

Our ref.: 5400-15/IPCC/TGICA

Annex(es): 1

To designated IPCC Focal Points and Ministries of Foreign Affairs (if no focal point has been designated)

## **COPY**

Geneva, 11 November 2015

Sir/Madam,

I am pleased to submit an interim report on the IPCC Data Distribution Centre (DDC) User Survey, which is still open for contributions until **16 November 2015**. The link to the survey can be found on the DDC home page at: <a href="http://www.ipcc-data.org/">http://www.ipcc-data.org/</a> (under "Highlights"). The survey comprises 17 simple questions that are designed to gather information on who visits the DDC site, what types of resources are being accessed there, how data that are downloaded are being used, experiences of the IPCC Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA) guidance material, and some opinions concerning possible improvements in the website.

The preliminary findings presented in the report, attached to this letter as Annex I, were compiled on the basis of responses obtained from about 150 users who had participated in the survey by mid-October 2015. While participation in the survey increased notably since it was re-launched in September 2015, more participation before the deadline would certainly be desirable.

Recalling paragraph 15 of Decision IPCC/XLI-4 on the Future Work of the IPCC, the responses from the user survey will form an input in determining the future of TGICA, which is contained in the vision paper which was sent for inputs until **20 November 2015**. It is expected that the preliminary findings from the user survey will provide additional guidance to governments, Observer Organizations and the IPCC Bureau as they revise the TGICA vision paper.

A copy of this letter is being sent for information to the Ministry of Foreign Affairs and to the Permanent Representatives from your country to the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).

Yours sincerely,

John make

(Carlos Martin-Novella) Deputy Secretary of the IPCC







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

# **IPCC-DDC Online Questionnaire Interim Analysis**

## **Charlotte Pascoe**

TGICA Ex Officio Member (IPCC Data Distribution Centre)
Centre for Environmental Data Analysis, STFC Rutherford Appleton Laboratory, Harwell, UK

This document was prepared for the IPCC TGICA-23 meeting held in Cape Town, South Africa, 26-28 October 2015. It was intended to offer ideas and raise issues relating to the preliminary analysis of responses to an online User Survey of the IPCC Data Distribution Centre (DDC) being made available on the IPCC home page and at the DDC website:

### https://www.surveymonkey.com/s/7MHNTCV

This Survey is open until 16 November 2015, and the current document is based on responses received up to mid-October 2015. It was drafted to initiate discussion among TGICA members on the most informative and effective way of portraying the results of the Survey ahead of the IPCC Expert Meeting on TGICA to be held on 26-27 January 2016. We are very grateful to Charlotte Pascoe (UK DDC) for undertaking this preliminary internal TGICA analysis. The suggestions received at TGICA-23 will be used by Dr Pascoe to prepare a revised version, which will then be reviewed by the TGICA membership. It is our intention to present that final analysis in a document to be made available to participants at the IPCC Expert Meeting.

This interim version is being released now following requests by some government representatives for information on user feedback concerning the DDC. This information may assist them in addressing a vision paper on TGICA and the DDC for which responses are requested by the IPCC Secretariat ahead of the IPCC Expert Meeting. As such, the findings shown here should be understood to be illustrative and designed for TGICA internal use. The report does not yet represent a final analysis of the Survey endorsed by the TGICA membership. We kindly request that the report not be cited or more widely distributed.

The final TGICA report will be posted by the IPCC Secretariat at the Expert Meeting website in early January.

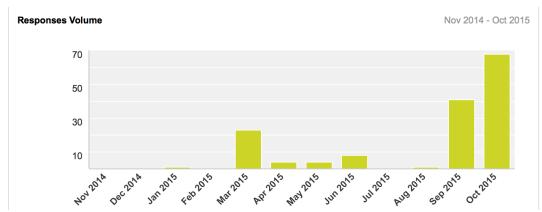
Timothy Carter and Bruce Hewitson (TGICA Co-Chairs) 6 November 2015

# **IPCC-DDC Online Questionnaire**

Charlotte Pascoe, October 2015

The survey of IPCC-DDC users was opened in March 2015 and re-advertised in September 2015. At the time of writing 150 users have taken part in the online survey and what follows is a summary of their responses.

