

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

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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





Mackenzie GEWEX Study (MAGS)

Baltic Sea Experiment (BALTEX)

GEWEX Americas Prediction Project (GAPP)



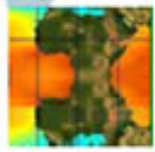
GEWEX Asian Monsoon Experiment (GAME)

Large Scale Biosphere-Atmosphere Experiment in Amazonia (LBA)



African Monsoon Multidisciplinary Analysis (AMMA)

La Plata Basin (LPB)



Murray-Darling Basin (MDB)



Data Management

Water and Energy Budget Studies

Stable Water Isotope Intercomparison Group

Worldwide Integrated Study of Extremes

Transferability

Water Resource Applications Project



- 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

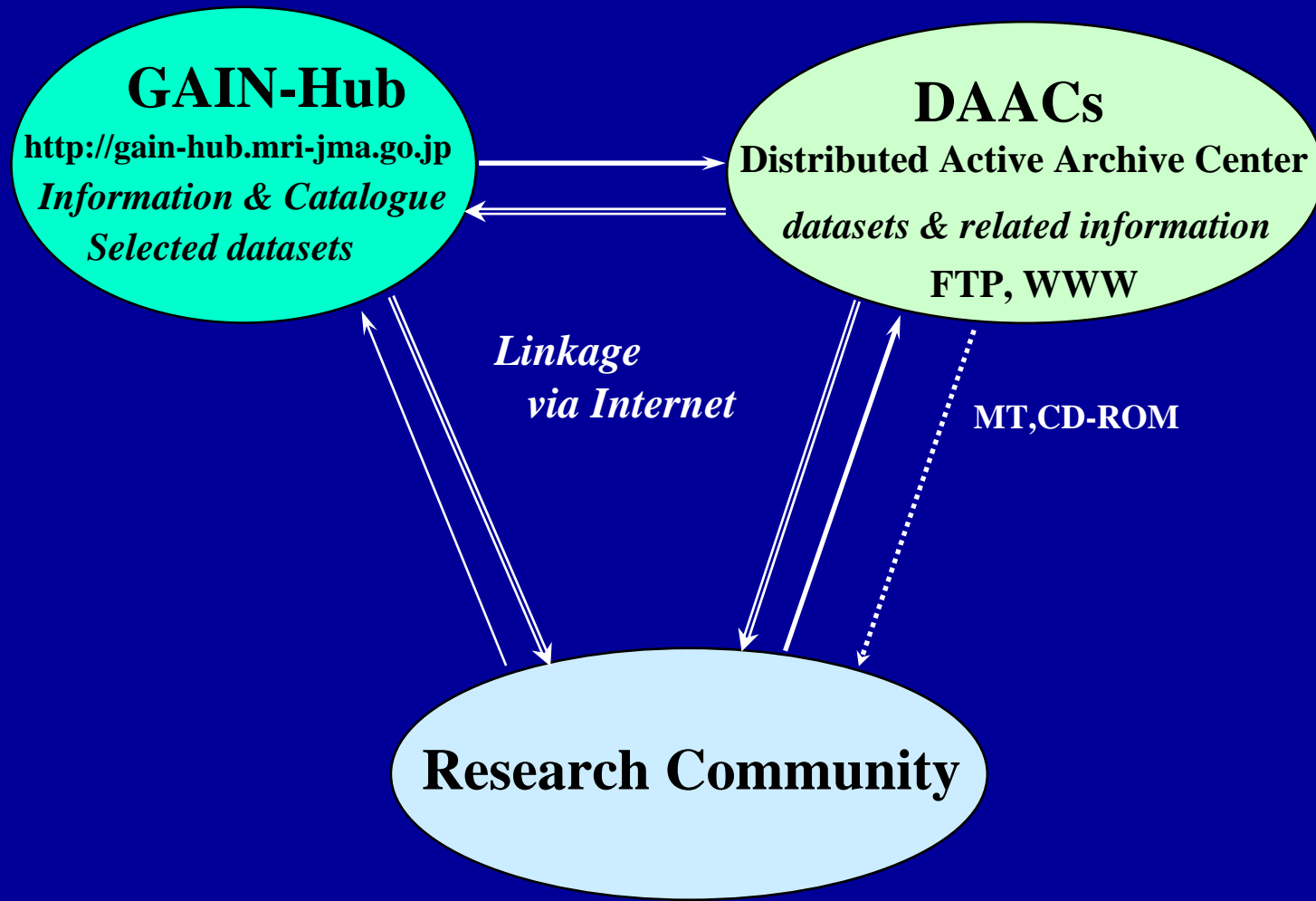
VI. Update

The other function is

- Data dissemination → Web sites, CD-ROMs

2-2. GAIN :

