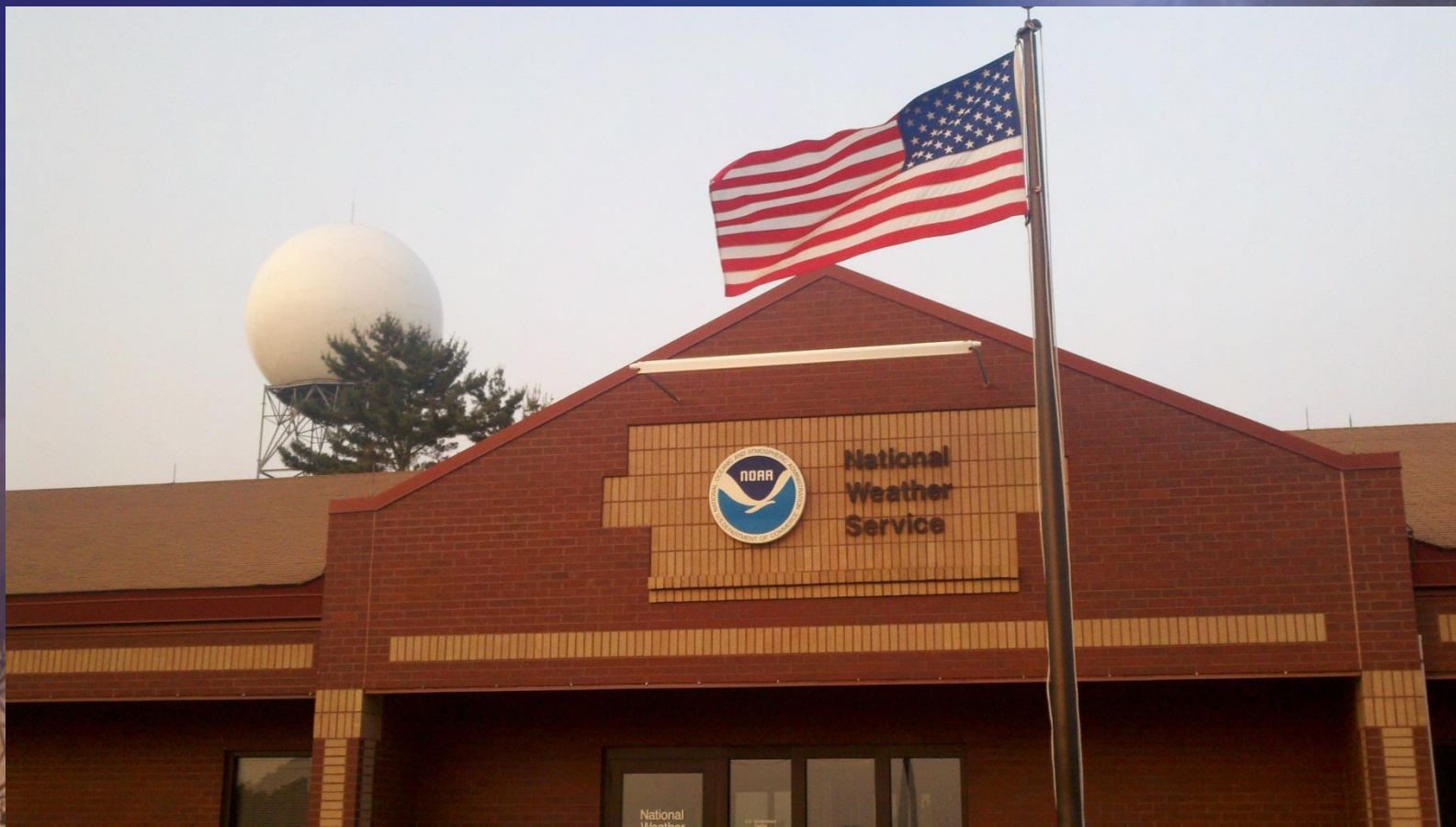


National Weather Service Northern Indiana



NWS Northern Indiana
www.weather.gov/iwx



[/US.NationalWeatherService.NorthernIN.gov](https://www.facebook.com/US.NationalWeatherService.NorthernIN.gov)



[@NWSIWX](https://twitter.com/NWSIWX)



[/NWSNorthernIndiana](https://www.youtube.com/NWSNorthernIndiana)

