



# Central Illinois Lincoln Logs

## National Weather Service, Lincoln, IL

Autumn 2008

Volume 11, Number 3

### In This Issue

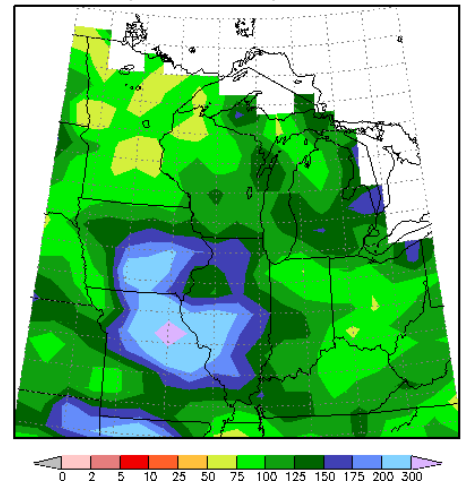
- Roller Coaster Rainfall Totals
- Winter Weather Headline Changes
- Lincoln NWS Staffer Retires
- Fire Weather Season Resumes
- Cooperative Observer Awards
- "Iron Man" Meteorologist
- Student Volunteers
- TAF Changes
- Mining the Online Forecast Database
- NOAA Weather Radio Distribution

## Roller Coaster Ride of Precipitation Across Midwest

By: *Darrin Hansing, Service Hydrologist and Kirk Huettl, Meteorologist*

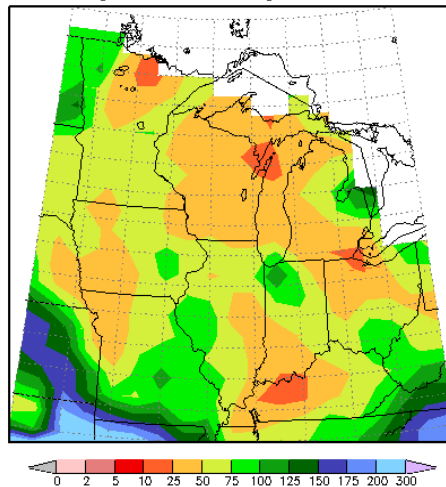
Central and southeast Illinois had its fair share of precipitation over the past few months. The month of July was a very wet month for the state, as multiple storm systems brought heavy precipitation across the area. Monthly rainfall totals ranked high among historical records. Both Springfield and Lincoln saw their 3rd wettest July on record. Total precipitation for July ranged from 125% to over 200% across central and southeast Illinois.

Total Precipitation Percent of Mean  
July 1, 2008 to July 31, 2008



NOAA Midwestern Regional Climate Cent  
Illinois State Water Survey  
Champaign, Illinois

Total Precipitation Percent of Mean  
August 1, 2008 to August 31, 2008



NOAA Midwestern Regional Climate Center  
Illinois State Water Survey  
Champaign, Illinois

The lack of significant rainfall in the month of August gave the state time to dry out, as rain amounts averaged below normal across the area. Monthly rainfall deficits were as much as 2 to 3 inches. This was the 5th driest August on record for Lincoln with 0.77". The normal August rainfall for Lincoln is 4.00". Other locations across the region also experienced very dry conditions with many receiving less than one inch of rain for the month.

Typical August rainfall is between 3.2 and 4.2 inches. Here are some monthly rain totals from around the area:

Lawrenceville..... 0.55"	Mattoon..... 0.62"
Champaign..... 0.72"	Bloomington..... 0.72"
Lincoln..... 0.77"	Peoria..... 1.04"
Springfield..... 1.61"	Decatur..... 2.23"

## July 2008 Rainfall Top 5:

### Springfield (normal 3.53")

10.76" in 1981  
9.46" in 1993  
**9.45" in 2008**  
8.51" in 1896  
7.06" in 1942

### Lincoln (normal 4.35")

15.93" in 1992  
11.20" in 1958  
**11.00" in 2008**  
10.09" in 1981  
9.94" in 2003

## September 2008 Rainfall Top 5:

### Springfield (normal 2.83")

15.16" in 1926  
10.68" in 1911  
8.57" in 1986  
**8.53" in 2008**  
8.38" in 1945

