



# ARKANSAS CoCoRaHS



Winter Report 2017

Arkansas Natural Resources Commission  
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Dear CoCoRaHS Observer:

March Madness is not just for basketball. During March, states across the U.S. compete for awards as the state with the most new recruits and with the most recruits per capita. If you have not been an active observer, recording rainfall on a daily basis, this is a good time to begin again. Any data submitted by observers could be valuable to the users of climate data. And it is fun to compare your gauge measurements with surrounding gauges.

We need more reporters statewide, but especially in the eastern and southern parts of the State. For you that are Master Gardeners, Storm Spotters or belong to other organizations, please contact members and encourage them to become a CoCoRaHS observer. But tell them not to sign up until March 1-31, so they can be counted in this year's contest.



<http://www.cocorahs.org/Content.aspx?page=Marchmadness17>

Below is a list of last year's observers (total of 75) who sent in 350 to 366 reports. Since most observers are away from home on occasions for vacations, weekends, etc., it is understandable that few send in one report for every day of the year.

Total precipitation for the 75 below ranged from 32.47 (Holiday Island) to 74.69 (Crossett) inches.

The counties with the most active reporters were: Stone (16), Pulaski (7), Faulkner (4), Pope (4), Benton (3), Carroll (3), Lonoke (2), Pike (2), Polk (2), Miller (2), Sebastian (2), Izard (1), Calhoun (1), Hempstead (1), Howard (1), Scott (1), Searcy (1), Van Buren (1), Crawford (1), Lawrence (1), Garland (1), Perry (1), Clark (1), Sharp (1), Dallas (1), Marion (1), Conway (1), Grant (1), Jefferson (1), Boone (1), Baxter (1), Franklin (1), Lafayette (1), Ashley (1), Sevier (1), Yell (1).

Thirty-six (36) counties had at least one nearly complete rain gauge record for 2016. **And, what's with Stone County? WOW!!** Stone County is one of the least populated counties in the State, yet they contribute, by far, the most nearly complete station records. It would be interesting to study the rainfall distribution for different seasons across the county. With 16 records, a pattern should be detected.

## Star Observers

Station Number	Station Name	Total Precipitation Inches	Snow Inches	Number of Reports
<a href="#">AR-BT-3</a>	Bella Vista 2.0E	39.05	1.2	367
<a href="#">AR-CN-3</a>	Hampton 6.8 SE	52.19	1.8	366
<a href="#">AR-FK-11</a>	Conway 2.8 SSE	49.98	2.5	366
<a href="#">AR-FK-17</a>	Greenbrier 2.4 NNW	46.48	3.5	366
<a href="#">AR-LK-1</a>	Austin 2.5 SSE	48.57	5.0	366
<a href="#">AR-PK-1</a>	Delight 0.3 NNW	63.30	0.0	366
<a href="#">AR-PL-6</a>	Mena 1.2 NNE	48.27	0.0	366
<a href="#">AR-PS-7</a>	Sherwood 1.8 NNW	52.71	5.5	366
<a href="#">AR-PS-71</a>	Sherwood 0.8 NNW	50.73	8.0	366
<a href="#">AR-SL-23</a>	Benton 10.9 WSW	55.74	2.0	366
<a href="#">AR-SC-3</a>	Parks 6.2 ENE	42.95	0.0	366
<a href="#">AR-ST-2</a>	Mountain View 0.4 S	46.28	0.0	366
<a href="#">AR-ST-10</a>	Mountain View 5.3 SE	51.97	0.0	366
<a href="#">AR-ST-11</a>	Leslie 10.3 ENE	49.78	0.0	366
<a href="#">AR-ST-12</a>	Mountain View 3.7 ESE	43.73	0.0	366
<a href="#">AR-ST-13</a>	Pleasant Grove 1.9 WNW	50.44	0.0	366
<a href="#">AR-ST-14</a>	Timbo 2.8 NNE	47.57	0.0	366
<a href="#">AR-ST-15</a>	Mountain View 6.1 SW	45.66	0.0	366
<a href="#">AR-ST-16</a>	Mountain View 5.5 W	51.37	0.0	366
<a href="#">AR-ST-17</a>	Mountain View 5.5 WSW	48.50	0.0	366
<a href="#">AR-ST-23</a>	Mountain View 13.0 W	48.91	0.0	366
<a href="#">AR-ST-24</a>	Shirley 6.8 NNE	47.18	0.0	366

