|  |
| --- |
| NOAA Header |
| **NOAA In Your State****Illinois** |
| *“NOAA's work touches the daily lives of every person in the United States and in much of the world. Our products and services are the result of the hard work of NOAA’s dedicated staff and partner organizations located in program and research offices throughout the country. The following is a summary of NOAA programs based in, and focused on, your state. The entries are listed by statewide, region, and then by congressional districts and cities or towns.”** Dr. Jane Lubchenco

Under Secretary of Commerce for Oceans and Atmosphereand NOAA Administrator |

|  |
| --- |
| where is illinois |

 |
| Due to congressional redistricting after the 2010 Census, we have tried to ensure that all changes in districts and locations have been accurately reflected. Corrections to the district and location for any entry may be sent to NIYSupdate@noaa.gov. |
| ***IL******Great Lakes Region*****National Ocean Service (NOS)****U.S. Integrated Ocean Observing System (IOOS) Program****IOOS Regional Association**U.S. IOOS® is envisioned to be an operational system and a network of regional partners responsible for regional observations, data management, modeling and analysis, education and outreach, and research and development. The overarching purpose of U.S. IOOS is to address regional and national needs for ocean data and information.  The Great Lakes Observing System (GLOS) is one of these Regional Associations. GLOS provides public access to critical, real-time and historical data and information about the Great Lakes, St. Lawrence River and interconnecting waterways for use in managing, safeguarding and understanding these immensely valuable freshwater resources. GLOS is intended to gather and integrate chemical, biologic and hydrologic data, and monitor lake conditions and trends over time.<http://www.glos.us/> **National Ocean Service (NOS)****Coastal Services Center****Coastal Storms Program**Coastal Storms Program transitioned resources to the Great Lakes region in 2012 and will continue providing support through 2017. Great Lakes project work will focus on the following priority areas: 1) improved weather observations, modeling, and risk communication to address hazards affecting beach safety (rip currents) and coastal development: 2) Shoreline assessment and management; and 3) stormwater impacts on aquatic resources. Outreach coordinators will be located with Minnesota and Wisconsin Sea Grant and a small grants competition will be held in FY13, administered by Ohio Sea Grant. <http://www.csc.noaa.gov/csp/> ***Statewide*****National Weather Service (NWS)****Automated Surface Observing Systems****Illinois Stations**The Automated Surface Observing Systems (ASOS) program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). ASOS serves as the Nation's primary surface weather observing network. ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. ASOS works non-stop, updating observations every minute, 24 hours a day, every day of the year observing basic weather elements, such as cloud cover, precipitation, wind, sea level pressure, and conditions, such as rain, snow, freezing rain, thunderstorms, and fog. There are 17 ASOS stations in Illinois.http://www.nws.noaa.gov/mirs/public/prods/maps/map\_images/state-maps/asos\_09/IL\_asos.pdf and <http://www.nws.noaa.gov/asos/>**National Weather Service (NWS)****Cooperative Observer Program****Illinois Sites**The National Weather Service (NWS) Cooperative Observer Program (COOP) is truly the Nation's weather and climate observing network of, by and for the people. More than 10,000 volunteers take observations on farms, in urban and suburban areas, National Parks, seashores, and mountaintops. The data are representative of where people live, work and play. The COOP was formally created in 1890 under the NWS Organic Act to provide observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes, and to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS.The data are also used by other federal (including the Department of Homeland Security), state and local entities, as well as private companies (such as the energy and insurance industries). In some cases, the data are used to make billions of dollars worth of decisions. For example, the energy sector uses COOP data to calculate the Heating and Cooling Degree Days which are used to determine individuals’ energy bills monthly. There are 263 COOP sites in Illinois<http://www.weather.gov/mirs/public/prods/maps/map_images/state-maps/coop_09/il_coop.pdf> and <http://www.nws.noaa.gov/om/coop/>**National Weather Service (NWS)****NOAA Weather Radio All Hazards****Illinois Transmitters**NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service (NWS) forecast office. NWR broadcasts official NWS warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "All Hazards" radio network, making it the single source for comprehensive weather and emergency information. In conjunction with federal, state, and local emergency managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as AMBER alerts or 911 Telephone outages).Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the NWS. NWR includes 1,100 transmitters covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. There are 29 NWR transmitters in Illinoishttp://www.nws.noaa.gov/mirs/public/prods/maps/map\_images/state-maps/nwr\_09/IL\_nwr.pdf and <http://www.nws.noaa.gov/nwr/>**Office of Oceanic and Atmospheric Research (OAR)****National Sea Grant College Program****Illinois-Indiana Sea Grant College Program**NOAA's National Sea Grant College Program is a federal-university partnership that integrates research, education and outreach (extension and communications). Sea Grant forms a network of 33 programs in all U.S. coastal and Great Lakes states, Puerto Rico and Guam. The Illinois-Indiana Sea Grant College Program fosters the creation and stewardship of an enhanced and sustainable environment and economy along southern Lake Michigan and the Great Lakes region through research, education, and outreach. Illinois-Indiana Sea Grant research addresses reducing the spread, introduction, and economic impact of non-indigenous species; improving both the biological and human aspects of the Lake Michigan fishery; supporting ecologically sound and sustainable coastal economic development and land use; reducing non-point pollution stemming from increased land development; and developing a viable aquaculture industry for the region. The Illinois office is located at the University of Illinois at Urbana-Champaign.[http://www.seagrant.noaa.gov](http://www.seagrant.noaa.gov/)**National Ocean Service (NOS)****Office of Ocean and Coastal Resource Management****Illinois Coastal Management Program**Through a unique Federal-state partnership, NOAA’s Office of Ocean and Coastal Resource Management (OCRM) works with the Illinois Department of Natural Resources (IDNR) to implement the National Coastal Management Program in Illinois. OCRM provides the coastal management program with financial and technical assistance to further the goals of the Coastal Zone Management Act to protect, restore and responsibly develop our nation’s coastal communities and resources by balancing the often competing demands of coastal resource use, economic development and conservation.<http://coastalmanagement.noaa.gov/mystate/il.html>***IL- 1,2,8,10******Coastal*****Office of Oceanic and Atmospheric Research (OAR)****Great Lakes Environmental Research Laboratory****GLERL CoastWatch**The CoastWatch node at GLERL provides clients including Federal, state, and local agencies, academic institutions, commercial/industries and the public, both within and outside of the Great Lakes region, with access to near real-time satellite observations and in-situ data for the Great Lakes. CoastWatch data are used in a variety of ways, including near real-time observation and tracking of algal blooms, plumes, ice cover, wind, water intake temperatures at fish hatcheries, two and three-dimensional modeling of Great Lakes physical parameters such as wave height and currents damage assessment modeling, research, and educational and recreational activities. In addition, through a cooperative project with Michigan Sea Grant, Great Lakes CoastWatch satellite-derived surface temperature imagery is contoured and made available via Michigan State Sea Grant’s web site. Great Lakes CoastWatch data and products benefit riparians as well as commercial and recreational users.http://coastwatch.glerl.noaa.gov/***IL- 1,5,7,9******Chicago*****Office of Oceanic and Atmospheric Research (OAR)****Great Lakes Environmental Research Laboratory****Real-Time Meteorological Observation Network**The Great Lakes Environmental Research Laboratory's Marine Instrumentation Laboratory has deployed and is maintaining a real-time network of shore-based meteorological instrument packages, including one in Chicago. The meteorological observations obtained from the network are being used in GLERL's Great Lakes Coastal Forecasting System to improve nowcasts and forecasts of wind, waves, water levels, and circulation. In addition, the National Weather Service forecast office in Chicago is using the observations to improve marine forecasts and warnings. The Chicago station measures/records wind speed, wind gust, wind direction, and air temperature at five-minute increments that are updated every 15 minutes on the web. In addition, a webcam provides an image of near shore Chicago waters and skyline that is updated every 60 minutes.<http://www.glerl.noaa.gov/metdata/chi/>***IL- 2******Chicago*****National Ocean Service (NOS)****Center for Operational Oceanographic Products and Services****National Water Level Observation Network**The National Ocean Service (NOS) operates one long-term continuously operating water level station in the State of Illinois, which provides data and information on Great Lakes and interconnecting waterways datum and lake level regulation and is capable of producing real-time data for storm surge warning. This station is located on Lake Michigan at Calumet Harbor. The National Ocean Service (NOS) also operates the Great Lakes Operational Forecast System (GLOFS). The GLOFS provides the maritime community with improved short-term prediction of water levels, currents, and water temperatures in Lake Michigan. These predictions are based on a hydrodynamic model and are considered to be computer-generated forecast guidance.[http://tidesandcurrents.noaa.gov](http://tidesandcurrents.noaa.gov/)**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Systems Division****Science On a Sphere® - The Museum of Science and Industry**Science On a Sphere (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere, which is used to explain what are sometimes complex environmental processes, in a way that is simultaneously intuitive and captivating.