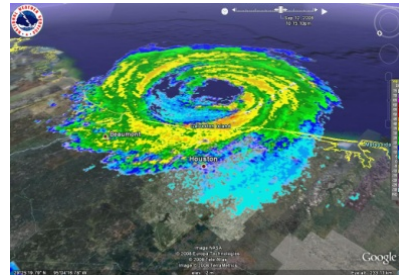
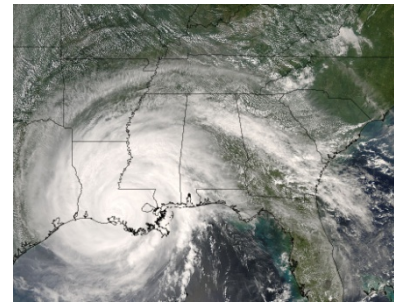
### Lincoln (normal 3.13")

14.31" in 1911  
11.95" in 1926  
**10.30" in 2008**  
8.37" in 1925  
8.34" in 1936

### Peoria (normal 3.12")

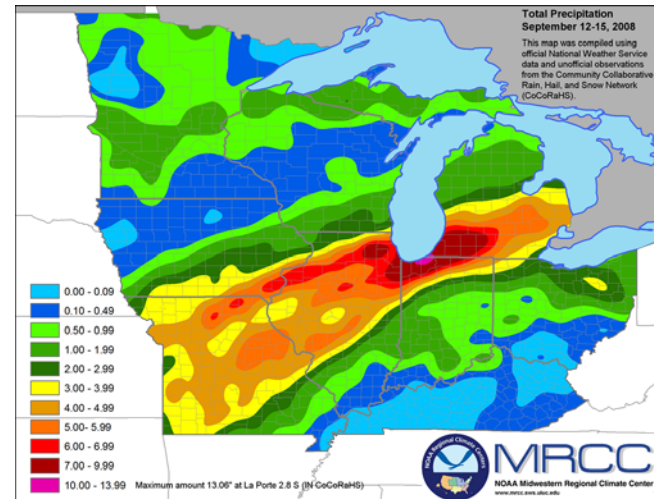
13.09" in 1961  
**12.34" in 2008**  
12.30" in 1911  
11.55" in 1926  
11.49" in 1970

September proved to be quite a wet month, thanks largely to remnants of Hurricanes Gustav and Ike. Rains from Gustav soaked much of the central Midwest early in the month of September. After hitting the Louisiana Gulf Coast on Labor Day, Gustav rapidly weakened as it pushed into Arkansas and temporarily stalled. By September 4, the remnants of Gustav merged with a cold front that was moving across the region and became a wave of low pressure on the front. Heavy rain spread through Illinois with rainfall amounts of three to four inches. However, the rain was confined to a relatively narrow band across the Midwest as the low raced northeast along the front.



September 11th through the 14th was also a very wet period across the region. Ahead of Hurricane Ike, a slow moving frontal boundary and tropical airmass brought 2 days of record setting heavy rains to the Midwest. This resulted in widespread flash flooding and caused many area rivers to push out of their banks. Precipitation from the remnants of Hurricane Ike only added to the flooding problem.

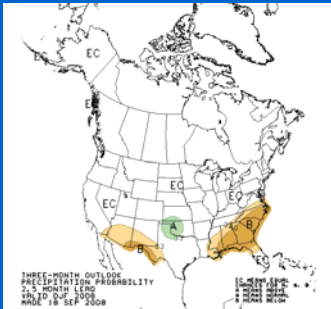
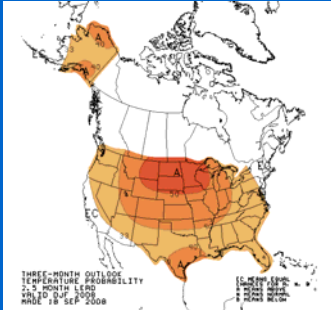
Ike slammed into the Texas coast during the early morning hours of September 13th. Its remnants merged with the slow moving cold front the next day. Additional heavy rain spread along the front as the system moved rapidly to the northeast at around 50 mph. Rainfall was three to seven times normal across sections of central and southeast Illinois during the span of these 4 days. Northern Illinois and the Chicago area experienced extreme flooding from the 6 to 10+ inches of rain that fell across the area. Creeks and rivers rapidly rose and overflowed their banks across northern Illinois. Some area rivers crested at record levels as a result of the heavy rain.



