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?**