Coordinated Enhanced Observing Period (CEOP)

Oral Session

1. The CEOP Model Data Archive at the World Data Center for Climate as part of the CEOP Data Network
   Michael Lautenschlager, Hans Luthardt, Frank Toussaint

2. Globally distributed evapotranspiration using remote sensing and CEOP data
   E.F. Wood, M.F. McCabe, H. Su, K. Tu

3. A basic study on a new satellite algorithm for snow
   H. Tsutsui, T.Koike, T.Graf, K.Tamagawa, H.Fujii

4. Standarization framework for CEOP metadata development and application
   Rong Xie, Ryosuke Shibasaki

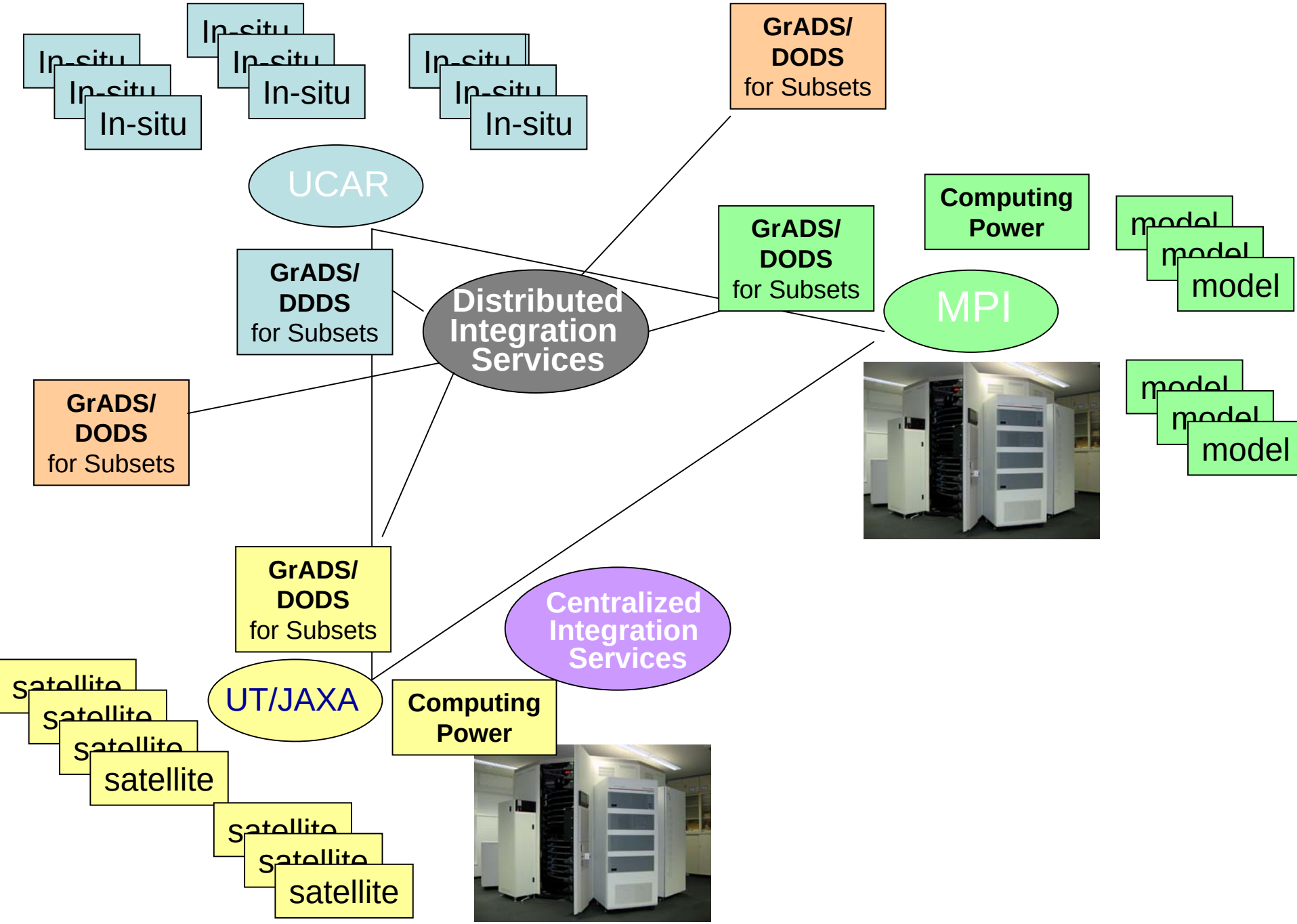
Coordinated Enhanced Observing Period (CEOP)

