

CEOS-GEO Actions Update

Mary Kicza, SIT Chair

Opening Thoughts

- Frame our discussion on CEOS-GEO Actions
 - Ivan will review the current status of the CEOS-GEO Actions
 - Updates follow from Working Group Chairs, CEOS SBA Coordinators, and the Constellation Co-leads
 - *Tour de Table*
- The CEOS-GEO remapping exercise, begun in earnest in December 2007, has shown significant progress.
- The SIT objective is to **demonstrate real progress and provide tangible results in its contributions to GEO and GEOSS**. We are accomplishing this goal through your Agency's commitments to these actions.

CEOS-GEO Actions with 2008 Completion Date

- Four Categories:
 - Category 1: Highest CEOS Priority
 - Category 2: Medium CEOS Priority to be completed after 1 Oct 2008
 - Category 3: Lower CEOS Priority
 - Category 4: Lower CEOS Priority to be completed after 1 Oct 2008
- Since SIT-21, 25+ actions have already been completed
- At SIT-21, we focused on Category 1 actions with completion dates before 1 Oct 2008
- Today, we are focusing our attention on all Category actions with completion dates before 1 Oct 2008

Summer Telecon Summary

- Connected with 11 of the 13 agencies identified as lead for CEOS-GEO Actions
- All agencies reported significant progress on actions
 - However, work still needed to meet our target of completion by 2008
 - Five Category 1 actions have delays greater than 3 months

Legend

- Actions in BLUE are **CLOSED**
- Actions in PURPLE are progressing as scheduled
- Actions in RED are delayed
- Actions in GREEN require attention
 - Change in Lead agency, recommend closure, etc.

ASI

Agenzia Spaziale Italiana

Category 3 Action:

- AG-06-01_1: Contribute to GEO Agriculture SBA Task Team – **CLOSED**

Unable to attend SIT-22

BNSC

British National Space Centre

Category 1 Action:

- DA-07-01_3: Global Digital Elevation Model (DEM) Interoperability

Category 2 Actions:

- DA-06-02_5: Benchmark Mission Coordination for TRUTHS and CLAREO
- DA-06-02_4: Radiometric Standards (co-lead with NOAA)

CSA

Canadian Space Agency

Category 1 Actions:

- DI-06-08_1: Establish link between Disaster SBA and Virtual Constellations - **CLOSED**
- DI-06-09_1: Develop requirements for virtual constellation for Risk Management from UN-SPIDER user requirements
- DI-06-09_3: Promote demonstration of four phases of disaster management

CNES

Centre National d'Etudes Spatiales

Category 1 Action:

- CL-06-02_12 (co-lead with NASA): Status report on June 2008 Jason 2 launch - **CLOSED**
- CL-06-02_6: Report on Phase 0 studies on potential future climate sensors

Category 2 Actions:

- WA-06-07_5: Develop tools for using EO data for disasters through Int'l Charter
- WA-07-01_3: CYMENT 3-year project for modeling for land hydrology
- WA-08-01_2: River and lake water monitoring feasibility study (SOLS & HYSOPE)
- DA-06-04_1: Land product harmonization

Category 3 Action:

- EC-06-02_3: Plan special session for evaluating Global Land Cover products and maps at WGC 29

CSIR

Council for Scientific and Industrial Research

Category 1 Actions:

- AR-07-02_1: Contribution to the implementation of the Sensor Interoperability Session
- EC-06-01_1: Installation of additional flux towers in areas covered by SAEON nodes
- EC-06-02_1: Operationalize CBERS-2B reception at CSIR facility

Category 3 Action:

- DA-07-04_1: WGISS sensor web for smoke forecast

DLR

Deutsches Zentrum für Luft-und Raumfahrt

Category 1 Action:

- CL-06-01_9: Reprocess SCIAMACHY Products

Category 3 Action:

- EN-07-03_1: Capacity Building Committee and Energy SBA Team E&T meeting
 - DLR proposes this action either be closed or transferred to another agency

Category 4 Action:

- EN-07-03_3: Connect energy databases to support energy policy planning in developing and developed countries
 - DLR proposes CNES be the lead for this action

Unable to attend SIT-22

ESA

European Space Agency

Category 1 Actions:

- DA-06-02_3: 2nd CEOS-GEO Cal/Val Workshop – **CLOSED**
- EC-07-01_1: ESA to release GlobCover data – **CLOSED**
- DI-06-09_2: Improve access to Disaster Charter data – **CLOSED**
 - ESA reported during agency telecon this action should be closed
- CL-06-02_11: Global datasets for GlobCarbon, GlobColour, GlobGlacier, Medspiration
- DI-06-03_1: Develop action plan for InSAR integration
- DA-06-02_2: Data QA Framework and Guidelines
- WA-06-07_2: Preparation of TIGER activities for 2008-2010

