



**Asia-Pacific
Economic Cooperation**

2022/SOM3/EPWG/SDMOF/005

Session 3.4

Introducing Advanced Study of Climate Change Projection for Climate Change Projection - Study on Downscaling of Climate Change Impact Projection

Purpose: Information

Submitted by: Asian Disaster Reduction Center



**15th Senior Disaster Management Officials'
Forum
Chiang Mai, Thailand
19 August 2022**



気候変動予測先端研究プログラム

Advanced Study of Climate Change Projection (SENTAN)

Introducing SENTAN for Climate Change Projection

Study on downscaling of climate change impact projection

Asian Disaster Reduction Centre (ADRC)



SDMOF/APEC August 19, 2022, Thailand

文部科学省・気候変動予測研究プログラム
領域課題4 ハザード統合予測モデルの開発
Theme #4

Implementing Framework

Leading agency: Professor Nobuto Mori (Kyoto Uni.)

A. Hazard Integration Model: Professor Takahiro Sayama (Kyoto Uni.)

B. Hazard Mechanism: Professor Kenji Tanaka (Koyo Uni.), Professor Masahiko Fuji(Hokkaido Uni), Senior Researcher Takeru Yoshida (NARO)

C. Hazard Event Attribution: Professor Tetsuya Takemi (Kyoto Uni.)

D. International Collaboration: Professor Yasuto Tachikawa (Kyoto Uni.), Professor Kenichiro Kobayashi (Kobe Uni.), Koji Suzuki(ADRC), Tadahiro Matsuki (ICHARM)

E. Adaptation Strategy: Professor Toshio Fujimi (Kyoto Uni.)

Participating researchers 119

Goals

- Multi hazard model development for storm & flood hazards
- Impact projections on disaster climate information, water resources, and ecosystems due to extreme weather by global/down-scaled warmings
- Analysis on changes of hazards depending on the level of global/down-scaled warming
- Down-scaled climate change impact projections in Japan and the regions of Asia and the Pacific
- Develop a framework/platform for strategic application of disaster climate information to climate change adaptation measures

Outcomes

- Develop major multi-hazard integration models
- Develop disaster climate information on storm & flood disasters with the global/down-scaled warmings for Japan and Asia and the Pacific
- Develop models on the extreme phenomena in water resources and ecosystems with the global/down-scaled warmings covering Japan and Asia and the Pacific
- Contribute “Climate Change 202X Japan” and “Climate Change Dataset 202Y”

Exit Strategy

- Regularly Organize Webinars inviting DRR practitioners and researchers to share the outputs
- Facilitate utilization of information infrastructures (DIAS/A-PLAT)
- Commit to climate change adaptation measures in collaboration with the government agencies
- Facilitate global/regional collaborations with the DMOs, UN agencies, academia in Asia and the Pacific

DIAS: Data integration analysis system program (<https://diasjp.net/en/>)

Climate Change Adaptation Information Platform (<https://adaptation-platform.nies.go.jp/en/>)