January 12-14, 2023 Rain to Snow Transition

National Weather Service Charleston, WV

- 1. Snow Cover Across the Higher Terrain of WV
- 2. Cirrus clouds moving in

GOES-16 GeoColor Image 2:41 PM Jan 15

Event Synopsis

A strengthening area of low pressure would move up the Ohio Valley towards the region during the morning and afternoon hours on January 12th. Showers and isolated thunderstorms coinciding with this system would begin to work into the area near dawn, with an associated warm front located just north of the NWS Charleston forecast area, while the cold front resided further west. Favorable dynamics across the Mid-Ohio Valley would allow for some strong thunderstorms to develop, with several reports of hail received. Hail up to an inch in diameter was reported near Mineral Wells, WV. Thunderstorm activity would weaken throughout the day as it continued to shift eastward, with the main impacts being during the morning hours across the Mid-Ohio Valley. Many areas would however receive a soaking rain of up to an inch, if not more, with precipitation in advance of the cold front, amid gusty conditions at times.

Hail Reports Received on the Morning of Jan. 12th

Location	Size	Time/Date	Provider
Ohio			
Athens County 3 ENE Coolville	0.25 in	0907 AM 01/12	Public
Jackson County 8 WSW Jackson	0.25 in	0842 AM 01/12	Law Enforcement
Washington County 6 S Beverly	0.25 in	1037 AM 01/12	Public
West Virginia			
Harrison County 2 NE Bridgeport	0.25 in	1050 AM 01/12	Public
Ritchie County 7 SSW Pullman	0.25 in	1023 AM 01/12	Public
		0926 AM 01/12 1015 AM 01/12	
1 SE Parkersburg 1 WSW Mineral Wells	0.88 in 0.50 in	0920 AM 01/12 0925 AM 01/12 0920 AM 01/12 0925 AM 01/12	

Event Synopsis (Continued)

The cold front would progress across the region through the late evening hours on January 12th. Colder temperatures working in overnight following the passage of the front would allow post-frontal rain showers to transition to snow across some locations by dawn, mainly across the higher terrain, where up to an inch of snow was reported in a few locations. While it would take a while, rain showers across the lowlands would eventually transition to snow showers during the day on Friday as colder temperatures progressively filtered in. Snow showers would continue at times throughout Friday and into Saturday, courtesy of moisture off of the Great Lakes, combined with upslope flow. The most consistent and widespread snowfall would occur Friday evening until mid morning Saturday as an upper level low slowly traversed across the region. Snow shower activity would gradually diminish throughout Saturday, from northwest to southeast, following the exit of the upper low. Flurries would linger into Saturday night across portions of the mountains, but with little to no additional accumulation. Event total snowfall amounts were up to an inch or two across portions of the West Virginia lowlands, with 2-6"+ across the mountains and nearby surrounding higher terrain of Virginia and West Virginia.

January 13-14 Snowfall Totals (≥2")

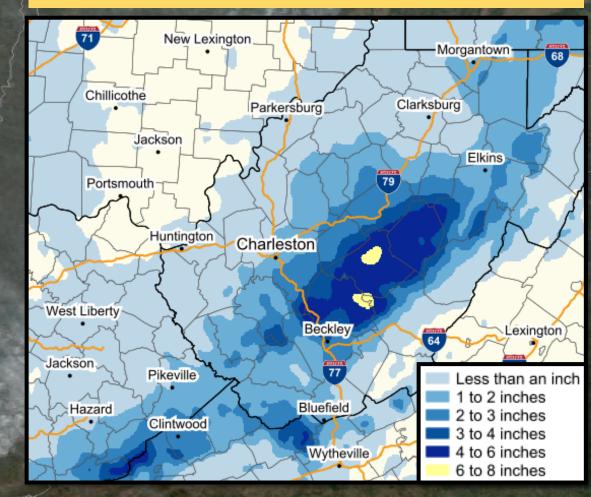
	Location	Amount	Time/Date	Elevation (ft.)
1	Virginia			
	Dickenson County Nora 4 SSE Clintwood		0720 AM 01/15 0700 AM 01/15	2688 1795
Contraction of the local data	West Virginia	5.1 10	0700 AM 01713	1793
CONDUCT OF CONTROL OF C	Barbour County 2 WSW Belington	2.8 in	0912 AM 01/14	
	Boone County 7 SW Whitesville	2.0 in	0908 AM 01/14	1494
	Clay County 5 NNW Clay	2.5 in	0846 AM 01/14	
ľ	Fayette County		0040 AM 01/14	
	Ansted	5.0 in	0115 PM 01/14	
2	Craigsville 0.6 NE	6.2 in	0700 AM 01/15	2239
1	Mount Nebo	5.5 in	0700 AM 01/15	1950
	Pocahontas County Snowshoe	3.0 in	0600 AM 01/15	4850
č	Showshoe	5.0 11	0000 AT 01/15	4050
	<pre>Raleigh County Prosperity</pre>	5.0 in	1215 PM 01/14	
6	Beckley Airport		0700 PM 01/14	2477
×.	Cool Ridge 0.4 NE	4.0 in	0700 AM 01/15	2964
į.	1 WNW Beckley	3.0 in	0951 AM 01/14	
â	Randolph County			
i.	4 ESE Beverly	3.9 in	0750 PM 01/14	
	1 NE Elkins	2.8 in	0700 PM 01/14	1948
	Upshur County			
	Rock Cave 2 NE	2.1 in	0822 AM 01/15	1749
	Webster County	120200		
	Hacker Valley	6.3 in	0735 AM 01/15	1590

Precipitation Maps

24-Hr Precipitation Ending at 7 AM Jan. 13 • PKB **V** Inches 3.0 2.5 CRW 2.0 .50 .25 .10 .01

Much of the region received a soaking rain on January 12th, particularly across the Mid-Ohio Valley.

January 13-14 Event Total Snowfall



Snow amounts of 2-6"+ fell in the mountains and nearby surrounding higher terrain of VA and WV.