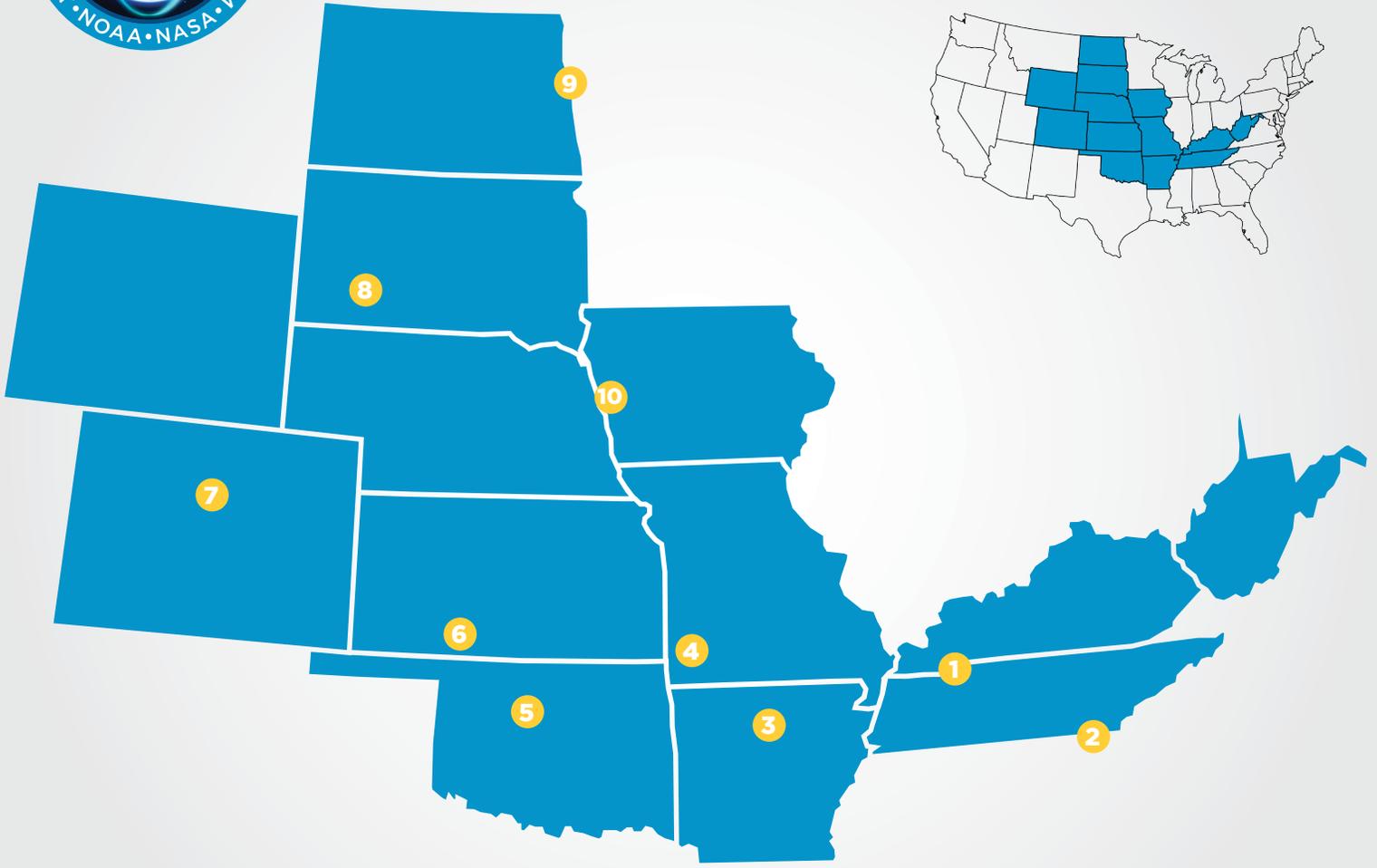




CENTRAL REGION



SUPPORTING WEATHER FORECASTING IN YOUR REGION

Thirty-two Weather Forecast Offices in the Central region receive vital data from JPSS, critical for providing an accurate forecast three to seven days in advance. With a population of just over 40 million, this region represents 13 states and 51 federally recognized Tribal governments. The region has four of the largest watersheds in the Nation (Mississippi, Missouri, Arkansas and Ohio Rivers) and represents the “inner coast” of the United States. The southwest states of this region are often referred to as “Tornado Alley”—the greatest concentration of the strongest tornadoes in the world occurs most frequently across the states of Oklahoma, eastern Colorado, Kansas and Nebraska. Weather in the Central region affects national food and fuel prices as the land represents a major portion of the nation’s agriculture, transportation networks and technology.

BILLION DOLLAR DISASTERS

\$ (in billions) (casualties)

1	Hurricane Katrina (2005)	153.0	1,833
2	Chattanooga Tornado (2011)	10.9	78
3	Hurricane Ike (2008)	33.6	112
4	Joplin Tornado (2011)	9.7	177
5	Moore Tornado (1999)	2.9	55
6	Southern Plains Drought (2011)	12.8	95
7	Colorado Flood (2013)	1.5	9
8	U.S. Drought (2012)	31.5	123
9	Red River Flood (1997)	5.0	11
10	Midwest Flooding (2008)	11.2	24

Sampling of billion dollar disasters over the last 20 years in the Central region. Data credit: NCEI

SUPPORTING A “WEATHER-READY NATION”

The Joint Polar Satellite System (JPSS) is the Nation’s advanced series of polar-orbiting environmental satellites. JPSS satellites provide sophisticated meteorological data and observations of atmosphere, ocean and land for short-term, seasonal and long-term monitoring and forecasting.

Specifically, data from the infrared and microwave sounding instruments is assimilated into numerical weather prediction models which forecast the path and intensity of severe weather events, including the damaging hurricanes and tornadoes that affect the Central region. The visible and infrared imaging capabilities of the satellite provide comprehensive Earth observation for mitigating hazardous events such as the droughts and floods that affect this region.