Demo Session

5. CEOP DATA ARCHIVE DISTRIBUTED DATA MINING SYSTEM
Ben Burford, Osamu Ochiai, Toshio Koike, Izumi Hasegawa

6. CEOP Data Server and Browse/Analysis Interface
Toshihiro Nemoto, Masaru Kitsuregawa

7. Development of a Visual Data Mining Application for Earth Environmental Data
Eiji Ikoma, Kenji Taniguchi, Toshio Koike, Masaru Kitsuregawa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DODS
for Subsets
UCAR
GrADS/
DDDS
for Subsets
Distributed
Integration
Services
GrADS/
DODS
for Subsets
Computing
Power
MPI
model
model
model
GrADS/
DODS
for Subsets
model
model
model
GrADS/
DODS
for Subsets
Centralized
Integration
Services
UT/JAXA
Computing
Power
satellite
satellite
satellite
satellite
satellite
satellite

Coordinated Enhanced Observing Period (CEOP)

Poster Session

8. Production of CEOP satellite dataset by JAXA
Kazuo Umezawa, Taroh Mutoh, Makoto Miyake

9. Integrated Snow Observation During the Cold Land Processes Field Experiment and its Application for the Development of Radiative Transfer Model for Snow
Tobias Graf, Toshio Koike, Hideyuki Fujii, Richard Armstrong, Mary J. Brodzik, Marco Tedesco, Edward J. Kim

10. A 2-D PROCESS STUDY THROUGH THE DEVELOPPEMENT OF A SATELLITE DATA ASSIMILATION BY A LAND-ATMOSPHERE COUPLED SYSTEM
Souhail Boussetta, Toshio Koike, Mahadevan Pathmathevan, Yang Kun

11. THE DEVELOPMENT OF AN 1-D CLOUD MICROPHYSICS DATA ASSIMILATION SYSTEM (CMDAS) BY USING AMSR-E DATA
Cyrus Raza Mirza, Toshio Koike, Kun Yang, Tobias Graf

12. Application of Remote Sensing based Snowmelt Runoff Model in Upper Yellow River Basin for Snowmelt Simulation
Bashir Ahmad, Dawen Yang, Toshio Koike, Tobias Graf

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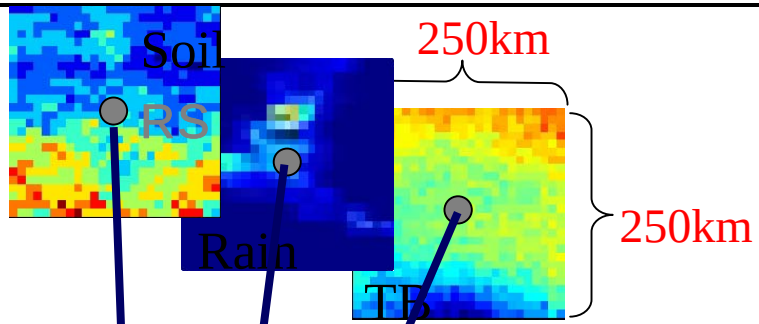
Satellite datasets for CEOP