<http://sos.noaa.gov/news/sos_sites.html>***IL- 7******Chicago*****National Ocean Service (NOS)****Office of Response and Restoration****Regional Resource Coordinator**NOAA acts on behalf of the Secretary of Commerce as a Federal trustee, under CERCLA and other laws, for natural resources in coastal and marine areas. NOAA's mandate is to protect and restore trust resources that are injured by Superfund site contaminants. NOAA fulfills its responsibilities through an effective network of Regional Resource Coordinators (RRCs) placed in eight EPA regional offices, as well as an interdisciplinary technical support group located in Seattle. The RRC based in Chicago responds to local technical requirements by identifying risks to natural resources, recommending protective remedial measures, and designing projects to restore injured resources and habitats in cooperation with U.S. EPA Superfund program managers, the State of Illinois, and other trustee agencies. RRCs work with lead cleanup agencies to achieve remedies that protect both human health and natural resources by fostering cooperative, cost-effective problem solving strategies; developing environmentally protective remedies; and minimizing costly litigation.[http://response.restoration.noaa.gov.](http://response.restoration.noaa.gov/)***IL-13******Chicago*****National Weather Service (NWS)****Weather Forecast Office****Chicago WFO**Located at Lewis University Airport in Romeoville, this NWS Weather Forecast Office (WFO) is staffed around-the-clock every day, and provides the best possible weather, water, and climate forecasts and warnings to residents of 18 counties in northeast Illinois and five counties in northwest Indiana; serving a population of more than 9,666,000. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, winter storms, floods, and heat waves. This essential information is provided to the general public, media, emergency management and law enforcement officials, the aviation and marine communities, agricultural interests, businesses, and others. Information is disseminated in many ways, including through dedicated government channels, satellite, the Internet, and NOAA Weather Radio All Hazards.Forecasters provide on-site, detailed weather support during critical emergencies, such as wildfires, floods, chemical spills, and for major recovery efforts such as those following the Greensboro, Kansas, tornado; Hurricane Katrina; and the Sept. 11, 2001, terrorist attack in New York City. The WFO collects and disseminates precipitation, river, and rainfall data, and prepares local climatological data. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs, which helps build strong working relationships with local partners in emergency management, government, the media and academic communities. The WFO operates Automated Surface Observing Stations (ASOS), as well as the local Doppler Weather Radar, which provides critical information about current weather conditions. The radar data enables forecasters to issue warnings for tornadoes, severe thunderstorms, and flash floods.<http://www.crh.noaa.gov/lot>***Urbana-Champaign*****Office of Oceanic and Atmospheric Research (OAR)****Cooperative Institute****Cooperative Institute for Limnology and Ecosystems Research (CILER), University of Illinois at Urbana-Champaign**Established in 2007, CILER conducts collaborative research through a ten-member consortium of academic institutions in the Great Lakes region. CILER’s primary NOAA research partner is the Great Lakes Environmental Research Laboratory; CILER is administratively housed at the University of Michigan, and is comprised of Grand Valley State University, Michigan State University, Ohio State University, Penn State University, State University of New York-Stony Brook, University of Illinois at Urbana-Champaign, University of Michigan, University of Minnesota, University of Toledo, and University of Wisconsin. CILER conducts research across six scientific themes: (1) Great Lakes forecasting; (2) invasive species; (3) observing systems; (4) protection and restoration of resources; (5) integrated assessment; and (6) education and outreach.[http://ciler.snre.umich.edu](http://ciler.snre.umich.edu/)***Bondville*****Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****In-Situ Aerosol Profiles**NOAA's Earth System Research Laboratory (ESRL) operates an aircraft sampling program. The aircraft measurements expand ESRL's surface-based aerosol monitoring capabilities to include vertical profiles of aerosol optical properties in a continental location. Aerosol particles create a significant perturbation of the Earth's radiative balance. Most long-term aerosol monitoring measurements are made from the surface, but understanding how aerosol particle properties vary vertically (i.e., is there a layer of aerosol particles aloft not seen by the ground stations) will further enhance our understanding of the impact of aerosols on climate forcing. The aircraft, typically a Cessna-C172, is based in Kay County at the Ponca City airport and it makes its measurement flights 2-3 times weekly over the Southern Great Plains Cloud and Radiation Testbed site operated by the Department of Energy's Atmospheric Radiation Measurement Program about 90 miles north of Oklahoma City. The airplane measures aerosol optical properties (how the particles absorb and scatter solar radiation) at 9 flight levels between 1500 and 12,000 ft.