# INTERGOVERNMENTAL PANEL ON Climate change

## FORTY-FIFTH SESSION OF THE IPCC Guadalajara, Mexico, 28 - 31 March 2017

IPCC-XLV/INF. 4, Rev. 1 (20.III.2017) Agenda Item: 5.3 ENGLISH ONLY

# REPORTS

**IPCC Secretariat** 

## Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA)

(Prepared by the Co-Chairs of the TGICA)

(Submitted by the Secretary of the IPCC)



## REPORTS

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## Summary of key developments since IPCC XLII (October 2015)

- Task Group met for one teleconference and two full meetings
- Fact Sheet on CMIP5 data published at the Data Distribution Centre (DDC)
- Data supporting selected AR5 summary figures now accessible at the DDC
- DDC user survey was undertaken and reported
- TGICA engaged with CORDEX (the Co-ordinated Regional Downscaling Experiment)
- Documents prepared to support IPCC discussions on future priorities for TGICA/DDC
- TGICA members attended the IPCC Expert Meeting on the Future of TGICA
- Priority tasks identified for 2017, including completion of ongoing Technical Guidelines and Fact Sheets, updating of DDC content and archiving of links to RCP/SSP datasets

#### 1. Background

This report outlines progress related to the Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA) since the previous written report, delivered by the Co-Chairs on behalf of the Task Group at IPCC-XLII (Dubrovnik, Croatia, 5-8 October 2015, IPCC-XLII/INF. 14). A brief verbal status report was delivered at IPCC-XLIV (Bangkok, Thailand, 17-20 October 2016), which is noted in the Draft Report of the Forty-Fourth Session of the IPCC (IPCC-XLV/Doc. 5, Item 8, p.13).

During the period since the previous written report was submitted, the Task Group held one teleconference (24 September 2015), met twice for full meetings in Cape Town, South Africa on 26-28 October 2016 (TGICA-23) and Helsinki, Finland on 6-8 July 2016 (TGICA-24) and held an informal meeting on 16 May 2016 in Stockholm, Sweden on CORDEX (the Co-ordinated Regional Downscaling Experiment). Task Group members also participated in the IPCC Expert Meeting on the Future of TGICA held in Geneva, Switzerland (26-27 January 2016) and are contributing to the activities of the recently formed Ad Hoc Task Force on the Future of TGICA (ATF-TGICA), which are reported under Item 5.3 (IPCC-XLV/INF. 5).

The following sections provide first, additional details of TGICA meetings held since October 2015, second, a summary of the main actions and progress emanating from these and other relevant meetings and third, planning for TGICA activities during 2017. Longer term plans for TGICA and the IPCC Data Distribution Centre (DDC) are addressed under Item 5.3.

#### 2. TGICA meetings

- TGICA-23 was held on 26-28 October 2016 at Kalk Bay, Cape Town, South Africa, arranged by the University of Cape Town and supported by the Government of South Africa. Seven TGICA members and four *ex officio* members attended along with three local guests and two administrative assistants. Four other members and one guest joined the meeting by teleconference. A special session was held on "Data and Scenario Needs in South Africa", with presentations from three local experts on data needs for health-related impacts, co-production of data and information between the climatological and hydrological communities, and activities to obtain near-term information at high spatial resolution.
- TGICA-24 took place on 6-8 July 2016 at the Finnish Environment Institute (SYKE), Helsinki, Finland, with financial support from the Government of Finland. Ten full members and six *ex* officio members attended along with four guests from Finland and one administrative assistant. Three members and one guest joined the meeting by teleconference. In a special session on "Data and Scenarios for Climate Change Research and Policy in Finland", three local guests

contributed presentations on climate data and scenarios, policy-oriented research and recent developments in Finnish climate policy. An additional presentation was made remotely by former TGICA member Dr Kristie Ebi on the activities of the International Committee On New Integrated Climate change assessment Scenarios (ICONICS), which has been co-ordinating work on developing the Shared Socioeconomic Pathways (SSPs).

 A meeting was held on 16 May 2016 between the TGICA Co-Chairs, a Data Distribution Centre manager and representatives of CORDEX (the Co-ordinated Regional Downscaling Experiment) and of the World Climate Research Programme (WCRP). Its primary objective was to discuss the management of CORDEX data. The two main conclusions of that meeting were: (1) CORDEX would like to remain an activity principally focused on core research and does not currently have the capacity or intent to provide a user interaction platform, and (2) it would be valuable to explore the possibility to establish partnerships between developed countries and developing countries with sufficient high performance computing capacity to host CORDEX data and so support broader access to the research products.

