

2020-21 USAP Operational Meteorology Field Season

Q/A Performances

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1. OVERVIEW

Operational activity provided an increase in caretaker functions for the 2021-22 field season. Special care and consideration continued to avoid COVID exposure on continent. Only required services for operations and projects were conducted.

Operational meteorology performance numbers remained high for this year but due to the drastically reduced schedule, the sampling of meteorology measures cannot be compared to the collectives of performance achievements from previous seasons.

The ISO/WMO recommended goals for a Quality Assurance program is not to merely monitor and judge the statistical performance of any activity over time, but to learn from your model and identify the strengths and weaknesses to improve what you can, when you can.

As per last year, this broader view has allowed a period of reflection on the operational meteorology performance in efficiency rather than hardline goal numbers to identify areas to improve support efforts.

2. ENHANCED PROCESSES

- Automation of the McMurdo Building 165 Observation System. This equipment was used for 3 to 6 hourly synoptic / intermediate observations. Adding automation to this process has produced METAR/SPECI observations distributed through GTS that has increase the reporting to global modeling.
- Quality Check of AWS observations vs. AMPS output. AMRDC is designing a periodic check of multiple sensor suites coupled to comparative values to the model output. These checks can provide a

multitude of automated advances in areas as validation of AMPS products and development of quantitative understandings of bias behaviors.

- A data query tool has been produced allowing customers to access and display current and historical weather data while on the USAP Network.
- An automated process has been developed to send direct from the Field Camps into the database for rapid observations display and data collection.

3. SUMMARY

We embrace ideas and cooperatives that have come from collaborative meetings and science research. Many of these past processes have produced quantitative measures to help improve forecasting proficiency aiding in future operational support and science studies.