

CoCoRaHS Collections

"Because Every Drop Counts"

What A Difference A Year Makes

Last year at this time some locations around the state had just finished up a record breaking wet spring. This year, according to the U.S. Drought Monitor, some locations across northern portions of the state are experiencing abnormally dry conditions to moderate drought. Looking further to the west, in the image from the U.S. Drought Monitor below, some locations in Indiana are experiencing moderate to severe drought. You can also find more information about the U.S. Drought Monitor at http://droughtmonitor.unl.edu.

Also below is a comparison of the highest and lowest rainfall totals during the spring of 2011 versus the spring of 2012. Both the highest and lowest rainfall totals were around 10 inches lower this year than last year. What a difference a year makes!

So what can we expect for precipitation through the summer months? The Climate Predication Center has the area in the Equal Chances category. Equal Chances means that the probability of a most likely category cannot be determined at this time. There is no clear signal or strong climate signal on whether the area will see an increased likelihood of wetter or drier conditions. As a reminder, if you see drought impacts in your area you may report them using the Drought Impact Reporter under Enter My New Reports on the CoCoRaHS webpage. (Continued on Page 3)

Of the stations that reported everyday, what were the highest and lowest precipitation totals for the spring time frame?

Highest 2011

OH-HM-5 24.62 Inches

Lowest 2011

OH-SM-5 15.11 Inches

D3 Drought - Extreme

D4 Drought - Exceptional

Intensity:

D0 Abnormally Dry D1 Drought - Moderate

D2 Drought - Severe

Highest 2012

OH-HM-13 13.83 Inches

Lowest 2012

OH-HY-5 5.15 Inches



The Ohio Newsletter

Spring 2012

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A special thank you to those listed below for contributing to this newsletter!

-Julian Turner, CoCoRaHS Headquarters

-Seth Binau NWS Wilmington, Ohio

-The CoCoRaHS, U.S. Drought Monitor, and NWS websites



CoCoRaHS Collections

Terminal Doppler Weather Radars

Ever wonder what sort of radars the National Weather Service is looking at when they are monitoring the weather and issuing warnings? Many people are familiar with the National Weather Service WSR-88D radar imagery, however in addition to these radars the National Weather Service also looks at TDWR radars or Terminal Doppler Weather Radars. These radars are owned and maintained by the FAA and were situated near major airports in response to accidents related to wind shear during the 1970s and 1980s. These radars have higher temporal (radar scans that occur every minute near the ground when storms are detected by the radar), and spatial resolution (narrower radar beam width) scanning properties in comparison to standard weather radar which help in better detection of microbursts and wind shear.

Three of these TDWRs are located in Ohio, with several others located nearby. The TDWRs in Ohio are located near Dayton, Columbus, and Cleveland. NWS meteorologists have been utilizing this data for the past few years and recently this data has also become more available to the public domain.

http://www.srh.noaa.gov/ridge2/ridgenew2 shows the radar sites and the radar data. Yellow markers indicate where TDWR locations are situated. Red markers indicate where National Weather Service WSR-88D radars are located.

On March 2, 2012 numerous tornadoes occurred in southern Indiana, northern Kentucky, and into southern Ohio. The TCVG TDWR (located 11 miles SE of the Cincinnati/ Northern Kentucky International Airport) was instrumental in this event. The radar images on the right show the Wilmington, Ohio WSR-88D radar and the TCVG radar. Although the main features are evident in both the KILN and TCVG radars, the TCVG images in this example show a crisp image of a well defined hook echo and debris ball associated with this tornado producing storm. Special thanks to Seth Binau, Science and Operations Officer NWS Wilmington Ohio for contributing to this article.



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CoCoRaHS Collections Page 3 What A Difference A Year Makes (Continued From Page 1) Across Ohio there have been nine reports from CoCoRaHS observers on drought impacts across the state. These reports have come from Franklin, Licking, Cuyahoga, Crawford, Henry, Morrow, Trumbull, and \geq Business And Industry Coshocton counties. As can be expected, most of these reports line up \triangleright Energy well with the locations indicated by the U.S. Drought Monitor as experiencing abnormally dry or moderate drought conditions. Some of the im- \triangleright Fire pacts include impacts to farming, trees, and lawns. \triangleright Plants And Wildlife As is mentioned on the CoCoRaHS Drought Impact Report Form, "The Relief Response significance of drought is tied directly to the impacts that it causes. Identifying and documenting impacts as they first appear and as they continue Society And Public Health is essential for comprehensive drought monitoring." There is also a Co- \geq Tourism And Recreation CoRaHS training slide show on drought reporting that provides more details on how to document any drought conditions occurring in your area. \triangleright Water Supply And Quality **Bronze Observer Award-1000 Daily Precipitation Reports OH-AT-5** OH-LS-I OH-MR-3

OH-FR-10 OH-LC-I

OH-LS-14 OH-MD-I

OH-OT-2 OH-TR-I

500 Club!

Congratulations to our newest 500 Club members! These observers have submitted at least 500 daily precipitation reports since becoming a CoCoRaHS observer. We look forward to adding onto this list with the next newsletter. Way to go!

OH-AT-13 OH-ER-2 **OH-FR-23**

OH-HM-14

OH-HY-3

OH-SM-16

OHWR-8

Spring 2012 Honor Roll

From March 1, 2012 through May 31 2012, these Ohio stations reported everyday. Here are those stations who get a thumbs up for their dedication!

OH-AL-5	OH-CN-I	OH-FR-3	OH-LC-I	OH-PT-8	OH-SM-5
OH-AT-I	OH-CN-6	OH-FR-23	OH-LK-I	OH-PT-9	OH-SM-16
OH-AT-2	OH-CN-10	OH-FR-24	OH-LR-10	OH-PT-12	OH-SN-I
OH-AT-12	OH-CW-3	OH-GG-4	OH-LR-11	OH-SC-4	OH-TS-I
OH-BT-I	OH-CY-4	OH-HM-5	OH-LS-I	OH-SD-2	OH-WR-10
OH-CB-2	OH-CY-16	OH-HM-13	OH-MD-2	OH-SD-3	OH-WR-14
OH-CC-I	OH-DR-I	OH-HR-2	OH-MY-5	OH-SH-4	
OH-CK-I	OH-FE-5	OH-HY-5	OH-PB-I	OH-SH-11	
	011-11-5				



Variability in Precipitation

Although precipitation variability occurs throughout the year, the convective season is known for having heavy precipitation in some areas while nearby locations receive little or no rainfall. In Shelby county alone there were some individuals who stayed dry all day in this particular event, while others received around a half inch of rainfall. Looking just outside Shelby county in Auglaize county, over two inches of rain occurred!

While across many parts of the state May started out with quite a bit of precipitation, many locations were dry and reporting lots of 0's for the middle and later parts of the month. Determining the edge and the duration of dry areas is where 0's really come into play.

Recently in Florida, an event occurred where multiple sites experienced over a foot of rain in a 24 hour period with one location receiving over twenty inches of rainfall! Within the same county, other locations had less than three inches of rainfall.

