

Second Global Precipitation Measurement (GPM) International Planning Workshop Agenda (as of May 13)

Date May 20-22, 2002

Place Room Oiso, 17th floor, New Tower,
Shinagawa Prince Hotel, Tokyo, Japan

Day 1: Monday, May 20

8:30 Registration

Session 0: OPENING (chaired by R. Oki, NASDA)

9:00 Agenda and Logistics- NASDA

- Welcome speeches by NASDA and NASA
Y. Furuhashi (NASDA, HQ) and R. Kakar (NASA, HQ)

Session 1: OVERALL PLANS AND ORGANIZATION

9:20 1-1. Overview of GPM

(chaired by E. Smith, NASA/GSFC)

Keynote speech (30 min):

D. Carson (World Climate Research Programme, WCRP), "Some WCRP requirements for GPM"

9:50 Break

10:10 Present Status of GPM (15 min each)

Status of GPM at NASA - NASA

J. Adams (NASA)

Status of GPM at NASDA - NASDA

R. Oki (NASDA)

10:40 1-2. Other organizations' possible contributions to GPM and expectations from GPM (15 min. for each presentation, chaired by K. Nakamura, Nagoya Univ.)

Presentations by meteorological organizations and space agencies in Japan, USA, Europe and other countries.

ESA (A. Ginati), "ESA's Earth Explorers and Precipitation Monitoring"

EGPM (A. Mugnai), "EGPM - The proposed European contribution to the Global Precipitation Measurement mission"

CNES (N. Paluch)

ISRO (Raju Garudachar), "Indo-French MEGHA-TROPIQUES satellite mission to study water cycle and energy exchanges in the tropics"

JMA (H. Nakamura), "Expected contributions of GPM to JMA/NWP forecasts of water vapor and precipitation"

NOAA (G. Legg and R. Ferraro), "NOAA's interest and potential contributions to GPM"

PWRI (K. Fukami), "Potential applications of GPM precipitation data to flood control and water resources management"

12:00 Lunch Break

13:30 1-3. Keynote speech, Introduction to GPM in Asia

T. Koike (Univ. of Tokyo), "GPM Contributions to Global Water Cycle Variation Studies and Local Water Resources Management in Asia"

13:50 1-4. Partners and possible GPM activities in various countries (10 min for each presentation)

Australia (T. Keenan, BMRC)

Bangladesh (Shah Alam, Bangladesh Meteorological Department)

Brazil (R. V. Calheiros, Brazilian Space Agency)

Canada (D. Kendall, Canadian Space Agency)

China (Lu Naimeng, CMA/NSMC)

China (Xiuwan Chen/Changyao Wang, Institute of RS & GIS)

India (Suresh, IMD)

Indonesia (Yunus S. Swarinoto, BMG)

Indonesia (Eddy Hermawan, Climate Modeling Division, LAPAN)

15:30

Break

15:50

Korea (Hyo-Sang CHUNG, Meteorological Research Institute)

Malaysia (Mardiana Shafiee, Malaysian Centre for Remote Sensing (MACRES))

Mongolia (Ts. Battsetseg, National Remote Sensing Center)

Nepal (Bijaya Kumar Vaidya, Department of Hydrology and Meteorology)

Philippine (M. F. Peralta, Flood Forecasting Branch, PAGASA)

South Africa (D. Terblanche, South African Weather Service)

Thailand (Somsri Huntrakul, Meteorological Department)

Thailand (Phonchai Klinkhachorn, Royal Irrigation Department)

Thailand (Waewchark Kongpolprom, Bureau of Royal Rainmaking and Agricultural Aviation)

Taiwan (Yuei-An Liou, Center for Space and Remote Sensing, National Central University)

Vietnam (Nguyen Thi Tan Thanh, HMS of Vietnam)

17:40 1-5. Overview of framework, organization, and Governance (chaired by NASA & NASDA)

S. Neeck (NASA), C. Ishida (NASDA)

18:00 adjourn

Day 2: Tuesday, May 21

9:00

Session 2: DESIGN AND DEVELOPMENT STATUS OF HARDWARE

(chaired by [J. Adams \(NASA/GSFC\)](#) and [T. Iguchi \(CRL\)](#))