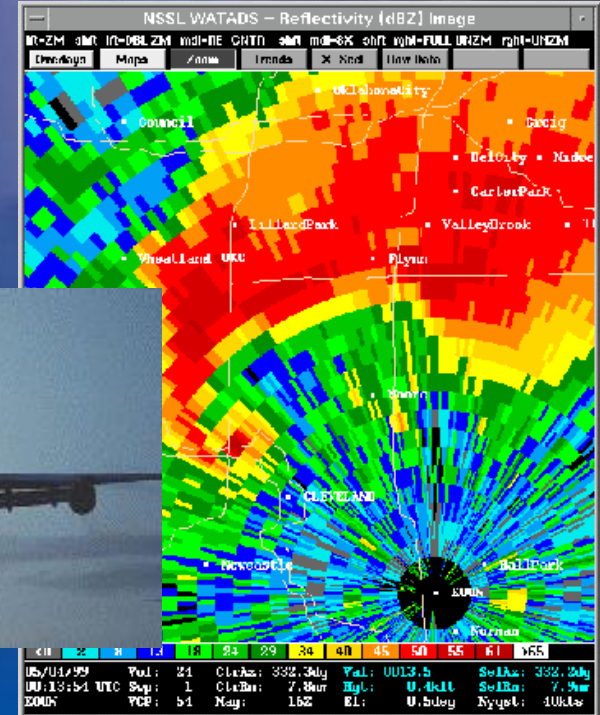
Why We're Here

- The National Weather Service Produces Weather, Water and Climate Forecasts and Warnings
 - For All Americans
 - To Protect Life and Property
 - To Enhance the National Economy

- Data and Products to:
 - Government Agencies
 - Private Sector
 - The Public
 - Global Communities

- Economic Decisions Are Based on NWS Data and Products

- *“Weather Impacts \$1.7 Trillion [per Year] of Our Economy” – Weather Risk Management Association, Jan. 2001*
- *Growing Weather Risk Management Industry Approaching \$8 Billion per Year – Weather Risk Management Association, Jan. 2001*



Why We're Here

- **10 year average (2003-2012)**
 - 640 weather related deaths
 - 117 heat related
 - 109 from tornado
 - 109 from hurricanes
 - 76 from flooding
 - 51 from wind
 - 46 from rip currents
 - 35 from lightning
 - 27 from cold
 - 24 winter weather related



Courtesy Paul Huffman, *Elkhart Truth*

Organization

Department of Commerce (DOC)



National Oceanic and Atmospheric
Administration (NOAA)



National Weather Service (NWS)



Central Region (CR)



Weather Forecast Office (WFO)
Northern Indiana (IWX)

We've Been Around for a While...

- **1870** – President Grant signed into existence a national weather observing service, as part of the Army Signal Service
- **1870 – 1891** – Part of the War Department
- **1891 – 1940** – Weather Bureau, in the Department of Agriculture
- **1940 – 1970** – Weather Bureau, in the Department of Commerce
- **1970 – present** – National Weather Service, in the Department of Commerce