The online questionnaire is being advertised on the IPCC-DDC website and the main IPCC website. Registered users of the IPCC-DDC have been invited to participate and announcements about the user survey have been sent to the participants of recent IPCC expert meetings and workshops, and to mailing lists held by the following groups: UNEP/PROVIA, VIACS-AB, CLIMLIST, CLIVAR, GEWEX and other regional contacts. Information about the user survey has also been circulated to IPCC Focal Points/Ministries of Foreign Affairs ahead of the expert group meeting in January to discuss the work of the TGICA.



Survey response volume by month.

Unless otherwise stated, the numbered axes on the charts presented in this report are indicative of the number of responses in a given category.

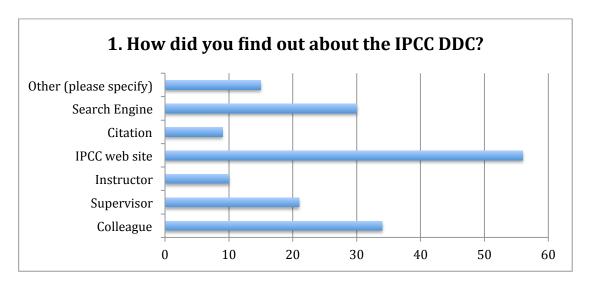
Some people told us that the user survey didn't seem that relevant to them, so the following preamble text has been added to the top of the survey with a view to making it clear that the survey is intended to capture feedback from DDC users across a breadth of experiences.

## **Preamble to the User Survey:**

"The IPCC DDC user survey is a intended to capture feedback from the many different users who make use of our website. None of the questions are compulsory, so if some of the things we ask are not relevant to your experience just skip those and move on. If we haven't asked about something that you would particularly like to share with us you can tell us about it at the end of the survey."

## 1. About You

The first part of the survey established information about the survey participants in a section titled "About You".



The "other" ways in which survey participants discovered the IPCC-DDC are listed below:

<sup>&</sup>quot;Skepticism"

<sup>&</sup>quot;Involved in it's design"

<sup>&</sup>quot;Invitation to respond to survey from IPCC to Bhutan Government"

<sup>&</sup>quot;Book"

<sup>&</sup>quot;Science text book"

<sup>&</sup>quot;University"

<sup>&</sup>quot;Working on drafting IPCC reports"

<sup>&</sup>quot;e-mail about the survey"

<sup>&</sup>quot;sent to me by DECC"

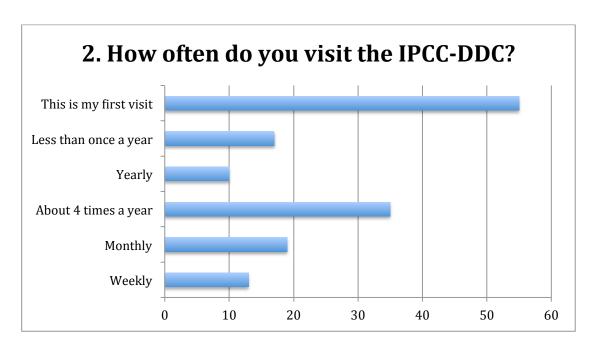
<sup>&</sup>quot;via email from UK DECC"

<sup>&</sup>quot;email about this survey"

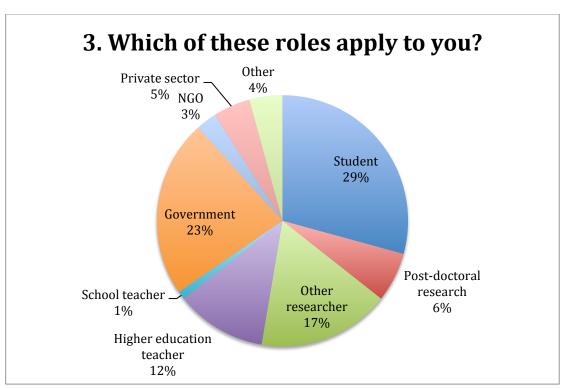
<sup>&</sup>quot;UK DECC"

<sup>&</sup>quot;Email message"

<sup>&</sup>quot;I was involved in early incarnations of the DDC"



For many survey participants this was the first time that they had visited the IPCC-DDC. However there are a significant number of regular visitors, nearly half of the survey respondents visited the DDC four times a year or more.



