Climate Change Working Group Activities

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5th GEOSS AP Symposium, Miraikan, Tokyo, WG1, AWCI, 3rd April, 2012

Review of CC Working Group Activities

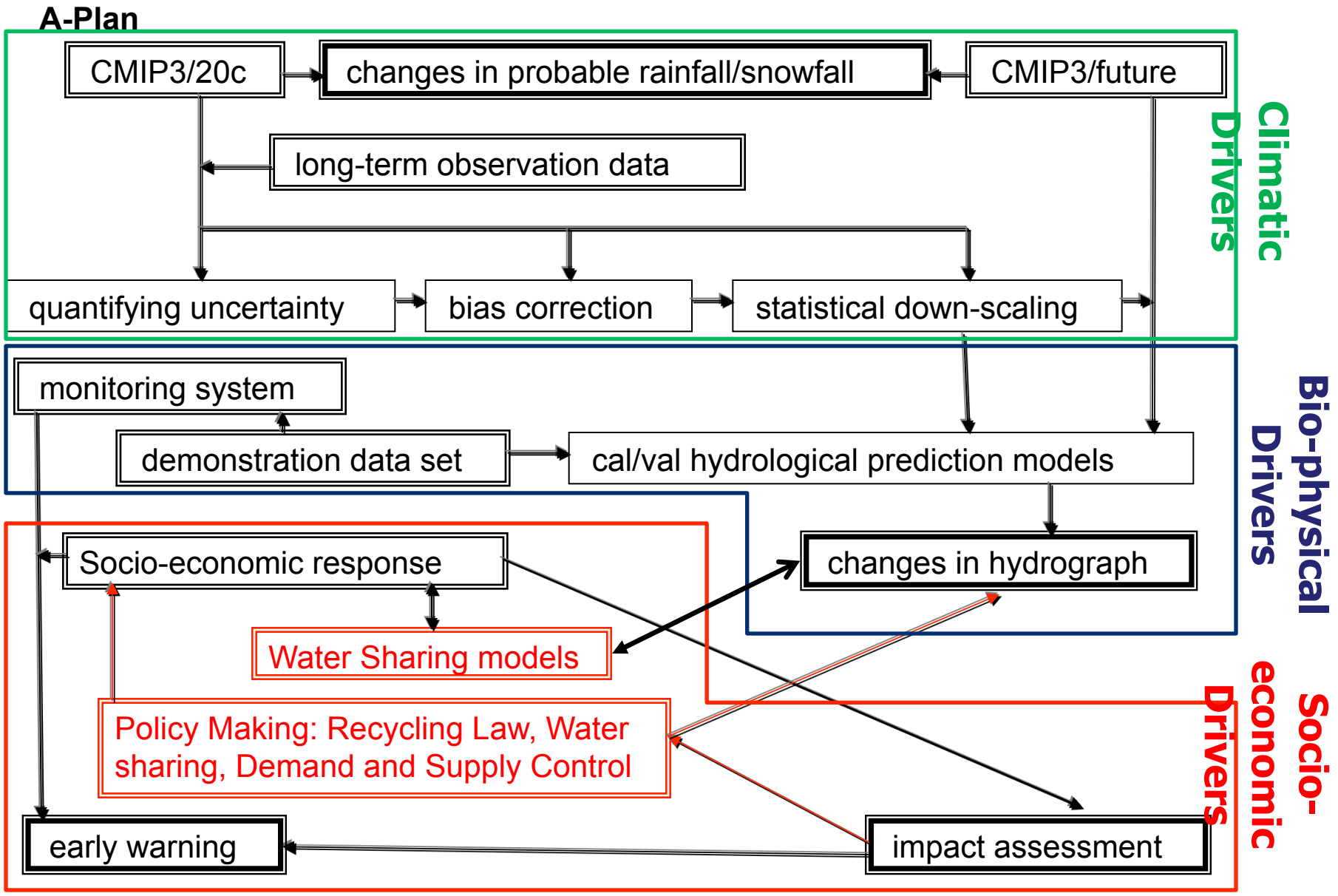
5th Meeting of the GEOSS/AWCI ICG (Tokyo, Dec. 2009)

- Issued the importance of local hydrologic data for global climate change on water resources

6th Meeting of the GEOSS/AWCI ICG (Bali, Mar. 2010)

- Proposed activities focusing on CC impact assessment in flood and drought pr oblems

Implementation Planning



Requirements for Climate Change Assessment and Adaptation

- **Assessment of Changing Hazard**
  usable information derived from climate projection models

- **Assessment of Changing Hydrology**
  integrated hydrological models with self-running capability

- **Leading to Public Awareness and Effective Actions**
  data integration for getting comprehensive

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AWCI training course for the Climate Change (Tokyo, Mar. 2011)

- Training on CC impact assessment in flood and drought problems
  - Climate Change Impact Assessment on Water Resources
  - GCM Selection, Bias Correction, Downscaling
  - Hydrological Modeling
  - Case Study

