

The Working Group on Information Systems and Services (WGISS)

Chair's Report to the 16th CEOS Plenary

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**Terry Fisher
Canada Centre for Remote Sensing**

Terry.Fisher@nrcan.gc.ca

A Proposed WGISS Test Environment

Version Sept 12, 2000

WGISS Data & Information Products

Agglomeration of tools and services held and operated by CEOS organisations

Products & services

WGISS Menu

Open reference list of WGISS products & services, updated on the basis of the results of the test facility, linked on-line to the products and services themselves

Improved Products & Services

Based on the test facility results

Products & services

Links to data suppliers

Disaster Management
CEOP
GOFC

Projects

Define the data & information systems and services requirements

Partnership

Nakodo

Disaster Management
CEOP

GOFC WGISS Test Facility

Selected WGISS products made into a coherent, open, modular system by the partners to address each project's needs (can include tools dev'd by the project), dev'd & tested against the project's requirements

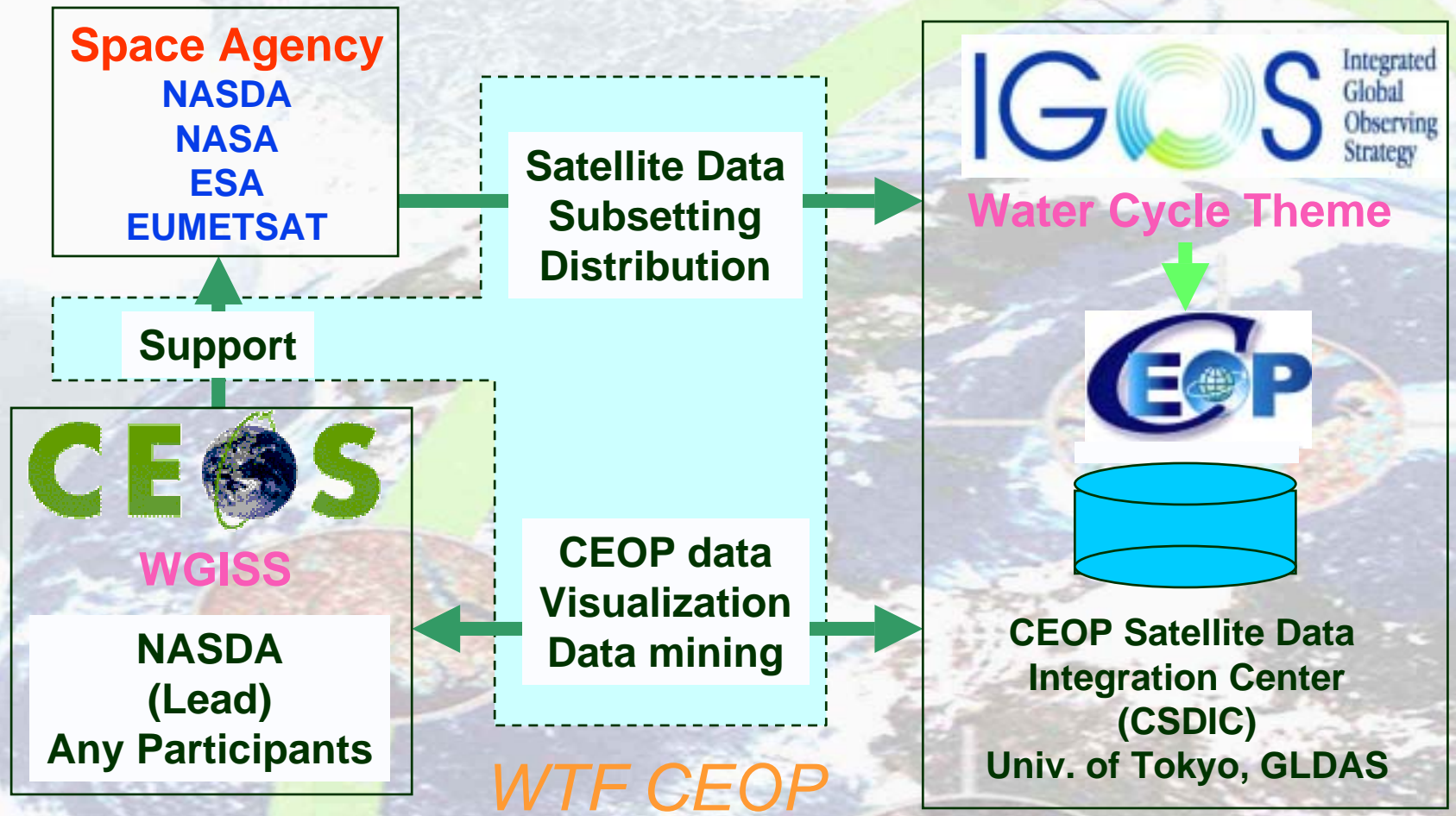
Tools, data

Products & services

Non-WGISS requirements

Long term operation

WTF CEOP role/organization



WGISS Test Facility

Coordinated Enhanced Observing Period (WTF/CEOP)

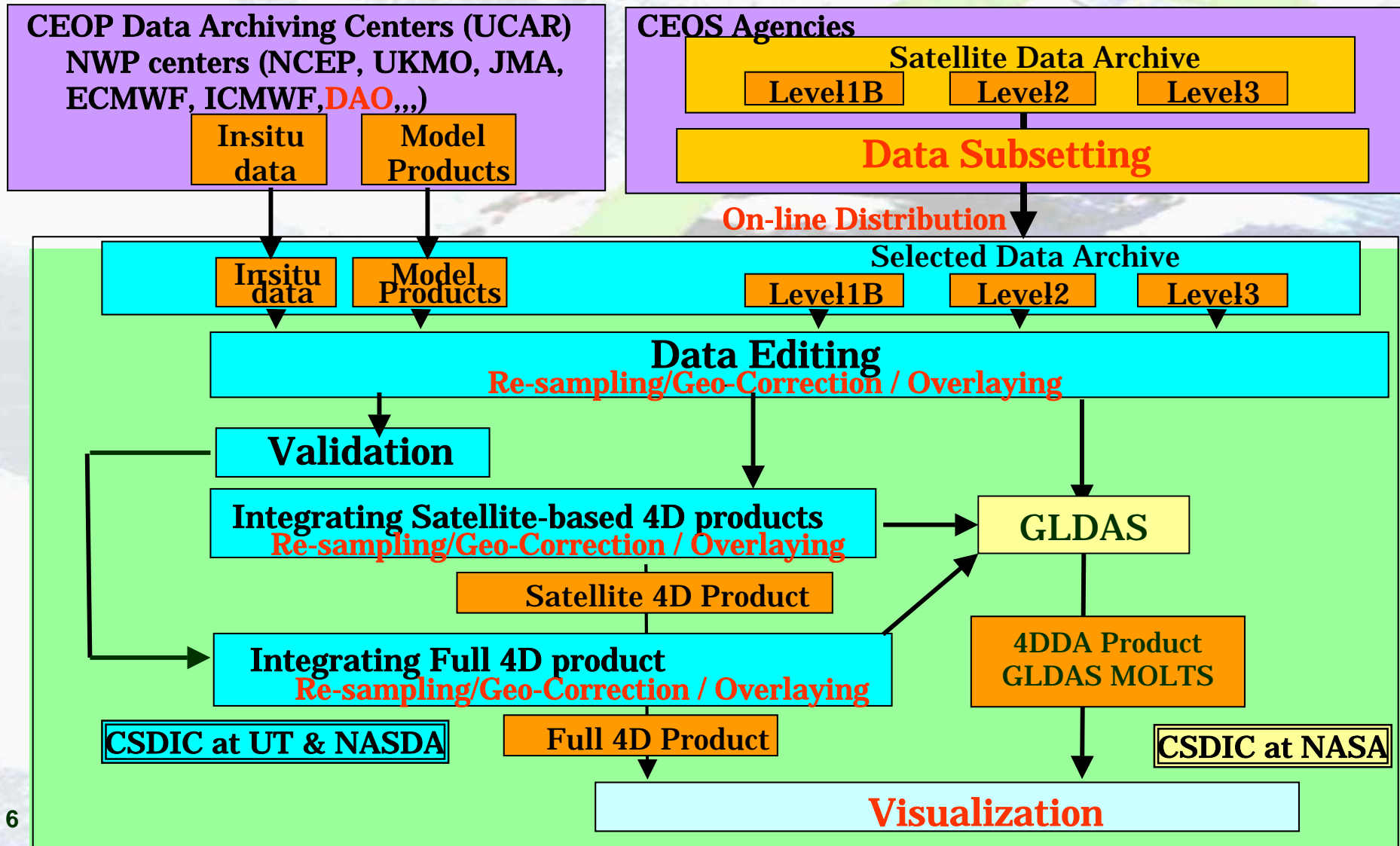
□ Objective

- Support the development and implementation of the IGOS Water Cycle Theme
- Provide information system and service input into the data handling (EO and in situ) issues related to numerical models and data analysis
- Aid the development of the Coordinated Enhanced Observing Period (CEOP) data sets

