# NORTH-CENTRAL PENNSYLVANIA 2004 ICE STORM

Amanda Reynolds



Goal: Determine how much rain fell, and what the temperatures were between the hours of 10PM LST on January 4<sup>th</sup> and Noon on January 5<sup>th</sup> 2004 for areas in McKean, Elk and Cameron Counties.

# Data from the KBFD Airport Observing Station

Note: No precipitation measurements at the airport during requested time frame

Data & Time	Average	Precipitation
Date & Time	Temp (°F)	(in)
1/4/2004 22:00	29.38	U
1/4/2004 23:00	28.52	
1/5/2004 0:00	28.57	
1/5/2004 1:00	28.57	
1/5/2004 2:00	29.38	
1/5/2004 3:00	30.38	
1/5/2004 4:00	30.55	
1/5/2004 5:00	30.43	
1/5/2004 6:00	30.55	
1/5/2004 7:00	32	
1/5/2004 8:00	32	
1/5/2004 9:00	32	
1/5/2004 10:00	33.1	
1/5/2004 11:00	33.1	
1/5/2004 12:00	33.87	

## Precipitation measurements before and after

2004-01-04 17:00:00	32.00	0.02
2004-01-04 18:00:00	32.00	0.02
2004-01-04 19:00:00	30.82	0.01
2004-01-04 20:00:00	30.10	0.00
2004-01-04 21:00:00	28.57	0.00
2004-01-04 22:00:00	29.38	0.00
2004-01-04 23:00:00	28.52	
2004-01-05 00:00:00	28.57	
2004-01-05 01:00:00	28.57	
2004-01-05 02:00:00	29.38	
2004-01-05 03:00:00	30.38	

2004-01-05 10:00:00	33.10	
2004-01-05 11:00:00	33.10	
2004-01-05 12:00:00	33.87	
2004-01-05 13:00:00	34.45	
2004-01-05 14:00:00	33.90	0.07
2004-01-05 15:00:00	33.45	0.03
2004-01-05 16:00:00	32.00	0.03
2004-01-05 17:00:00	31.45	0.02
2004-01-05 18:00:00	30.10	0.00
2004-01-05 19:00:00	28.90	0.00
2004-01-05 20:00:00	28.27	0.00

## From PA Climate Events Database: Ice

	Date & Time	lat	lon	comments	state
	1/4/2004 21:00	41.331	-78.1251		PA
	1/4/2004 21:00	41.2513	-78.4344		PA
	1/4/2004 21:00	41.5721	-78.3845		PA
	1/4/2004 23:00	40.5111	-75.4255		PA
	1/4/2004 23:00	40.5915	-75.1102		PA
	1/4/2004 23:00	41.0317	-74.4514	0.5	NJ
_	1/5/2004 6:00	41.2715	-79.1025	0.25	PA
	1/5/2004 6:00	41.144	-79.03	0.25	PA

Slightly South of Given Area

#### + Buffalo Geneva L 70 65 amestown 60 55 50 + Clarion 45 Lock Haven oungstown 40 State College 35 Pittsborgh Altoona 30 25 20 15 Qumberland + Morgantown Westminster \* Martinsburg + Fairmont 10 Baltimore 🛪 +/Clarksburg + Elkins Radar Image from National Weather Service: KCCX 22:54 UTC 01/04/2004

### Radar from KCCX

# Daily Observations from Local COOP Stations

Date	Max Temp (F)	Min Temp (F)	Rainfall (in)
1/4/2004	59	35	0.25
1/4/2004	56	36	0.35
1/4/2004	54	33	0.27
1/4/2004	56	39	0.44
1/4/2004	57	36	0.29

Date	Max Temp (F)	Min Temp (F)	Rainfall (in)
1/5/2004	35	28	0.81
1/5/2004	36	29	1.08
1/5/2004	33	27	0.68
1/5/2004	40	33	1.25
1/5/2004	37	30	1.15

### CONCLUSION

- > Rain did occur between the hours of 10pm and Noon from January 4-5 2004
  - Based on Radar imagery and COOP Observation Sites
- > Temperatures were below freezing for much of that time
  - Based on hourly observations at KBFD Airport
- ➤ Approximately 1-1.5 inches of rain fell during the time frame
  - ▶ Based on COOP Observation Sites
- ► Ice likely accumulated significantly on power lines
  - > Based on ice reports from nearby stations.