<a href="#">AR-ST-25</a>	Mountain View 12.7 ESE	51.76	0.0	366
<a href="#">AR-ST-26</a>	Mountain View 6.5 W	52.23	0.0	366
<a href="#">AR-VB-11</a>	Bee Branch 5.4 ENE	51.41	0.0	366
<a href="#">AR-BT-12</a>	Decatur 2.6 ESE	36.81	0.5	365
<a href="#">AR-CR-14</a>	Berryville 0.8 SSW	32.47	1.0	365
<a href="#">AR-CF-5</a>	Van Buren 2.1 NNW	35.87	0.0	365
<a href="#">AR-GL-16</a>	Hot Springs 2.3 S	47.96	0.0	365
<a href="#">AR-LW-2</a>	Smithville 4.4 SSE	46.14	4.1	365
<a href="#">AR-PY-2</a>	Houston 5.0 S	49.47	2.2	365
<a href="#">AR-PL-1</a>	Mena 3.2 WNW	53.57	0.0	365
<a href="#">AR-PS-26</a>	Sherwood 4.6 NNW	50.14	7.6	365
<a href="#">AR-PS-58</a>	North Little Rock 2.5 N	53.41	6.9	365
<a href="#">AR-ST-3</a>	Mountain View 4.7 SSW	49.99	4.4	365
<a href="#">AR-ST-20</a>	Mountain View 7.4 NW	51.70	0.0	365
<a href="#">AR-ST-22</a>	Mountain View 8.8 NW	52.10	0.0	365
<a href="#">AR-CK-2</a>	Arkadelphia 7.8 NNE	64.71	0.0	364
<a href="#">AR-HW-1</a>	Nashville 1.0 NE	52.03	0.0	364
<a href="#">AR-PS-24</a>	Little Rock 4.2 NW	49.12	4.1	364
<a href="#">AR-SH-11</a>	Hardy 8.0 SSW	46.14	1.2	364
<a href="#">AR-BT-45</a>	Bentonville 6.6 SSW	35.91	0.5	363
<a href="#">AR-CR-8</a>	Holiday Island 1.3 SSW	33.25	2.3	363
<a href="#">AR-DL-1</a>	Fordyce 6.6 NNW	65.67	2.2	363
<a href="#">AR-FK-28</a>	Conway 2.3 WNW	42.20	3.5	363
<a href="#">AR-SR-8</a>	St. Joe 2.7 WNW	48.96	5.0	363
<a href="#">AR-FK-16</a>	Greenbrier 2.8 W	44.48	2.5	362
<a href="#">AR-PP-1</a>	Russellville 0.7 W	44.90	0.0	362
<a href="#">AR-CW-7</a>	Morrilton 9.4 WSW	43.81	0.1	361
<a href="#">AR-MR-13</a>	Yellville 7.3 NW	39.27	1.6	361
<a href="#">AR-WH-5</a>	Searcy 4.1 SE	54.59	3.0	361
<a href="#">AR-GT-9</a>	Sheridan 1.2 S	59.33	4.5	360
<a href="#">AR-IZ-3</a>	Calico Rock 0.8 NNE	44.49	0.3	359
<a href="#">AR-PS-52</a>	North Little Rock 2.6 NNE	53.00	8.0	359
<a href="#">AR-HM-5</a>	Hope 0.9 SSW	61.62	0.0	358
<a href="#">AR-ML-11</a>	Fouke 5.3 ENE	63.59	0.0	358
<a href="#">AR-BX-2</a>	Mountain Home 5.8 NE	44.33	0.8	357
<a href="#">AR-BN-2</a>	Harrison 5.4 SW	37.40	6.6	357
<a href="#">AR-CR-2</a>	Busch 0.4 E	46.52	0.5	357
<a href="#">AR-LK-2</a>	Lonoke 1.2 SSW	55.89	0.0	357