Rivers across central Illinois also experienced significant flooding. The greatest river impacts in central Illinois were felt along the Illinois River as the heavy rains from the north flowed downstream and combined with local runoff, causing major flooding to areas along the river.

According to state climatologist Jim Angel, statewide across Illinois the average precipitation for September was 7.98 inches, 4.79 inches above normal and the 3<sup>rd</sup> wettest September since 1895. The statewide precipitation is also the 2<sup>nd</sup> wettest January to September on record, with 42.75 inches, barely beat by 1993 with 42.91 inches.

## Winter Weather Outlook:



The long range outlooks issued by the Climate Prediction Center, for the winter period (December through February), are shown above. In the top image, above normal temperatures are forecast for nearly the entire nation, except parts of the southwest U.S. The precipitation outlook is not as clear cut, with most of the nation showing equal chances of being above normal, near normal or below normal (as shown by lack of shading). The southeast and southwest U.S. are expected to be drier than normal, with above normal precipitation over only a small part of the central Plains.

## Illinois River flooding:



Henry (left) crested at 31.10 feet on September 19, the 3<sup>rd</sup> highest crest on record.

Peoria (center) crested at 27.06 feet on September 19, the 6<sup>th</sup> highest crest on record.

Havana (right) crested at 23.54 feet on September 23, the 7<sup>th</sup> highest crest on record.

## Winter Weather Product Headlines to be Simplified

By: Chris Miller, Warning Coordination Meteorologist



It won't be very long before wintry weather is upon us. The past two winters have brought damaging ice storms, heavy snow and blizzards to our region. This coming season, the products that we use to alert the public about threatening winter storms will be simplified.

The tables below illustrate the changes for this winter season:

Advisory Types – Past Years	Definition	Advisory This Year
<b>Winter Weather Advisory</b>	A combination of winter weather types which meet at least two of the advisory criteria listed below (e.g. snow and freezing rain)	
<b>Snow Advisory</b>	An average of 3 to 5 inches of snow	<b>Winter Weather Advisory</b>
<b>Blowing Snow Advisory</b>	25-34 mph wind blows snow with a visibility of ¼ mile or less	
<b>Snow and Blowing Snow Advisory</b>	Falling snow <u>AND</u> 25-34 mph wind with blowing snow & a visibility of ¼ mile or less	
<b>Sleet Advisory</b>	Sleet accumulating to less than ½” deep	
<b>Freezing Rain Advisory</b>	Ice accumulates to a thickness of less than ¼”	<b>Freezing Rain Advisory</b>
<b>Wind Chill Advisory</b>	Wind chill values of -15 to -24 °F	<b>Wind Chill Advisory</b>

## Summer Climate Statistics:

### Peoria:

- Average temperature 73.7°F (0.6°F above normal)
- 9.74" of precipitation (1.28" below normal)

### Springfield:

- Average temperature 73.5°F (1.1°F below normal)
- 18.55" of precipitation (7.84" above normal)
- 3<sup>rd</sup> wettest summer on record

### Lincoln:

- Average temperature 72.1°F (1.1°F below normal)
- 18.72" of precipitation (6.40" above normal)
- 6<sup>th</sup> wettest summer on record

Warning Types – Past Years	Definition	Warning This Year
Winter Storm Warning	A combination of winter weather types which meet at least two of the warning criteria listed below (e.g. heavy snow and ice)	Winter Storm Warning
Heavy Snow Warning		
Sleet Advisory		
	An average of 6 inches or more of snow	
	Sleet accumulating to ½" deep or more	
Blizzard Warning	Visibility below ¼ mile with falling <u>or</u> drifting snow, and wind speeds (sustained or gusts) of at least 35 mph	Blizzard Warning
Ice Storm Warning	Ice accumulates to a thickness of ¼" or more causing power outages and tree damage	Ice Storm Warning
Wind Chill Warning	Wind chill values of -25 °F or colder	Wind Chill Warning

As you can see by the tables above, a Winter Weather Advisory product and a Winter Storm Warning product will be used for a variety of winter weather events. The first paragraph of the Winter Weather Advisory or Winter Storm Warning will highlight the reason for the product. An example of a simplified Winter Storm Warning would be:

**...WINTER STORM WARNING IN EFFECT UNTIL 6 AM CST TUESDAY...  
THE NATIONAL WEATHER SERVICE IN LINCOLN IL HAS ISSUED A WINTER STORM WARNING FOR HEAVY SNOW...WHICH IS IN EFFECT UNTIL 6 AM CST TUESDAY.**

In past years, the NWS could use up to 13 separate products for advisories and warnings for the variety of winter weather we experience. This year, that number will be reduced to 7. This will mean fewer types of advisories and warnings for our customers to keep track of.