Survey Participants were invited to select roles that applied to them. Other roles that participants chose to identify themselves with were:

former researcher and higher education teacher (retired)

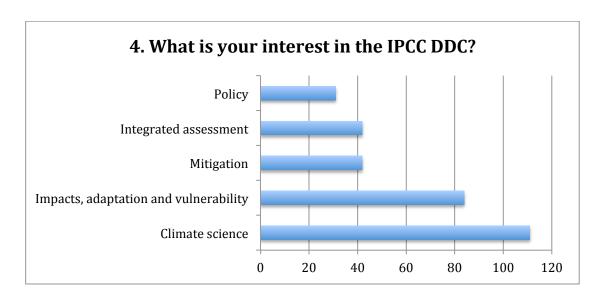
consultant

Concerned citizen

Engineer

Retired, former University researcher and teacher (Astronomy)

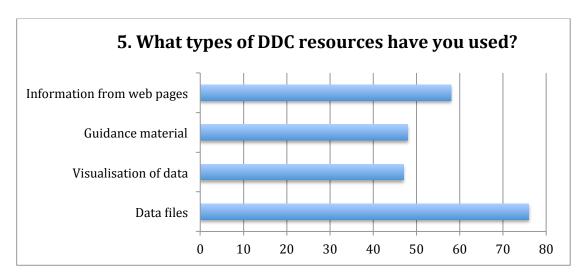
International organisation



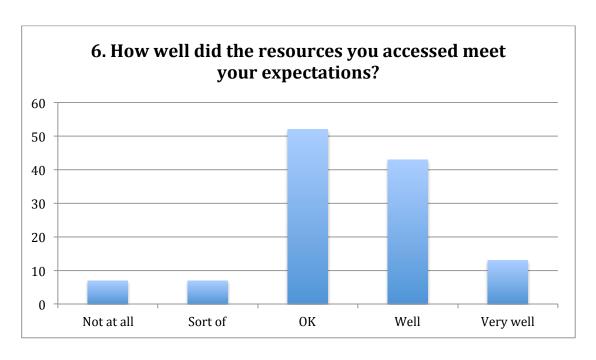
Participants were asked about their interest in the IPCC-DDC. The most popular themes identified by the participants were Climate science and IAV (Impacts, Adaptation and Vulnerability).

## 2. DDC Resources

We asked the survey participants to tell us about what IPCC-DDC resources they had accessed and how well those resources had met their expectations.



Data files were the most popular resource accessed by the survey participants. However, there is a fairly even distribution of interest in the other resources that are available on the DDC website.



The resources provided by the IPCC-DDC met the participant's expectations in 89% of cases nevertheless we received useful constructive criticism from our respondents.

## **Positive responses:**

"I employed statistical downscaling on the IPCC DDC output for my thesis"

"They provided what I expected -- working on the IPCC I have a good concept of what to expect"

"The data was useful to create a climate change based model predicting the likely impacts of drought and temperature increases on a particular bird species in Australia."

"I am working as a researcher in climate change projects ...it helps"

"I was looking for data and information about the climate change on plant distribution and in this web site I found many useful information and data."

#### **Critical responses:**

## Issues to do with the clarity of the DDC layout and content

"Purpose of the site is not obvious"

"I never used before such resources"

"I'm not familiar enough to this website and cannot use it well."

"The Information provided at this web site is presented in a rather scientific way most suitable for experts. It is not so useful for outsiders. E.g. the information about the scenario process is not so easily accessible."

## Users who would like to see more regional information

"Some times it is hard to find information about specific places."

"Data base from many countries do not exist like Sudan"

"local data was not available"

#### Users with issues to do with data format and download

"IPCC models are not working"

<sup>&</sup>quot;I needed data and found data in a easy way"

"Downloading takes forever. Would be nice to download more than one file at a time. Also a search option so you can type in a key work and locate a specific file you are looking for easier.

Otherwise love that you have these files available"

"I use the climate prediction scenario's, i.e. for temperature and precipitation. Our models run till e.g. 2050 or 2100 and need T and prec on a yearly but continuous basis. However the data provided are not continuous and that is awkward."

"The access through CMIP5 portal was easier 2 years back. Now the server often does not let the data download happen probably due to location or server limitations."