Former Fort Wayne Office

1911 - 1998

Former South Bend Office

1939 - 1998

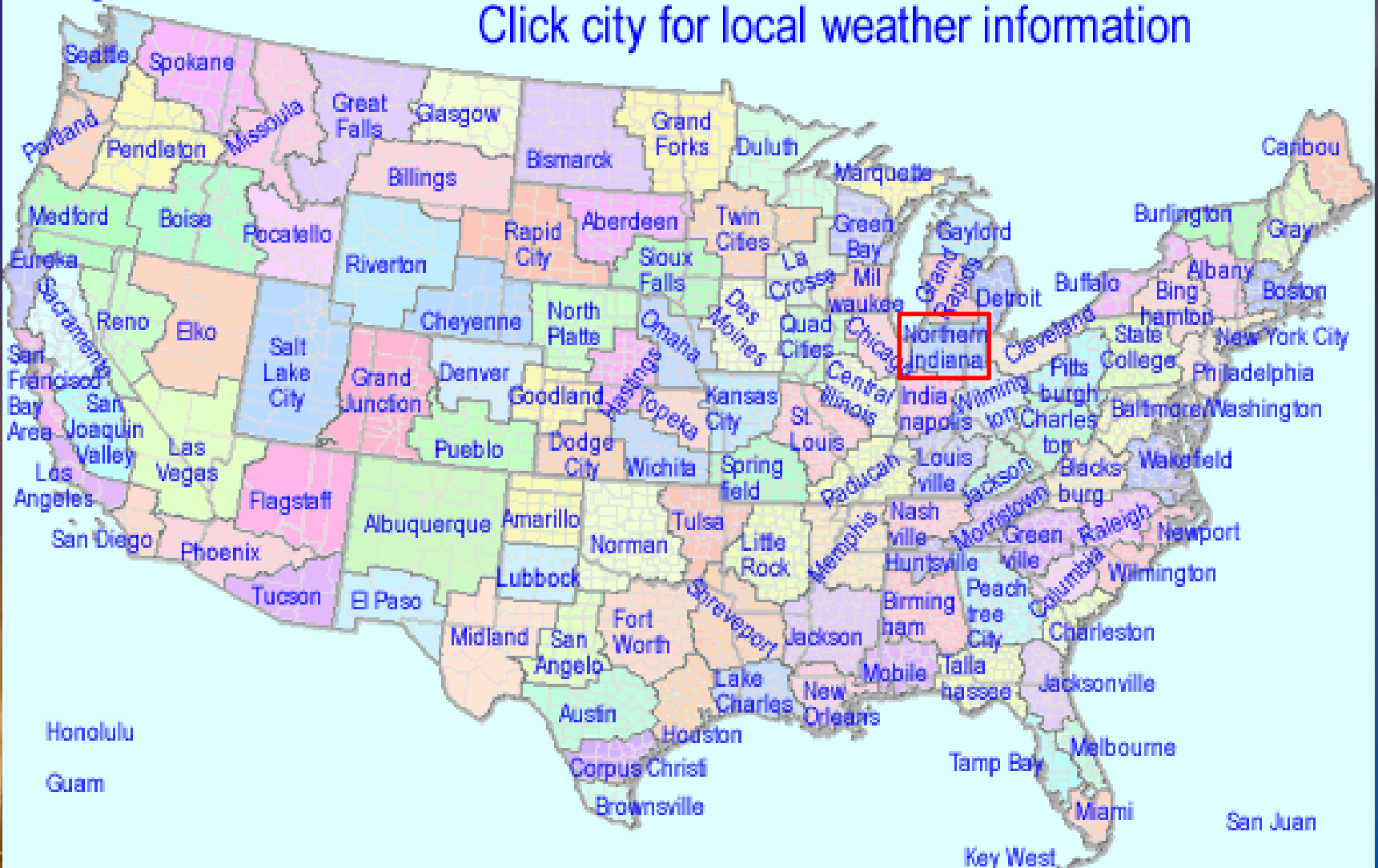
IWX

1998 - present

NWS Office Locations

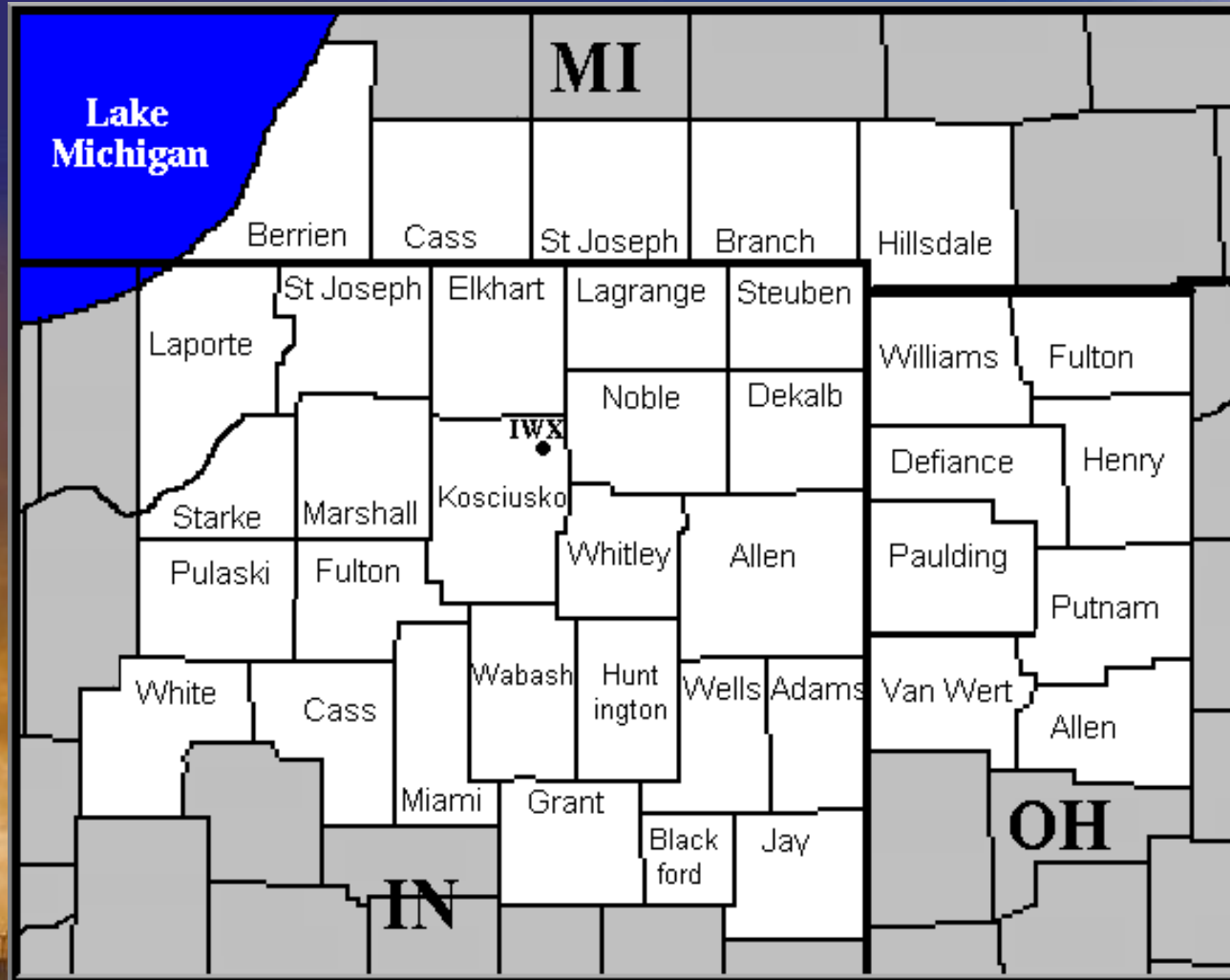
Anchorage Juneau Fairbanks

Click city for local weather information



What We Do At WFO Northern Indiana (IWX)

Maintain 24/7 Weather Watch for County Warning and Forecast Area (CWFA)



37 counties

3 states

2 time zones

How America Gets Weather Information

The average person only sees the tip of the iceberg

TV
Radio
Internet

Private Weather Companies

NATIONAL
WEATHER
SERVICE

122 Weather Forecast Offices
Weather and Flood Forecasts
and Warnings

13 River Forecast Centers
River Forecasts (used for
Hydropower, Flood warnings,
Irrigation, River Navigation)

National Centers for Environmental Prediction

Model Simulations
Climate & Seasonal Outlooks
Aviation & Marine Forecasts
Storm & Tornado Prediction, Hurricane Tracks

Observations

Radar Network, Satellites, Weather Balloons, Ground-level
Observations at Airports, Aircraft, Lightning Network, Data
Buoys, Stream Gauge Network, 11,000 Volunteer Daily-Data