Speaking of winter weather, check out our Winter Weather Safety section on our web page at: <http://www.crh.noaa.gov/ilx/?n=winter>

This year, Winter Weather Preparedness Week in the state of Illinois will be **November 16 – 22, 2008**. Use this week, and our web site, to make sure that you, your friends and your family are prepared for the problems we face every year when winter storms impact our area!





Remember that Daylight Saving Time now ends on the first Sunday of November. This year, it will be November 2. At 2 AM on that day, clocks are set back one hour.

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## Lincoln Information Technology Officer Retires

Chris Fotinos, Information Technology Officer (ITO) at the Lincoln NWS, decided to call it a career in August.

His federal career spanned 40 years, beginning with 22 years in the Air Force. He then began his career with the NWS in Oklahoma, at what is now known as the Radar Operations Center. He had two tours of duty at the Lincoln office, first as the Electronics System Analyst from 1995 to 1999, then returning to serve as our first ITO in 2002. In between, he worked at NWS Headquarters in suburban Washington DC.



The staff of the Lincoln office congratulates Chris on his retirement!

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## Fall Fire Weather Season Arrives

*By: Patrick Bak, Senior Meteorologist*

October 1<sup>st</sup> marked the start of the first fall Fire Weather season at the National Weather Service Office in Lincoln since our spin-up of a full Fire Weather Forecast program earlier this year. The fall Fire Weather season is expected to run through November 30<sup>th</sup>, though the end date may be adjusted after coordination with our primary fire weather user groups, including the Illinois Department of Natural Resources and U.S. Fish & Wildlife Service.

During the fall (or spring) Fire Weather season, routine Fire Weather Forecasts are issued twice daily, around 6 AM and 3 PM, to assist land managers with planning and decision making with respect to prescribed burning. In addition, Fire Weather Watches and Red Flag Warnings will be issued as needed when the combination of dry fuels (grasses, trees, etc) and weather conditions support extreme fire danger. For site specific Fire Weather forecast needs, Spot Forecasts will be issued upon request from land management agencies to support prescribed burn or wildfire operations.

The wet conditions that have existed for much of this year have largely kept fire danger to a minimum. In fact, the wet conditions precluded prescribed burning this spring in many areas. If ample drying takes place this fall, prescribed burning opportunities will increase once again and our Fire Weather Forecasts will be available as an aid to safe burning.

Check out the Fire Weather section on our website for more information:  
<http://www.crh.noaa.gov/ilx/firewx.php>

## Cooperative Observer Program News

By: *Chris Geelhart, Meteorologist*

### About COOP Awards:

The NWS begins presenting service awards to observers who have completed 10 years of service, then every 5 years afterward. Institutions that function as COOP stations receive the "Honored Institution Award" every 25 years.

The awards at the 45-year level and above are named after specific people:

**45 years – Dick Hagemeyer** (former Cooperative Program Manager who later served as director of the NWS Pacific Region)

**50 years – Edward Stoll** (cooperative observer in Elwood, NE, for 76 years)

**55 years – Benjamin Franklin** (used a network of postal workers to observe the weather along the East Coast, the first known method of tracking hurricanes)

**60 years – Helmut Landsberg** (largely responsible for establishing the nationwide climate network as we know it today)

**65 years – Gen. Albert Myer** (the "father" of U.S. meteorological services, who was the chief of the NWS's predecessor, the Signal Service)

**70 years – Ruby Stuff** (observer in Elsmere, NE, who became the first woman to serve 70 years as a COOP observer)

**75 years – Earl Stewart** (longest-serving individual COOP observer, 77 years at Cottage Grove, OR)

Three of our cooperative weather observers have received prestigious awards over the summer.