- 2-1 Constellation architecture ([D. Everett \(NASA/GSFC\)](#))
- 2-2 Core spacecraft design and development ([J. Durning \(NASA/GSFC\)](#))
- 2-3 DPR design and development ([N. Takahashi \(NASDA\)](#))
- 2-4 Overview of GPM product and data distribution ([E. Stocker \(NASA/GSFC\)](#))
- 2-5 Issues and discussion

10:20 Break

10:40 Keynote Speech (Continuation of Session 1-1. Overview of GPM)

[M. Schoupe \(European Commission\)](#), "Potential European Research contribution to GPM"

11:00

Session 3: GPM SCIENCE

(The objective of this session is to identify possible research fields in which substantial progress is expected with GPM data. 15 min. each, chaired by [K. Nakamura](#) and [E. Smith](#).)

- [E. Smith \(NASA\)](#), "Overview of NASA's Science Agenda for GPM Mission"
- [K. Nakamura \(Nagoya U\)](#), "Expectation of GPM as an extension of TRMM"
- [E. Wood \(Princeton U\)](#), "Hydrologic Opportunities for GPM: An Example for Flood Forecasting"
- [T. Oki \(U of Tokyo\)](#) "Expected Application of GPM Products for Hydrological Predictions and Water Resources Management"
- [A. Sumi \(U of Tokyo\)](#), "GPM for Climate Studies"
- [A. Hou \(NASA\)](#), "Better Weather Forecasts and Climate Analyses with GPM"

12:30 Lunch break

14:00

- [G. Tripoli \(U of Wisconsin\)](#) "Cloud Radiation Simulation for GPM"
- [Y. Sato \(JMA\)](#), "TMI rain rate assimilation experiment with 4D-Var system for JMA meso-scale model"
- [L. Fillion \(Canadian Meteorological Service\)](#), "Some basic issues related to variational assimilation of precipitation data for Weather Prediction"
- [R. Roca \(Laboratoire de Meteorology Dynamique, France\)](#), "The MEGHA-TROPIQUES project Tropical Climate Studies"
- [V. Mehta \(NASA\)](#), "The role of precipitation in ocean surface processes"

15:15 break

15:40

- [W. Lau \(NASA\)](#), "New insights on hydrologic processes-climate feedback from TRMM: implications for GPM"
- [T. Yasunari \(Tsukuba U\)](#)
- [W. K. Tao \(NASA\)](#), "TRMM Latent Heating Algorithms and Proposed GPM Cloud Heating/Moistening Algorithm"
- [Y. Takayabu \(U of Tokyo\)](#) "Rain characteristics observed with TRMM PR and expectations to GPM"
- [V. Chandrasekar \(CSU\)](#), "Global Mapping of attenuation at Ku and Ka bands: Application to GPM design and Satellite Communication"

17:00

Poster presentation

18:00

18:30 Reception (Room Hiroshima, 8th floor)

Day 3: Wednesday, May 22

9:00

Session 4: BREAKUP SESSIONS

9:00

Introduction to breakup sessions (K. Nakamura)

9:10

(a) GPM partnership: (C. Ishida (NASDA), D. Neeck (NASA))

(b) Sensor and products: (K. Nakamura, T. Iguchi and C. Kummerow)

(c) Data system for operational use: (R. Oki and E. Stocker)

10:20 Break

10:40

Session 5: DATA AND ALGORITHMS

5-1 GPM data products and distribution

(chaired by K. Ohta, NASDA, and E. Stocker, NASA/GSFC)

E. Stocker (NASA/GSFC), "GPM Precipitation Processing System Data
Production and Distribution Plans"

T. Nio (NASDA), "GPM data processing center envisioned in NASDA"

5-2 Data processing algorithms

(chaired by T. Iguchi, CRL and C. Kummerow, CSU)

C. Kummerow (CSU), "Relation between GPM core and constellation
algorithm"

T. Iguchi (CRL), "Issues in dual-frequency radar algorithm"

R. Adler (NASA), "Global Precipitation Analysis Using Multiple Satellites:
Now and with GPM"

12:00

Lunch break

13:30

Session 6: BREAKUP SUMMARY and ISSUE DISCUSSION

(chaired by K. Nakamura, Nagoya Univ.)

Overall summary and conclusions (K. Nakamura (Nagoya U))

Closing remarks (T. Iida (CRL))

15:00 Adjourn