

**Sub-task Number:** DA-09-03b

**Sub-task Title:** Global Meteorological and Environmental Data

**Overarching Task:** Global Data Sets

**Area:** DATA MANAGEMENT

**Relevant Committee:** ADC

**Related Targets:** (to be included in 2009)

**Sub-task Definition** (as given in the 2009-2011 Work Plan):

Implement the Chinese Meteorological Satellite Program for global weather and environmental monitoring. This Program will (i) provide users worldwide with low-resolution multiple-source observation data; (ii) develop integrated multi-source satellite retrieval products shared with users; and (iii) enhance capabilities to acquire and apply Chinese meteorological satellite data and products.

**Leads** (GEO Member or PO, Entity carrying out the work, Contact: e-mail):

China (CMA-NSMC), Point of Contact: Peng Zhang, zhangp@cma.gov.cn

### **Motivation/Background**

FY-3A on-orbiting commission test is carried out within 2008. All 11 payload instruments have been fully evaluated with the real data during the on-orbiting commission test. The radiance calibration will be implemented operationally to monitoring the data quality.

FY-3A is the second generation polar orbiting meteorological satellite of China. On-orbiting commission test and radiance calibration are the key point to guarantee the data application before the data service.

**Outputs** (e.g. products and services which result from the activities of the Task/sub-task; outlined in the form of deliverables with timelines)

#### Planned:

L1 data will be released before 2009.

L2 products will be released before 2010.

#### Produced (current status):

L1 data and L2 products can be generated operationally through FY-3A ground segment.

Currently, L1 data have been fully evaluated. The validation activities for L2 products are still under going.

**Activities** (operations or work processes through which resources are mobilized to produce specific outputs; outlined in the form of milestones including timelines)

Planned: Data Pre-Processing System (DPPS) and Product Generation System (PGS) of FY-3A ground segment will be constructed and full-tested.

Progress (current status): DPPS and PGS have been done. L1 data and L2 products can be generated operationally through FY-3A ground segment.

**Resources** (indication of resources – e.g. financial, human – contributed by GEO Members or Participating Organizations to produce outputs)

**Architecture and Data Component**

1) Please briefly describe any task-related Earth observation resources (data set, system, website/portal) and any related Web Service interfaces that are contributed to GEOSS. State whether these items are or will be registered with the GEOSS Component and Service Registry for access via the GEO Web Portals, and whether any associated standards or other interoperability arrangements will be registered in the Standards and Interoperability Registry.

2) Please also describe what data and information your activity/system needs that you would request to be accessible through the GEOSS Common Infrastructure.

**Capacity Building Component**

(capacity building is defined to include the development of capacity related to: (i) Infrastructure and technology transfer (Hardware, Software and other technology required to develop, access and use EO); (ii) Individuals (education and training of individuals to be aware of, access, use and develop EO) and (iii) Institutions – building policies, programs & organizational structures to enhance the value of EO data and products).

1) In accordance with the above definition does this Task have a capacity-building component? If so, please provide a short description of this component including a description of end users.

Yes. The new source space-based observation data will be provided to the end users after the on-orbit commission test completed.

2) Have any additional CB needs for this Task been identified? Please provide a short description.

FY-3A data will be provided to the end users through the FY-3A ground segment construction.

**User Engagement Component**

(please briefly describe to what extent end users are engaged in this Task and influence the nature of the outputs produced)

**Science and Technology (S&T) Component**

1) Please briefly describe the elements of scientific research or technological development contained in this Task.

2) In relation to the S&T component(s) of this task, please describe gaps, priorities, continuity needs, barriers, scientific expertise and additional resource needs (this information will be used for developing a gaps and needs assessment in Task ST-09-01)

**Members and POs' Contributions to Outputs and Activities above:**

(Input is optional. This section gives the chance to Members and POs to provide more details (3-5 lines) on their individual activities, making a clear connection with the Outputs and Activities outlined above).

**China**

National Satellite Meteorological Center (NSMC): Fengyun 3A is a new satellite data set. This task will promote Fengyun 3A data communication and share. At the same time, this task will promote Fengyun 3A data application in GEOSS social benefit area.

**Greece**

Academy of Athens, Research Center for Atmospheric Physics and Climatology: The Research Center for Atmospheric Physics and Climatology will support the implementation of this task provided a web based Data base including meteorological data, satellite data and future models for Greece. The project named HellasCLIM and is already under implementation.

*Participation (Table to be filled in 2009):*

Type	Member or PO	Representing	Contact Name	EmailAddress
Lead(PoC)	China	CMA - NSMC	Peng Zhang	zhangp@cma.gov.cn
Lead				
Contributor	Greece	Academy of Athens, Research Center for Atmospheric Physics and Climatology	G.Tselioudhs	gtselioudis@academyofathes.gr