<a href="#">AR-PP-3</a>	Russellville 7.3 ENE	47.75	0.0	357
<a href="#">AR-PP-26</a>	Hector 2.2 WSW	37.90	0.0	357
<a href="#">AR-AS-1</a>	Crossett 2.5 NNE	74.69	0.0	356
<a href="#">AR-ML-3</a>	Texarkana 5.3 SSW	63.04	0.0	356
<a href="#">AR-PP-12</a>	Dover 3.0 SW	41.22	0.2	356
<a href="#">AR-JF-2</a>	White Hall 0.8 SE	61.42	0.0	355
<a href="#">AR-SB-8</a>	Greenwood 1.9 WNW	35.38	0.0	355
<a href="#">AR-LF-3</a>	Bradley 7.8 W	67.82	0.0	354
<a href="#">AR-PS-5</a>	Little Rock 2.2 N	49.53	6.5	354
<a href="#">AR-FR-2</a>	Charleston 1.7 E	34.87	0.0	353
<a href="#">AR-SB-4</a>	Greenwood 1.4 W	38.20	0.1	353
<a href="#">AR-SV-2</a>	Lockesburg 9.6 NNE	56.07	0.0	352
<a href="#">AR-PK-9</a>	Murfreesboro 4.5 E	38.90	0.0	350
<a href="#">AR-YL-11</a>	Bluffton 0.7 SSE	42.90	0.0	350

Arkansas currently has over 900 registered CoCoRaHS observers. Only 297 sent in reports last year. Arkansas has participated in CoCoRaHS since 2009.

CoCoRaHS continues to grow. There are nearly 60,000 stations nationwide. Spend some time on the CoCoRaHS website and explore the information and features you can engage beyond just rainfall measurements.

It is particularly important to put ZEROs in you daily submission, and not just leave the space blank. That way, the staff at Colorado State University, where CoCoRaHS is based, know that “it did not rain” instead of “did not report”. It is important to track droughts, though not as exciting as a large rainfall event...or snowfall accumulation.

Please give me feedback regarding your experience with CoCoRaHS. Would you be willing to be interviewed for a newspaper article or television during March Madness?

<http://www.cocorahs.org/Content.aspx?page=Marchmadness17>

## Special Award

**STONE COUNTY CoCoRaHS Observers**

## Annual Precipitation Totals

From NOAA Climate at a Glance, the average annual precipitation for Arkansas was 51.34 inches in 2016. This is 1.74 inches above normal. Sixty-nine (69) CoCoRaHS stations exceeded that total. Here are the top 5.

<u>Station Number</u>	<u>Station Name</u>	<u>Daily Precip Sum in.</u>	<u>Total Precip in. ▼</u>	<u># of Reports</u>
<a href="#">AR-AS-1</a>	Crossett 2.5 NNE	74.69	74.69	356
<a href="#">AR-HM-6</a>	Hope 12.2 S	73.11	73.11	94
<a href="#">AR-CM-5</a>	McNeil 1.4 E	66.16	70.95	87
<a href="#">AR-AS-9</a>	Crossett 0.9 S	70.37	70.45	348
<a href="#">AR-LF-3</a>	Bradley 7.8 W	67.82	67.82	354

The highest one day rainfall total was over 8 inches (8.30 inches at McGhee 0.6 N and 8.25 inches at Hamburg 0.8 S) on March 10.

## Drought Reports

2016 was a relatively drought-free year. No area of the State experienced a category D4 or Exceptional Drought.

Month	Day	None	DO-D4	D1-D4	D2-D4	D3-D4	D4
January	28	100	0	0	0	0	0
February	23	100	0	0	0	0	0
March	29	80.45	10.55	0	0	0	0
April	26	71.25	28.75	0	0	0	0
May	31	94.01	9.99	0	0	0	0
June	28	94.91	5.09	0	0	0	0
July	26	56.75	43.25	1.09	0	0	0
August	30	99.96	0.04	0	0	0	0
September	27	71.02	28.98	0	0	0	0
October	25	30.87	69.13	29.01	1.16	0	0
November	29	0	100	86.49	46.92	0.49	0
December	27	23.75	76.25	40.46	7.21	0	0

CoCoRaHS has replaced the Drought Report with a Condition Monitoring Report, which expands the observer's ability to comment on local weather conditions and its impacts.

