

Summary and Discussion

2013.01.15

1. Mong-Ming Lu* and Yin-Ming Cho :

Changes in the annual frequency of the extreme events of Taiwan Mei-yu and preliminary results of the future projection

- ⇒ Phenomenon Metrics and performance metrics conduction for local climate
- ⇒ Relationship in between local extreme rainfall and large scale circulation

2. Hyung-Jin Kim, I.-W. Chung, Y.-H. Shin, E.-J. Lee, S.-H. Shin, Y.-Y. Kim, and C.-S. Chung:

Projection and uncertainty in CMIP5: Wasteful or useful?

- ⇒ The method to reduce uncertainty and keep signal for projection
- ⇒ Potential application of GCM projection on High frequency variability

3. Cheng-Ta Chen and Shou-Li Lin:

Regionalization and Uncertainty of Future Taiwan Climate Change Projection Based on CMIP5 Statistical Downscaling

- ⇒ Preliminary results of projected local rainfall based on CMIP5
- ⇒ Uncertainty assessment for the downscaled results based on CMIP5 projections over Taiwan

4. Ryo MIZUTA, Osamu ARAKAWA , Kohei YOSHIDA, Tomoaki OSE, Toshiyuki NAKAEGAWA , Hiroyuki MURAKAMI:

Climate projections using MRI-AGCM3.2 with 20-km and 60-km grid

- ⇒ Performance of TC activity in MRI-AGCM
- ⇒ Uncertainty analysis for MRI-AGCM

5. Chao-Tzuen Cheng, Yi-Yin Lin, Cheng-Ta Chen, Huang-Hsiung Hsu, and Akio Kitoh:

Preliminary Results of Dynamical Downscaling for TCCIP project Phase 2

- ⇒ Preliminary results of Dynamic downscaling based on GCMs in Taiwan
- ⇒ Seasonal rainfall, diurnal cycle, Typhoon

6. Ke-Sheng Cheng and Yii-Chen Wu:

Revisiting Statistical Downscaling Methods - Richardson WG & BCSD

- ⇒ The method to transfer monthly projection to daily time scale
- ⇒ BCSD study

1. Roger Stone:

Climate variability and climate change issues for agriculture in Australia: aspects related to seasonal forecasts and climate change predictions

=> Major trends occurring in both temperature and precipitation – although in a country as large as Australia these trends are not uniform across the country (water demand, heat stress, and spatial resolution)

⇒ Need to include integrated climate-agricultural modelling systems, although the challenge is to address scale issues between GCMs and crop/pasture models

2. Ming-Hwi Yao and Hsuan-Pin Chen, Jun-Jih Liou:

Evaluation of Climate Change on Crop Production and Food Security in Taiwan (1/3)

⇒ Performance of DSSAT crop model concerning climate change over Taiwan

3. Jaepil Cho:

Climate Change Impact on Agricultural Drought by Considering Uncertainty of CMIP5

⇒ The application of daily projection data on agriculture

⇒ Introduction of statistical downscaling method on reservoir scale

4. Pei-Chih Wu, Wan Ting Chen, Huey-Jen Su, Shih-Chun Lung, Chuan-Yao Lin, Tzu-I Sung, Mu-Jean Chen, Yung-Ming Chen, Lee-Yaw Lin:

Climate variability and change and their potential health effects in Taiwan--Case studies of Vector-borne diseases and temperature extreme associated deaths

⇒ Application of climate change information on public health – Dengue fever

⇒ Temperature and Humidity are important factors for public health

5. Yi-Chao Wu, Yung-Ming Chen, Jung-Lien Chu, Bo-Cheng Huang, Huei-Lin Lee, Yen-Chen Huang, Pei-Ling Liu, Ching-Chun Huang, Chia-Ying Hsieh, Lee-Yaw Lin:

The climate services of the TCCIP Project phase II : Climate Change Data Services and Information Promotion

⇒ Information transferring

⇒ Communication between data providers and users

Discussion

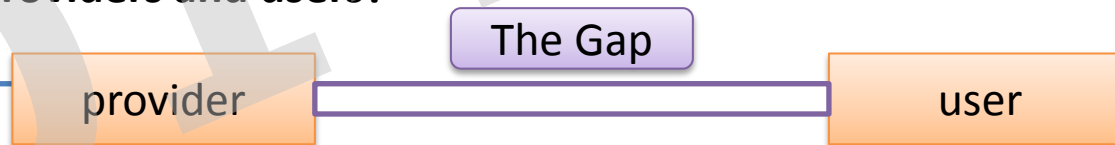
Climate information provider
(Session I)



Application(Session II)

- **What kind of climate change information is useful for application sectors under a lot of uncertainties come from projection data?**
- **Which variables and resolution is suitable for application?**
(rainfall, temperature, radiation,.....etc.)
(hourly, daily, monthly, seasonal,.....etc.)
(1000Km, 100Km, 5Km, 1Km,1m)²

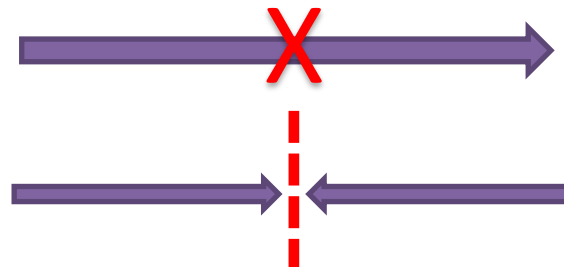
- **How to get the Mutual-understanding for the use of climate information in between providers and users?**



A



B



How to fill the gap ?