Delivering Science for a Climate-Smart Nation

The climate record contains multiple types of data from various sources. Data collected every month from around the globe continues this record and adds to how we understand the history of the Earth’s climate and the changes that are now occurring. UNC Asheville’s NEMAC is working with NOAA’s National Climatic Data Center (NCDC) and the Cooperative Institute for Climate and Satellites - NC to provide this data to the many sectors of society that need it for future planning and decision making.

Creating a Valuable Climate Resource

NOAA’s Climate.gov web portal is a valuable resource for NOAA’s climate data, products, and services for all users. In creating an environment that encourages users to interact with and explore historical data, the website fosters a sense of perspective that promotes wise use of our most valuable natural resource: climate.

Global Climate Dashboard

Just as the dashboard of a car gives a quick look at the status of the vehicle, the Global Climate Dashboard gives a quick look at the status of Earth’s climate system. UNC Asheville’s NEMAC developed the Global Climate Dashboard application in collaboration with NOAA for use on the NOAA Climate.gov website.

It presents graphs of global temperature, carbon dioxide, global sea level, winter snow cover extent, glacier mass, arctic sea ice, ocean heat content, and many other measurable environmental elements in an interactive format that allows easy movement through time and comparison between variables.

Online Mapping Applications

UNC Asheville’s NEMAC is working to refine and develop geospatial tools to present climate data in various projects and environments. UNC Asheville’s NEMAC collaborates with the Climate Portal team to ensure seamless integration of applications and services into the web environment.

Widget Development

A climate-based widget will invite users to engage in exploration of weather and climate history that touches them personally. UNC Asheville’s NEMAC will develop software to replace the site’s current Past Weather widget.