

Summary and Closing

AWCI Training Workshop on

Assessment of Climate Change
Impact on a Watershed Hydrology
and Hydrological Modeling in Cold
Region Basins





Objectives of the Workshop

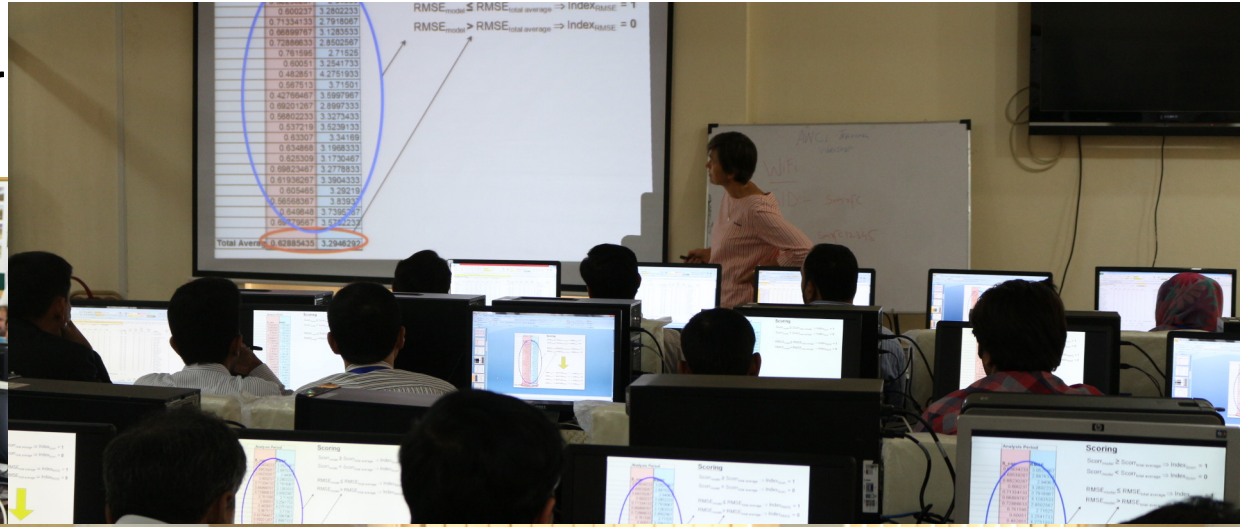
- Capacity building on climate change impact assessment techniques for water resources management support
- Thematic Lectures on relevant topics
- In-depth explanation of the techniques
- Demonstration
- Practical, hands-on exercises