Program of the AWCI training course for the Climate Change (Tokyo, Mar. 2011)

- Overview of Climate Change Impact Assessment on Water Resources
  - General approaches for climate change impact assessment
  - Uncertainties of climate change impact assessment
  - MME-based climate change impact assessment
- Multi-GCM Analysis
  - GCM Selection
  - Bias Correction
  - Statistical Down Scaling
- Hydrologic Modeling
  - Review of Hydrologic Model
  - Proposed Hydrologic models for CC Study
  - Hydrologic Impact Assessment Process
- Case Study : SURR Model

Progress Report on APN Project

Title of project

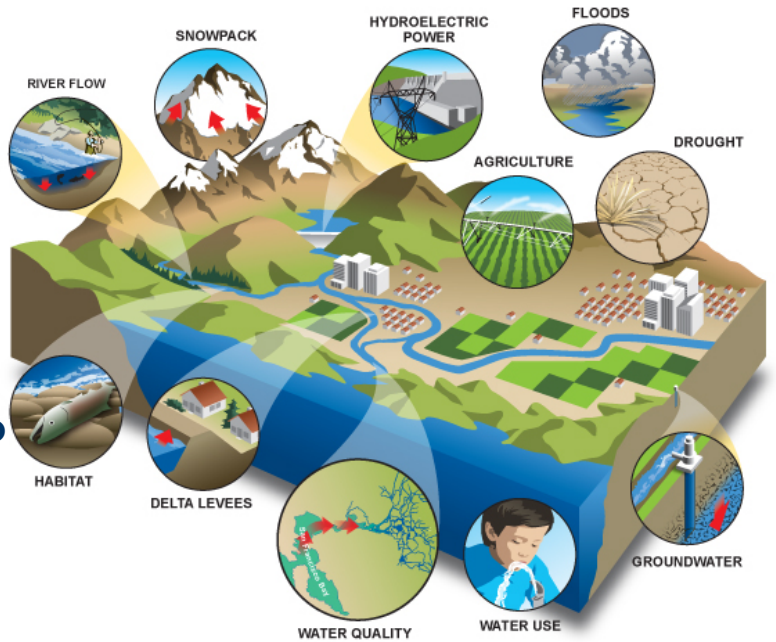
- Climate change impact assessment on the Asia-Pacific water resources under GEOSS/AWCI

Project period

- 2010.10.15 - 2012.10.14 (2 years)

Motivations of this study

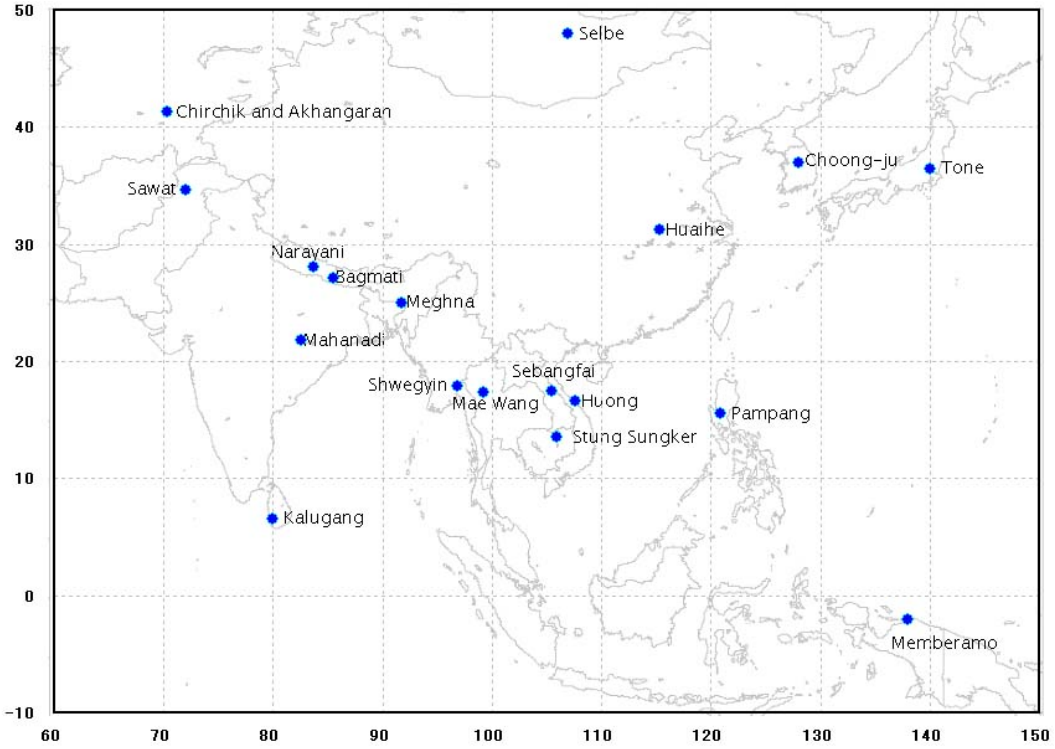
- Asia monsoon plays an important role on global water cycle
  - Provides substantial rainfall and water resources
  - Provides many benefits, but causes serious water-related disasters
- Various reasons for the disasters, but the current climate change makes difficult to manage them