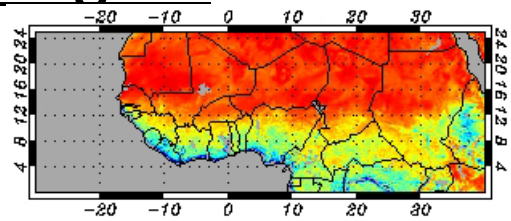
At 3 type scales

1.Reference site:35 Points

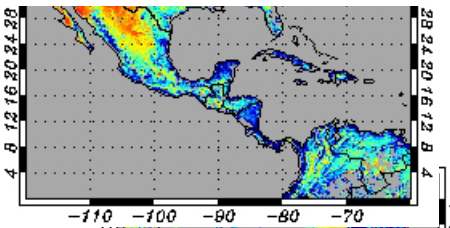


2.Monsoon Region

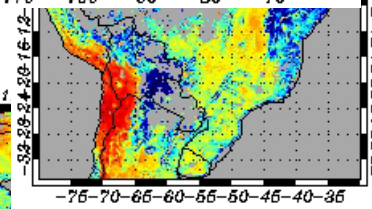
>West African



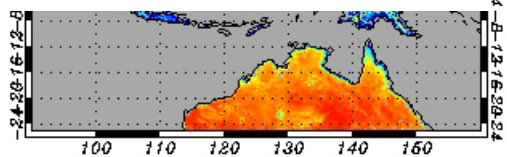
>North American