In August, **Jim and Ruby Mitchell of Avon** were presented with the Dick Hagemeyer Award, for 45 years of service. Jim assumed operation of the Avon station in April 1963. Presenting the award were (from left to right) student volunteer Nick Vercellotti, meteorologist intern Chuck Schaffer, hydrometeorological technician John Parr, and Data Acquisition Program Manager Billy Ousley.



**Edna Hale of Flora** also received the Hagemeyer Award in August. The award was presented by Billy Ousley and Chuck Schaffer, as well as student volunteer Amanda Perry (not pictured). The station has been operated by Edna (and her late husband Allen) since March 1963.



Long time **Clay City** observer **Ruth Lynn** received a 35-year Length of Service Award in August, presented by Billy Ousley. The station has been operated by Ruth, and her late husband Hugh, since November 1972. They took over when the previous observer had to step down after 58 years. Besides precipitation readings, Ruth provides the NWS with stages on the Little Wabash River as necessary.



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## Meteorologist Participates in Triathalons

Senior Meteorologist Ed Shimon participated in 3 triathlons this summer.

He started with the Evergreen Lake Triathlon near Bloomington on July 19. He completed the Sprint distance triathlon, which included a 500 meter swim (0.3 miles), a 40 km bike ride (24.8 miles), and a 5 km run (3.1 miles). Despite a steady dose of rain throughout the entire race, Ed was able to finish in first place for his men's division, with a time of 1 hr and 36 minutes. He received a customary cow bell as his prize.

The next race was the Iron Abe Triathlon at Lake Springfield on July 27, where he participated in the Olympic distance triathlon. That race included a 1500 meter swim (0.9 miles), a 40 km bike ride (24.8 miles), and a 10 km run (6.2 miles). The weather was much better for that race, with sunny skies and temperatures in the 70s to low 80s. He finished in a time of 2 hrs and 35 minutes, which put him in second place for his men's division and garnered him a \$200 prize and an Iron Abe Trophy!

The last race was the inaugural Railsplitter Triathlon at Lake Petersburg, on August 23. He completed the International distance triathlon, which included a 1 mile swim, a 37 mile bike ride, and a 7.5 mile run. The weather that day was very hot and humid, with temperatures in the mid 80s and dewpoints in the mid 70s by the time the race was completed. Many racers were forced to pull out of the race due to the high heat and humidity. Ed was able to complete that race in a time of 3 hours and 30 minutes, which put him in first place for his men's division.



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## Summer Student Volunteers



The Lincoln NWS hosted two summer student volunteers, Amanda Perry and Nick Vercellotti. Amanda is a senior at Western Illinois University this fall, and Nick is a senior at the University of Illinois.



## Central Illinois TAF sites:

KBMI -- Central Illinois Regional Airport (Bloomington)

KCMI – University of Illinois Willard Airport (Champaign)

KDEC – Decatur Airport

KPIA – Greater Peoria Regional Airport

KSPI – Abraham Lincoln Capital Airport (Springfield)

## Format of Aviation Forecasts Changing Soon



Terminal Aerodrome Forecasts (TAF's) are issued by the Lincoln NWS for several central Illinois airports. They give detailed information on sky conditions, winds, weather types, and visibilities for the next 24 hours. Beginning on November 5, users

of these TAF products will notice a change.

The changes are being done to support international aviation requirements. Approximately 32 airports in the U.S. will see the forecast period extended from 24 to 30 hours. In order to accommodate this, the TAF format is being slightly altered to include the date as well as the time of the forecast period. While none of the central Illinois TAF sites are included in the 30-hour forecast, all TAF's across the U.S. are being changed to support this requirement.

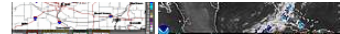
More details can be found at the Aviation Weather Center's web site:

<http://aviationweather.gov/notice/taf30.php>

## Mining the Online Forecasts

One of the lesser known abilities of our online forecasts is going beyond the standard 7-day forecast to obtain hourly forecast data.

**Saturday Night:** Partly cloudy, with a low around 53.  
**Sunday:** Mostly sunny, with a high near 74.  
**Sunday Night:** Partly cloudy, with a low around 55.  
**Monday:** Mostly sunny, with a high near 77.  
**Monday Night:** A chance of showers. Mostly cloudy, with a low around 54.  
**Tuesday:** Partly sunny, with a high near 71.