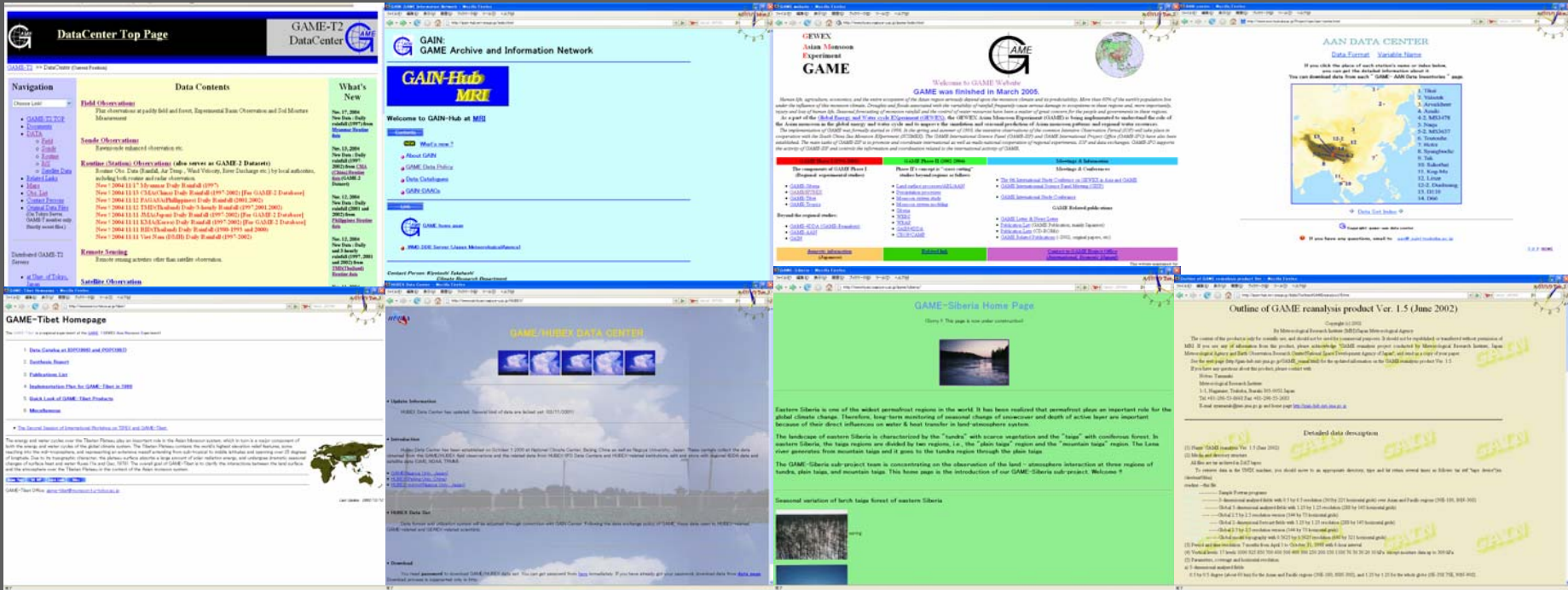
GAME Archive & Information Networks



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

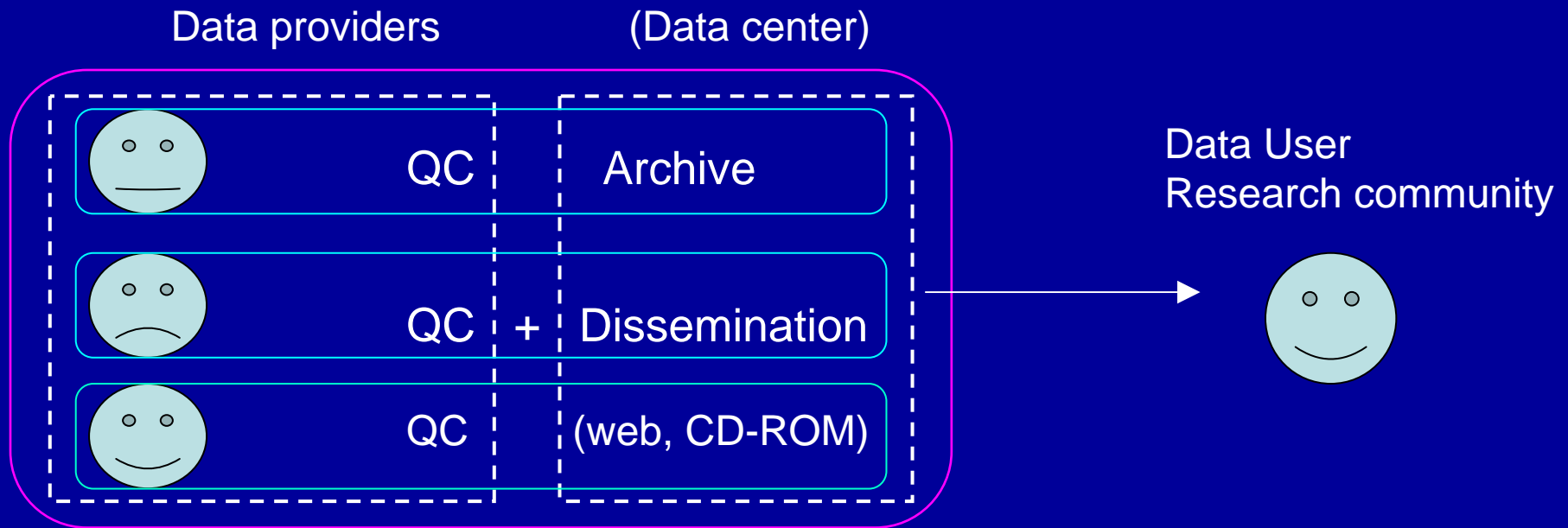


AAN DVD



