MAHASRI Data Release Guidelines

Executive Summary

Ver. 1.0 (3 Sept., 2010)

All data users are strongly requested to follow these data release guidelines. The following six "golden rules" for a smooth and successful use of MAHASRI Data should particularly be noted and followed by any data user.

1. No financial implications are involved for the MAHASRI data exchange. See section 2.1.

2. Commercial use and exploitation of MAHASRI data is prohibited. See section 2.2.

3. Any re-export or transfer of the original data received from the MAHASRI Data Committee (MDC) archive to a third party is prohibited. See section 2.3.

4. The origin of MAHASRI data being used for publication of scientific results must be acknowledged and referenced in the publication. See section 2.5.

5. MAHASRI data users are strongly encouraged to establish direct contact with data providers for complete interpretation and analysis of data for publication purposes. See section 2.6.

6. Co-authorship of data users and MAHASRI Projects' Principle Investigators on papers making extensive use of MAHASRI data is justifiable and highly recommended. See section 2.7.

1. INTRODUCTION

The MAHASRI (Monsoon Asian hydro-Atmospheric Science Research and Prediction initiative) Program is an integrated observation and modeling initiative that investigates the variability of the Asian monsoon and associated ocean-land-atmosphere interaction, and the multi-scale interaction. MAHASRI has been endorsed by the GEWEX (Global Energy and Water Cycle Experiments) of the World Climate Research Programme (WCRP) as a Regional Hydroclimate Project. Further details on MAHASRI can be found on the internet located at: http://mahasri.cr.chiba-u.ac.jp .

The overarching goal of MAHASRI is "To develop a hydro-meteorological prediction system, particularly with the time scale up to a season, through the better scientific understanding of Asian monsoon variability". To meet this goal, MAHASRI has set the following four activities:

- Determine the predictability and key components of Asian monsoon variability with a time scale up to a season for the development of a hydro-meteorological prediction system.
- Develop a real-time monitoring capability for hydro-meteorological observations.
- Develop an integrated hydro-meteorological database including data rescue.
- Examine and improve the hydro-meteorological models in some specific river basins.

As part of the strategy to meet these objectives in situ observational and ground-based remote sensing data will be gathered and archived. The time periods for which data will be archived will basically cover the period 2003-2012.

MAHASRI observation sites have been established and are being maintained by a variety of institutions, organizations, national services, international and national research groups, and research individuals. Henceforth, these will be referred to as data providers. Maintaining continuous, high-quality measurements during the MAHASRI periods, performing quality and error checking procedures,

and submitting data will require substantial financial and logistical efforts of the data providers. The necessary support for these activities originates from a variety of international, national and institutional sources. MAHASRI data will be archived in each participating project and will be managed by MAHASRI Data Committee (MDC) should follow the data policy of the data provider's project. In any case data quality checking and meta-data generation should be conducted in each participating project.

MAHASRI data cover a wide spectrum of measurements and observations concerning for example the complexity of measurement techniques used and their scientific (and commercial) value for the data provider. While MAHASRI data users generally wish to receive all types of MAHASRI data in an unrestricted manner, with as little delay as possible and free of charge, the data providers' interest is generally to protect their data to a certain extent for the sake of their own (or other projects') scientific and commercial exploitation.

Considering the noted constraints and interests of the various parties involved, the MAHASRI SSC Co-chairs and Data Management Working Group members drafted the following MAHASRI data release and dissemination guidelines.

2. MAHASRI DATA RELEASE AND DISSEMINATION GUIDELINES

2.1 Release of Data in Compliance with WMO Resolution 40 (CG-XII) and WMO Resolution 25 (CG-XIII)

MAHASRI was endorsed by WCRP, which is sponsored by WMO together with ICSU and UNESCO, as an international project. It is thus appropriate that any policy for release and dissemination of MAHASRI data should principally comply with the WMO policy, practice and guidelines for the exchange of meteorological, hydrological, and related data and products, as embodied in Resolution 40 of the Twelfth WMO Congress 1995 (CG-XII), and Resolution 25 of the Thirteenth WMO Congress 1999 (CG-XIII); that is, free and unrestricted exchange of essential data and products.

