

National Digital Forecast Database (NDFD) Grids to Customers Service Product Description Document 10/01/03

Part I - Mission Connection

Product/Service Description - Advances in computer capabilities and web services technologies, as well as scientific advances in National Weather Service (NWS) software, have afforded the NWS an opportunity to create customer-based products and services. The National Digital Forecast Database (NDFD) will allow the NWS to provide near-real time, coordinated forecasts that are widely accessible in a gridded format.

Purpose/Intended Use - This experimental version of the NDFD is being made available to:

1. Allow users to get a feel for the specifics of the database (FTP location, format, geographic sectors, weather forecast elements, etc.)
2. Receive feedback from those users on potential NDFD refinements (e.g., quality, timeliness, usefulness, accessibility, etc.).

Audience - The current audience for the experimental NDFD is primarily the large volume users of forecast information, but also any others who wish to decode and explore various potential applications of the NWS digital data. The NDFD is not intended for redistribution or official use at this time.

Presentation Format - The NDFD is presented in GRIB, Edition 2 format and can be readily decoded for those that wish to create derived products from the forecast parameters/values contained within the NDFD.

Feedback Method - User feedback is extremely important in our effort to improve the quality and usefulness of products and services. Therefore, customers and partners of this experimental digital database are strongly encouraged to email comments to: nws.ndfd@noaa.gov.

- Comments will be accepted for **Group 1 Elements** (shown in Part II below) through **December 1, 2003**. The evaluation of these elements will be completed while they continue to be available as experimental. The process, and decision whether to declare them official, will be completed no later than **March 31, 2004**.
- Comments will be accepted for **Group 2 Elements** (shown in Part II below) through **March 31, 2004**. The evaluation of these elements will be completed while they continue to be available as experimental. The process, and decision whether to declare them official, will be completed no later than **June 30, 2004**.

Technical questions regarding the NDFD may be addressed to:

National Weather Service Headquarters
ATTN: David Ruth, W/OST21
1325 E-W Highway, SSMC2
Silver Spring, MD 20910
or e-mail questions to nws.ndfd@noaa.gov

Part II - Technical Description

Format and Science Basis - The NDFD will make available 5 kilometer spatial resolution data for the entire conterminous United States, as well as sixteen subsectors and Puerto Rico. Additional sectors (e.g., Alaska, Hawaii, Guam) will be appended to the NDFD periodically until the database is fully populated.

NDFD grid elements will be generated at up to 3 hourly resolution out to a maximum of 7 days from initial issuance. These data files will contain forecast information for the following experimental weather forecast elements:

Group 1 Elements:

MAXIMUM TEMPERATURE
MINIMUM TEMPERATURE
PROBABILITY OF PRECIPITATION /POP12/
WEATHER
SKY COVER
WIND DIRECTION AND SPEED
SIGNIFICANT WAVE HEIGHT

Group 2 Elements:

TEMPERATURE
DEWPOINT
QUANTITATIVE PRECIPITATION FORECAST /QPF/
SNOW ACCUMULATION

Product Availability - Updates to the NDFD will be made available shortly after the top of each hour. Forecast grids for the next Day 7 will be introduced daily around 1800 UTC.

Additional Information - Information about the developmental status of NDFD, sector coverage areas, specific element time projections, instructions for downloading digital data, and contacts for real-time customer support are available on the NDFD web site at:

<http://www.nws.noaa.gov/ndfd/index.htm>