"One of the big disadvantages of the data are various format of row data based on various sources. It can be fur better if the common format was defined (or converted the common format)."

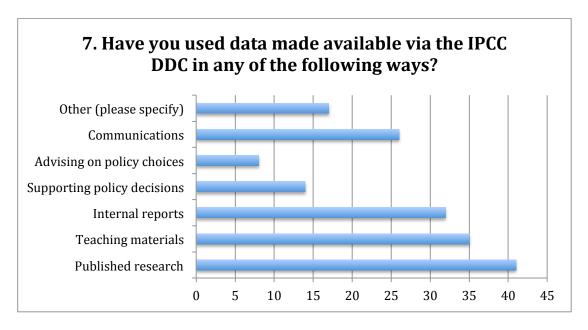
"The IPCC DDC focuses on "raw" GCM output. I was looking for the processed data used to create figures and maps in the IPCC AR5 TS and SPM, which I was unable to find."

#### Other

"You have proven that you are political lobbyists"

## 3. Data

We asked the survey participants to tell us about their experiences accessing and using the data that is available on the IPCC-DDC.



In addition to the uses listed above, participants also stated that they had used data from the IPCC-DDC in the following ways:

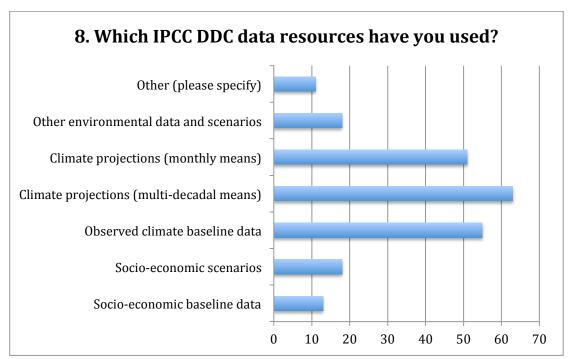
<sup>&</sup>quot;Research"

<sup>&</sup>quot;Private use (not published)"

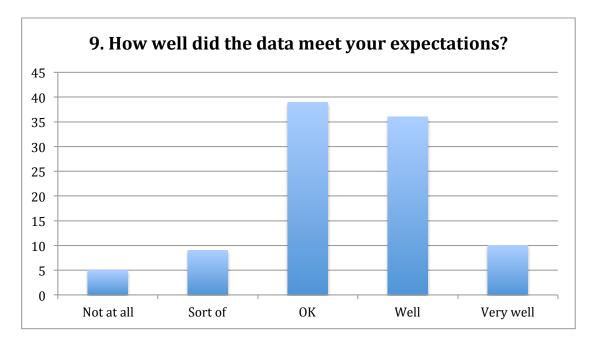
<sup>&</sup>quot;Basic scenario's data"

<sup>&</sup>quot;I did not use data from this portal- only used guidance material"

<sup>&</sup>quot;To show many others who you really are"



The majority of IPCC-DDC data used by the survey participants were data from observed climate baseline datasets and data from climate model projections. The "other" data resources specified by the participants were "meta data" and "guidance material".



The data provided by the IPCC-DDC met the participant's expectations in 86% of cases.

<sup>&</sup>quot;Knowledge about facts for myself"

<sup>&</sup>quot;Background for input into IPCC"

<sup>&</sup>quot;Assignments"

#### **Positive Comments:**

"I needed data and found data"

"It was an easily accessible and understandable set of data and predictions."

"Good explanation of the scenario process in AR5"

#### **Critical comments:**

"The materials are very general and lack regional value"

"Still looking to make a sense of it (I am 54)"

"Too scientific."

"Observed CO2 increase without ambient temperature trend support since 1998. Not supposed to happen according to IPCC"

"For publication purposes, the data is acceptable with a wide range of peer reviewer-ship. However, the uncertainty in the climate projections by CMIP5 leaves the policy makers with ambiguity, and they are less likely to implement the adaptation packages scientists propose to them."

