

What can THORPEX collaborate with MAHASRI?

TIGGE: THORPEX Interactive Grand Global Ensemble

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About THORPEX

Mission

Organization

Planning Phase

Implementation phase

Milestones

Meetings

Second THORPEX International Science Symposium

4-8 December 2006

Landshut, Bavaria, Germany

News

Brochure

Publications

Fellowships

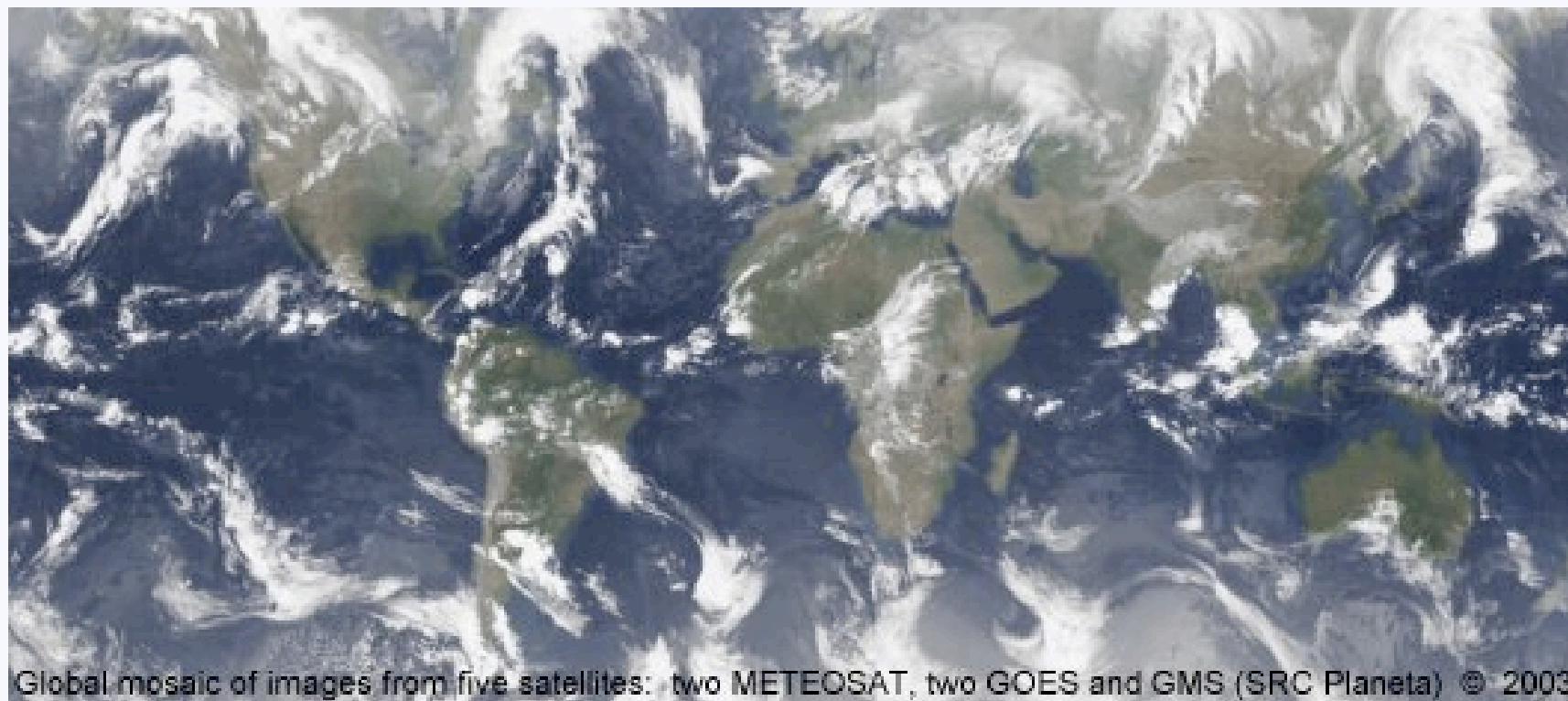
Trust fund

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WMO WWRP

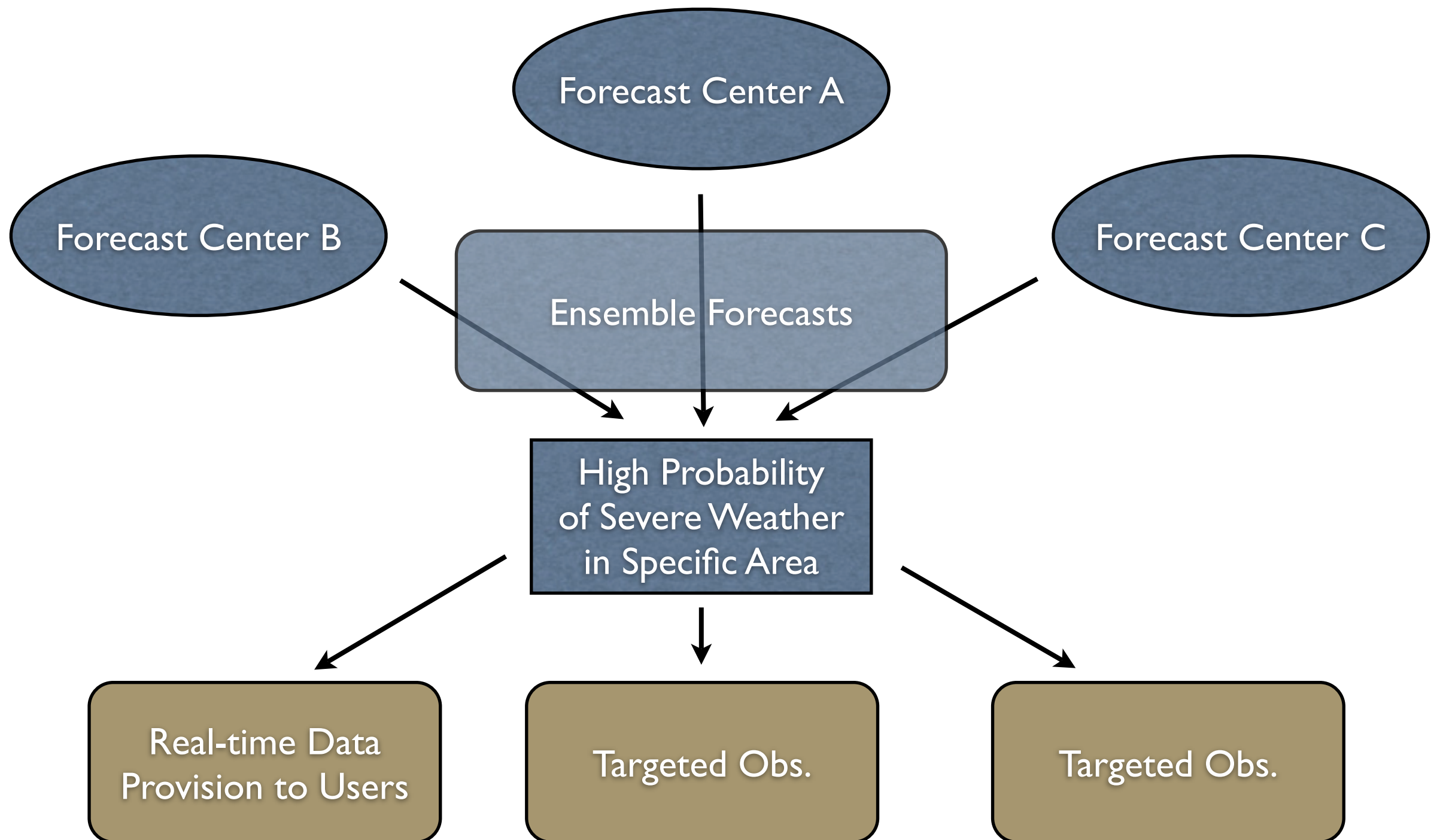
Accelerating improvements in the accuracy of one day to two week high-impact weather forecasts for the benefit of society, the economy and the environment



Global mosaic of images from five satellites: two METEOSAT, two GOES and GMS (SRC Planeta) © 2003

<http://www.wmo.ch/thorpex/>

TIGGE Concept



The key objectives of TIGGE are:

- ❖ Enhanced international collaboration between operational centres and universities on the development of ensemble prediction
- ❖ Development of new methods of combining ensembles of predictions from different sources and of correcting for systematic errors (biases, spread over-/under-estimation)
- ❖ Increased understanding of the contribution of observation, initial and model uncertainties to forecast error
- ❖ Increased understanding of the feasibility of employing, operationally, an interactive ensemble system which responds dynamically to changing uncertainty (including the use of adaptive observing, variable ensemble size, on-demand regional ensembles) and which exploits new technology for grid computing and high-speed data transfer
- ❖ Evaluation of the elements required of a TIGGE Prediction Centre to produce **ensemble-based predictions of high-impact weather**, wherever it occurs, on all predictable time ranges
- ❖ Development of a prototype future Global Interactive Forecasting System

