

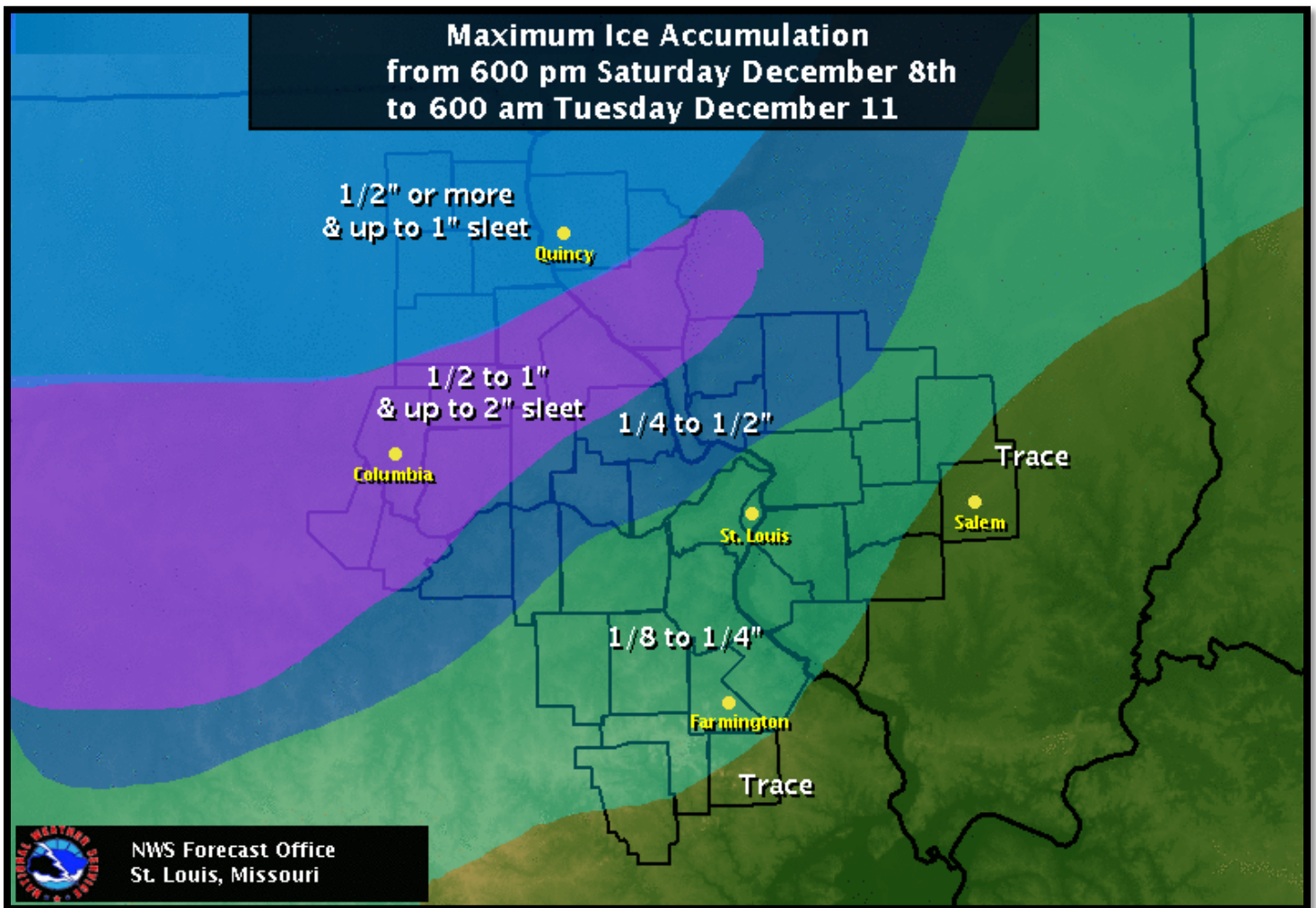
Severe Ice Storm

December 8th-11th, 2007

Overview

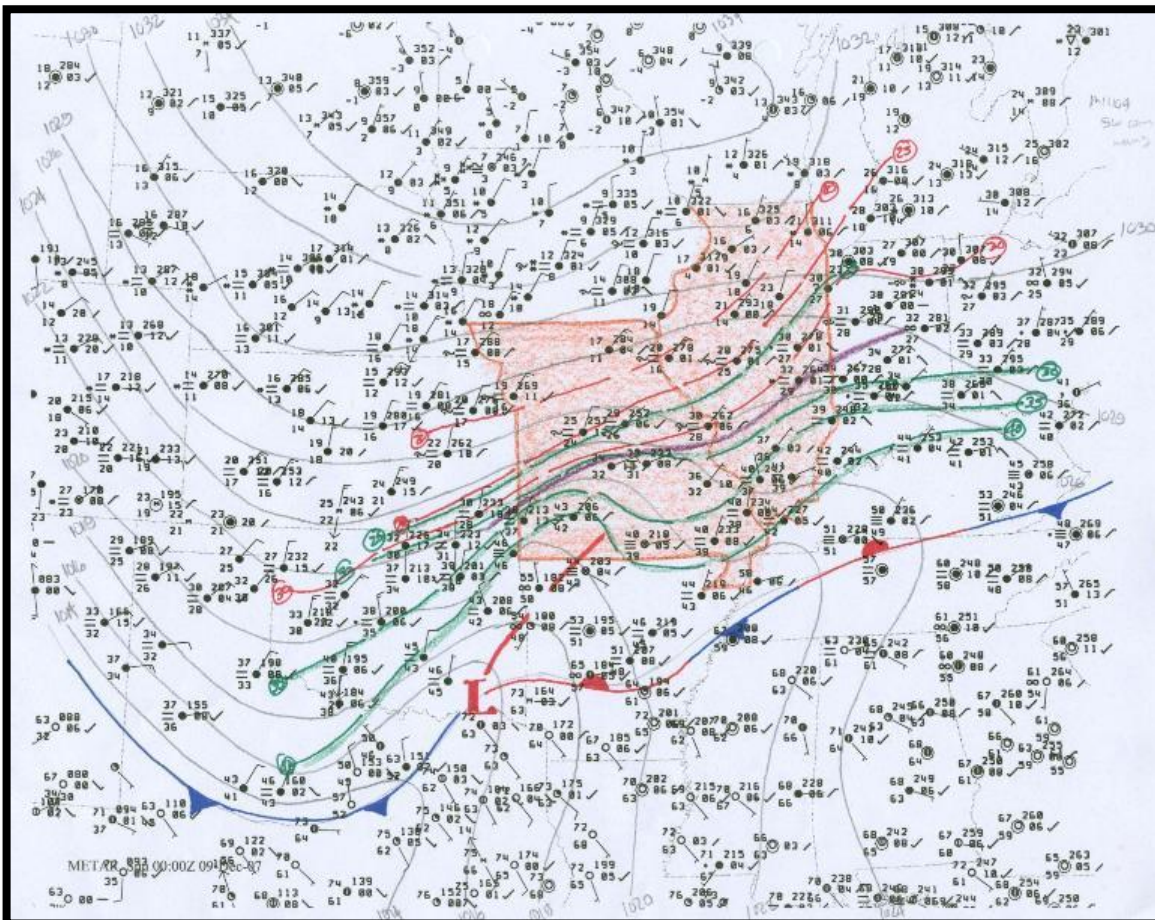
On Saturday December 8th, a strong, cold high pressure system moved from Canada into the Great Plains. This high pressure system brought some very cold air streaming into the Midwest and Great Plains regions. At 2 pm on December 8th, temperatures ranged from the mid 30s in southeast Missouri to the upper teens in northeast Missouri. As this cold air was settling in across the bi-state region, a low pressure system developed over the southern plains which helped draw Gulf moisture northward and up and over the cold air which was locked in at the surface. Sub-freezing temperatures across the northern 2/3 of the bi-state region combined with this overrunning warm and moist air provided the perfect setup for freezing rain.

Between Saturday evening and Tuesday (12/11) morning several waves of precipitation affected Missouri and Illinois, bringing up to an inch of freezing rain accumulation, as well as up to 2 inches of sleet in parts of central and northeast Missouri which fell after midnight on Sunday morning.



