Review on GAME Data Management Activity

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- 2. Data management in the GAME
 - 2-1. Data Policy
 - 2-2. GAIN: GAME Archive & Information Networks
- 3. Achievements and Problems
- 4. Summary

1. Introduction

GAME project

Phase I (1996-2001)

Phase II (2002-2004)

GEWEX-GHP-CSEs

GAME (LBA,GCIP,BALTEX,etc)

Leaded by Prof.T.Yasunari

Intensive Observation Period (IOP): 1998











GEWEX Asian Monsoon Experiment

(GAME)

Data Management

Water and **Energy Budget** Studies

Stable Water Isotope Intercomparison Group

Worldwide Integrated Study of Extremes

Transferability

Water Resource Applications Project

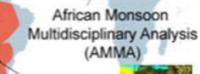




GEWEX Americas Prediction Project (GAPP)

> Large Scale Biosphere-Atmosphere Experiment in Amazonia (LBA)





La Plata Basin (LPB)





















Data Policy for the GAME

GAME was a multilateral project. → Data policy was important.

Originally late Dr.M.Murakami prepared.

(based on the experience in MONEX)

- Guideline for data management
- Utilization of the Internet for data dissemination

2. Data management in the GAME

2-1. Data Policy

Objective: to provide the GAME data to research communities

smoothly with minimum cost in order to support research

activity

Functions: two major functions

- Coordination for data
 - → Guideline for GAME data Quality control, Data level
 - I.International Data Resources and Institutional Holding (Operational data)
 - II.Participating Institutes
 - **III**.Utilization and Transfer (Scientific, non-commercial)

2. Data management in the GAME

2-1. Data Policy

IV.Data policy (Time schedule)

By the end of June 1996(6months after the IOP), for the participating institutes and scientists. By the end of June 2000(one year after the IOP), for the international research community

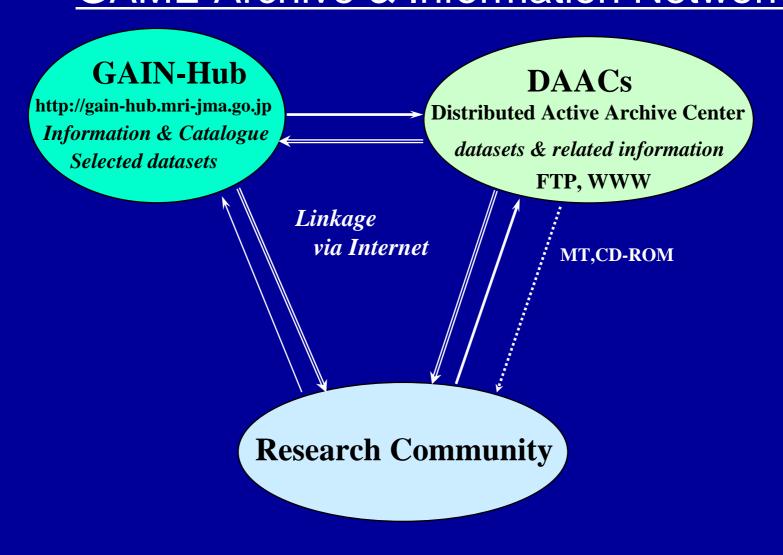
By the end of one year after the measurement for the participating institutes and scientists. By the end of two years after the measurement, for the international research community

V.Retention VI.Update

The other function is

Data dissemination → Web sites, CD-ROMs

2-2. GAIN: GAME Archive & Information Networks



3. Achievements and Problems

Establishing Web/ftp sites

GAME home page : CD images by Dr.Higuchi

GAIN-hub : Data information

GAME-Tropics : Very nice site maintained by Dr.Agata

GAME-AAN : AWS data

GAME-Tibet

GAME-Siberia

GAME-Hubex

GAME-reanalysis : for IOP(1998)

GAME-Radiation : ftp site



3. Achievements and Problems

Publishing GAME data CD-ROM sets

Tibet

Reanalysis (Ver1.1 & 1.5)

GAME-T (Vol.1 & 2(under preparation))

AAN (Ver.1, 2 & 3)

Standard data (including Hubex data, but only '98)

Siberia

GAME phase 2 collected data CD



AAN DVD





Meteorological Research Institute/Japan Meteorological Agency



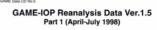
This CD-ROM contains the first part of Reanalysis Data ver.1.1 for the GAME IOP (April-October 1998). Data are composed of analysis data with 2.5 and 1.25 degree horizontal resolutions for the globe and 0.5 degree for the Asian-Pacific region and 2-dimensional forecast fields data with 2.5 and 1.25 degree resolution for the globe. Please see "readments" in the CD-ROM for more information.

