What Are Digital Services?

The National Weather Service now provides access to gridded forecasts of weather elements through the National Digital Forecast Database (NDFD).

Digital data: Numerical or other information in a form suitable for processing by a computer.

NDFD contains a seamless mosaic of digital forecasts from NWS field offices working in collaboration with the National Centers for Environmental Prediction.

The database is made available to all customers and partners to meet their needs for faster access to accurate, easier to understand information provided in new formats.

Customers and partners may use this data to create a wide range of text, graphic, gridded and image products. The NDFD, and the products and services derived from it, are the starting point for Digital Services.

What Data Are Available?

NDFD makes it possible to provide forecasts on a 3-dimensional, high-resolution grid, allowing NWS and its partners and customers to create a wide range of products.

Interactive NDFD websites offer a variety of weather, water, and climate forecasts. Initially, you can access the following forecast elements for projections shown at the following Coordinated Universal Times: 00, 03, 06, 09, 12, 15, 18, 21.

Forecast Elements	Projections
Maximum Temperature	Every 24 hours, out to 168 hours
Minimum Temperature	Every 24 hours, out to 168 hours
Probability of Precipitation (12-hour)	Every 12 hours, out to 168 hours
Sky Cover	Every 3 hours out to 72 hours; every 6 hours out to 168 hours
Temperature	Every 3 hours out to 72 hours; every 6 hours out to 168 hours
Dewpoint Temperature	Every 3 hours out to 72 hours; every 6 hours out to 168 hours
Wind Direction	Every 3 hours out to 72 hours; every 6 hours out to 168 hours
Wind Speed	Every 3 hours out to 72 hours; every 6 hours out to 168 hours
Weather Type	Every 3 hours out to 72 hours; every 6 hours out to 168 hours
Rainfall Amount	Every 6 hours out to 72 hours
Snow Amount	Every 6 hours out to 48 hours
Significant Wave Height	Every 12 hours out to 120 hours

Find Out More

Get More Information

http://weather.gov/ndfd

View Graphical Representations of NDFD data:

http://weather.gov/forecasts/graphical

Access NDFD Digital Data:

http://weather.gov/ndfd/technical.htm

Find Verification and Performance Assessments

http://weather.gov/ndfd/verification/

Questions, Comments?

nws.ndfd@noaa.gov



NOAA's National Weather Service Digital Services



Our Vision

To meet customer and partner needs for high quality, accessible, and reliable digital weather, water and climate services

How Might You Use Digital Services?

- Input data to decision support systems: fitting the forecast to the challenge
- Provide weather forecasts data along a path
- Provide forecasts for vehicles or devices with Global Positioning Systems
- Generate graphics for mass media
- Generate multilingual text
- Use with controls for smart appliances: heating, cooling, irrigation
- Enhance crop management applications
- Improve support during hazardous materials emergencies
- Access for Homeland Security events
- Incorporate into new products, creating new business opportunities

What Formats Are Available?

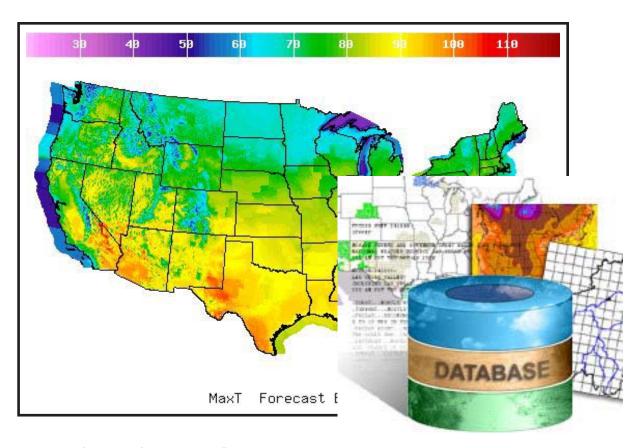
- Gridded binary (GRIB2)
- eXtensible Markup Language (XML)
- Geographic Information Systems (GIS) compatible options
- Text and tabular products
- Graphical products

Traditional Text Forecast

TODAY, RAINLINELY SNOWLHELY ABOVE 2500 FEET, SNOW ACCUMULATION BY LATE AFTERNOON 1 TO 2 WICHES ABOVE 2500 FEET COLDER WITH HIGHS 35 TO 40 SOUTH-AST WIND 5 TO 10 MPH SHIFT BY STO THE SOUTH-WESTEAR, Y THIS AFTERNOON CHANCE OF PRECIPITATION 70%.

Multiple Products from Gridded Data





Benefits of Digital Services

Anyone with Web access can download Digital Services data. Teaming Digital Services with GIS provides powerful capabilities for combining datasets and generating new products for changing needs.

Digital Services offers the information you want, when you want it.
Organizations can produce their own products for print, broadcast or posting online, or can tailor products to meet customer requirements.

Additional benefits are:

- More timely and consistent weather information
- Data delivered in a variety of formats
- Higher temporal and spatial resolution
- Support for weather enterprise
- Easier access to data
- Consistency between products in all formats