

# Eastern Region National Digital Forecast Database (NDFD) Experimental Graphic Forecast Displays Product Description Document (PDD) 09/28/05

## Part I - Mission Connection

- a. Description of Product – The National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) National Digital Forecast Database (NDFD) Experimental Graphic Forecast Displays (<http://www.erh.noaa.gov/ndfd/graphical/sectors/ccc.php>) , where “ccc” is the WFO ID, are web-based presentations of digital forecast data originating from local Weather Forecast Office (WFO) digital databases. The data is displayed in a graphical form on a local scale.
  
- b. Eastern Region generated products are described in this Product Description Document (PDD). For more information on the NDFD, please refer to the NDFD Information web site at the following URL:  
<http://www.nws.noaa.gov/ndfd/index.htm>.

The following are experimental graphic elements available from Eastern Region (and the associated comment/ feedback periods), and are shown in Table 1 below. Additional National Elements are listed at <http://products.weather.gov/PDD/NDFDGraphics061505.pdf>

Graphic Element	Comment Open Date	Comment Close Date
Lightning Activity Level (LAL)	10/01/05	09/30/06
Precipitation Potential Index (PPI)	10/01/05	09/30/06
Total Snow Accumulation	10/01/05	09/30/06
Total Ice Accumulation	10/01/05	09/30/06
Ice Accretion	10/01/05	09/30/06
Ceiling Height Category	10/01/05	09/30/06
Visibility	10/01/05	09/30/06
Mixing Height	10/01/05	09/30/06
Transport Winds	10/01/05	09/30/06
Haines Index	10/01/05	09/30/06
Max/Min Relative Humidity	10/01/05	09/30/06
Heat Index/Wind Chill	10/01/05	09/30/06
Wind Gusts	10/01/05	09/30/06
Davis Stability Index	10/01/05	09/30/06
Ventilation Rate	10/01/05	09/30/06
Burn Category	10/01/05	09/30/06
Dispersion Index	10/01/05	09/30/06

**Table 1. NDFD Experimental Graphic Elements issued by Eastern Region and Associated Comment/Feedback Period. Depending upon the element, forecast time projections will extend out to a maximum of 168 hours.**

c. Purpose - NDFD is a high resolution data set in non-displayable form. In support of the mission described in the *National Weather Service Strategic Plan for FY2003 - FY 2008*, the NDFD is a "...national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community." Graphic displays of these data are primarily required by NWS forecasters needing to view a composite of the collective forecast efforts, as well as emergency managers who require rapid visual forecast information to help make critical decisions. Once these graphic displays are created, they must also be made available to the general public. The NWS Eastern Region NDFD graphic forecasts fulfill additional NWS objectives for improving the accessibility and availability of weather information to the public. Future graphic mosaic displays will be developed in accordance with growing user needs.

d. Intended Audience - The NWS Eastern Region NDFD graphic forecasts are intended for government emergency managers, academia, businesses, and anyone in the general public who needs to view the content within the NWS digital forecast databases. While the data are available in digital form, many NWS customers cannot interpret or use these digital data unaided. For those who cannot, a graphic presentation is the most efficient means to communicate the large amount of information originating from NWS WFOs.

e. Presentation Method - The data are presented as web-based graphic images. The Eastern Region NDFD graphics provide weather forecast information for the county warning area (CWA) of the issuing WFO. The graphic forecast displays follow a standard format prescribed by the NWS Eastern Region and in concert with national objectives, to best meet the needs of its customers and partners. One final mouse click will zoom to individual WFO County Warning and Forecast areas. For each geographic level of display, the user may select the weather element and time period to display, and create animations of the images.

f. Feedback Mechanism - We are always seeking to improve our products based on user feedback. Please submit your comments on these experimental elements by completing our brief [experimental product survey](#) during the comment period specified for the individual graphic shown in Tables 1 or 2 above. Comments may also be submitted by clicking on the "Survey/Comments" links on the experimental product web pages. For general questions regarding the National Digital Forecast Database, please email: [nws.ndfd@noaa.gov](mailto:nws.ndfd@noaa.gov)

Technical questions regarding the Eastern Region NDFD graphics may be addressed to:

National Weather Service Eastern Region Headquarters  
ATTN: I. Ross Dickman W/ER1x1  
630 Johnson Ave, Ste. 202 Bohemia, NY 11716

## Part II - Technical Description

- a. Format & Science Basis -The NDFD forecast element definitions and technical information (e.g., temporal and spatial resolutions of the graphics, and geographic coverage) may be found on the NDFD technical page at the following URL:  
<http://www.nws.noaa.gov/ndfd/technical.htm>
  - b. Product Availability - The Eastern Region NDFD web-based graphics are available continuously by accessing the main National Weather Service homepage, [www.weather.gov](http://www.weather.gov), and clicking on the “Graphical Forecasts” tab, or directly at the following URL= <http://www.erh.noaa.gov/ndfd/graphical/sectors/sid.php>> (where 'sid' is the office 3-letter site id) Example:  
<http://www.erh.noaa.gov/ndfd/graphical/sectors/okx.php>
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Forecast grids are revised at the local WFOs on an event-driven basis. The revised grids are uploaded to the NDFD server and new graphic mosaics are generated at the top of each hour. At a minimum, revised mosaics will be refreshed daily no later than 1800 Coordinated Universal Time (UTC).

c. Other Details -

- (1) National Weather Service Instruction (NWSI) 10-506, Digital Data Products/Services Specification provides detailed information on both experimental and operational elements in NDFD.
- (2) Experimental graphic elements are differentiated from NWS operational elements by the “experimental” label found on the individual graphics.
- (3) Experimental graphic elements are evaluated regularly on timeliness, completeness, spatial consistency, accuracy, and other subjective criteria. When they meet the guidelines established by the NWS, they are declared “operational” and are no longer covered by this PDD for experimental elements.
- (4) Not all NWS Eastern Region Weather Forecast Offices in this PDD may produce elements listed in this PDD. Some elements may be designated as locally required and may not apply to differing geographical areas. Additional provisions may be listed in the Regional Table of Experimental Elements in PART I section b..