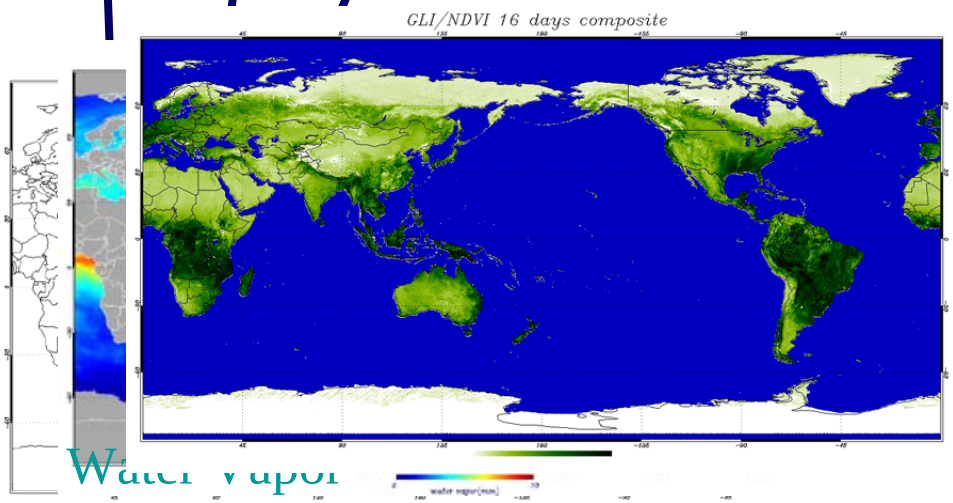
>South American



>Asia- Australian



3.Global



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