collectors, Thousands of Volunteer Storm Spotters

NWS Northern Indiana Staff

- **Meteorologist-In-Charge (MIC)**
- **Science and Operations Officer (SOO)**
- **Warning Coordination Meteorologist (WCM)**
- **13 Meteorologists (5 Lead Forecasters)**
- **Information Technology Officer (ITO)**
- **Observations Program Leader (OPL)**
- **Service Hydrologist (SH)**
- **Electronic Systems Analyst (ESA)**
- **2 Electronics Technicians (ET)**

Warnings and Forecasts

- **Convective Warnings (Tornado, Severe, and Flash Flood)**
- **Non-convective Watches and Warnings (Wind Chill, High Wind, Winter Storm, etc.)**
- **Zone Forecast (Text, Digital, and Graphical)**
- **Terminal and Route Aviation Forecasts**
- **Short Term Forecasts**
- **River Forecasts and Warnings**
- **Climatology Products**
- **Marine Forecasts, Statements and Warnings**
- **Fire Weather Forecasts**

Observation Tools - Ground Level

Automated Surface Observation System (ASOS)

- Rainfall
 - Temperature/Dewpoint
 - Weather
 - Wind
 - Sky Cover
 - Freezing Rain
 - Thunderstorm
 - Visibility
 - Pressure
- Benton Harbor
 - Defiance
 - Fort Wayne
 - Goshen
 - Lima
 - South Bend



