Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

NATIONAL WEATHER SERVICE POLICY DIRECTIVE 10-2 APRIL 20, 2018

Operations and Services

FORECAST DATABASE SERVICES

NOTICE: This publication is available at: http://www.nws.noaa.gov/directives/.

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-2, *Forecast Database Services*, dated September 29, 2014. Changes made to reflect NWS Headquarters reorganization effective April 1, 2015.

The following changes were made to this directive:

- 1. Added additional responsibilities for AFSO in Section 3.1.
- 2. Added mention of Regional Operations Centers in Sections 3.2 and 5.
- 3. Added mention of the Office of Water Prediction to this directive.
- 4. Removed most of second paragraph of Section 5, and removed Figure 1.
- This policy directive establishes the framework for climate, water, and weather services provided via digital forecast and guidance databases. National Weather Service (NWS) Weather Forecast Offices (WFOs), the National Centers for Environmental Prediction (NCEP) and the Meteorological Development Laboratory (MDL) within the Office of Science and Technology Integration (OSTI) provide a variety of forecast and guidance products, all derived from digital databases. Products include the National Digital Forecast Database (NDFD), the National Digital Guidance Database (NDGD), a wide range of web-based products and local services, and a host of alphanumeric text products.
- The NWS will provide a diverse suite of products and services that are derived from digital forecast databases. These products will exploit technology to the fullest to meet user needs, promote public safety and enhance the national economy. The NWS will strive to produce as many of its forecast products and services as possible from digital databases.
- This policy directive establishes the following authorities and responsibilities:
- **3.1** The Analyze, Forecast and Support Office (AFSO) is responsible for coordinating and establishing national policy and procedural directives for database-derived services. AFSO is also responsible for outreach efforts to promote forecast database services to national users,

supporting training via NWS Portfolio investments, ensuring compliance with national policies; and providing service change notifications.

3.2 NWS Regional Headquarters offices will:

- a. Ensure their WFOs, River Forecast Centers (RFCs) and Regional Operations Centers (ROCs) are organized, equipped, and ready to fulfill the database forecast services obligations within their region.
- b. Support training requirements for forecast database services and hold field offices accountable for fulfilling these requirements via Regional Annual Operating Plans.
- c. Ensure field office compliance with established policies and procedures.
- d. Coordinate with AFSO on database forecast services policy and requirements.
- e. Develop Supplements to Procedural Directives and coordinate them with AFSO.
- f. Ensure Supplements are compatible across regional boundaries.
- g. Evaluate performance and effectiveness indicators of the database forecast services program within their region.
- h. Ensure consistency across spatial and temporal scales across the database.

3.3 NCEP and the Office of Water Prediction (OWP) will:

- a. Ensure the Centers / Office are organized, trained, equipped, and ready to fulfill forecast guidance and direct database services as applicable.
- b. Ensure compliance with established policies and procedures and coordinating with AFSO on database forecast services policy and requirements.
- c. Evaluate performance and effectiveness indicators of the database forecast services program within NCEP Centers and OWP.
- d. Ensure consistency across spatial and temporal scales across the database.

3.4 WFOs and RFCs will:

- a. Ensure office staff is organized, trained, equipped, and ready to fulfill the office's database forecast services obligations.
- b. Ensure office compliance with established policies and procedures.
- c. Provide outreach to state and local partners and other users to promote database forecast services.
- d. Evaluate performance and effectiveness of forecast database services within their service areas.
- e. Ensure consistency across spatial and temporal scales across the database.

4 The NWS measures the effectiveness of database forecast services using:

- a. Verification scores of forecast elements
- b. Database consistency scores per element
- c. Database completeness of each element
- d. Integrity of meteorological elements in the database
- e. Timeliness of new data
- f. Latency of the database

The NWS utilizes a collaborative forecast process to populate digital forecast databases. Each National Center, WFO, ROC, RFC, OWP, Center Weather Service Unit, etc., has a responsibility to collaborate among neighboring offices/centers to ensure consistency on spatial and timing issues affecting their geographic area of responsibility. This policy directive is supported by the references listed in Attachment 1

Signed April 6, 2018
Louis W. Uccellini Date
Assistant Administrator for Weather Services

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Procedural Directives

I Toccama Directive	
Instruction 10-201	National Digital Forecast Database (NDFD) and Local Database
	Description, Specifications and Appendix
Instruction 10-202	National Digital Guidance Database (NDGD) Specifications
Instruction 10-203	Web-Based Products Specifications
Instruction 10-204	Derived Forecast Text Products Specifications