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The Climate Services of the TCCIP: Climate Change Data Services and Information Promotion

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CLIMATE KNOWLEDGE FOR ACTION:

A GLOBAL FRAMEWORK FOR CLIMATE SERVICES-EMPOWERING THE MOST VULNERABLE



THE REPORT OF THE HIGH-LEVEL TASKFORCE FOR THE GLOBAL FRAMEWORK FOR CLIMATE SERVICES



WMD-No. 1005

GLOBAL FRAMEWORK FOR CLIMATE SERVICE







Framework of TCCIP Phase II



Team 4, the climate services group of TCCIP II, aims to promote the project results generated by the data producers (Team 1, 2) and the application technology developers (Team 3) to data end users, impact assessment experts, and policymakers.



Framework of Climate Services (TCCIP II)

Scientists/researchers & adaptation policymakers: targeted users of TCCIP's products





The accomplishment achieved so far (2010-2012 in TCCIP I and 2013 in TCCIP II)





Climate Change in Taiwan: Scientific Report 2011



Climate Change in Taiwan: Scientific Report 2011





Scientific Report 2011



Trend in the past 100 years



Annual mean rainfall exhibits inter-decal variability. The linear long-term trend is not significant.



Local surface temperature has increased by approximately 1.4°C in the past century (1906 to 2005)

Scientific Report 2011



Taiwan Climate Projection (A1B) (2080-2099 minus 1980-1999)

Temperature

The median of the near-surface temperature increase is between 2.1 °C and 2.4 °C, which is slightly higher in N. Taiwan than in S. Taiwan, and it is lower in autumn than in other seasons.



Precipitation

For Central and Southern Taiwan, where rain is abundant in summer and scarce in winter, these projections indicate a greater rainfall contrast between the wet and dry seasons.



Scientific Report 2011





cil for Economic Planning and Developme June 2012

Council for Economic Planning and Development



Information Platform and Data Services



TCCIP Information Platform





TCCIP Information Platform





Data Services of TCCIP



Major Data Provided for users

5km gridded observation

(temperature & precipitation)



Downscaled Projection (24 models, three scenarios,



Data Service Procedure

Jsers' needs feedback to TCCIP for improving data services

TCCIP produced data

Data provided for researchers

Data services of TCCIP



Since 2012, about 40 applicants have requested data from TCCIP



The research institutes and the government agencies are the users that TCCIP plan to serve for the first stage.

disaster prevention.





Knowledge exchange and communication

Conferences, workshop of data introduction and application





Communication with Researchers



International Conferences with Project Result Presentation

	2010 11/1~3	2011 12/6 ~8	2013 1/13~15
Speaker (international+ domestic)	33 (16+17)	27 (17+10)	21 (11+10)
Participant	150	240	380 (webcast)
Conference topics	Climate Variability: Observation, Simulation, and Projection	Climate Change and Extremes	Project/Plan on Climate Change
	Dynamical and Statistical Downscaling of Climate Simulation	Projection and Downscaling	Climate Change Projection
	Impact Assessment: Impact on disasters and water resources	Impact Assessment & Adaption Strategy	Climate Change Impact Assessment

Communication with Users



(Workshop of Data Services to Promote Project Accomplishments)



Communication with users



(IPCC WGI AR5 Introduction Lectures)

Two months (2013/12/02) after the release of final draft of WGI AR5
Webcast and Video taping available on TCCIP website
Chinese version of WGI AR5 SPM provided for participants



ONGOING & FUTURE (2014-2015) WORK



TCCIP Phase II (2014-2015)



Goals of the Climate Services of TCCIP II

- Writing and Publishing the "Climate Change in Taiwan: Scientific Report 2015".
- Updating the Information Platform and Establishing the on-line Data Services
- Improving communications and data services within scientific societies.
- Translation and dissemination of climate change knowledge.

Climate Change in Taiwan: the Scientific Report (2nd Edition)





Climate Change in Taiwan: the Scientific Report (2nd Edition)



TCCIP + TaiCCAT

Volume I Physical Science Basis

- 1. Global Climate Change
- 2. Ocean Systems and Their Changes
- 3. Natural Variability of the Climate Systems
- 4. Climate Variability and Change in EA/WNP
- 5. Taiwan Climate Analysis (Observation)
- 6. Taiwan Climate Projection

PLAN Final draft: end of 2014 Publishing: 2015

TCCIP + TaiCCAT

Volume II Impacts and Adaptation

- 1. Introduction of Volume II
- 2. Greenhouse gases, aerosols, and land use changes
- 3. Environmental Disasters
- 4. Land ecology
- 5. Marine ecology
- 6. Water resources
- 7. Food production & security
- 8. Human health
- 9. Economy and society
- 10. City, country, and mountains areas
- 11. Coasts and islands
- 12. Adaptation and management

TCCIP II Information Platform



Three main modules



TEAM 4 Plans to develop an information database for data traceability

so that data users may better realize the characteristics and limitations of the data from TCCIP II.

Translation and Dissemination of Climate Change Knowledge



The objective is to convert the climate change jargons, often difficult and complicated for the non-expert policymakers or public, into understandable information.

Preliminary results: translation of IPCC reports

IPCC SREX: Summary for Policymakers WGI AR5 Summary for Policymakers





Translation and Dissemination of Climate Change Knowledge



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Promotion Product: Printed or Electronic



MANAGING THE RISKS OF EXTREME EVENTS AND DISASTERS TO ADVANCE IMATE CHANGE ADAPTATION iocc





AR5 Intro website



SUMMARY



- By establishing a service platform to integrate systematically the climate change data, technology, and knowledge, the TCCIP, a user-based climate change service project, aims to improve the communication among the data generators (Team 1, 2), application technology developers (Team 3), data end users, and impact assessment experts or policymakers.
- Scientific researchers and climate change adaptation policymakers are the targeted users of TCCIP's products. To fulfill the needs of these users, TCCIP has accomplished the following in TCCIP Phase I and in year 2013.

Accomplishments of climate services in TCCIP I (2010-2012) & 2013



TCCIP I information platform (2011-2013)

The Climate Change in Taiwan: Scientific Report 2011 (Full report in Chinese: 2011; Summary in English: 2012)

The preliminary data service (application, review, consulting) and communication (2010-2013)

2 data introduction workshops (2012, 2013) and 1 WGI AR5 introduction lecture (2013)

3 TCCIP International conferences and project result representation (2010-2013)

Translation of 2 IPCC reports (2013)

What to be accomplished in TCCIP Phase II (2014-2015)



The new information platform of TCCIP II

Second edition of the Scientific Report for Climate Change in Taiwan

An on-line data service system (with data traceability database) and reinforced data consulting service

Data introduction workshop, international conferences, and project result representation for better information communication and promotion

Experimental work to translate and disseminate climate change-relevant knowledge



Thanks for your listening