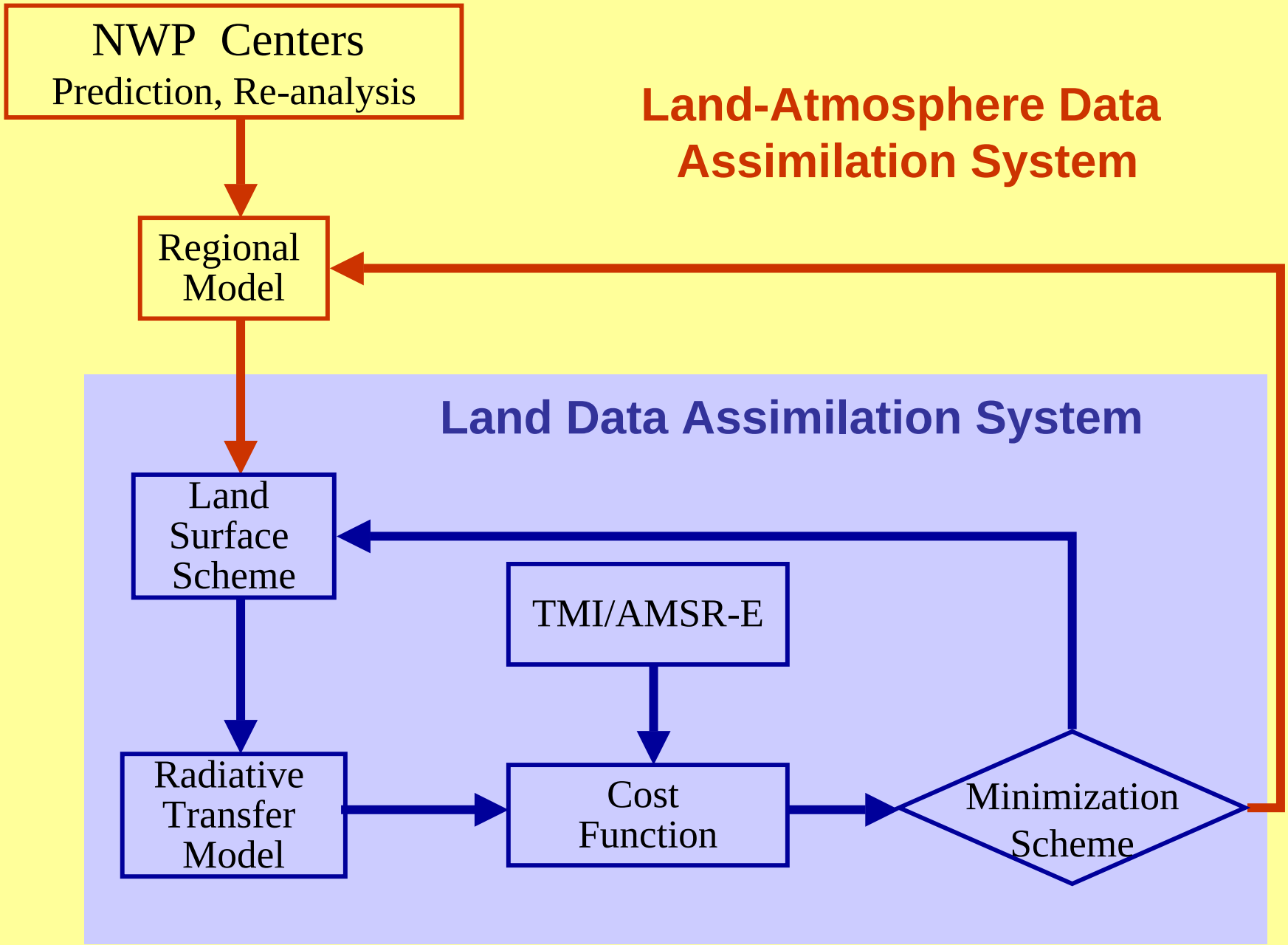
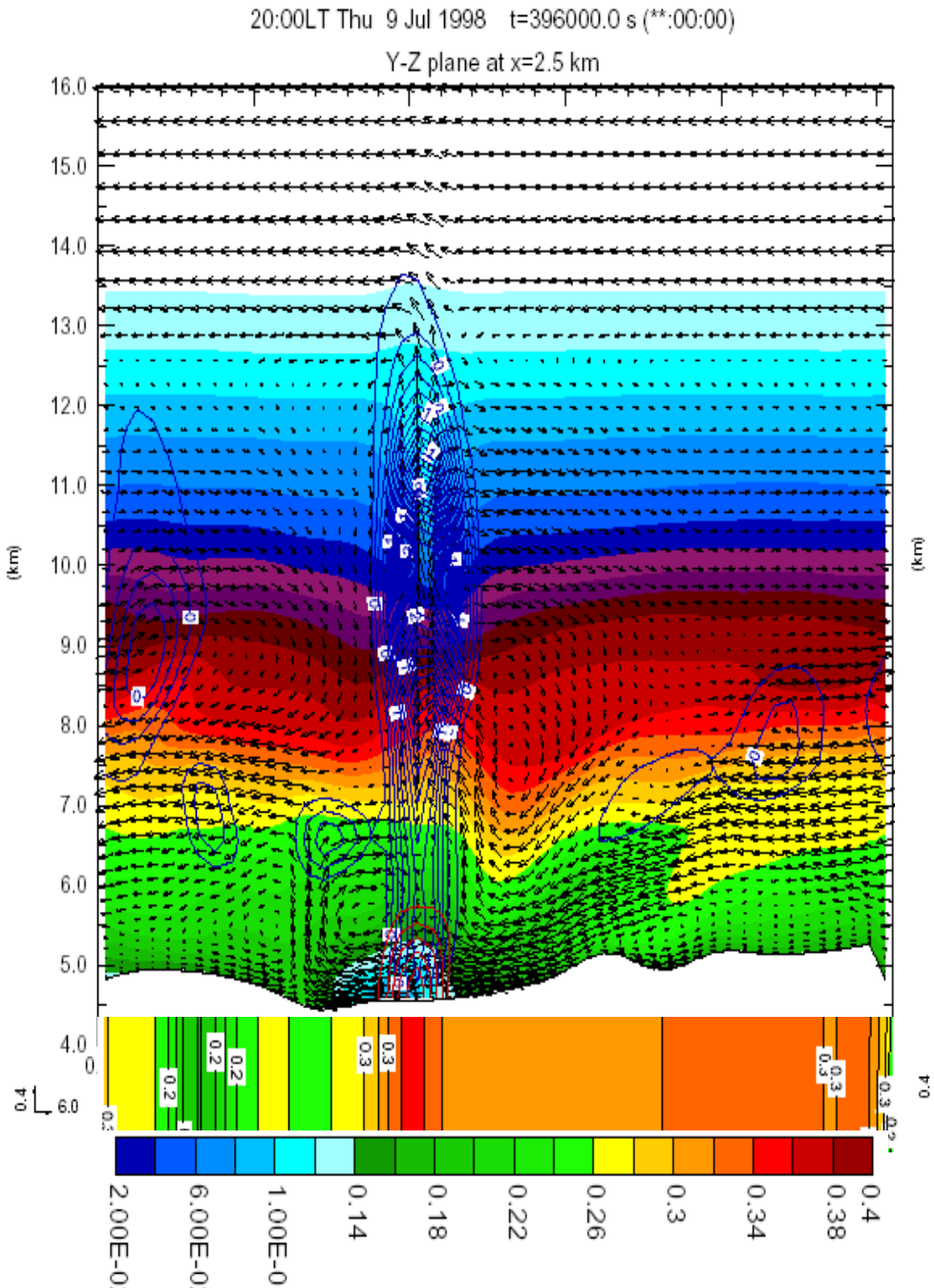
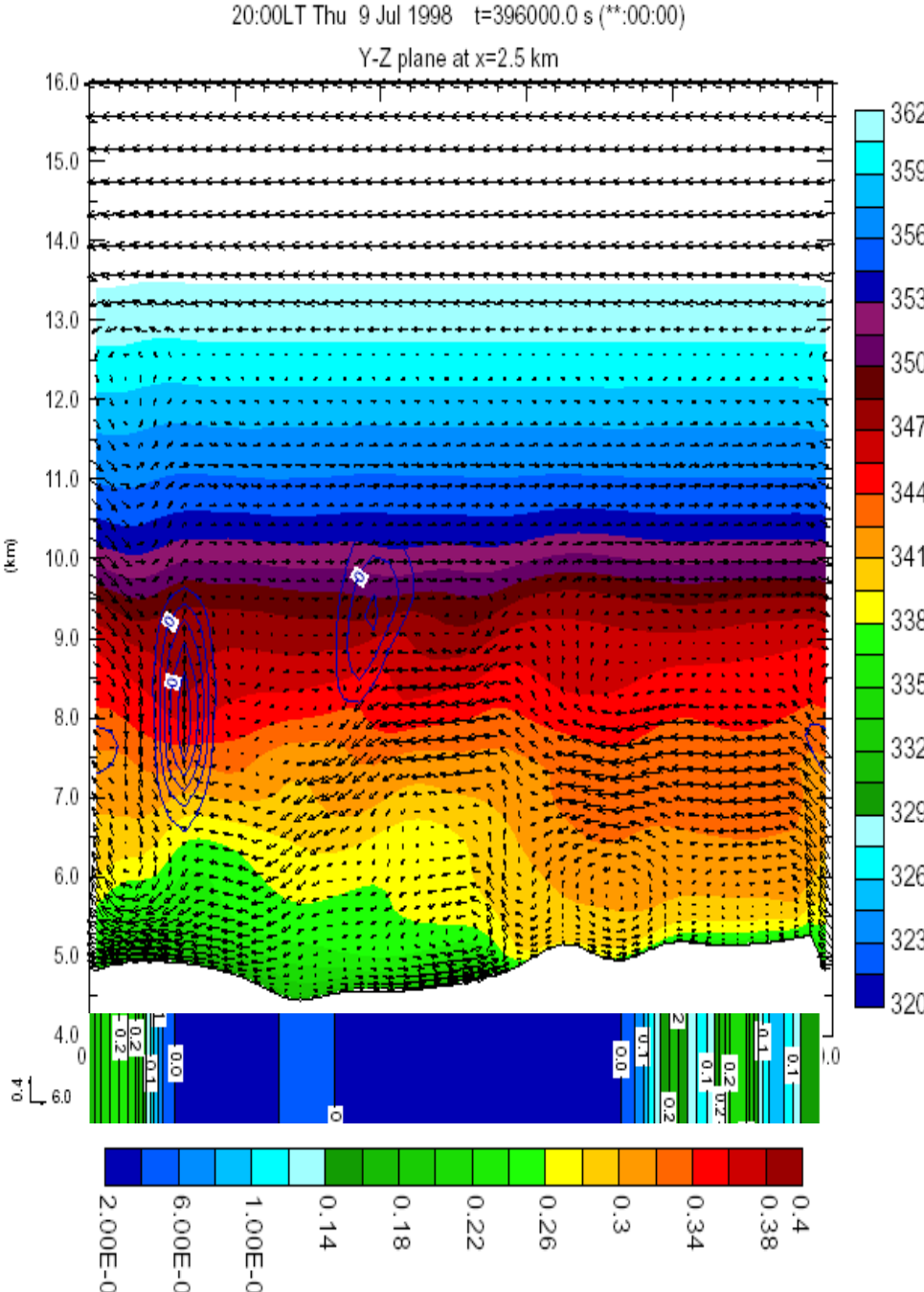