WTF for CEOP Summary

- **Approve to implement WTF for CEOP with 6 months prototype by NASDA and NASA as follow;**
 - **Period : October 2002 – March 2003**
 - **Agencies: NASDA(lead), NASA with CEOP**
 - **Satellite data: MODIS, AQUA, TRMM (and ADEOS-II)**
 - **Content**
 - **Interoperable coordination between CSIDC (UT) and GLDAS**
 - **IT technology prototyping**
 - **Prototype 4D Integrated products.**
 - **Prototype visualization tools.**
 - **Prototype data mining tools.**
 - **Technology transfer catalogue system for CSIDC**

CEOS Working Group on Information Systems and Services (WGISS) Test Facility (WTF) for CEOP



Data Levels & Sub-setting Request to CEOS Space Agencies

Level-1b

coverage

- 250km*250km area centered at each CEOP reference site

Level-2

coverage

- 250km*250km area centered at each CEOP reference site
- Mosoonal regions(Asia-Australia, N.America, S.America, W.Africa)

Level-3

coverage

- Whole Globe

Milestone & Strategy

1. Project period : Oct. 2002 – Sept. 2005
2. Three Phases for step by step prototyping and upgrading
 - Small area (250Km* 250km) → Larger area
 - Small dataset → Large dataset
 - A Few participants → Many participants
3. Target evaluation(demonstration) period of each phase : @GEWEX SSG, @WCRP JSC, @CEOS plenary, @IGOS-P meetings

Scenario overview

Time Period

Phase 1a, 1b, 1c

CEOP Reference Site (RS)/Global Prototyping

Phase 2a, 2b

Regional area (Monsoon) Prototyping

Phase 3

→ IGOS Water Cycle Theme

Phase 1a scenario

- **Work Period:** June 2002 – Nov. 2002
- **Participants:** NASDA, UT, EUMESAT(TBD)
- **Data Period:** July – Sept. 2001
- **Data & Area:**
 - TRMM/TMI, PR (NASDA), DMSP/SSM-I (UT): for the all CRSs.
 - GMS(UT), GOES(TBD), Meteosat(EUMESAT(TBD)): for the all CRSs.
 - Terra/MODIS, NOAA/AVHRR (UT): for the CRS in Asia
 - Level 1b & available Level 2 data only
- **Prototyping:**
 1. NASDA and UT will deliver the satellite subsetting data to CSDIC
 2. NASDA and UT will prototype 4D products.
 3. NASDA, UT and WGISS member (who is interested) will prototype integrated visualization tools.
 4. NASDA, UT and WGISS member (who is interested) will prototype data mining systems.
- **Evaluation:**

WGISS, CEOS Plenary, GEWEX SSG, WCRP JSC

Phase 1b scenario

- *Work Period:* Dec. 2002 – May 2003
- *Participants:* NASDA, UT, EUMESAT(TBD), NASA(TBD), ESA(TBD) or other WGISS members
- *Data Period:* July – Sept. 2001 and Oct. 2002 – Mar. 2003
- *Data & Area:*
 - TRMM/TMI, PR (NASDA), DMSP/SSM-I (UT): for the all CRSs
 - GMS(UT), GOES(TBD), Meteosat(EUMESAT(TBD)), for the all CRSs
 - ENVISAT/ASAR (ESA), Terra/MODIS, CERES, MISR, ASTER, Aqua/MODIS, CERES, AIRS (NASA): for the all CRSs
 - Terra/MODIS (UT), NOAA/AVHRR (UT): for the CRS in Asia
 - Level 1b & available Level 2 data only**
- *Prototyping:*
 1. NASDA, ESA, NASA and UT will deliver the satellite subsetting data to CSDIC.
 2. NASDA, NASA and UT will prototype 4D products.
 3. NASDA, NASA, UT and **WGISS member (who is interested)** will prototype **integrated visualization tools**.
 4. NASDA, UT and **WGISS member (who is interested)** will prototype data mining systems.
- *Evaluation:* WGISS, CEOS Plenary, GEWEX SSG, WCRP JSC, IGOS-P