The no-restriction principle shall in particular mean that no financial implications are involved for the MAHASRI data exchange.

MAHASRI data providers shall transfer their measured data to the MDC free of charge. Also, MAHASRI data files established at MDC shall be offered free of charge to MAHASRI data users.

2.2 No Commercial Use or Exploitation

It is understood that all MAHASRI data shall be delivered to data users only for scientific studies designed to meet MAHASRI-WCRP objectives. Commercial use and exploitation by either the data users or the MDC is prohibited, unless specific permission has been obtained from the data providers concerned in writing.

2.3 No Data Transfer to Third Parties

One restriction which will be imposed on all data users concerns the re-export or transfer of the original data to a third party. Such restriction shall apply to all categories of MAHASRI data, and is in the best interests of both the data providers and the potential users. Unrestricted copying of the original data by multiple, independent users may lead to errors in the data and loss of identity of its MAHASRI data and is strictly prohibited.

MAHASRI will provide the data files to potential data users through electronic data transfer (e.g. on the Internet). To potential data users who have difficulty in on-line electronic data transfer, MDC will offer them off-line (e.g. on CD-R disks).

2.4 Timing for Release of MAHASRI Data

Ideally, data should be ready for general release after some specific period following its acquisition, during which the exchange process between the data provider and the MDC, including quality control and assurance, will have been completed. It is suggested that all observation data taken for MAHASRI shall be freely open to the science community after the basic turn-around period of two years.

It shall be possible in special cases for a potential data user to establish direct contact to a data provider (or a PI at the data provider)

in order to agree on exceptions (i.e. shortenings of the turn-around period) to these rules for specific data or data periods. It is suggested that these communications shall be performed with co-ordination of the MDC.

2.5 Acknowledgement and Citation

Whenever MAHASRI data distributed by the MDC are being used for publication of scientific results, the data's origin must be acknowledged and referenced. A minimum requirement is to reference MAHASRI and the MDC. If only data from one observation site (or a limited number of observation sites) has been used, additional acknowledgement to the observation site(s) and its (their) maintaining institutions or organizations shall be given.

Maintaining continuous, high-quality measurements, performing quality and error checking procedures, and submitting data and related documentation to the MDC will require substantial financial and logistical efforts of the data providers. The necessary support for these observation site activities originate from a variety of international, national and institutional sources. The MDC shall make proper reference to all MAHASRI data providers and, if required, to their funding sources.

2.6 Co-operation between MAHASRI Data Users and MAHASRI Participating Projects' Principal Investigators (PIs)

MAHASRI data users are encouraged to establish direct contact with PIs at data providers for the purpose of complete interpretation and analysis of data for publication purposes.

2.7 Co-Authorship for MAHASRI Participating Projects' Principal Investigators (PIs)

Some MAHASRI observation sites are equipped with sophisticated, state-of-the-art instrumentation and shall comply with strict requirements of station maintenance, exposure of instruments, calibration, quality assurance procedures and the like, in order to achieve the highest attainable standards of measurement, accuracy, representativeness, stability and repeatability. To ensure that this goal is reached, PIs who are leading experts for the instruments used at respective MAHASRI observation sites are often taking

responsibility for individual instruments operated at the respective MAHASRI observation site.

Co-authorship of MAHASRI participating projects' PIs on papers making extensive use of MAHASRI data is justifiable and highly recommended, in particular, if a PI has responded to questions raised about the data's quality and/or suitability for the specific study in question, or has been involved in directly contributing to the paper in other ways. It is highly recommended that any data user should contact the responsible PI and ask him/her if he/she wants to become co- author, or if an acknowledgement (see section 2.5) would be sufficient. If co-authorship is requested, the PI and the data user should establish a basis for collaboration. A PI in this context means the responsible site or instrument scientist or any person (student, collaborator) that he/she may suggest.

2.8 MAHASRI Publication Library

Whenever MAHASRI data distributed by MDC are being used for publication of scientific results, the author(s) shall sent a copy of the respective publication, preferably in electronic form, to the MDC in order to build up a MAHASRI publication library. MDC will maintain this library and will it make public, for example via MDC's web site, for a continuous monitoring of the MAHASRI data applications and MAHASRI's achievements in general.