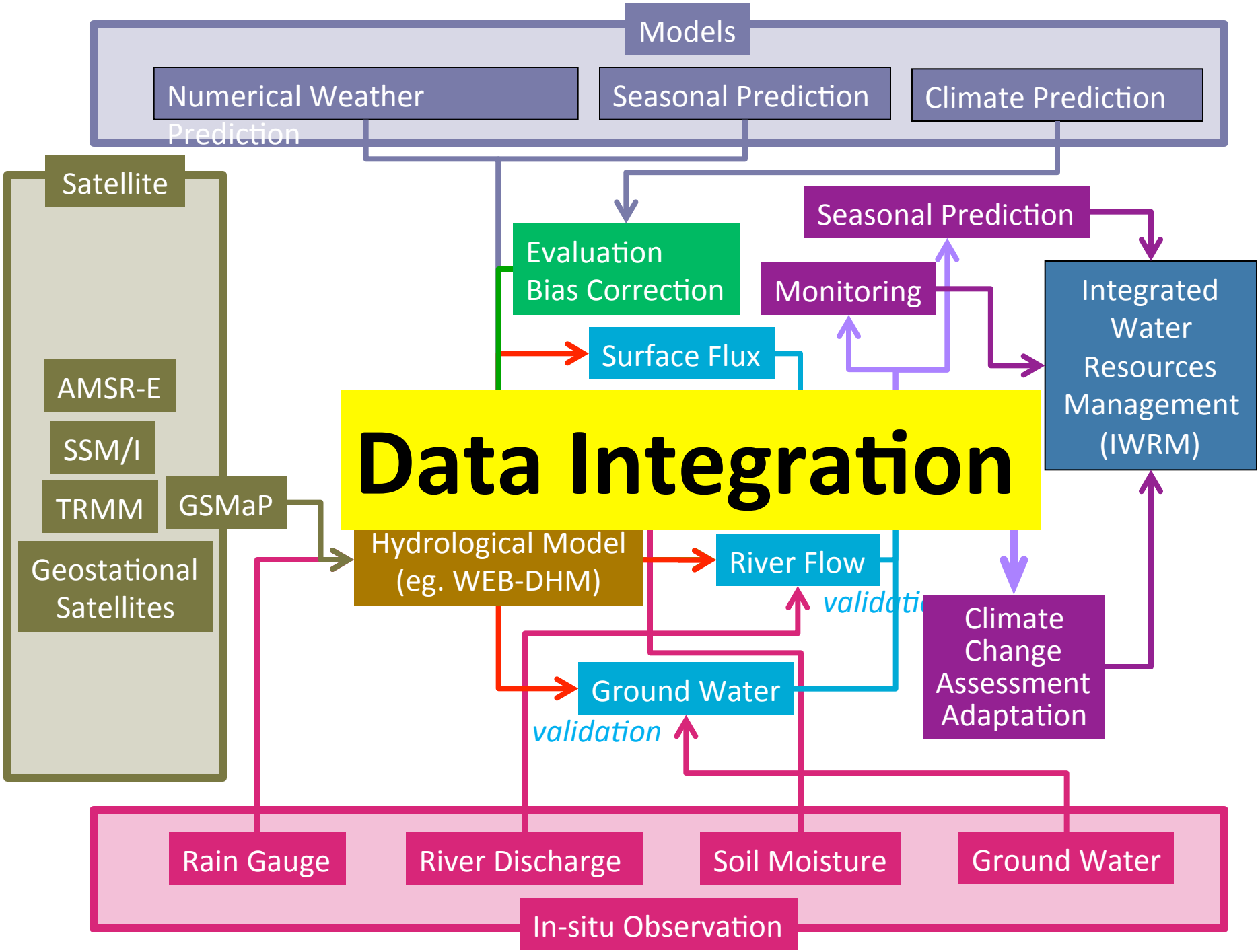


www.climatechange.water.ca.gov

The objectives

- **To evaluate the climate change impact assessments on water resources over the Asia-pacific regions joining GEOSS/AWCI**
- **To promote the capacity building for climate change impact assessment technology**




Models
Numerical Weather Prediction
Seasonal Prediction
Climate Prediction
Satellite
AMSR-E
SSM/I
TRMM
GSMaP
Geostational Satellites
Evaluation Bias Correction
Seasonal Prediction
Monitoring
Integrated Water Resources Management (IWRM)
Surface Flux
Data Integration
Hydrological Model (eg. WEB-DHM)
River Flow
validation
Climate Change Assessment Adaptation
Ground Water
validation
Rain Gauge
River Discharge
Soil Moisture
Ground Water
In-situ Observation

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- **5th GEOSS Asia-Pacific Symposium (Tokyo, Apr. 2012)**
  - CC and Water Nexus for Implementation Planning

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