CGMS-XXVII EUM-WP-31 Prepared by EUMETSAT Agenda Item: III.4

MONITORING OF SATELLITE WINDS AT THE NWP SAF

The paper proposes to put satellite wind monitoring results from NWP centers (ECMWF and UK Met. Office) on the Internet for public access.

CGMS satellite operators are kindly requested to comment on and to agree to the proposal.

MONITORING OF SATELLITE WINDS AT THE NWP SAF

1 INTRODUCTION

EUMETSAT Council has approved a Satellite Applications Facility (SAF) for NWP in November 1998. This project, approved initially for 5 years, will be hosted by UKMO and will coordinate research and development efforts among the SAF partners (UKMO, ECMWF, KNMI and Météo-France) to improve the interface between satellite data and NWP for the benefit of EUMETSAT Member States.

2 COORDINATED SATELLITE WIND MONITORING REPORT

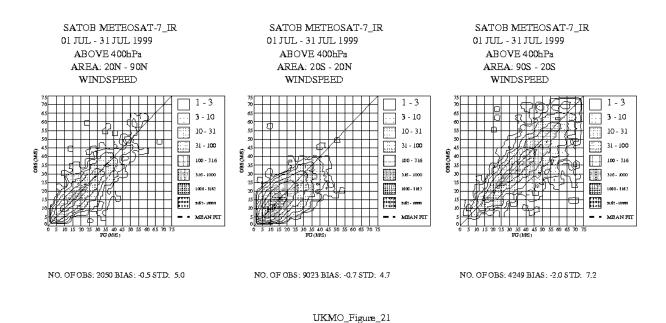
One of the agreed tasks of the NWP SAF is to produce coordinated satellite wind monitoring reports (from UKMO and ECMWF, in the first instance, but perhaps from other NWP centres later), in order to provide a direct comparison between satellite wind observations and wind fields from different models. CGMS have already established a web site (http://sat.wmo.ch/cgmswinds/index.html) to display statistics of satellite winds vs collocated radiosondes. Our proposal is to compile a study of differences (in graphical, and perhaps tabular form) between satellite winds and different NWP models. It is hoped that this will go some way towards separating the contributions from observation and first guess when looking at observation-model differences. As such, this should enable the improvement of both derived satellite winds and their treatment within NWP models, as well as highlighting differences in the characteristics of the models.

3 PROPOSAL

The intention is that these reports will be made available on the Internet for public access. We hope that the proposed web site, based at UKMO, will be easily available via a link from the WMO CGMS server, and therefore we seek the support of the satellite wind producers (i.e. EUMETSAT, NESDIS, JMA, IMD) to publish the observation-model first guess data pertaining to their particular satellite(s) and invite comments on these plans.

Annex:

The figure provides an example of the information that will be contained on the web page. The web page is currently under construction. A preliminary version can be viewed under http://www.met-office.gov.uk/sec5/NWP/NWPSAF



Example figure from proposed web page: Contour plot of bias of high-level (> 400 hPa) IR winds from Meteosat-7 against first guess of the UKMO forecast model.