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

NATIONAL WEATHER SERVICE POLICY DIRECTIVE 10-2 JUNE 17, 2023

Operations and Services

FORECAST DATABASE SERVICES

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

OPR: W/AFS1 (M. Tew) Certified by: W/AFS (A. Allen)

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SUMMARY OF REVISIONS: This directive supersedes NWS Directive 10-2, *Forecast Database Services*, dated April 20, 2018. The following changes were made:

The following changes were made to this directive:

- 1. Changed Certifying Official to A. Allen and Assistant Administrator for Weather Services to Kenneth Graham.
- 2. Removed mention of the National Digital Guidance Database (NDGD) from section 1 as its corresponding NWS Instruction has been rescinded.
- 3. Changed verbs to "active voice" in section 2.
- 4. Updated Attachment 1 References to reflect prior directive rescissions.
- This policy directive establishes the framework for climate, water, and weather services provided via digital forecast and guidance databases. The National Oceanic and Atmospheric Administration's (NOAA's) 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), a wide range of web-based products and local services, and a host of alphanumeric text products.
- 2 The NWS provides a diverse suite of products and services that are derived from digital forecast databases. These products exploit technology to the fullest to meet user needs, promote public safety and enhance the national economy. The NWS strives to produce as many of its forecast products and services as possible from digital databases.
- 3 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

notifies the Office of Planning and Programming for Service Delivery (OPPSD) for digital forecast changes, who then engages the NWS Portfolios necessary for coordination. 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 any Supplements to Procedural Directives and/or regional practices and coordinate them with AFSO.
- f. Ensure any Supplements and/or regional practices 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 coordination with AFSO on database forecast services policy and requirements.
- c. Provide outreach to national and international partners to promote database forecast services.
- d. Evaluate performance and effectiveness indicators of the database forecast services program within NCEP Centers and OWP.
- e. 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; Territories, (e.g., Guam, Northern Mariana Islands, American Samoa); International (e.g., Republic of Palau, Federated States of Micronesia and Republic of the Marshall Islands) 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.

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- 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
- 5 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 temporal issues affecting their geographic area of responsibility. This policy directive is supported by the references listed in Appendix 1.

Kenneth E. Graham	Date	
Assistant Administrator for Weather Services		

Appendix 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Procedural Directive

National Digital Forecast Database (NDFD) and Local Database Description, Specifications and Appendix Instruction 10-201

Instruction 10-203 **Web-Based Products Specifications**