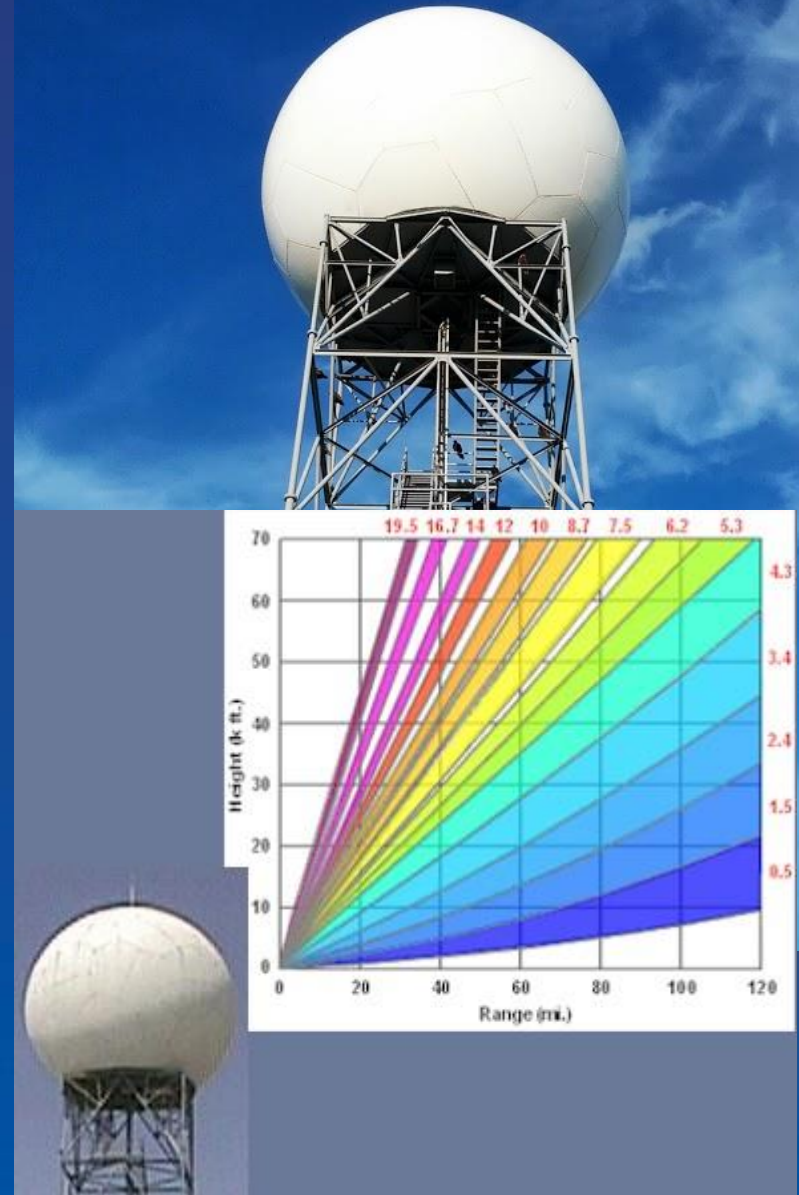
Doppler Radar WSR-88D (Weather Surveillance Radar 1988 Doppler)