<http://www.esrl.noaa.gov/gmd/aero/>**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Monitoring the Atmosphere Aloft - Carbon Cycle Gases and Halocarbons**NOAA's Earth System Research Laboratory (ESRL) operates a new and growing small aircraft-based North American network of sampling sites to measure vertical profiles of important greenhouse gas concentrations. Air is sampled above the surface up to approximately 25,000 feet above sea level using a relatively small, light, and economical automated system developed by ESRL researchers. These air samples are delivered to the ESRL laboratory in Boulder, Colorado for measurements of CO2, CH4, and other greenhouse gasses. This data will improve understanding and models of the global carbon cycle. Sampling is conducted bi-weekly. Halocarbon measurements help determine the effectiveness of efforts to protect and restore the ozone layer so it can protect us from the sun’s ultraviolet radiation.<http://www.esrl.noaa.gov/gmd/about/climate.html>**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Monitoring the Surface Atmosphere – Ozone Measurements**ESRL conducts long-term monitoring of ozone at the surface, with aircraft, and with balloons, through cooperative relationships with local partners. The ESRL tropospheric ozone aircraft measurement program is being done in conjunction with the Carbon Cycle and Greenhouse Gas (CCGG) group's existing aircraft sampling network. Aircraft based in-situ tropospheric ozone measurements provide data relevant to: pollution events, lower atmosphere mixing dynamics, boundary layer stability, ozone trend studies, and the validity of other samples collected in-flight. Near ground level ozone is currently monitored using ultraviolet absorption photometers at eight sites that are generally representative of background conditions. These sites, four of which have records exceeding 25 years in length, provide information on possible long-term changes in tropospheric ozone near the surface and support air quality research.<http://www.esrl.noaa.gov/gmd/ozwv/>**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Surface Aerosol Monitoring**NOAA’s Earth System Research Laboratory (ESRL) operates surface-based aerosol monitoring sites in five states. The sites in Illinois and Oklahoma expand ESRL’s aerosol monitoring capabilities to include continental sites in response to the finding that human activities primarily influence aerosols on regional/continental scales rather than on global scales. Aerosols create a significant perturbation of the Earth’s radiative balance on regional scales. The Illinois site is located in rural Champaign County at the Bondville Environmental and Atmospheric Research Site, about 10 miles south-west of Urbana-Champaign. The measurements made include aerosol optical properties (how the particles absorb and scatter solar radiation), aerosol number concentration and chemical composition of the aerosol particles. The site was established in 1994.<http://www.esrl.noaa.gov/gmd/about/climate.html>**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Surface Radiation Measurement Network**The Earth System Research Laboratory operates seven stations as part of its surface radiation measurement network (SURFRAD). The station measurements support regional and global weather and climate research with accurate, continuous, long-term measurements of the surface radiation budget over the United States. Solar radiation is the driving energy for geophysical and biological processes that control weather and affect planetary life; understanding the global surface energy budget is, therefore, key to understanding climate and the environmental consequences to agriculture and other statewide concerns. Because it is impractical to cover the whole earth with monitoring stations, the answer to global coverage lies in reliable satellite-based observations. Accurate and precise ground-based measurements across a range of climate regions are essential to refine and verify the satellite observations. One of these stations is located near Bondville. These ground-based measurements also support special research projects on radiation and climate processes in the Illinois region and serve as important verification for weather forecasts.<http://www.srrb.noaa.gov/surfrad/index.html>**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Total Column Ozone Measurements**NOAA's Earth System Research Laboratory (ESRL) makes measurements of the column amounts of ozone between the earth's surface and the top of the atmosphere at a number of locations around the United States, including Bondville, IL The observations are obtained with ground-based spectrometers that measure the attenuation by ozone of ultraviolet light. This integrated ozone amount is critical in determining the amount of ultraviolet radiation reaching the earth's surface. Excess ultraviolet radiation is responsible for human skin cancer and is also harmful to other biogenic organisms. Column ozone measurements monitor changes in the stratospheric ozone layer resulting from human-produced chlorine and bromine compounds that destroy ozone. With controls now in place on the manufacture and use of these ozone-destroying compounds, it will be important to monitor the ozone layer for the expected recovery and determine whether other factors such as long-term climate change are influencing this recovery.