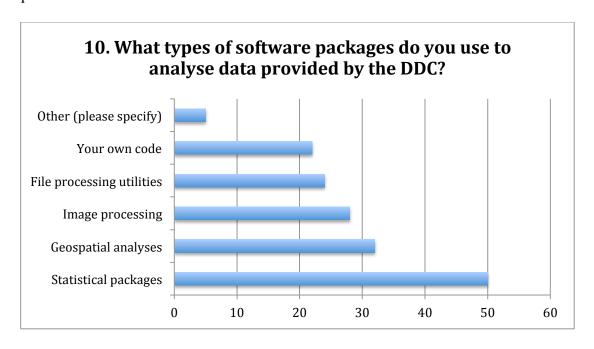
"We acquire CMIP5 model data mainly from the PCMDI website which is kept updated."

## Requests for data at higher temporal resolution

"if DDC center, will equip daily based data it can be more applicable for the users."

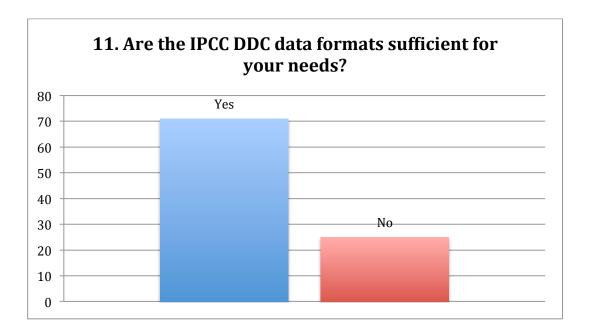
"we could not find daily climate information for using in estimating the evolution of the climate variables"

"Observational data for climate in IPCC-DCC is rather limited: there are many more sources, and monthly data aren't very useful for applications in many sectors (often daily data or even hourly used). In most European countries the period 1981-2010 or 1971-2000 is used to describe the current climate"



The survey participants told us that they use many different kinds of software packages to analyse the data provided by the IPCC-DDC. The other packages specified by the survey respondents were:

<sup>&</sup>quot;climexp.knmi.nl"



The data formats provided by the IPCC-DDC were sufficient for the needs of 74% of the survey participants.

Other data formats requested by the survey participants were:

<sup>&</sup>quot;Used regional downscaling"

<sup>&</sup>quot;Input to our own models predicting the effect of climate change on biomass and biodiversity"

<sup>&</sup>quot;GrADS, CDO"

<sup>&</sup>quot;.csv and .xls"

<sup>&</sup>quot;CSV"

<sup>&</sup>quot;I've not used your data yet, but prefer text format. I can manage also csv format."

<sup>&</sup>quot;.dta .sav"

<sup>&</sup>quot;GIS-compatible"

<sup>&</sup>quot;the ascii files I've found for CO2 MaunaLoa data is fine for me. Using my own software, ascii data work very well"

<sup>&</sup>quot;we are waiting for CMIP5 data, CRUTEM3 data, CRUT3 with Image processing" "The data supplied are maybe useful for climate researchers, however many impact/adaptation researchers will need biases corrected data and/or tools to generate time series for their applications"

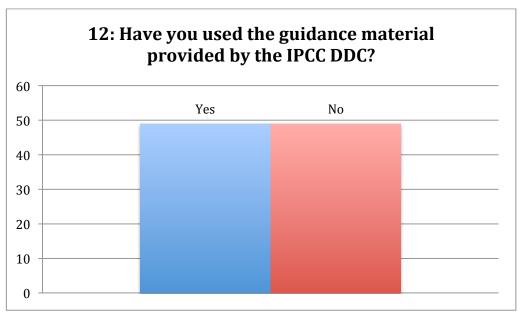
<sup>&</sup>quot;daily data"

<sup>&</sup>quot;Finer spatial temporal resolution"

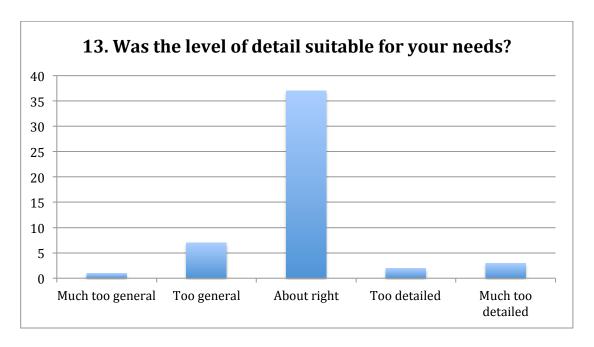
<sup>&</sup>quot;Formats directly usable for reproducing figures and maps in the IPCC reports"

## 4. Guidance

We asked participants to tell us about their experience using the guidance material that is provided by the IPCC-DDC.