This CD-ROM is published by support of the Grant-in-Aid for Scientific Research from the Javanese Ministry of Education, Science, Sports and Culture (No.11201209).



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This CD-ROM contains the first part of Reenalysis Data ver.1.5 for the GAME IOP (April-Obbier 1998). GAME resnalysis data are produced with 2.5 and 1.35 degree to the April obbier 1998 of the State of States of the April obbier 1.35 and 1.25 degree demandation brocket fields data are produced with 2.5 and 1.25 degree resolution. The globe. The CP-OME contains data with only 2.5 degree resolution. Presses see

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GAME EX Asian Monsoon

(GEWEX Asian Monsoon Experiment)
Phase I



Summary CD-ROM edited by J. Asamuma, A. Higuchi, K. Nakamura, T. Yasu



CAME CO-DOM No. 8 AME Dataset for Water and Energy Cycle in Siberia Version 1 (September 2003)



oduced by GAME-Siberia and Frontier Observational Research System for Global Change Edited by Rikie Sutuki and Tetsuo Chiesa



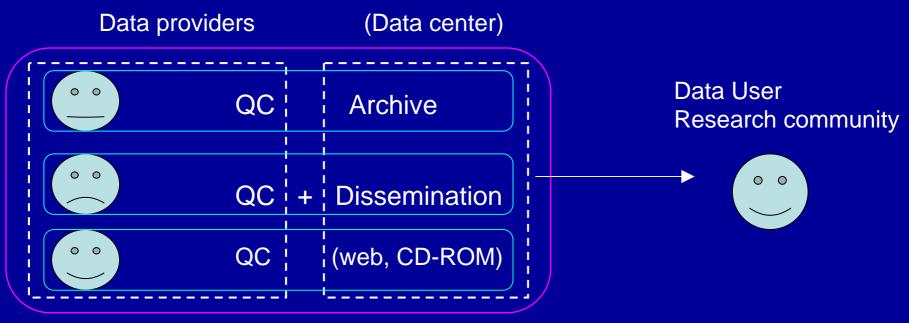
Presented by GAMI AAN Working Group Office Contest address: Dr. Michalds Sugita de Contest address: Dr. Michalds Sugita de University of Thadaba Voice: #81-29-833-253, Faz. #81-29-853-253 Email: anolipoint traksbas. op http://www.byur.orgope.ac.jo/psime/



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Problems in GAIN activity

- Delay of data releases and establishing web sites
- Delay of revision of information on web sites
- Insufficiency of meta data
- Lack of substantial data center (No staff)



Too much work?

4. Summary

- GAME data resources are very useful and valuable.
- ■To maintain/develop the database is very important. → MAHASRI

Available GAME Data

Experimental obs. data : GAME-AAN data Flux data → CEOP reference site Continuous availability ?