Monday 15 September

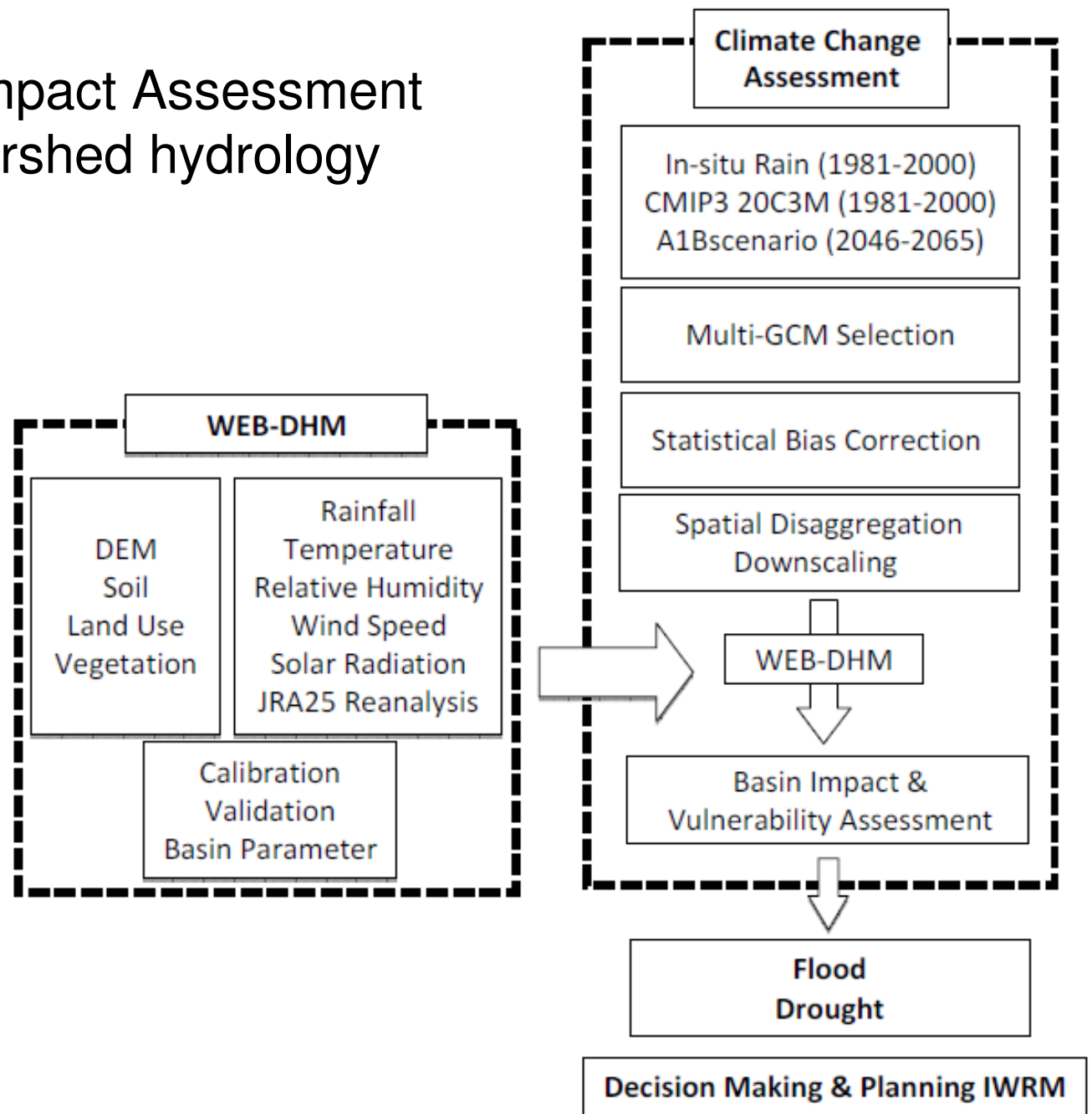
Inaugural Session: Remarks by Honorable Guests
 Thematic Lectures by Experts
 Data Tools Demonstration



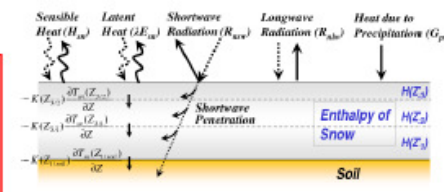
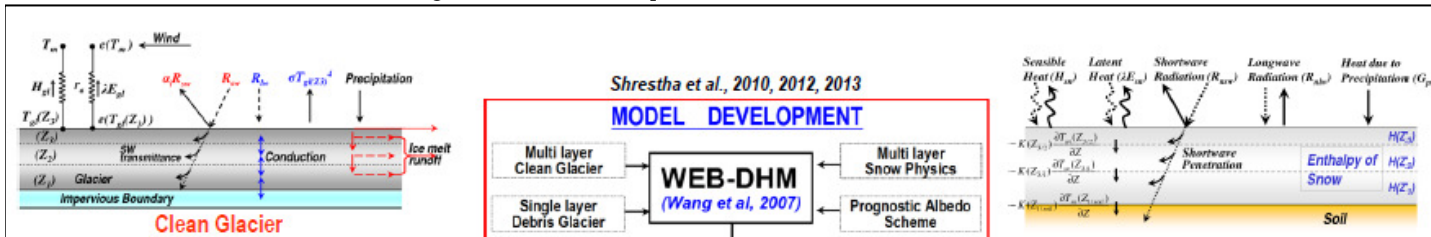
Tuesday 16 September