<http://www.esrl.noaa.gov/gmd/about/ozone.html>**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Ultraviolet Radiation (UV) Monitoring Network**The Earth System Research Laboratory (ESRL) operates an ultraviolet radiation (UV) monitoring network site in Bondeville. These measurements are done as part of ESRL’s research on the Earth's surface radiation budget. Research efforts are devoted to the extent and cause of observed variations in long-term radiation and meteorological measurements, using satellite observations and climate model calculations. In addition, observations of spectral solar radiation are made for remote sensing of certain atmospheric constituents and spectral solar UV is measured for the investigation of the interaction of ozone and solar radiation. ESRL also provides essential instrument calibration services for national and worldwide partner UV monitoring networks.<http://www.esrl.noaa.gov/gmd/grad/>***Springfield*****Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Systems Division****Science On a Sphere® - National Museum of Surveying**Science On a Sphere (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere which is used to explain what are sometimes complex environmental processes, in a way that is simultaneously intuitive and captivating.<http://www.sos.noaa.gov> and <http://sos.noaa.gov/What_is_SOS/sites.php>***IL-14******Aurora*****National Weather Service (NWS)****Chicago CWSU****Center Weather Service Unit**Housed in the Federal Aviation Administration's Chicago Air Route Traffic Control Center (ARTCC), the Center Weather Service Unit (CWSU) staff provides forecasts and other aviation weather information to ARTCC personnel for use in directing the safe, smooth flow of aviation traffic in northern Illinois, northern Indiana, southwestern Michigan, southern Wisconsin, and eastern Iowa.<http://www.crh.noaa.gov/zau>***IL-15******Champaign County*****National Environmental Satellite, Data, and Information Service (NESDIS) and Office of Oceanic and Atmospheric Research (OAR)****Climate Reference Network****Champagne County Station**The U.S. Climate Reference Network (USCRN) is an operational network of climate stations. Data from the USCRN will be used in operational climate monitoring activities and for placing current climate anomalies into an historical perspective. NOAA's National Climatic Data Center (NCDC) manages the USCRN. The USCRN will also provide the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). NOAA’s National Environmental Satellite, Data, and Information Service and NOAA’s Office of Oceanic and Atmospheric Research jointly manage USCRN.<http://www.ncdc.noaa.gov/crn/>**Office of Oceanic and Atmospheric Research (OAR)****Air Resources Laboratory****Atmospheric Integrated Research Monitoring Network**A NOAA Atmospheric Integrated Research Monitoring Network (AIRMoN) site is located in Bondville (Champaign County), IL. The site has been in operation since 1992 collecting data on major ions in precipitation (rain, snow) on a daily event basis, and previously since 1976 on an event basis. The major ions collected include: sulfate, nitrate, phosphorus, pH, ammonium, sodium, chloride, and soil cations. AIRMoN is a sub-network of the National Atmospheric Deposition Program. <http://nadp.sws.uiuc.edu/AIRMoN>**Office of Oceanic and Atmospheric Research (OAR)****Air Resources Laboratory****Global Energy and Water Cycle Experiment**NOAA has several observational sites that support the World Climate Research Programme’s Global Energy and Water Cycle Experiment (GEWEX). One of NOAA’s GEWEX sites is located near Champaign, IL. GEWEX sites were established to provide detailed measurements (such as turbulent fluxes of heat, water vapor, momentum, carbon dioxide, air temperature, and relative humidity) and other information about the physical and biological processes that occur at the land/surface interface. Observations from these sites are being used to test and improve the current generation of land surface models that are used for both regional and global climate prediction.[http://www.ceop.net](http://www.ceop.net/)***Homer*****Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Monitoring the Atmosphere Aloft - Carbon Cycle Gases and Halocarbons**NOAA's Earth System Research Laboratory (ESRL) operates a new and growing small aircraft-based North American network of sampling sites to measure vertical profiles of important greenhouse gas concentrations. Air is sampled above the surface up to approximately 25,000 feet above sea level using a relatively small, light, and economical automated system developed by ESRL researchers. These air samples are delivered to the ESRL laboratory in Boulder, Colorado for measurements of CO2, CH4, and other greenhouse gasses. This data will improve understanding and models of the global carbon cycle. Sampling is conducted bi-weekly. Some air samples from the small aircraft program are also analyzed for halocarbon gases that can destroy the stratospheric ozone layer. Halocarbon measurements help determine the effectiveness of efforts to protect and restore the ozone layer so it can protect us from the sun’s ultraviolet radiation.