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Prepared by KMA/NIMR  
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## **PLAN FOR PROVIDING THE SST DATA FROM COMS INTO THE GHRSSST INTERNATIONAL FRAMEWORK AT KMA/NIMR**

KMA/NIMR has been retrieving GEO-based sea surface temperature (SST) by using MTSAT-1R satellite. According to increase of necessity of high resolution SST with no gaps due to clouds, NIMR has started to use multi-sensor SSTs as well as model predicted SST to composite using the 1-D ocean mixed layer model over the SST missing area. It plans to apply for COMS later, and the SST with no gaps will be provided within the international framework of GHRSSST.

Action/Recommendation proposed:

CGMS is invited to comment and report their activity regarding the satellite based SST retrieval and application.

## **PLAN FOR PROVIDING THE SST DATA FROM COMS INTO THE GHR SST INTERNATIONAL FRAMEWORK AT KMA/NIMR**

### **1 INTRODUCTION**

This paper presents the plan for activity to provide the sea surface temperature (SST) from COMS as the international framework of GHR SST.

### **2 STATUS OF ACTIVITIES**

The KMA/NIMR has been retrieving GEO-based SST using MTSAT-1R satellite. Recently, multi-sensor SSTs have been added and now are under developing to have GEO-LEO SST composite map over the East Asia considering different spatial and time resolution as well as sensor characteristics.

Necessity of high resolution SST with no gaps has been increased with the purpose of NWP model application and climate monitoring globally. KMA/NIMR has been monitoring the GHR SST activity during last few years and participating in the GHR SST workshops. And, to elevate applicability of the satellite based SST, research on filling the gaps due to clouds or observation frequency of LEO satellites is in progress by coupling 1-dimensional ocean mixing layer model.

Now, the algorithm has been tested with MTSAT-1R data, however it will be tested with COMS data later.

It was discussed in August this year with NOAA/NODC for providing the COMS Level 2 and/or Level 4 gap-free SST data for the GHR SST international framework.

### **3 Future Plan**

The following main planning elements are applicable:

- GEO-LEO SST composite map retrieval and validation : 2010
- Gap-free L4 SST retrieval over E. Asia using MTSAT-1R : 2010-2011
- COMS Level 2 SST retrieval and validation in regular basis : Mid 2011
- Put COMS L2 SST into the GHR SST netCDF-3 data format : 2012
- COMS Level 4 gap-free SST production : 2012-2013