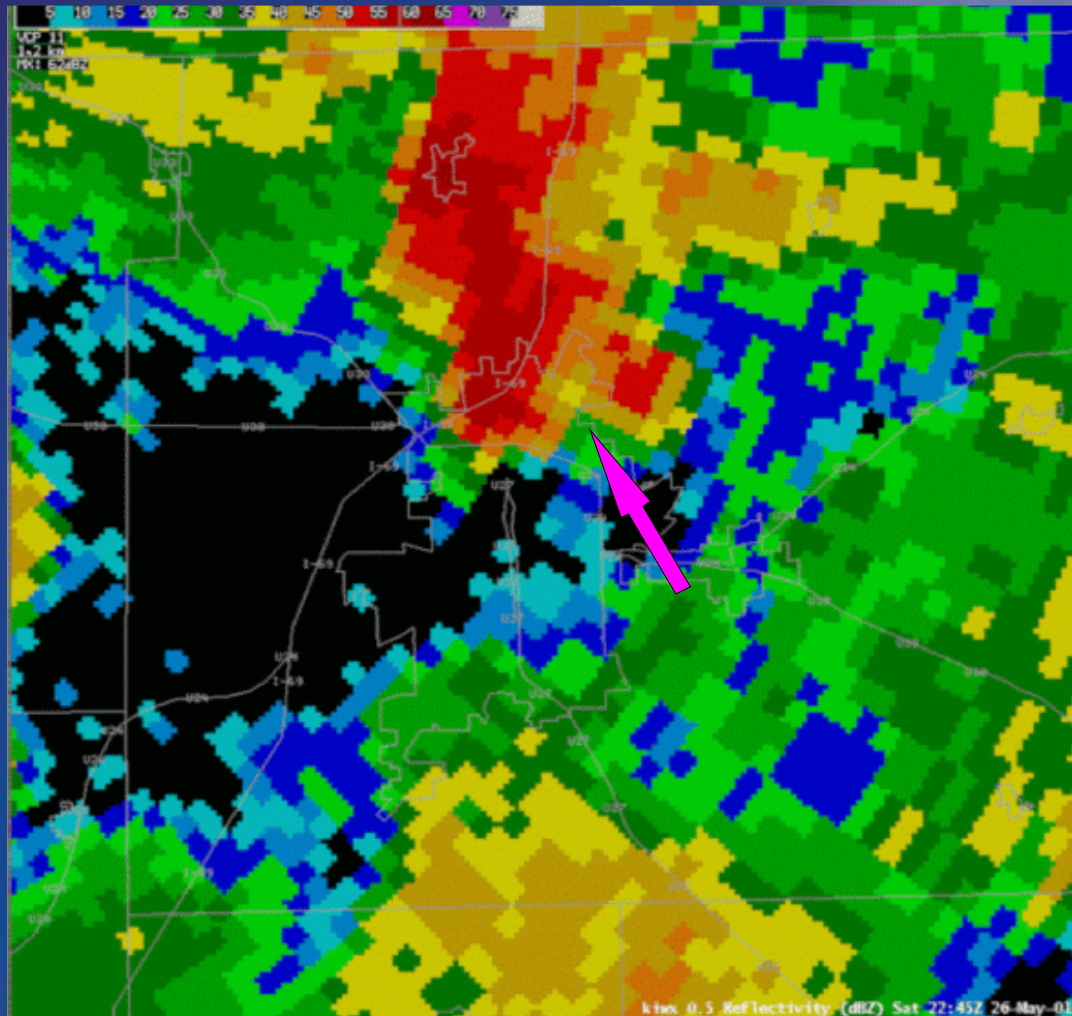
WSR-88D

World's most powerful radar

- 28-foot diameter antenna transmits and receives energy (750,000 Watts)
- While rotating, samples up to 14 elevation scans in the atmosphere
- Range of 250 miles
- In addition to capabilities of older radars, can also identify rotation and strong winds inside of thunderstorms



WSR-88D Reflectivity Image Fort Wayne, Indiana (North Side) F2 Tornado *May 26, 2001*

