2001/2002 NOAA/NESDIS Comments on "The Integrated Satellite Winds Monitoring Report"

SUMMARY AND PURPOSE OF DOCUMENT

This paper is the USA response to Action 29.41

ACTION REQUESTED: NONE

2001/2002 NOAA/NESDIS COMMENTS ON "THE INTEGRATED SATELLITE WINDS MONITORING REPORT"

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1. Introduction

The Integrated Satellite Winds Monitoring Report (ISWMR) is an invaluable tool that serves as a vital communication interface between the satellite wind producers and the Numerical Weather Prediction (NWP) users of satellite wind observations for monitoring, assessing, and understanding differences between satellite-derived wind observations and NWP model winds. The ISWMR provides the means to detect abrupt changes between satellite winds and NWP winds due to planned or inadvertent changes introduced by either the satellite producer or the NWP center. On more than one occasion over the past two years, the graphics products provided by the ISWMR have been used in a coordinated way by UKMET and NESDIS personnel to detect, analyze, and resolve anomalous features observed in the operational NESDIS wind products. More importantly, the ISWMR provides a path for improving the utilization of satellite-derived wind observations in NWP and improved forecasts. In the following section, NOAA/NESDIS provides some input on ways to further enhance the ISWMR.

2. NOAA/NESDIS Recommendations

- Encourage participation by NOAA's National Center for Environmental Prediction (NCEP) / Environmental Modeling Center (EMC) in the ISWMR effort
- Encourage the addition of the GOES three-hourly water vapor winds and low-level visible cloud-drift winds to the ISWMR page as these are being generated operationally at NESDIS
- Encourage the distinction between water vapor clear air and water vapor cloud-top winds and the generation of individual statistics for each
- Encourage the addition of the GOES three-hourly low-level short-wave (3.9um) infrared cloud-drift winds to the ISWMR page when NESDIS begins operational production of these in late 2002.
- Encourage the addition of the new MODIS polar wind products to the ISWMR page. These products are currently being made available routinely by CIMSS in near real-time to the ECMWF and NESDIS plans to initiate operational production of these in early 2004.
- The ISMWR should serve as the model for the development of similar reports for other satellitederived observations used in NWP.
- Encourage incorporation of information in the ECMWF SATOB quarterly report into the ISWMR.

References

Butterworth, P., 1998: Use, quality control, and monitoring of satellite winds at UKMO. *Proc.Fourth Intl Winds Workshop*, Saanenmoser, Switzerland, 233-238.

Lalaurette, F., A. Garcia-Mendez, and M. Rohn, 1998: Monitoring SATOB products at ECMWF: Availability, quality control, and impact. *Proc.Fourth Intl Winds Workshop*, Saanenmoser, Switzerland, 239-246.