<http://www.esrl.noaa.gov/gmd/about/climate.html>**Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Monitoring the Surface Atmosphere – Ozone Measurements**ESRL conducts long-term monitoring of ozone at the surface, with aircraft, and with balloons, through cooperative relationships with local partners. The ESRL tropospheric ozone aircraft measurement program is being done in conjunction with the Carbon Cycle and Greenhouse Gas (CCGG) group's existing aircraft sampling network. Aircraft based in-situ tropospheric ozone measurements provide data relevant to: pollution events, lower atmosphere mixing dynamics, boundary layer stability, ozone trend studies, and the validity of other samples collected in-flight. Near ground level ozone is currently monitored using ultraviolet absorption photometers at eight sites that are generally representative of background conditions. These sites, four of which have records exceeding 25 years in length, provide information on possible long-term changes in tropospheric ozone near the surface and support air quality research.<http://www.esrl.noaa.gov/gmd/ozwv/>***IL-16******Peru*****Office of Oceanic and Atmospheric Research (OAR)****Earth System Research Laboratory/Global Monitoring Division****Carbon America**NOAA's Earth System Research Laboratory (ESRL) operates a new and growing small aircraft-based North American network of sampling sites (Carbon America) to measure vertical profiles of important greenhouse gas concentrations. Air is sampled above the surface up to approximately 25,000 feet above sea level using a reasonably small, light, and economical automated system developed by ESRL researchers. These air samples are delivered to the ESRL laboratory in Boulder, Colorado for measurements of CO2, CH4, and other greenhouse gasses. This data will improve global carbon cycle models. Weekly sampling is conducted from Peru, IL. The Peru site is operated in coordination with the National Aeronautics and Space Administration's Measurement of Pollution in the Troposphere experiment.<http://www.esrl.noaa.gov/gmd/>***Shabbona*****National Environmental Satellite, Data, and Information Service (NESDIS) and Office of Oceanic and Atmospheric Research (OAR)****Climate Reference Network****Shabbona Station**The U.S. Climate Reference Network (USCRN) is an operational network of climate stations. Data from the USCRN will be used in operational climate monitoring activities and for placing current climate anomalies into an historical perspective. NOAA's National Climatic Data Center (NCDC) manages the USCRN. The USCRN will also provide the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). NOAA’s National Environmental Satellite, Data, and Information Service and NOAA’s Office of Oceanic and Atmospheric Research jointly manage USCRN.<http://www.ncdc.noaa.gov/crn/>***IL-17******Springfield*****National Ocean Service (NOS)****National Geodetic Survey****Geodetic Advisor**The Geodetic Advisor is a jointly funded National Ocean Service (NOS) employee that resides in the state to provide liaison between NOS and the host state. The Geodetic Advisor guides and assists the state's charting, geodetic and surveying programs through technical expertise. This program also provides assistance in planning and implementing Geographic/Land Information System (GIS/LIS) projects.[http://http://www.ngs.noaa.gov/ADVISORS/AdvisorsIndex.shtml](http://www.ngs.noaa.gov/ADVISORS/AdvisorsIndex.shtml)***IL-18******Lincoln*****National Weather Service (NWS)****Weather Forecast Office****Central Illinois WFO**Located at the Logan County Airport in Lincoln, this NWS Weather Forecast Office (WFO) is staffed around-the-clock every day, and provides the best possible weather, water, and climate forecasts and warnings to residents of 35 counties in central and east-central Illinois, serving a population of more than 1,639,000. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, winter storms, floods, and heat waves. This essential information is provided to the general public, media, emergency management and law enforcement officials, the aviation and marine communities, agricultural interests, businesses, and others. Information is disseminated in many ways, including through dedicated government channels, satellite, the Internet, and NOAA Weather Radio All Hazards.Forecasters provide on-site, detailed weather support during critical emergencies, such as wildfires, floods, chemical spills, and for major recovery efforts such as those following the Greensboro, Kansas, tornado; Hurricane Katrina; and the Sept. 11, 2001, terrorist attack in New York City. The WFO collects and disseminates precipitation, river, and rainfall data, and prepares local climatological data. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs, which helps build strong working relationships with local partners in emergency management, government, the media and academic communities. The WFO operates Automated Surface Observing Stations (ASOS), as well as the local Doppler Weather Radar, which provides critical information about current weather conditions. The radar data enables forecasters to issue warnings for tornadoes, severe thunderstorms, and flash floods.<http://www.crh.noaa.gov/ilx> |
| **NOAA’s Office of Legislative and Intergovernmental Affairs**[**http://www.legislative.noaa.gov**](http://www.legislative.noaa.gov) |