

# Summary of the 4<sup>th</sup> GPM Asia Workshop on Precipitation Data Application Technique

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The PMM PI Workshop

17 January 2014, Tokyo, Japan

TKP Garden City Takebashi, Japan

Participants:

Bangladesh, Indonesia, Korea, Lao PDR, Pakistan, Philippine,  
Thailand, Vietnam, US, Japan, MRC

Wide themes

Many local comparisons of satellite precipitation map with  
ground observations.

Expectation to GPM frequent observation

May need more understanding of algorithm.

Scientific researches on the precipitation characteristics

Operational applications: data assimilation, flood warning,  
etc.

Projects/missions, such as SAFE, MRC, int'l rivers

## Global rain map

Now, several global rain maps exist. Improvement in spatial/temporal resolution is significant, but still the resolution and accuracy do not satisfy the requirements of the local applications.

Third phase (now): more experience in using the satellite rain maps with more understanding regional precipitation climates.

Make ready for GPM

Expand applications of satellite precipitation data.

Climate science: need long term stable data

Applications

(short-term forecast, nowcasting, flood warning, etc.): need high spatial/temporal resolutions

Coverage, coast region, orographic rain problem

Precipitation system structure

(e.g., “humid Asia”, “monsoon Asia”)

Global rain map for climate science

Accuracy is essential.

To improve accuracy, high spatial/temporal resolutions, and biases depending on the precipitation systems are required.

No specific preparation for soon-coming GPM era, but experiences are accumulated.

More validation/evaluation of the satellite rain map.

ex. Evaluation using river runoff

More understanding of local precipitation characteristics/climate. E.g., orographic rain

Snow

Flood has also wide variety. (TD, snow, mountainous region, plain region, ...)

This time, joint workshop with “The 2<sup>nd</sup> International workshop on CMIP5 model intercomparisons for future projections of precipitation and climate in Asia” organized by Prof. Y. Takayabu (Univ. Tokyo)

Giving a good chance to have collaboration with the model research community and the application community on precipitation over Asia.

There still exists a gap between climate modelling community and satellite precipitation. However, precipitation characteristics in “humid Asia” might be a good scientific research theme.