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 ?

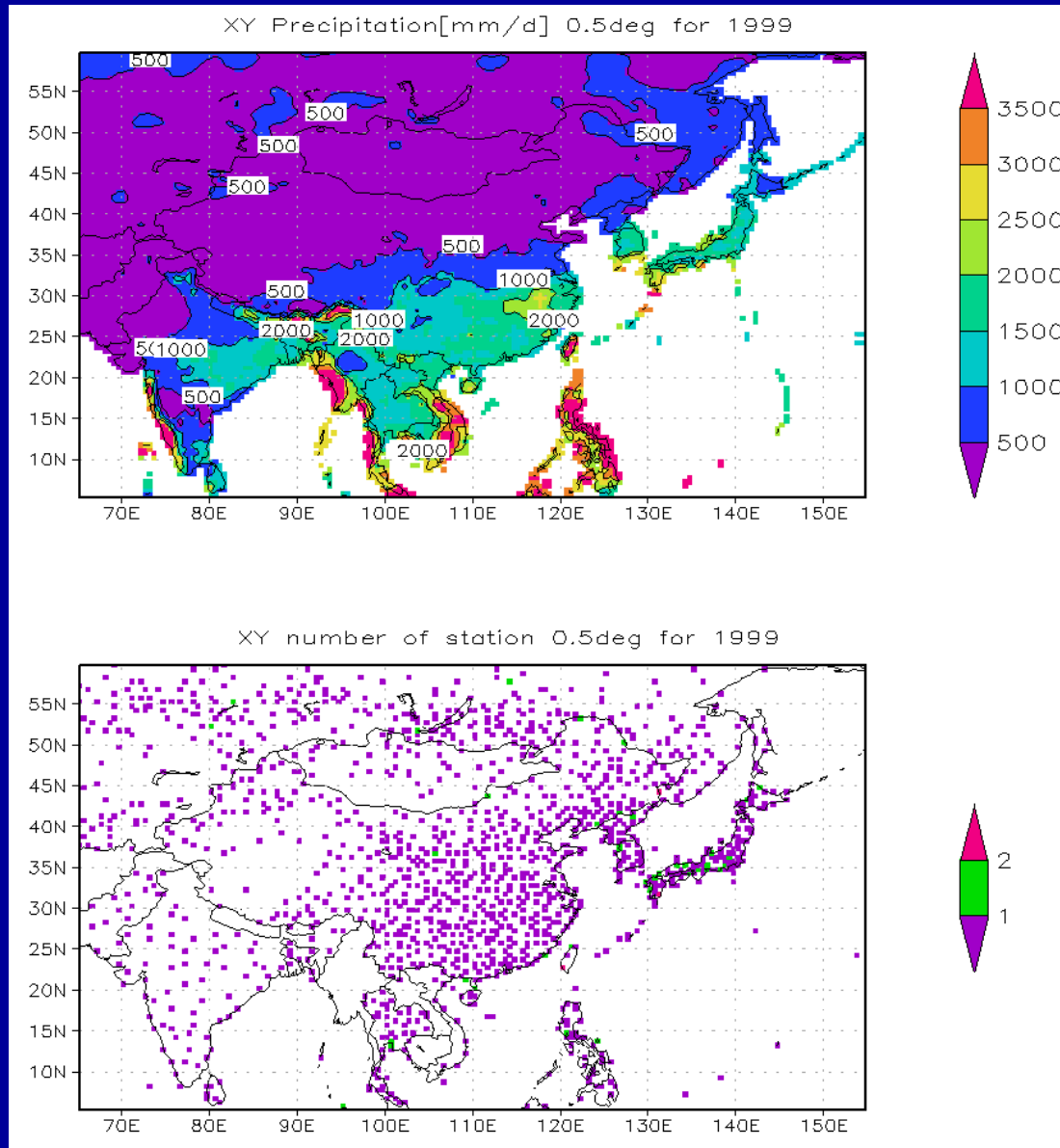
Reanalysis data : GAME + SCSMEX + Chinese project
Ver.1 & 1.5 → **Ver.2 (JRA-25)**