Category 3 Action:

- EC-06-01_2: Data from 10-year GlobCarbon to generate fully calibrated estimates of land products

EUMETSAT

European Organisation for the Exploitation of Meteorological Satellites

Category 1 Action:

- CL-06-01_7: Reanalyzed global sea ice data

Category 2 Action:

- CB-07-01b_1: Identify best practices, gaps and needs for GEO Portal – **CLOSED**
 - EUMETSAT reported during agency telecon this action should be closed

INPE

Instituto Nacional de Pesquisas Espaciais

Category 1 Actions:

- CL-07-01_1: Report on monthly results of prediction of precipitation and temperature anomalies
- WA-06-07_1: Develop SIGMA to process GEONETCast data

Category 2 Actions:

- CB-07-01e_1: Open source software with INPE and USGS
- WA-06-02_3: Daily map production to assess fire risk over Amazon
- WA-07-01_4: Develop automatic system to detect water quality of Pariba do Sul river
- WA-08-P1_6: Develop large basin and important watershed hydrological models

JAXA

Japan Aerospace Exploration Agency

Category 1 Actions:

- AG-06-04_3: Global scale forest mapping data sets – **CLOSED**
- CL-06-05_2: Antarctic mosaic dataset of ALOS PALSAR – **CLOSED**
- DA-07-03_1 (Co-lead with NASA): Intercomparison study undertaken by PMM with CGMS/GSICS – **CLOSED**
- DA-07-03_2 (Co-lead with NASA): Ground Validation (GV) activities – **CLOSED**
- WA-07-01_2: Release final version of the WTF-CEOP JAXA prototype system – **CLOSED**
- WA-08-P1_1: Support IGWCO planning meeting 3/2008 – **CLOSED**
- AR-07-02_2: JAXA server and GEOSS portal clearinghouse tasks
- CL-06-02_7: Report on current and future JAXA space-based climate observation missions
- WA-07-01_1: Support two Asian Water Cycle Initiative meetings

JAXA

Con't

Category 2 Actions:

- AG-07-01_2: Continue research on use of SAR data for biomass estimation
- AR-07-01_1: JAXA contribute to GEOSS guidance documents through ADC
- DA-07-03_9 (co-lead with NASA): TRMM operations through 2009
- CL-06-02_17 (co-lead with NASA): TRMM precipitation products

Category 3 Action:

- DA-07-06_1: Establish Task Team to assist Task Leads of DA-07-06

Category 4 Action:

- WA-08-P1-7 (co-lead with NASA): GPM ground validation working group

NASA

National Aeronautics and Space Administration

Category 1 Actions:

- CL-06-02_2: Conversion of TRMM product to GIS format – **CLOSED**
- DA-07-03_1 (co-lead with JAXA): Intercomparison study undertaken by PMM with CGMS/GSICS – **CLOSED**
- DA-07-03_2 (Co-lead with JAXA): Ground Validation (GV) activities – **CLOSED**
- DA-07-03_6: TRMM data processing assumed by PPS – **CLOSED**
- CL-06-02_3: Planning for SWOT mission
- CL-06-02_13: ACC/Climate workshop (trending ECVs)
- CL-06-02_14: WGISS IDN TT to iterate with Climate SBA
- EN-06-04_1: Collaboration between ACC and Energy SBA on future space-based atmospheric measurements
- DA-07-03_14: Complete ACC requirements and gap analysis

NASA (Con't)

Category 2 Actions:

- CL-06-01_10: 50% completion of NASA MERRA Reanalysis
- WA-07-01_5: Inland and near-coastal water-quality remote sensing techniques
- WA-08-01_3: Conversion of HDF global rainrate products to GIS rain accumulation products
 - Precipitation Constellation stated closed during tag-up; Recommend **CLOSURE**
- WA-08-01_4: PPS dynamic geographic subsets of TRMM data
 - Precipitation Constellation stated closed during tag-up; Recommend **CLOSURE**
- WE-06-02_8: Flood monitoring and landslide warning using TRMM data
- WE-06-02_9: TRMM precipitation products (same as CL-06-02_17)
- DA-07-03_9 (co-lead with JAXA): TRMM operations through 2009
- CL-06-02_17 (co-lead with JAXA): TRMM precipitation products
- WA-06-02_4: Land surface model outputs available on-line
- WA-06-07_8: Central and South American capacity building for water-related remote sensing

NASA (Con't)

Category 3 Action:

- EC-06-01_3: Conduct pre-launch cross-calibration between GOSAT and OCO

Category 4 Action:

- EN-06-04_3: GEO Energy CoP stakeholder engagement workshop
 - NASA proposes this task be lead by another agency or closed.
- WA-08-01_7 (co-lead with JAXA): GPM ground validation working group
 - Precipitation Constellation stated closed during tag-up; Recommend **CLOSURE**
- WA-08-01_8: Water and energy cycle datasets available on-line

USGS

U.S. Geological Survey

Category 1 Action:

- DA-07-03_5: Demonstration of LSI Constellation portal prototype

Category 2 Action:

- AG-07-03_1: Participate in IGOL workshop on cropped area and in GOFC/GOLD workshop

WMO

World Meteorological Organization

Category 1 Actions:

- WE-06-02_2: CEOS SIT and Agencies to review WMO Vision for Space-based component of GOS – **CLOSED**
- WE-06-02_1: Communicate to CEOS the WMO Vision for Space-based component of the Global Observing System – **CLOSED**

Category 2 Actions:

- WE-06-02_4: Confirmation of plans for geostationary hyperspectral sounders
- WE-06-02_5: Plan for operational IR and MW sounding from early morning orbit

Unable to attend SIT-22

NOAA

National Oceanic and Atmospheric Administration

Category 1 Actions:

- CL-06-01_1: Characterize historical HIRS instrument response effects – **CLOSED**
- CL-06-01_2: SBU/V Ozone climate data record reprocessing – **CLOSED**
- CL-06-01_3: Extend long-term series AVHRR and SSMI – **CLOSED**
- CL-06-01_8: Intercalibrated MSU and SSU models – **CLOSED**
- WA-06-07_9: International Hydrometeorology Analysis and Forecasting Course – **CLOSED**
- WE-07-01_3: Observing System Simulation Experiment – **CLOSED**
- CL-06-02_1: Measurement consistency for 1-5 km sensors – Recommend **CLOSURE**
- CL-06-02_4: Greenhouse gas products from AIRS and IASI – Recommend **CLOSURE**
- CL-06-02_5: SIT discussions with NPOESS Program Scientist
- CL-06-02_9: Secure funding for and implement Jason-3

NOAA (Con't)

Category 1 Actions:

- CL-06-02_10: Operational implementation of GEO to LEO intercalibration for IR imagers – Recommend **CLOSURE**
- CL-06-05_1: Generate polar products in real-time – Recommend **CLOSURE**
- DI-06-13_1: Better access to data for fire monitoring – Recommend **CLOSURE**
- DA-06-02_1: Dome C experiment – Recommend **CLOSURE**
- WE-07-01_1: MetOp-A IASI on global medium range forecasts – Recommend **CLOSURE**
- WE-07-01_2: JCSDA demonstrate uses of cloudy radiance in NCEP – Recommend **CLOSURE**
- WE-07-01_4: JCSDA partners to begin assimilation of Windsat vectors – Recommend **CLOSURE**
- WE-07-01_6: Develop and test major radiative transfer components – Recommend **CLOSURE**

NOAA (Con't)

Category 2 Actions:

- AG-07-01_1: Research on biomass products using GOES-R and other sensors
- CL-06-01_11: AVHRR CDRS workshop
- CL-06-02_8: Free and open exchange of MOBY data – Recommend **CLOSURE**
- DA-06-02_4: Radiometric standards
- HE-06-03_6: Weekly 4-km global maps of Vegetation Health Index via Internet – Recommend **CLOSURE**
- WA-06-02_1: Shared vision paper for re-analysis and re-forecast from atmospheric models
- WA-06-02_2: Identification of funding sources for HEPEX and NIDIS activities
- WA-06-07_6: Identify funding source for global H-E code
- WA-08-01_5: Provide *in situ*, remote sensing, and global/regional land, water, and energy products to CPPA-CEOP sites
- WE-06-02_3: OSSE comparison

NOAA (Con't)

Category 3 Actions:

- DA-07-01_1: NOAA and ISRO to participate in satellite algorithm workshop – **CLOSED**
- AR-07-04_1: AVHRR-based system, indices, and data products
- CL-06-06_1: MERIS ocean color processing for U.S. coastal waters
- DA-07-02_1: ISRO-NOAA Implementing Arrangements for INSAT-3D data
- EC-06-07_1: Phenological networks workshop planning

Category 4 Actions:

- EC-07-01_2: Satellite product development
- EC-07-01_3: Mid-decadal global land survey
- EC-07-01_4: Long-term monitoring of brightness temperatures over Amazon rainforest

Participating Agencies

- The following are Participating Agencies
 - CONAE
 - CSIRO
 - EC
 - GISTDA
 - NSC
 - ISRO

Concluding Thoughts

Sincerest thanks to all for your continued
commitment to advance CEOS in support
of GEOSS