NWP Centers
Prediction, Re-analysis
Land-Atmosphere Data Assimilation System
Regional Model
Land Data Assimilation System
Land Surface Scheme
TMI/AMSR-E
Radiative Transfer Model
Cost Function
Minimization Scheme

L-A DAS



Only Regional Model



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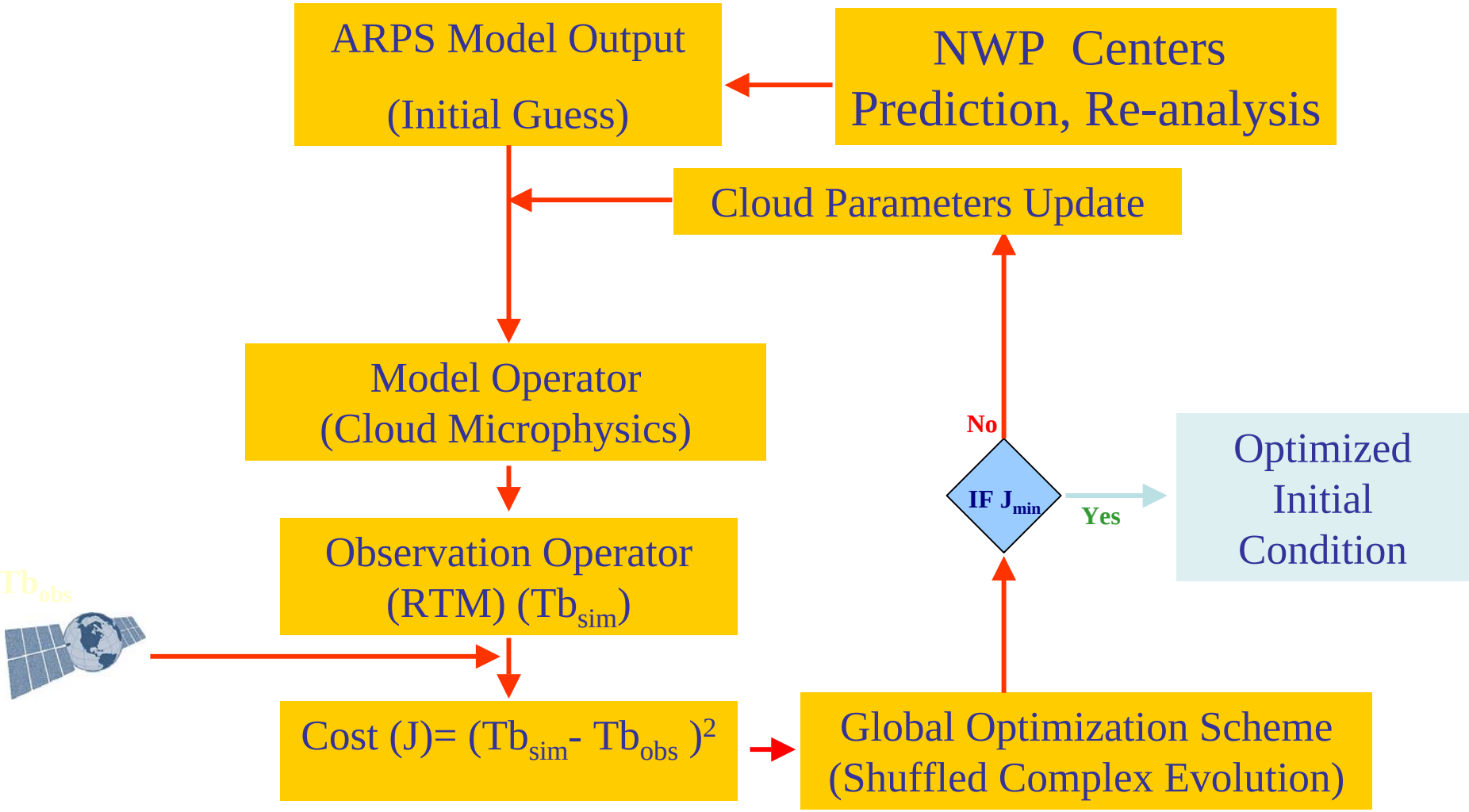
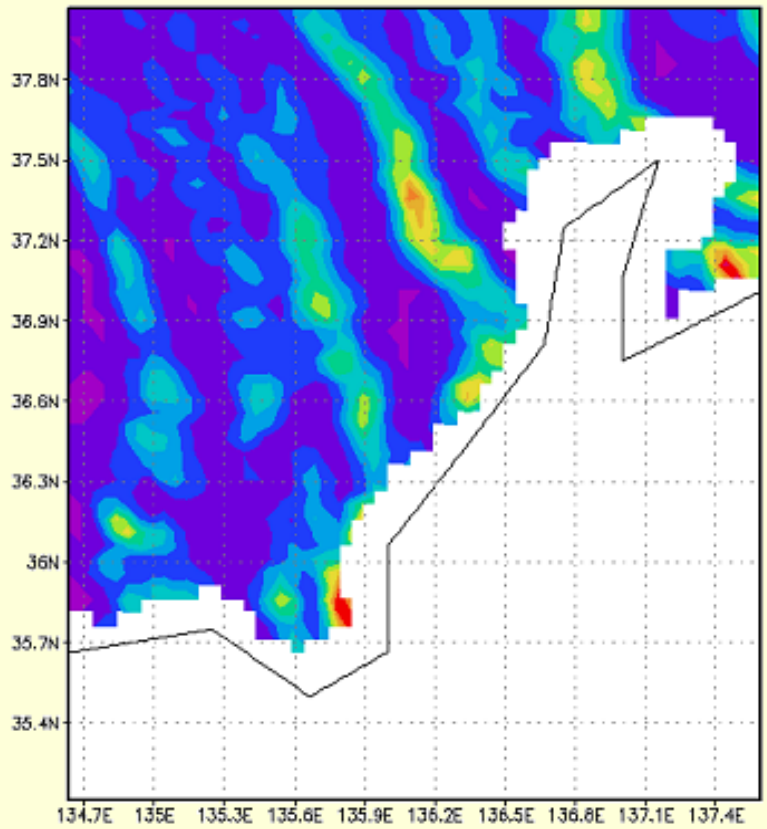
CMDAS Development Methodology