Phase 1c scenario

- *Work Period:* Jun. 2003 – Sept 2005
- *Participants:* NASDA, UT, EUMESAT(TBD), NASA(TBD), ESA(TBD) or other WGISS members
- *Data Period:* July – Sept. 2001 and Oct. 2002 – Sept. 2004

- *Data & Area:*

For the all CRSs

TRMM/TMI, PR, Aqua/AMSR-E, ADEOS-II/GLI, AMSR(NASDA) GMS(UT), GOES(TBD), Meteosat(EUMESAT(TBD)), DMSP/SSM-I(UT), ENVISAT/ASAR (ESA), Terra/MODIS, CERES, MISR, ASTER, Aqua/MODIS, CERES, AIRS (NASA)

Level 1b & available Level 2 data only

For the global coverage: Level 3 products of the above sensors

- *Prototyping:*

1. NASDA, ESA, NASA and UT will deliver the satellite subsetting data to CSDIC.
2. NASDA, NASA and UT will prototype 4D products.
3. NASDA, NASA, UT and **WGISS** member (who is interested) will prototype **integrated visualization tools**.
4. NASDA, UT and **WGISS** member (who is interested) will prototype data mining systems.

- *Evaluation:* WGISS, CEOS Plenary, IGOS-P, WCRP JSC, GEWEX SSG, GHP

Phase 2a scenario

- *Work Period:* Jun. 2003 – May 2004
- *Participants:* NASDA, UT, EUMESAT(TBD), NASA(TBD), ESA(TBD) or other WGISS members
- *Data Period:* July – Sept. 2001 and Oct. 2002 – Mar. 2003
- *Data & Area:*

For the Asia – Australia Monsoon Region

TRMM/TMI, PR, Aqua/AMSR-E, ADEOS-II/GLI, AMSR(NASDA),
GMS(UT), GOES(TBD), Meteosat(EUMESAT(TBD)),
DMSP/SSM-I, NOAA/AVHRR (UT), ENVISAT/ASAR (ESA),
Terra/MODIS, CERES, MISR, ASTER, Aqua/MODIS, CERES, AIRS (NASA)
Level 2 data only

- *Prototyping:*
 1. NASDA, ESA, NASA and UT will deliver the satellite subsetting data to CSDIC.
 2. NASDA, NASA and UT will prototype 4D products.
 3. NASDA, NASA, UT and WGISS member (who is interested) will prototype integrated visualization tools.
 4. NASDA, UT and WGISS member (who is interested) will prototype data mining systems.
- *Evaluation:* WGISS, CEOS Plenary, IGOS-P, WCRP JSC, GEWEX SSG, GHP

Phase 2b scenario

- **Work Period:** Jun. 2004 – Sept 2005
- **Participants:** NASDA, UT, EUMESAT(TBD), NASA(TBD), ESA(TBD) or other WGISS members
- **Data Period:** July – Sept. 2001 and Oct. 2002 – Sept. 2004
- **Data & Area:**

For the four Monsoon Regions

TRMM/TMI, PR, Aqua/AMSR-E, ADEOS-II/GLI, AMSR(NASDA),
GMS(UT), GOES(TBD), Meteosat(EUMESAT(TBD)),
DMSP/SSM-I, NOAA/AVHRR (UT), ENVISAT/ASAR (ESA),
Terra/MODIS, CERES, MISR, ASTER, Aqua/MODIS, CERES, AIRS (NASA)
Level 2 data only

- **Prototyping:**
 1. NASDA, ESA, NASA and UT will deliver the satellite subsetting data to CSDIC.
 2. NASDA, NASA and UT will prototype 4D products.
 3. NASDA, NASA, UT and WGISS member (who is interested) will prototype integrated visualization tools.
 4. NASDA, UT and WGISS member (who is interested) will prototype data mining systems.
- **Evaluation:** WGISS, CEOS Plenary, IGOS-P, WCRP JSC, GEWEX SSG, GHP

Phase 3 scenario

Phase 3: IGOS Water Cycle Theme Implementation Phase

-Period: Sept. 2005 –

**-Participants: NASDA, ESA, NASA, (or other
WGISS members), Univ. of Tokyo or other
operational org**

**-Evaluation: Operational System consideration
and movement**

WTF CEOP role/organization

