# Committee on Earth Observation Satellites (CEOS) CEOS-GEO Actions Table

**NASA Summary Report** 

Michael Freilich Director, Earth Science Division

CEOS SIT Meeting Tokyo, Japan September 17-18, 2008

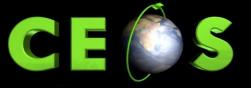




## **NASA Category 1 Actions**

- 10 Category 1 actions.
- 8 actions have been closed, all by the due date.

 2 actions remain open and are on track for completion by due date.



## 

Status: CLOSED

Action: CL-06-02\_12

Category #: 1

Primary SBA Area: Climate

NASA Point of Contact: Steven Neeck

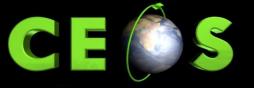
Due Date: 6/30/2008

Participating Organizations: NASA, CNES, EUMETSAT, NOAA

Participating CEOS groups: OSTC

### **Action Description**

Status report on June 2008 Jason-2 Launch



## Action: CL-06-02\_12 Status

- The launch was successful on June 20 and the spacecraft checkout is proceeding nominally with all core instruments activated and first orbit maneuver to obtain the Tandem Mission orbit. The deployment is nominal.
- The first instruments data is excellent compared to Jason-1 even before the final orbit is reached. The current orbit is still lower than the final one. On its final orbit Jason-2 will fly in a tandem mission with Jason-1.
- There will be a 2-month commissioning phase period. The satellite will be handed over to NOAA in October 2008 for routine operations.



## Action # DA-07-03\_14 Description

Status: OPEN

Action: DA-03-07\_14:.

Category #: 1

Primary SBA Area: Cross Cutting

NASA Point of Contact: E. Hilsenrath, B. Killough

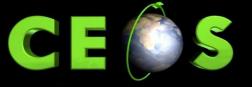
Due Date: September

Participating Organizations: Rutherford Appleton Laboratories (RAL)

Participating CEOS groups: AC Constellation, SEO

## **Action Description**

- Requirements and Gap Analysis for Atmospheric Composition measurements.
  - Survey and compile international agencies, institutions, science committees requirements for space borne measurements to support air quality, stratospheric ozone, climate processes, and their applications
  - Compare requirements to measurements in orbit and those planned by international agencies.
  - Prepare report for CEOS



## **Action # DA-07-03\_14 Status**

#### **Action Status**

- 1. April 1, 2008: Complete first draft of requirements

  COMPLETED RAL preliminary draft received on March 17.
- 2. September 8, 2008: Complete draft of requirements and gap analysis report. COMPLETED RAL draft of report received on September 8.
- 3. November 3, 2008: Complete final report Final report on schedule for completion by November 3.

Note: RAL progress has been delayed by the ESA work on PREMIER. The RAL point-of-contact completing the analysis for the report is responsible for deliverables to European and Canadian PREMIER team members. This task has taken priority at RAL over the ACC task. Discussions on Aug 22 have confirmed the current milestone schedule.



# Action # CL-06-02\_13 Description

Status: Open

Action #: CL-06-02\_13

Category#: 1

Primary SBA Area: Climate

NASA Point of Contact: Ernest Hilsenrath

Due Date: September 31, 2008

Participating Organizations: CEOS Agencies and international science community

Participating CEOS groups: ACC and WGISS

### **Action Description**

- Conduct Climate Workshop at GISS to develop requirements and plans for supporting the measurement and long-term trending of atmospheric composition Essential Climate Variables (ECV)
- Long term objective: Determine the impact of gaps on climate model validation and forecast accuracy



## Action # CL-06-02\_13 Status

- 1) June 30, 2008: Announce CEOS Atmospheric Composition Constellation (ACC)-3 / Climate Workshop at GISS.
  - COMPLETED. Preliminary plans have been completed for the CEOS ACC 3/Climate Workshop at the Goddard Institute for Space Studies (GISS) on October 15-16, 2008. Invitation letter has been sent out. The ACC will have one of the first demo webpages on the revised CEOS website with an advertisement for the CEOS ACC-3 meeting.
- 2) October 15-17, 2008: Conduct CEOS ACC-3 / Climate Workshop at GISS. Workshop on schedule and draft agenda prepared.
- 3) November 10, 2008: Complete workshop final report and post on CEOS website.1



## **NASA Category 2-4 Actions**

19 Category 2 and 4 actions.

- 3 actions have been closed, all by the due date.
- 11 actions remain open and are on track for completion by due date.
- 5 actions are recommended for deletion.



## Action #CL-06-01\_10 Description

Status: OPEN

Action: CL-06-01\_10

Category #: 2

Primary SBA Area: Climate

NASA Point of Contact: Michele Rienecker

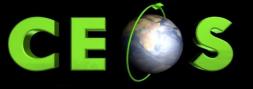
Due Date: 12/31/2008

Participating Organizations: NASA/GSFC/Modeling and Assimilation Office

Participating CEOS groups:

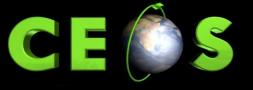
### **Action Description**

- 50% completion of the NASA Modern Era Retrospective-analysis for Research and Applications (MERRA)
- MERRA is an atmospheric analysis of the historical data stream for the satellite era (1979 to present) that is focused on producing climate-quality analysis for studies of the hydrological cycle.