Reanalysys data : GAME + SCSMEX + Chinese project

 $Ver.1 \& 1.5 \rightarrow Ver.2(JRA-25)$

Operational obs. data : GAME phase-2 collected data CD

Quality checked data are important,

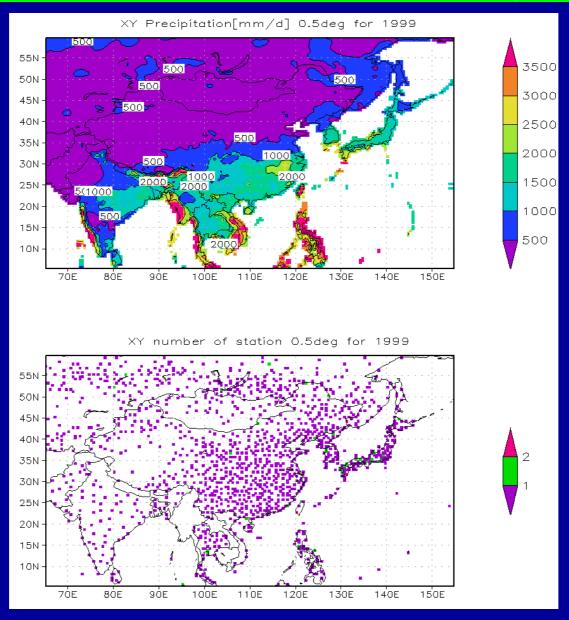
particularly in extreme event study.

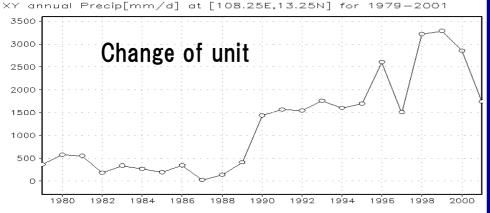
GTS data have problems in quality.

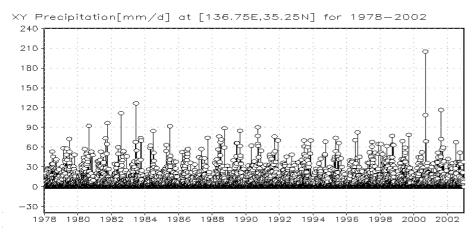
Satellite & Radiation

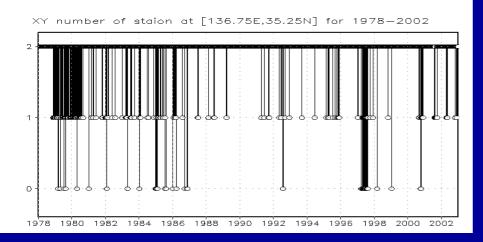
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Gridded East Asian Daily Rainfall (Xie & Yatagai):1999









Examples of problems in GTS data

Rainfall 1979-2001 At (108.25E,13.25N) South of Vietnam

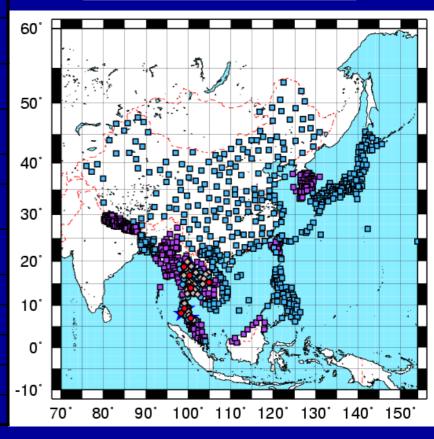
Daily Rainfall 1978-2003 At (136.75E, 35.25N) North of Nagoya, Japan

Number of observation Many missing cases are contained.

GAME phase2 collected data CD

China	181	Precip, T, P, Ws, RH, Sunshine duration(SD)
Taiwan	25	Precip, T, P, RH, DT, Wind, T(mean/max/min)
Japan	153	Precip, T, P, Wind, RH, SD, GSR, Sonde
Korea	76	Precip, T, P, Wind, RH, SD, T(mean/max/min)
Philippine	52	Precip, T (mean/max/min), P, RH, Wind
Malaysia	33	Precip, T (mean/max/min), RH (mean/max/min), SD, GSR
Vietnam	60	Precip, Piball
Laos	11	Precip, T (mean/max/min), SD, P, Wind
Thailand	77	Precip, T, P, Wind, RH, SD, Sonde
Cambodia	12	Precip
Myanmar	68	Precip
Singapore	1	Precip
Bangladesh	35	Precip
Nepal	88	Precip
D III		The state of the s

Target period: 1997-2002 (GAME period)



Bold face means 3 hourly data are available.

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Ver.1 & 1.5 (\sim 20Papers) \rightarrow Ver.2(JRA-25)

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particularly in extreme event study.

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Satellite & Radiation

Jan.10, 2007 1st MAHASRI/AMY