ARPS : Advanced Regional Prediction Systems

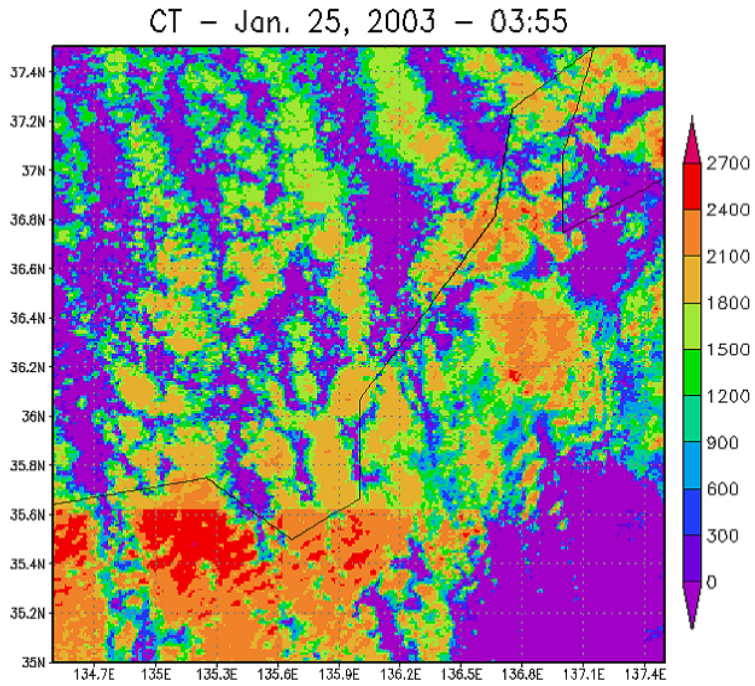
ICLWC at 03:55z (25th Jan, 2003)



Satellite Image:

MODIS on AQUA Platform

I.R Image (Res: 1km)



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Criteria for measuring CEOP Progress

Technical Requirements, P, I, F (Planned, Initiating, Functioning)
Scientific Requirements B, Pr, C (Beginning, Progressing, Completed)

Data Management	Reference Site Composite Data Archive	F	35 Reference Sites, EOP-1: completed, EOP-3/4: on-going
	Model Output Archive	F	9 NWP centers and 2 Data Assimilation Centers
	Satellite Products Archive	F	TMI,PR, SSM/I, AMSR, AMSR-E, AIRS, AVHRR, MODIS, GMS: *on-going*
	Interoperability Arrangement	I-F	Meta Data Design, GCMD portal
	Distributed Data Integration System	I-F	Demo at GHP,CEOS and CEOP. To be open in Mar. 2005
	Centralized Data Integration System	I-F	Demo at GHP,CEOS and CEOP. To be open in Mar. 2005
WESP	Water and Energy Budget	Pr	3 articles on the CEOP Newsletter 1 Workshops (Irvine) GLDAS Product generation: on-going
	Model Output Validation by NWP Centers	Pr	
	GLDAS	Pr	
	GHP/CEOP Model Transferability Study	B	
	Model Inter-comparison Study	B	
CIMS	Monsoon Intercomparison Study	Pr	2 article on the CEOP Newsletter 2 Workshops (Milan, Montevideo)
	Diurnal, Intraseasonal and Seasonal Variability	Pr	
	Monsoon Process Study by Using Models	B	
	Impacts of Local & Remote Forcings on Monsoon	B	
Satellite	Algorithm Development and Validation	Pr	Soil moisture, Snow, 2 articles on the CEOP Newsletter
	Satellite Data Assimilation for Land Hydrology	Pr	Soil moisture, Surface fluxes, 2 journal papers
Project Management	Establishment of Direct Links and Connections	F	Reference Sites, NWPCs, Space Agencies
	CEOP Meetings	F	Implementation Planning Meeting, Workshop, Tele-Conf.
	Scientific Conferences	F	AGU:2, AOGS:1, AMS:1
	Levy Actions/Milestorne Documentation and Tracking	F	Working Group, Phase-II Planning
	Newsletter	F	Twice a Year (1-7)

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	Model Output Validation by NWP Centers	Pr	
	GLDAS	Pr	
	GHP/CEOP Model Transferability Study	B	
	Model Inter-comparison Study	B	
CIMS	Monsoon Intercomparison Study	Pr	2 article on the CEOP Newsletter 2 Workshops (Milan, Montevideo)
	Diurnal, Intraseasonal and Seasonal Variability	Pr	
	Monsoon Process Study by Using Models	B	
	Impacts of Local & Remote Forcings on Monsoon	B	
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