NATIONAL WEATHER SERVICE POLICY DIRECTIVE 10-2
SEPTEMBER 29, 2014

Operations and Services

FORECAST DATABASE SERVICES

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-2, *Forecast Database Services*, dated February 2, 2012. Primary revisions to this document include:

1. Added Figure 1, Digital Forecast Process
2. Updated Certification and Approving Official
3. Added language to stress importance of ensuring consistency across spatial and temporal scales across the Database, Sections 3.2, 3.3, 3.4, 5

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 (OST) 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 alpha-numeric text products.

2. 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.

3. This policy directive establishes the following authorities and responsibilities:

3.1 The Office of Climate, Water, and Weather Services (OCWWS) is responsible for coordinating and establishing national policy and procedural directives for database-derived services. OCWWS is also responsible for outreach efforts to promote forecast database services to national users.

3.2 NWS Regional Headquarters offices will:

a. Ensure the WFOs 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 OCWWS on database forecast services policy and requirements.
e. Develop Supplements to Procedural Directives and coordinate them with OCWWS.
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 will:

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

3.4 WFOs and River Forecast Centers (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

5. The NWS utilizes a collaborative forecast process to populate digital forecast databases. Each WFO/RFC/National Center/Center Weather Service Unit, etc. have a responsibility to collaborate and can initiate collaboration. WFOs collaborate among neighboring offices to ensure consistency on spatial and timing issues affecting their geographic area of responsibility.

Additionally, WFOs collaborate on regional and national scales (i.e., with NCEP and other WFOs/RFCs) to ensure consistency across spatial and temporal scales across the database. State-of-the-art tools should be used to support the collaboration effort. Figure 1 illustrates the digital forecast process and is described in NWS Instruction (NWSI) 10-201, *National Digital Forecast Database and Local Database Description and Specifications*. Attachment 1 lists the corresponding procedural directives under the *Forecast Database Services*.

signed 9/15/14

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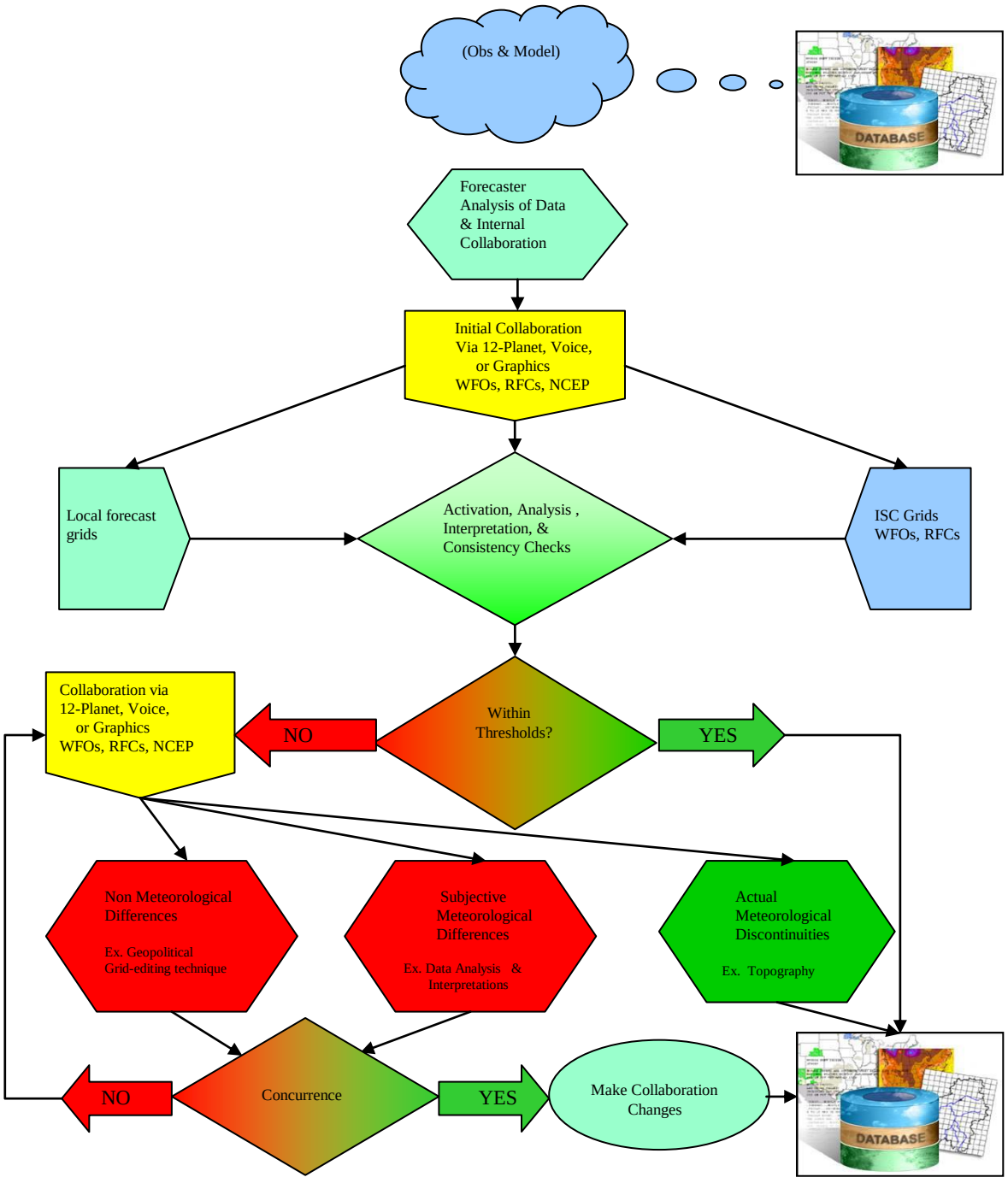

Figure 1: Digital Forecast Process Diagram: New Information & Data

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Procedural Directives

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*