## Action #CL-06-01\_10 Status

- MERRA production is currently 25% complete and it is expected that the 12/31/2008 milestone will be met.
- MERRA products will be available online at <a href="http://disc.sci.gsfc.nasa.gov/MDISC/dataprods/merra">http://disc.sci.gsfc.nasa.gov/MDISC/dataprods/merra</a> products.shtml
- The web interface to the products has been prototyped with several download options. Online subsetting and science tools are under development.
- 100% of processing of the historical stream to the end of 2007 is planned for completion by 8/31/2009.



# Action: DA-07-03\_9 <u>Description and Status</u>

Status: OPEN

Action: DA-07-03\_9

Category #: 2

Primary SBA Area: Transverse

NASA Point of Contact: Steven Neeck, Riko Oki

Due Date: 12/31/2008

Participating Organizations: NASA, JAXA

Participating CEOS groups: PC

## **Action Description**

Continue Tropical Rainfall Measuring Mission (TRMM) operations through 2008.
 Action is necessary to support GPM Preparatory Phase of PC.

Complete of 11 years of TRMM 3-hr, multi-satellite standard products (TMPA, 3B42).

- TRMM flight operations and data processing fully funded through September 2009 (preliminarily through September 2011).
- Spacecraft and instruments remain in good health with robust consumables.



# Action: CL-06-02\_17 Description and Status

Status: RECOMMEND DELETION

Action: CL-06-02\_17

Category #: 2

Primary SBA Area: Climate

NASA Point of Contact: Steven Neeck

Due Date: 12/31/2008

Participating Organizations: NASA

Participating CEOS groups: PC

### **Action Description**

 Implement improved algorithm (Version 6) for the production of Merged Tropical Rainfall Measuring Mission (TRMM) Multi-satellite Precipitation Products (same as WE-06-02\_9).

#### **Action Status**

 Completed development and initial testing. Follow-up testing scheduled for late September (see WE-06-02\_9).

NOTE: This action is same as WE-06-02\_9. Recommend action be deleted.



# Action #WA-06-02\_4 Description and Status

Status: RECOMMEND DELETION

Action: WA-06-02\_4

Category #: 2

Primary SBA Area: Water

NASA Point of Contact: Jared Entin

Due Date: ongoing

Participating Organizations:

Participating CEOS groups:

#### **Action Description**

Continue to make Land Surface model outputs (in particular related to droughts) available on-line.

#### **Action Status**

Land Surface model data out is available from the Following websites:

http://disc.gsfc.nasa.gov/hydrology/index.shtml

http://ldas.gsfc.nasa.gov/map/riglive.html

http://gmao.gsfc.nasa.gov/cgi-bin/products/climateforecasts/

NOTE: This action is ongoing and not closeable. Recommend action be deleted.



# Action #WA-06-07\_8 Description and Status

Status: RECOMMEND DELETION

Action: WA-06-07\_8

Category #: 2

Primary SBA Area: Water

NASA Point of Contact: Jared Entin

Due Date: ongoing

Participating Organizations: NASA

Participating CEOS groups:

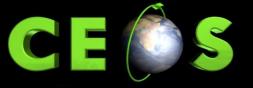
#### **Action Description**

Continue building capacity in Central and South America to use Water-related remote sensing and model output data through "SERVIR" and directed capacity building activities.

#### **Action Status**

- Water cycle variables are given to SERVIR node in Central America for dissemination
- Small meetings are held in US to educate members of the South (and Central) American communities to use NASA satellite remote sensing products and models.

NOTE: This action is ongoing and not closeable. Recommend action be deleted.



## Action: EN-06-04\_3 Description

Status: RECOMMEND DELETION

Action: EN-06-04\_3

Category#: 4

Primary SBA Area: Energy

NASA Point of Contact: Richard Eckman

Due Date: 9/1/2009

Participating Organizations: TBD

Participating CEOS groups:

#### **Action Description**

- Organize and conduct a stakeholder engagement workshop (outside of US) in collaboration with the GEO Energy Community of Practice.
  - Based on recommendations from GEO Energy Strategic Plan submitted to GEO IV Plenary (November 2007).
  - Follow-up to NASA Applied Sciences Program Energy stakeholders engagement workshop held in March 2007.

#### **Action Status**

 Discussed at multiple GEO Energy Community of Practice WebEx meetings. Lead, sponsor funding, and venue have not yet been identified. Issue will be brought up at GEO UIC meeting (week of 9/22) to assess path forward.

NOTE: As interest in completing this action is not apparent, recommend action be deleted.



# Action: EN-06-04\_2 Description and Status

Status: RECOMMEND DELETION

Action: EN-06\_04\_2

Category#: 4

Primary SBA Area: Energy

NASA Point of Contact: Richard Eckman

Due Date: 3/31/2009

Participating Organizations: TBD

Participating CEOS groups:

#### **Action Description**

- Complete an analysis (similar to that done by NASA in 2007) of non-US spaceborne measurements, modeling assets, and decision support systems relevant to the energy community.
- Develop reports to be circulated to CEOS member agencies and energy sector end-users.
  - Based on recommendations from GEO Energy Strategic Plan submitted to GEO IV Plenary (November 2007).

#### **Action Status**

 Discussed at GEO Energy Community of Practice WebEx meetings during 2008, but no lead agency or POC have been identified.

NOTE: As interest in completing this action is not apparent, recommend action be deleted.