

CGMS-37, NOAA-WP-30 Prepared by NOAA Agenda Item: III/4 Discussed in WG IV

THE USE OF NPOESS GROUND INFRASTRUCTURE TO IMPROVE THE TIMELINESS OF METOP DATA

In response to action 35.31: NOAA and EUMETSAT to study possibilities for the use of NPOESS ground infrastructure to improve the timeliness of Metop data, within the framework of JPS discussions and report findings to CGMS. Deadline: CGMS-36

Beginning in October 2007, NOAA and EUMETSAT have been analyzing opportunities to downlink MetOp data using the McMurdo Ground Station in Antarctica. After several proposals, NOAA, NASA and the National Science Foundation have agreed to refurbish and maintain systems at McMurdo that will allow for MetOp data recovery at nine passes per day in 2011 and full pass recovery in 2014.

The benefit to NOAA and EUMETSAT is that the Metop data will be downlinked twice an orbit reducing the data latency by half.



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OVERVIEW

Beginning in October 2007, NOAA and EUMETSAT have been analyzing opportunities to downlink MetOp data using the McMurdo Ground Station in Antarctica. After several proposals, NOAA, NASA and the National Science Foundation have agreed to refurbish and maintain systems at McMurdo that will allow for MetOp data recovery at nine passes per day in 2011 and full pass recovery in 2014.

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NOAA CURRENT ACTIVITIES

NOAA has worked with the National Aeronautics and Space Administration (NASA) to develop a solution that we believe will benefit both the NOAA and EUMETSAT for the recovery of MetOp data in a more timely and efficient manner using the McMurdo Station.

Since NPOESS plans to utilize MetOp data, the NPOESS Program Executive Officer has agreed to fund service upgrades to the existing NASA McMurdo Ground Station (MGI) antenna system.

NASA will also install a refurbished 5.4 meter Sl Ka-band antenna system as the second McMurdo Ground Station (MG2).

This will allow NASA to transfer their S-band missions from MGI to MG2, and provides for a single antenna data recovery capability for MetOp at McMurdo on MG1.

MGI readiness to capture MetOp data is planned for early 2011, with the availability of 9 contacts (passes) per day for MetOp data recovery each day until the MG2 antenna system is operational.

MG2 is scheduled to be operational in early 2014; once operational, full MetOp data recovery, 14 contacts per day, will be available.

The Initial Operational Capability (IOC) date is Spring 2011.

The Full Operational Capability (FOC) date in Spring 2014.

This will reduce by half the data latency for MetOp data and benefit European and US users.

Equipment is en route to McMurdo to begin the refurbishment and installation procedures.



WG-III is invited to take note of this planning and coordination with EUMETSAT regarding the utilization of the McMurdo station to provide the Metop data to environmental users in a more timely and efficient manner.