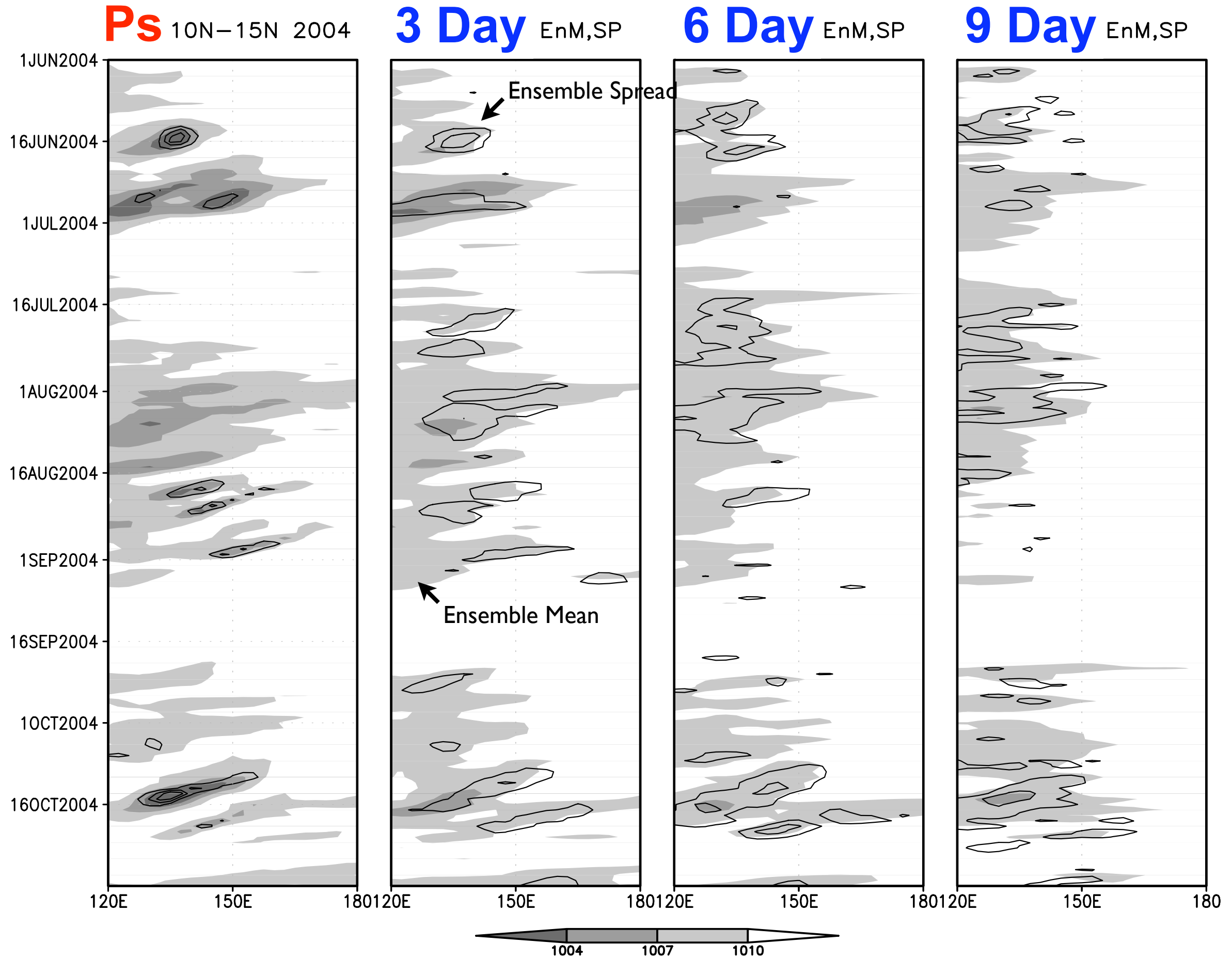
Data policy:

- ❖ TIGGE data should be **available to all users for research purposes**
- ❖ Consideration needs to be given to the issue of **real-time access to data**, in particular for demonstration projects and field experiments
- ❖ The process of obtaining approval for data access should be transparent, stream-lined and reasonably fast
- ❖ The user interface for access to the central archives should be user-friendly and should make it as easy as possible for researchers in disciplines not used to dealing with exceptionally high data volumes to obtain subsets of data
- ❖ Open-source sharing of post-processing software (calibration, combination, decision-making) should be promoted in order to maximise benefit for both researchers and end-users

TIGGE should provide **real-time support** for:

- ❖ International Polar Year field campaigns in 2007-2008
- ❖ Beijing 2008 Olympics WWRP Research and Development project
- ❖ **Regional and global experiments on the enhanced disaster management systems**, including those initiated in the framework of Multi-Hazard Strategy
- ❖ Other major campaigns – users of TIGGE, which should be yet identified

MJO/TC Activity by JMA Weekly Ensemble Forecast



T-PARC Experiments and Collaborative Efforts

