not Selected

Largest: Not Selected

Hail Lasted

Minutes This time is accurate within Select Accuracy

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

Click here to access a Hail Report

Intense Precipitation Report

CoCoRaHS COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK
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My Data Entry : Intense Precipitation Report Form

Enter My New Reports

- Daily Precipitation
- Hail
- Intense Precipitation**
- Multi-Day Accumulation
- Monthly Zeros

List/Edit My Reports

- Daily Precipitation
- Hail
- Intense Precipitation
- Multi-Day Accumulation

Notification:

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

Intense Precipitation Report

Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

* Denotes Required Field

10/1/2008 *Observation Date

AM *Observation Time

Minutes Time duration that the report covers

Rain

- New Rain and Melted Snow that has fallen during the report duration, in inches to the nearest **hundredth**
- Total Precipitation, rain and melted snow, since storm began, in inches to the nearest **hundredth**

Snow

- Depth of New Snow that has fallen during the report duration, in inches to the nearest **tenth**
- Total depth of snow and ice on ground at the time of this observation to nearest **half inch**

Additional Information

Click here to access the Intense Precipitation Report

Monthly Zeros

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Data Entry : Monthly Zeros Form

Enter New Reports

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Monthly Zeros

Station Number : CO-LR-133 Station Name : WEL 8 SW

June 2006

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1 <input type="checkbox"/> 0.0 Precip	2 <input type="checkbox"/> 0.0 Precip	3 <input type="checkbox"/> 0.0 Precip
4 <input type="checkbox"/> 0.0 Precip	5 <input type="checkbox"/> 0.0 Precip	6 <input type="checkbox"/> 0.0 Precip	7 <input type="checkbox"/> 0.0 Precip	8 <input type="checkbox"/> 0.0 Precip	9 <input type="checkbox"/> 0.0 Precip	10 <input type="checkbox"/> 0.0 Precip
11 <input type="checkbox"/> 0.0 Precip	12 <input type="checkbox"/> 0.0 Precip	13 <input type="checkbox"/> 0.0 Precip	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

You can go back in and enter days of zero precipitation on one "simple to use" page

Multi-Day Precipitation

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

Enter My New Reports

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- [Multi-Day Accumulation](#)

Multiple Day Accumulation Form

Submit Data Reset

Station Number : CO-LR-610

Station Name : Fort Collins 3.5 SW

9/27/2008 First day of accumulation period. This day should be one day after your last report.

10/1/2008 Date the rain gauge was emptied.

8:15 AM Time the rain gauge was emptied.

Yes No Report was taken at registered location?

Multi Day Precipitation (in inches)

Total Depth of Snow on Ground (in inches)

Core Precipitation (in inches)

Notes

Submit Data Reset

I was away for a week and read the accumulation in my gauge when I returned.

You can even enter information after you've been away for several days

Daily Precipitation Reports



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

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View Data : List Daily Precipitation Reports

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Search Daily Precipitation Reports

Station Fields: Station Number Station Name

Location:

Date Range:

Start Date: End Date:

Precip Value: Operator:

Searched: Report date on 10/1/2008.

Showing 1 - 50 of 4802 Records. [<Back](#) Page [Next>](#)

Date	Time	Station Number	Station Name	Total Precip .ins	New Snow .in	Total Snow .in	State	County	View
10/1/2008	7:15 AM	FL-MN-9	Marathon 1.7 ENE	2.64	0.0	NA	FL	Monroe	
10/1/2008	7:00 AM	FL-MD-17	Cutler 1.3 SW	2.37	0.0	NA	FL	Miami-Dade	
10/1/2008	6:00 AM	PA-ER-2	Erie 5.6 SW	2.31	0.0	NA	PA	Erie	
10/1/2008	7:00 AM	FL-MD-2	Miami 4.9 NNE	1.89	0.0	NA	FL	Miami-Dade	
10/1/2008	7:00 AM	FL-MD-10	South Miami Heights 1.3 SSW	1.77	0.0	NA	FL	Miami-Dade	
10/1/2008	6:00 AM	NC-CN-10	Vanceboro 6.9 NW	1.64	0.0	NA	NC	Craven	
10/1/2008	6:00 AM	NC-RN-1	Asheboro 2.2 SSE	1.58	0.0	NA	NC	Randolph	
10/1/2008	7:00 AM	MD-MG-47	Wheaton-Glenmont 1.5 NNE	1.57	0.0	NA	MD	Montgomery	
10/1/2008	8:00 AM	PA-ER-5	North East 1.2 WNW	1.54	0.0	NA	PA	Erie	
10/1/2008	7:00 AM	NY-ER-12	West Seneca 1.4 E	1.50	0.0	NA	NY	Erie	
10/1/2008	7:00 AM	FL-BV-24	Indialantic 0.8 N	1.44	0.0	NA	FL	Brevard	
10/1/2008	8:00 AM	MD-CV-11	North Beach 0.3 W	1.38	0.0	0.0	MD	Calvert	
10/1/2008	7:00 AM	GA-CT-2	Skidaway Island 2.3 S	1.32	0.0	NA	GA	Chatham	
10/1/2008	7:00 AM	FL-CR-7	Naples 0.7 SSW	1.31	0.0	NA	FL	Collier	
10/1/2008	8:15 AM	FL-MN-4	Key Largo 5.3 SW	1.27	0.0	NA	FL	Monroe	
10/1/2008	8:00 AM	FL-MN-8	Islamorada 7.8 SW	1.25	0.0	NA	FL	Monroe	
10/1/2008	5:25 AM	NY-ER-15	Lancaster 2.3 SE	1.21	0.0	NA	NY	Erie	
10/1/2008	7:00 AM	MD-HW-2	Sykesville 1.7 SSE	1.21	0.0	NA	MD	Howard	

SECTION THREE:

Frequently Asked Questions

In this section we will try to answer common questions asked by observers.

CoCoRaHS

Mail & Snow Network

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

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 I don't have a good place to put my gauge?

Answer: Few people have ideal locations. Do your best. Send site photos if possible to help interpret results.

What if it hails when I'm not at 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?

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

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 equivalent 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





How long is my commitment to CoCoRaHS?

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

Thanks for joining us today!

You can find out more about the CoCoRaHS Network by visiting our web site or speaking with your local coordinator.



Just 5 minutes a day!

It's easy and fun!

We're Cuckoo For CoCoRaHS!

www.cocorahs.org