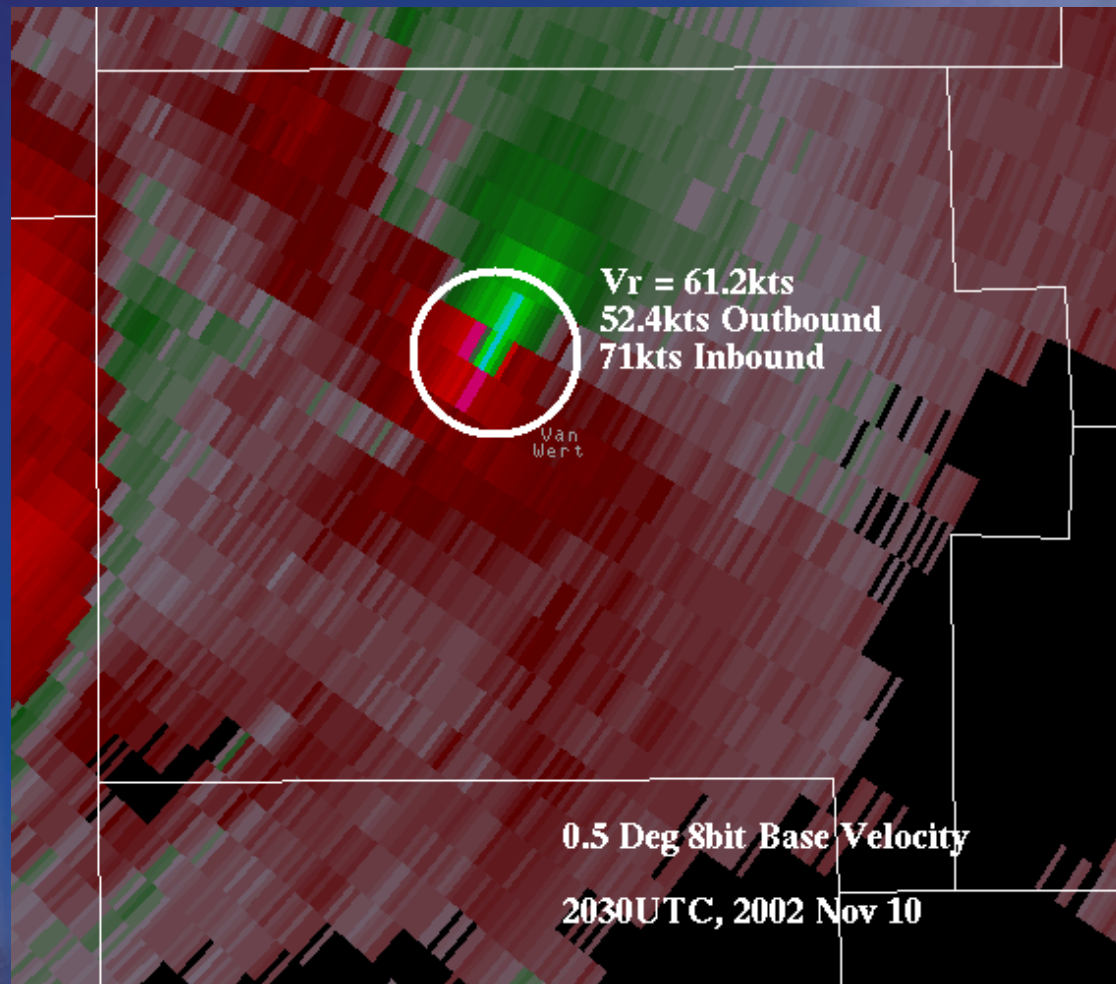


WSR-88D Velocity Image

Van Wert, Ohio

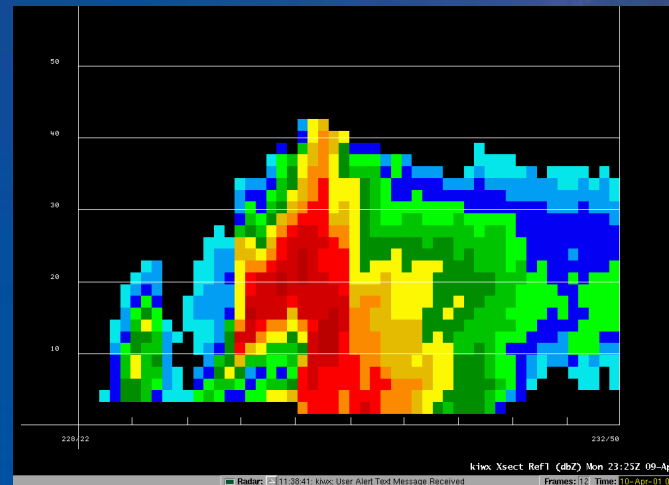
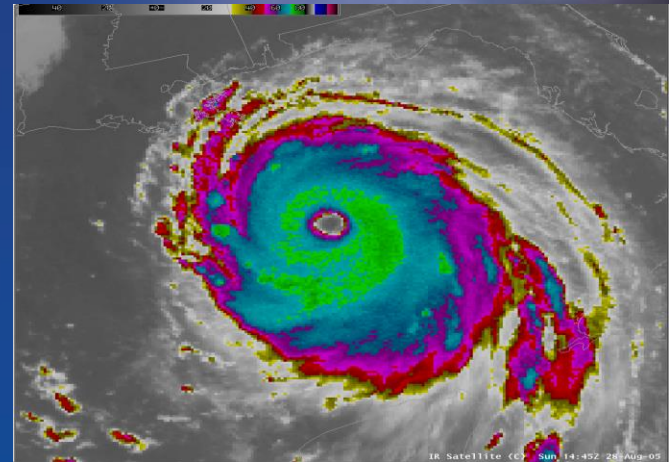
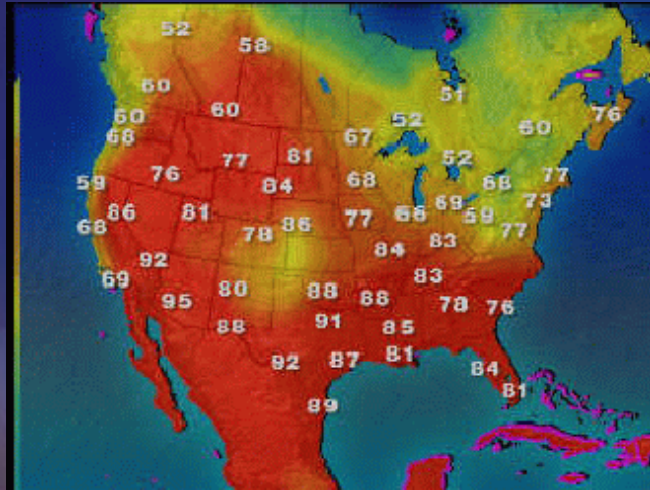
F4 Tornado

November 10, 2002



Analysis and Forecasting

Forecasters analyze myriad surface, upper air, radar, satellite, and numerical model data to create a plethora of forecasts



Forecast and Warning Distribution To...