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.

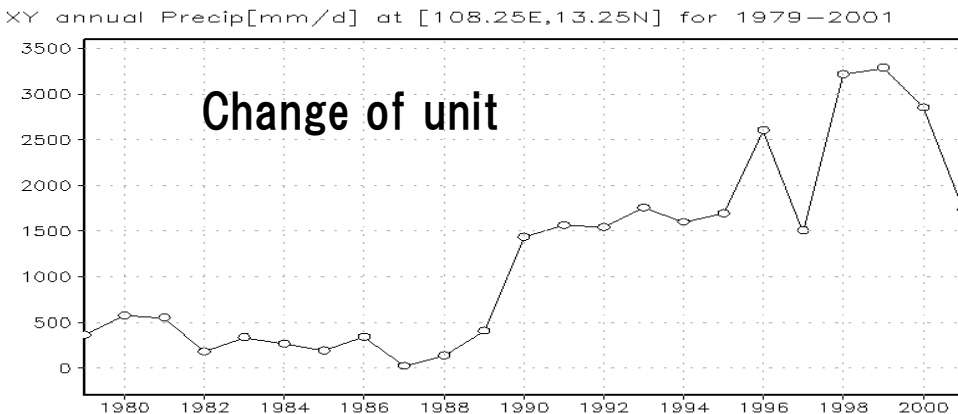
Satellite & Radiation

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

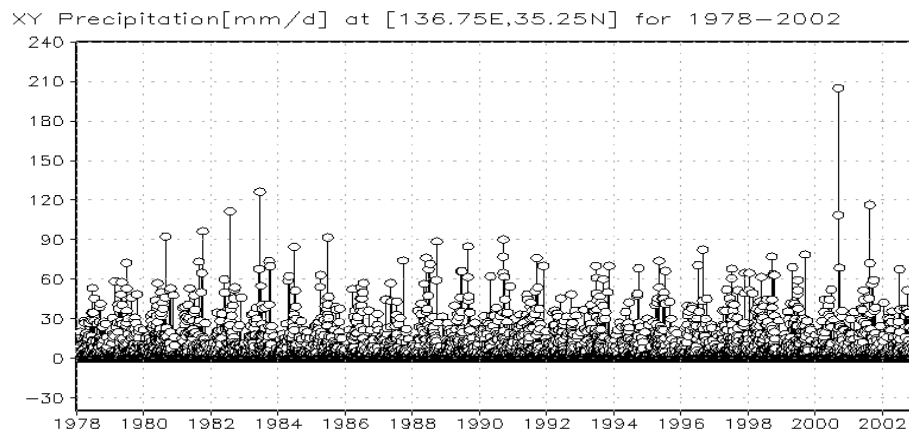


Examples of problems in GTS data

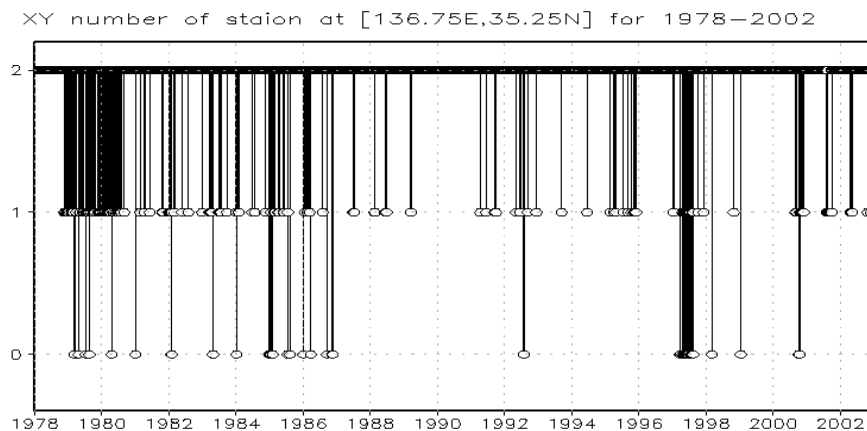
Rainfall 1979-2001
At (108.25E, 13.25N)
South of Vietnam



