SUMMARY OF THE SEVENTH INTERNATIONAL WINDS WORKSHOP

The Seventh International Winds Workshop (IWW7) was held in Helsinki, Finland, from 14-17 June 2004. The workshop was organised jointly by the Co-operative Institute for Meteorological Satellite Studies (CIMSS), EUMETSAT, and the Finnish Meteorological Institute (FMI). FMI provided support for the venue and for local arrangements, which were expertly handled by Mrs. Pirkko Pykkö of FMI. The event was co-sponsored by the World Meteorological Organization (WMO), the Japanese Meteorological Organisation (JMA), and the National Environmental Satellite Data and Information Service (NESDIS) of NOAA. These organisations provided travel support for a limited number of international participants.

The workshop was originally foreseen to take place in Beijing, China, in October 2003. Due to concerns related to Severe Acute Respiratory Syndrome (SARS) in Beijing, it was decided in May 2003 to postpone and relocate the meeting.

The IWWs provide an established forum for satellite data providers, users and the science community to portray advances and exchange ideas on the use and interpretation of Atmospheric Motion Vectors (AMVs). They also provide the WMO with a synopsis of AMV advances, issues and recommendations from which action items may be drafted for consideration by the international community.

The IWW7 was attended by 53 scientists from 15 countries. All operational satellite data centres producing AMVs were represented, as were most global numerical weather prediction (NWP) centers.

The workshop was opened with a series of welcome addresses, by Prof. Petteri Taalas (FMI), Dr. Tillmann Mohr (EUMETSAT), and Dr. Paul Menzel (NOAA). It proceeded with seven plenary sessions, focusing on topics relevant to the processing and utilisation of AMV, as well as other satellite-based observing platforms which are producing, or are planned to produce, wind information. A novelty was a session that was completely devoted to polar winds in general and MODIS data in particular.

During and after the meetings there were working group sessions on four issues related to AMV topics: (1) methods, (2) data assimilation, (3) height assignment, and (4) MODIS winds. The working groups considered, among others, the issues and recommendations offered by the WMO Co-ordination Group on Meteorological Satellites (CGMS).

IWW7 concluded with a plenary session that reviewed the working group findings and recommendations, and that discussed the achievements of the workshop.

Among the highlights from IWW7 were the encouraging results from two new geostationary satellites, Meteosat-8 (EUMETSAT) and Kalpana-1 (India). Several presentations discussed the impact of the Meteosat-8 winds on NWP output, showing mixed results, and leading to a recommendation to modify the height assignment methodology for the Meteosat-8 AMVs. In the last two years the use of MODIS winds quickly moved from an experimental phase to an early operational phase. Three meteorological centres (ECMWF, JMA, and NASA GMAO) use the MODIS data-sets now operationally; many other institutes are running experiments with the data. Scatterometer winds have also proved very successful and are assimilated by a growing number of meteorological centres. In addition there are very promising prospects of AMV data from space-based lidar profilers and from hyperspectral imaging and sounding instruments.

The detailed reports of all seven plenary sessions and four working group sessions are provided in the following pages.

The general feeling was that IWW7 was a very successful workshop and that future workshops should be continued in their current format. The next IWW is planned for 2006 in Beijing, China.

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