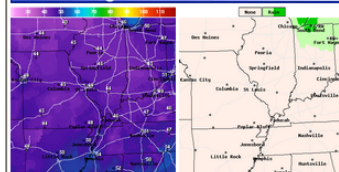


### Detailed Point Forecast [Move Up]



After clicking on the desired point on the map on the front page of our homepage (or by entering a town or ZIP code in the top left corner of the page), you will get the standard 7-day forecast. Scroll down to the bottom. In the section that says "Additional Forecasts & Information", there are two links that say "Hourly Weather Graph" and "Tabular Forecast".

### National Digital Forecast Database



### Additional Forecasts & Information

Zone Area Forecast for Sangamon County, IL	
<a href="#">Forecast Discussion</a>	<a href="#">Air Quality Forecasts</a>
<a href="#">Printable Forecast</a>	<a href="#">Text Only Forecast</a>
<a href="#">Hourly Weather Graph</a>	<a href="#">Tabular Forecast</a>
<a href="#">International System of Units</a>	<a href="#">About Point Forecasts</a>
<a href="#">Hazardous Weather</a>	<a href="#">Cooperative Observers</a>
<a href="#">Observed Temps/Pcpn</a>	<a href="#">River Info (AHP)</a>
<a href="#">Local Climate</a>	<a href="#">NOAA Weather Radio</a>
<a href="#">Home</a>	





## NOAA Weather Radio School Distribution Concludes

### Central Illinois Lincoln Logs

National Weather Service  
1362 State Route 10  
Lincoln, IL 62656

Phone: (217) 732-3089  
(8:30am to 4pm weekdays)

The *Central Illinois Lincoln Logs* is a quarterly publication of the National Weather Service office in Lincoln, Illinois. It is available on our Internet page at

[www.weather.gov/lincoln](http://www.weather.gov/lincoln)

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Federal agencies recently distributed more than 182,000 Public Alert Radios to preschools, Head Start programs, K-12 nonpublic schools and nonpublic school central offices, K-12 school district offices and post-secondary schools. In two earlier phases, the federal government distributed radios to all 97,000 K-12 public schools across the country, bringing the program to a close this September with life-saving radios in every school in the nation.

The radios sound an alarm to alert school personnel about hazardous weather and other emergencies, even when other means of communication are disabled.

The radios were distributed by NOAA, with funding from the U.S. Department of Homeland Security and assistance from the departments of Education and Health and Human Services.

Commonly known as [NOAA Weather Radio All Hazards](#), these Public Alert Radios provide alerts and safety steps on a wide range of emergencies — from an approaching tornado, a telephone outage disrupting 911 emergency services, local roads overrun by flash floods, a derailed train posing a hazardous material threat, or the urgent need to be on the lookout for an abducted child.

The program also encourages school officials, emergency managers, human service providers, and Citizen Corps Councils across the country to partner and align their efforts with local emergency plans to build overall community preparedness. By coordinating with their local emergency managers and Citizen Corps Council, schools also can obtain technical and other assistance to improve their school safety plans and other emergency preparedness efforts.

For additional information on the [Public Alert Radios for Schools program](#), see the Web site. Information on NOAA Weather Radio All-Hazards coverage in central and southeast Illinois is available at <http://www.crh.noaa.gov/ilx/?n=nwr>. Nine stations are operated by the Lincoln NWS:



<b>Bloomington</b> <b>KZZ-65</b> <b>162.525 MHz</b>	<b>Champaign</b> <b>WXJ-76</b> <b>162.550 MHz</b>	<b>Galesburg</b> <b>KZZ-66</b> <b>162.400 MHz</b>
<b>Jacksonville</b> <b>WXM-90</b> <b>162.525 MHz</b>	<b>Newton</b> KXI-48 162.450 MHz	<b>Paris</b> KXI-47 162.525 MHz
<b>Peoria</b> <b>WXJ-71</b> <b>162.475 MHz</b>	<b>Shelbyville</b> KXI-46 162.500 MHz	<b>Springfield</b> WXJ-75 162.400 MHz

In several cases, coverage for a given area is available from more than one transmitter. Visit the link above for more details.