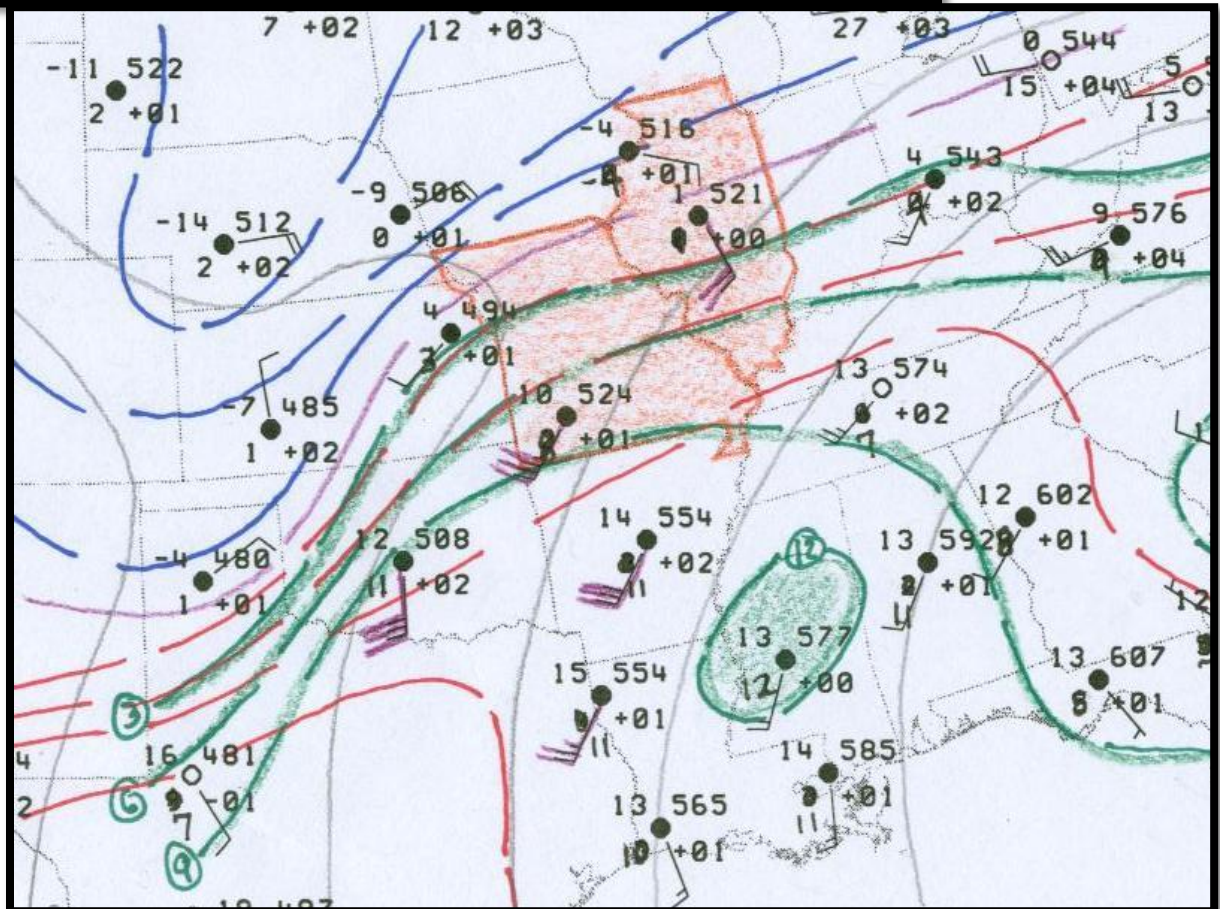
Ice accumulation map for December 8th through 11th, 2007 Ice Storm. (analysis by Fred Glass, Lead Forecaster WFO St. Louis)

Map Analysis



December 8th, 2007
6 PM (00z,
12/09/07) Surface
Map. Note the cold
air in place across
the bi-state region
as well as the
quasi-stationary
front across
Arkansas and
Tennessee (analysis
by Scott Truett,
retired Lead
Forecaster WFO St.
Louis).

December 8th,
2007 6 PM
(00z, 12/09/07)
850MB/5,000
feet weather
map. Warm
and moist
southwest flow
at
850mb/5,000ft
which is
overrunning
the cold air
at the surface
over Missouri
and Illinois at
this time
(analysis by
Scott Truett,
retired Lead
Forecaster
WFO St. Louis).



Impacts

The hardest hit portions of the bi-state area were the Jefferson City area, and an area from western Warren County, across Lincoln County to Pike County. Here are some estimated power outage numbers:

- Immediate Jefferson City area: 20,000
- Cole County: 30,000 total
- Moniteau County: 10,000 (virtually all of California, MO was out for a period)
- Callaway County: 8000 – 10,000
- Lincoln County: 6000 – 7000
- Pike: 4000 – 5000 (most of Louisiana, MO lost power)
- Boone: The cities of Hartsburg, Ashland, and Holts Summit lost power.
- Shelters were opened in Cole, Pike and Warren Counties (since closed). From 50 – 60 people had been staying at the shelters in Cole County, and over 100 people were coming to the shelters at meal times for hot food.



Any questions regarding this event review should be address to w-lsx.webmaster@noaa.gov