Climate Change Impact Assessment Framework - watershed hydrology

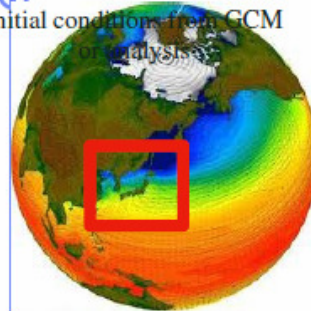


Wednesday 17 September



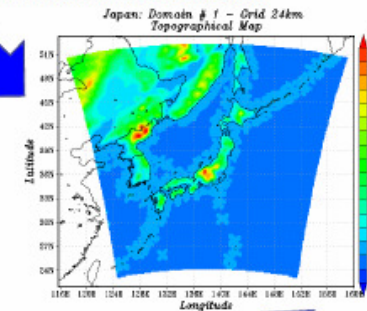
Nesting of RCM with GCM

Initial conditions from GCM analysis



GCM simulate the response of the global circulation to large-scale forcings but at coarse resolutions (computational constrains) → to bridge the gap between global and local scale, nesting was implemented to obtain more information on local weather.

One-way Nesting- information in one direction

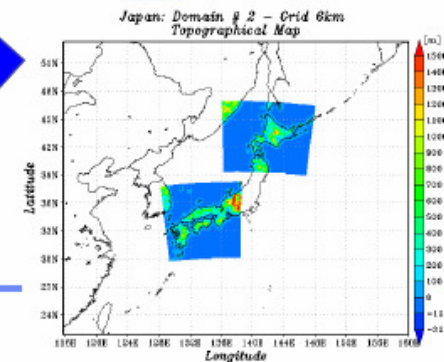


GCM → Initial and time-varying lateral and surface boundary conditions to capture the important synoptic- and mesoscale features.

Goal of nesting:

- Provide good environment reasonable boundary condition of **large-scale environment** to the innermost grid.
- Enables running at finer resolution at low computational cost with mismatched time and spatial lateral boundary conditions

Two-way Nesting- information in both direction



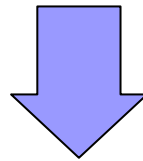
- The RCM account for sub-GCM grid scale forcings (e.g., complex topographical features and land cover inhomogeneity) in a physically-based way to enhance the simulation of atmospheric circulations and climatic variables at fine spatial scales.



Participant Assignment

APN CAPaBLE program project (Dr. Rasul, PMD):

*Impact of Climate Change on Glacier Melting and Water Cycle
Variability in Asian River Basins*



Participants expected to submit a brief report that would be attached to the Final report of the APN project.



Participant Assignment

Report submission: by email – **petra@hydra.t.u-tokyo.ac.jp**
by 30 September 2014

Report contents:

0. Name, affiliation, email address

1. Overall impression from the training (1 ~ 2 paragraphs)

- Did training content meet your expectations – do you find it useful?
- Was it well organized and explained by lecturers/trainers?
- Was the reference material sufficient?
- Brief summary of the activities – as you remember is

2. CEOS Water Portal exercise:

- Open your account
- Browse the data available for your area of interest
- Provide your opinion on whether and how this system could be useful for your research/work (1 ~ 2 paragraphs)



Participant Assignment

Report submission: by email – petra@hydra.t.u-tokyo.ac.jp
by 30 September 2014

Report contents - continue:

3. Outcomes of the hands-on exercises

- Open your own account on the UT GCM output evaluation tool
- List of selected models
- Plots before and after bias correction for selected models, 1 grid
- Your comments on hydrological analyses



Thank you for your
participation.