

**NATIONAL WEATHER SERVICE POLICY DIRECTIVE 10-21
OCTOBER 19, 2017**

Operations and Services

Intercomparison of Hydrometeorological Instruments and Algorithms

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

OPR: W/AFS23 (F. Horsfall)

Certified by: W/AFS (A. Stern)

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SUMMARY OF REVISIONS: This directive superseded the NWSPD 10-21, “*Intercomparison of Hydrometeorological Instruments and Algorithms*,” dated February 14, 2003. Changes made to reflect NWS Headquarters reorganization effective April 1, 2015.

1. Data produced by the National Weather Service for short-term forecasts and warnings also provide long-term historical information for climate monitoring, analysis and study. From time to time, the NWS will replace or modify instruments and algorithms as a normal life cycle event, or to take advantage of new technology. Each instrument or algorithm possesses unique performance characteristics which may impact the long-term climate record. To ensure data quality and compatibility, the guidelines and principles for climate monitoring will be met.
2. Intercomparisons will be conducted on all new or modified hydrometeorological instruments, and algorithms in accordance with procedures and instructions listed in Attachment 1. Wherever applicable, NWS intercomparisons will follow American Society for Testing Materials Standards (ASTM).
3. This directive establishes the following authorities and responsibilities:
 - 3.1 The Director of the Analyze, Forecast, and Support Office (AFSO) will establish procedures and instructions consistent with this policy directive and in consultation with the Director of the National Centers for Environmental Information (NCEI).
 - 3.2 All national sensor acquisition program managers, such as, but not limited to, those in the Office of Science, Technology, & Integration (STI) and the Office of Observations (OBS) will implement this policy. These program managers will also budget for conducting intercomparisons.
4. The effectiveness of this policy will be measured by verifying the intercomparisons are conducted in accordance with applicable procedures and instructions.
5. This policy directive is supported by references and information listed in Attachment 1.

Signed _____

Louis W. Uccellini
Assistant Administrator for Weather Services

10/5/2017 _____

Date

Attachment 1
REFERENCES

References

[10-2101 General Instructions for Terrestrial-Based In-Situ Instrument and Algorithm Intercomparisons for the Purpose of Climate Data Continuity](#)

[WMO-No.8, "Guide to Meteorological Instruments and Methods of Observation"](#)