# 3. Actions and progress

The following agenda items have been *approved and/or implemented*:

- A report of an online DDC questionnaire survey from 2015 was completed in January 2016 ahead of the IPCC Expert Meeting on the Future of TGICA and presented there by DDC Manager Dr Charlotte Pascoe. It has also been posted at the DDC<sup>1</sup>.
- Background references and data underlying an AR5 figure on observed impacts of climate change in the Working Group II Summary for Policymakers have been prepared and made available at the DDC in co-operation with chapter authors<sup>2</sup>.
- A TGICA Fact Sheet on "*CMIP5 data provided at the IPCC Data Distribution Centre*" prepared by a seven-person TGICA author team led by Dr Seita Emori, was published in September 2016 and posted on the DDC<sup>3</sup>, following an international and internal review process adhering to formal TGICA procedures.
- The TGICA Co-chairs contributed a section on TGICA to a paper by Ruane et al. (2016)<sup>4</sup> on "The Vulnerability Impacts, Adaptation and Climate Services Advisory Board (VIACS AB) contribution to CMIP6" for a Special Issue of *Geoscientific Model Development* on the 6<sup>th</sup> Phase of the Climate Model Intercomparison Project (CMIP6).
- The TGICA Co-chairs contributed to the preparation of the Meeting Report of the IPCC Expert Meeting on the Future of the Task Group on Data and Scenario Support for Impacts and Climate Analysis<sup>5</sup>
- Following a suggestion from the IPCC Expert Meeting on the Future of TGICA (January 2016) to
  prioritise the activities of TGICA and the DDC, the TGICA Co-chairs prepared a document in
  March 2016 as IPCC-XLIII/INF.17 for input to IPCC-43 discussions on TGICA: "Priority
  objectives for TGICA and the Data Distribution Centre (DDC)", which was subsequently revised
  in July 2016 as BUR-LII/INF.7.
- Following queries about the functions of TGICA and the DDC at IPCC-43, and discussion among the membership at TGICA-24, the TGICA Co-chairs prepared a second document in July 2016 for submission to the IPCC Bureau: "Some implications for the IPCC of re-aligning the functions and roles of TGICA and the DDC" as BUR-LII-INF.8.
- A TGICA response to a questionnaire concerning the 1.5 °C IPCC Special Report (SR1.5) was compiled in a breakout group, agreed and submitted ahead of the Scoping Meeting (August 2016), primarily focusing on issues relating to data and scenario requirements for SR1.5.
- A poster entitled: "Intergovernmental Panel on Climate Change (IPCC) Data Distribution Centre (DDC)" by DDC Managers Drs Robert S. Chen, Charlotte Pascoe and Martina Stockhause was presented at the 2016 World Data System Forum, 11 September 2016, Denver CO, USA.

<sup>&</sup>lt;sup>1</sup><u>http://www.ipcc-data.org/ddc/user\_surveys.html</u>

<sup>&</sup>lt;sup>2</sup> http://sedac.ipcc-data.org/ddc/observed\_ar5/index.html

<sup>&</sup>lt;sup>3</sup> http://www.ipcc-data.org/guidelines/index.html

<sup>&</sup>lt;sup>4</sup> http://www.geosci-model-dev.net/9/3493/2016/gmd-9-3493-2016.html

<sup>&</sup>lt;sup>5</sup> http://www.ipcc.ch/publications\_and\_data/publications\_and\_data\_supporting\_material.shtml

Other items for which there has been *significant progress* since the previous meeting include:

- Notification was received that the UK node of the DDC will be shifted to using a Content Management System (CMS) that should streamline additions, management and backup of data on the UK DDC node, whilst conforming to IPCC web site standards.
- Drafting of the "General guidelines on the use of scenario data for climate impact and adaptation assessment" is making good progress following several author teleconferences and a generous offer by the Government of Canada to expand the role of the Canadian co-author to facilitate completion of the document.
- Data underlying WG II and WG III SPM figures in the AR5 were prioritised for collation and posting on the DDC
- The DDC pages on the Scenario Process for AR5, including information about the Representative Concentration Pathways (RCPs) and Shared Socioeconomic Pathways (SSPs), are being archived and new pages developed under a proposed generic heading: "Scenarios assessed by IPCC"
- Based on a breakout group discussion and outline, "Notes for authors preparing Frequently Asked Questions (FAQs) for TGICA" are being developed by a TGICA sub-group.

#### 4. Future meetings

A TGICA teleconference is scheduled for 17 March 2017. The next full meeting (TGICA-25) is being planned for June/July 2017 with a venue still to be determined. Following a Decision at IPCC XLIV, this will be the final meeting for the Task Group as currently constituted. A final teleconference for the group may be arranged ahead of IPCC XLVI, in order to conclude all existing agenda items.