- **County Officials via National Warning System (NAWAS), 800 MHz, NWSChat and phone**
- **Media by Associated Press, Family of Services, and NOAA Weather Radio (Emergency Alert System)**
- **Amateur Radio Network by radio operator at WFO IWX**
- **Public by NOAA Weather Radio and Internet (<http://www.crh.noaa.gov/iwx>)**
- **Social Media – Facebook and Twitter**
- **Third party cell phone apps and Wireless Emergency Alerts (WEA)**

NOAA Weather Radio

- **Voice of the National Weather Service**
- **Network of 1021 stations nationwide** (Apr. '13)
- **NOAA Weather Radio can be heard by more than 85% of the U.S. population**
- **Continuous weather information broadcasts from local forecast offices:**
 - Warnings
 - Watches
 - Forecasts
 - Observations
- **For more info, visit the NOAA Weather Radio Website at: www.crh.noaa.gov/iwx.?n=noaaweatherradionew**

NOAA All-Hazards Radio Coverage Areas For Northern Indiana



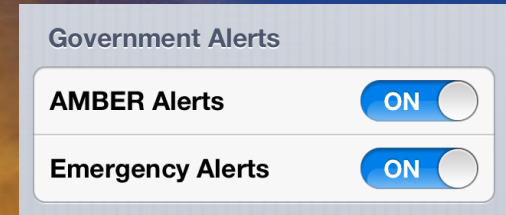
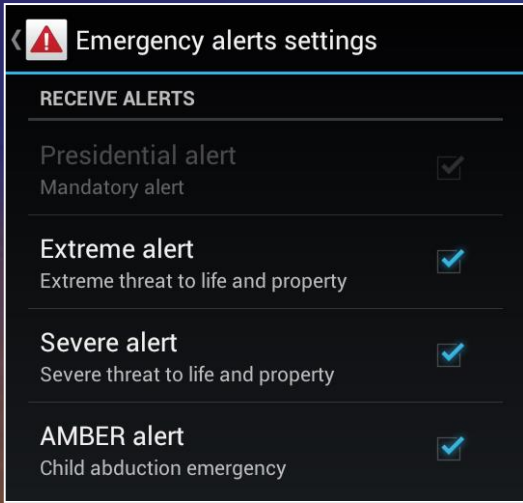
Name	Abbreviation	Call Letters	Frequency
Marion	MAR	WXM-98	162.450
Muncie	MUN	KJY-93	162.425
Plainwell	PLN	WWF-34	162.475
Onondaga	ONO	WXK-81	162.400
Toledo	TOL	WXL-51	162.500
Yeoman (Monticello)	LAF	WXK-74	162.475
Cridersville (Lima)	LIM	WXJ-93	162.400
Adrian	ADR	WNG-647	162.450
Hebron	HEB	WNG-689	162.450

Name	Abbreviation	Call Letters	Frequency
South Bend	SBN	WXJ-57	162.400
Fort Wayne	FWA	WXJ-58	162.550
Angola	ANQ	KXI-94	162.425
La Porte	LAP	KJY-62	162.500

North Webster KZZ-36 162.500



WIRELESS EMERGENCY ALERTS CAPABLE



- **Built-in on newer cell phones**
 - About 10 to 40 devices per major carrier
 - May be called wireless alerts, CMAS, or government alerts (iPhone)
- **Contact your carrier for questions**

Extreme

Tornado Warning
Extreme Wind Warning
Tsunami Warning*
Hurricane/Typhoon Warnings

Severe

Flash Flood Warning
Dust Storm Warning

Social Media at NWS Northern Indiana



NOAA's National Weather Service
NWSChat



Customer and Community Interaction in Addition to Forecasts and Warnings...

- Build and maintain relationships with local, state, and Federal governments and the media
- Provide expert advice to Emergency Operations Centers and the media
- Solicit feedback from customers (*that's you!*)
- Conduct community awareness and education programs
- Train volunteer observers and storm spotters (SKYWARN)

Contact WFO IWX

USPS:

**National Weather Service Northern Indiana
7506 E 850 N
Syracuse, IN 46567**

E-mail:

nws.northernindiana@noaa.gov

Phone:

574-834-1104

Mon – Fri, 8:00am – 5:00pm



NWS Northern Indiana
www.weather.gov/iwx



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[@NWSIWX](https://twitter.com/NWSIWX)



[/NWSNorthernIndiana](https://www.youtube.com/NWSNorthernIndiana)