CGMS-XXXIII WMO WP-12 Prepared by WMO Agenda item: E.1

## TROPICAL CYCLONE PROGRAMME REQUIREMENTS

(Submitted by WMO)

## Summary and purpose of document

The purpose of this document is to advise CGMS Members of WMO's Tropical Cyclone Programme requirements.

# ACTION PROPOSED

CGMS to take action on the Tropical Cyclone Committee's request for EUMETSAT to find a solution ensuring geostationary coverage of the Indian Ocean beyond 2006 in order to provide Members the necessary satellite data in support of their national mandates.

### DISCUSSION

#### Requirements of the various tropical cyclone regional bodies

1. The WMO/ESCAP Panel on Tropical Cyclones during its 32<sup>nd</sup> session (New Delhi, February 2005) was pleased to note that EUMETSAT would continue to provide the Indian Ocean Data Coverage (IODC) service until the end of 2008. Meteosat-7 will then take over from Meteosat-5 at 63°E by 2006 subject to the successful launch and commissioning of the MSG-2 (M-9) satellite.

2. The RA I Tropical Cyclone Committee for the South-West Indian Ocean during its sixteenth session (Maputo, September 2003) thanked EUMETSAT for agreeing to maintain its coverage over the Indian Ocean. However, it reiterated its concern about the absence of any permanent geostationary satellite coverage over the Indian Ocean and requested WMO to make representations with EUMETSAT to find a solution ensuring continuous geostationary coverage of the Indian Ocean.

ACTION: EUMETSAT to find a solution ensuring continuous geostationary coverage of the Indian Ocean

3. The RA V Tropical Cyclone Committee during its tenth session (Brisbane, July 2004) noted NASA's plan to terminate the Tropical Rainfall Measuring Mission (TRMM). The Committee further noted that data from TRMM are used routinely in tropical cyclone monitoring and forecasting in many countries in RA V, and by RSMCs and TCWCs in particular. Data from TRMM assist in identifying the centres of tropical cyclones and other structural information (such as eye diameter, estimates of the radius of maximum winds) when the eye is observed with cirrus clouds. TRMM data are particularly valuable at night. TRMM data have many advantages over other microwave sensing instruments, such as higher spatial resolution, real-time calibration and more direct measurement of rainfall rates. Noting the value of TRMM data for the high priority task of TC forecasting in the context of disaster mitigation, the Committee requests the Secretary-General of WMO to:

- Inform the Coordination Group on Meteorological Satellites (CGMS) of the great value TRMM data are providing to operational TC forecasting; and
- Use whatever avenues are available to request that NASA reconsider the decision to terminate the TRMM mission while the satellite is still functioning.
- **ACTION:** NASA to reconsider the decision to terminate the TRMM Mission while the satellite is still functioning

### All five tropical cyclone regional bodies

4. With the current advances in the direct and derived products of meteorological satellite instruments, training be provided to operational forecasters in the use of these new products and tools.

5. Although Scatterometer data were not specifically developed for tropical cyclone applications the tropical cyclone community (forecasters and researchers) recognizes the valuable contribution these data have provided to both the operational and research communities.

**ACTION:** That the development of future plans for deployment of scatterometer sensors, and other satellite surface wind vector retrievals within the tropical cyclone be encouraged.