JPSS satellites increase the timeliness and accuracy of forecasts three to seven days in advance of a severe weather event. NOAA’s National Weather Service uses JPSS data as critical input for numerical forecast models, providing the basis for these mid-range forecasts. These forecasts allow for early warnings and enable emergency managers to make timely decisions to protect American lives and property, including ordering effective evacuations.

JPSS satellites circle the Earth from pole-to-pole and cross the equator 14 times daily in the afternoon orbit—providing full global coverage twice a day. Polar satellites are considered the backbone of the global observing system.

Information from JPSS supports NOAA’s mission to ensure a more “Weather-Ready Nation.”

Which industries benefit from JPSS data?

- Emergency management
- Agriculture
- Transportation
- Commercial aviation
- Regional general aviation
- Maritime transportation
- Commercial fishing industry
- Transoceanic container shipping industry
- Recreational boating
- Land transportation
- Defense
- Coastal community preparedness
- Tourism (land and ocean)
- Energy
- Construction
- Insurance
- Conservation
- Oil spill trajectories (ocean)
- Vegetation health



PARTNERS IN YOUR REGION

JPSS commits to continually improving forecasting capabilities by leveraging its relationships with academic institutions, government agencies, ongoing research and development, and working closely with industry contractors.

ACADEMIC AND INDUSTRY PARTNERS

- Ball Aerospace and Technologies Corp., Boulder, CO
- Colorado State University (NOAA Cooperative Institute)
- NOAA, National Centers for Environmental Information, Boulder, CO
- Raytheon Intelligence and Information Systems, Aurora, CO
- United Launch Services LLS, Centennial, CO
- University of Colorado (NOAA Cooperative Institute)



To learn more about the science behind JPSS, visit www.jpss.noaa.gov

To view an interactive tool that allows users to explore NOAA data, visit: www.nvli.noaa.gov/view