Here are some of the Condition Monitoring messages sent from Arkansas observers:

“Soils are somewhat dry, causing plants to brown early instead of producing the fall colors normal for this area. Wildfires, and risk of wildfires, in parts of the state prevented local agencies from sending firefighting help to other regions of the country. Natural water ways and normally flooded crop fields exhibited low water levels. Duck numbers are low for the duck hunting industry.”

White County 11/27/2016

“After we received 1.23" of rain on 11/22/16 thru the overnight & early morning hours of 11/23/16 the burn ban for Faulkner County was lifted today 11/23/16 per county judge. \*11/27/16 Updated condition scale bar from mildly dry to mildly wet\*.”

Faulkner County 11/23/2016

“A cold front move through yesterday bringing 0.28 inches of rainfall which is the first rain amount over 0.25 inches of rain since Oct. 15. We have been watering fall garden beds each week just to keep them alive until we could get some moisture and cooler temperature. Summer temperature and March winds keep everything dried out bringing high fire danger. Leaf are falling before they chance color because of the dry weather leaving heavy fine fuel load for wildfire.”

Lawrence County, 11/19/2016

Share your weather experiences with other observers by submitting conditions in your area.

## Hail Reports

Six (6) hail reports were recorded in 2016.

Date ▲	Time	Station Number	Station Name	Average	Largest	County
5/9/2016	4:35 PM	AR-FR-5	Riverdale 4.2 E	NA	1/2" Grape	Franklin
4/30/2016	9:30 PM	AR-SH-17	Hardy 10.7 S	3/8"	1/2" Grape	Sharp
4/12/2016		AR-UN-3	El Dorado 1.0 WSW	1/4" Pea Size	1/4" Pea Size	Union
3/30/2016	12:40 PM	AR-GL-18	Hot Springs 5.2 NNE	1/2" Grape	3/4" Penny Size	Garland
3/13/2016	6:05 PM	AR-PY-2	Houston 5.0 S	7/8" Nickel Size	NA	Perry
3/13/2016	7:58 PM	AR-JH-1	Knoxville 2.0 NE	1/4" Pea Size	NA	Johnson

The CoCoRaHS website contains instructions on how to construct a hail pad and record hail measurements. Hail pads are also available at the Arkansas Natural Resources Commission address listed on the first page header. Since these pads are fragile, they cannot be shipped to observers.

# Snowfall

Seventy-four (74) observers submitted snow depth reports. The highest annual total was 8.0 inches at North Little Rock 2.6 NNE and Sherwood 0.8 in Pulaski County.

The five (5) highest annual snowfall totals are listed below:

<u>Station Number</u>	<u>Station Name</u>	<u>Daily Snow Sum in.</u> ▼
<a href="#"><u>AR-PS-52</u></a>	North Little Rock 2.6 NNE	8.0
<a href="#"><u>AR-PS-71</u></a>	Sherwood 0.8 NNW	8.0
<a href="#"><u>AR-PS-26</u></a>	Sherwood 4.6 NNW	7.6
<a href="#"><u>AR-PS-70</u></a>	Sherwood 1.0 NNW	7.5
<a href="#"><u>AR-PS-16</u></a>	North Little Rock 1.2 E	7.0

## Other Climate Information

The Little Rock National Weather Service (NWS) has a wealth of information regarding all phases of weather and climate. The NWS issues an annual report summarizing the past year's weather. Here is the webpage link: <http://www.weather.gov/lzk/?n=2016.htm>.

If you want to see what the historic precipitation and temperature records and trends are for Arkansas, as well as other states and the nation, NOAA's webpage "Climate at a Glance" is fun to play with. Its web address is <http://www.ncdc.noaa.gov/cag/>.

Later this summer, it may be interesting to see how drought has progressed (or regressed). The U.S. Drought Monitor provides maps and explanations of drought conditions across the Nation. (<http://droughtmonitor.unl.edu/>)

The Office of the Arkansas State Climatologist has a website - <http://www.climate.ar.gov>.

Comments are welcomed.