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



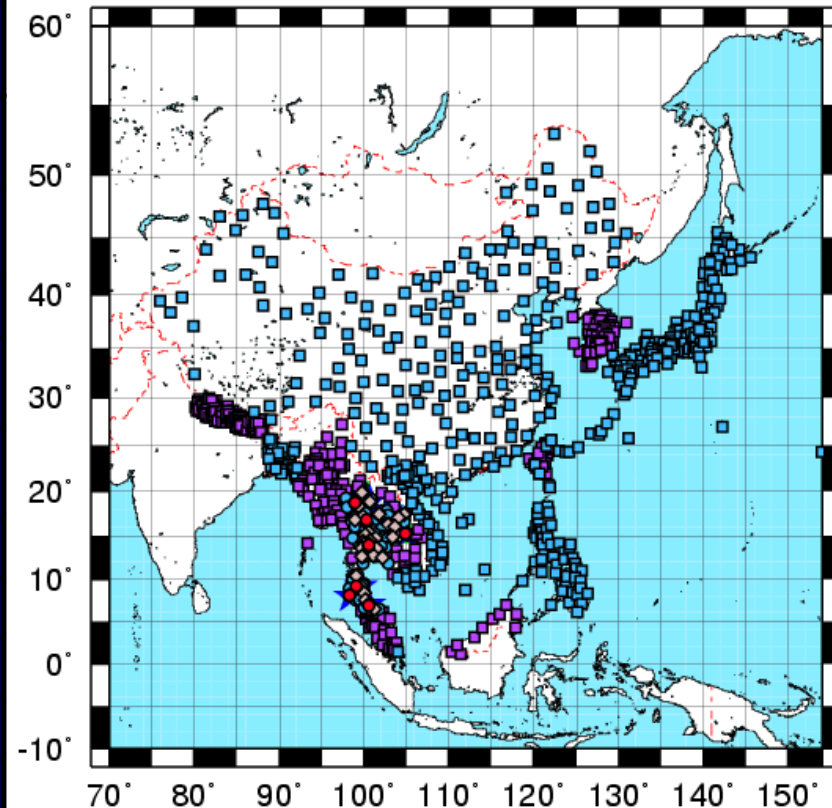
Number of observation
Many missing cases are contained.



GAME phase2 collected data CD

Target period:
1997-2002
(GAME period)

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



Bold face means 3 hourly data are available.

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Satellite & Radiation