Half of the respondents who answered this question had used the guidance material.



We asked the survey participants who had used the IPCC-DDC guidance material to tell us how satisfied they were with the level of detail found in the guidance material. The majority of participants found that the detail provided was sufficient for their needs but of those that were dissatisfied, there was no clear pattern as to whether the level of detail was too general or too detailed. This point is further demonstrated by the comments that were provided by some of the participants.

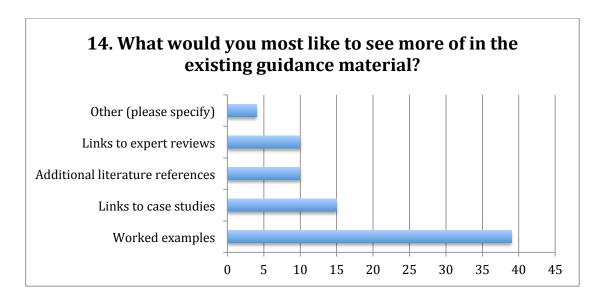
#### **Positive comments:**

"I did not use it myself, but for users of climate data (impact/adaptation Research). Depending on the type of user the information was good or could have had some more detail"

"It went into detail, but wasn't overwhelming"

#### **Critical comments:**

- "where do I find?"
- "The material is too big ... needs to be broken down into more modular / short fact sheets to facilitate access"
- "I think the IPCC info should be general. I know many others would like very detailed guidance, but I do not think this is the role of the IPCC -- should be national governments and others"
- "Not specific enough on key issues."
- "... and too scientific."



The most popular suggestion for additions to the existing IPCC-DDC guidance material was to provide more worked examples. The inclusion of worked examples would go some way towards resolving the criticism that the guidance material is too detailed.

Other suggestions from users were to have:

- "Overview of datasets, methods/tools for processing data, info about data quality, overview of guidance material (case studies can be useful, but not just case studies)"
- "Simpler language for non-experts"
- "Up to date information from AR5, information closely linked to the assessment process in a transparent way"
- "Inclusion of recognition of CO2 as being the basic element the life is made of. CO2 is not a poison as IPCC makes it to be"

We asked the survey participants to tell us if there was anything else that they would like to see changed about the guidance material on the IPCC-DDC. They told us:

"There is a need for standardized tools to process the data rather than gleaning information.....from different sources"

"More materials definitely needed on controversial topics, such as contradictions between different data sets, and how to develop regional information."

"More guidelines on statistical downscaling"

"The file sizes are very large making it difficult to download"

"see more guidance material on mitigation"

"stop putting temp change in C when in US as US is critical to join and US people relate to F not C."

"Should be made comprehensive so that the user spends least amount of time in guideline and most on practical usage."

"maybe also FAQs"

"I work on coastal areas -- coastal climate and other scenarios could be better developed. I do not think the IPCC DDC supports coastal assessment as well as it might."

"Please provide more recent material."

"file format must be in excel files"

"powerpoint slides"

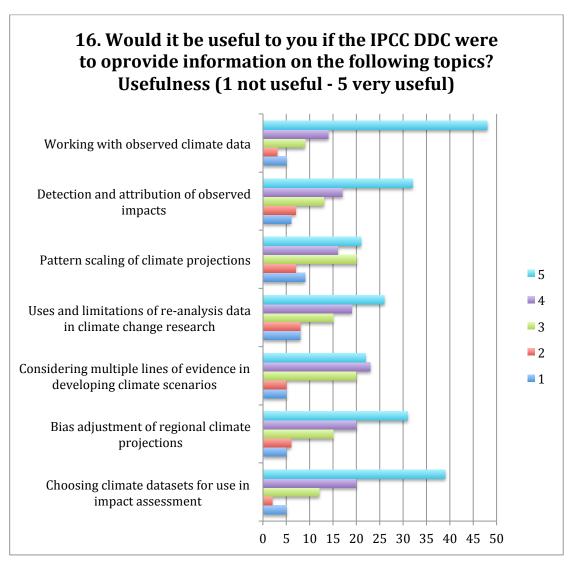
## 4. Future Material

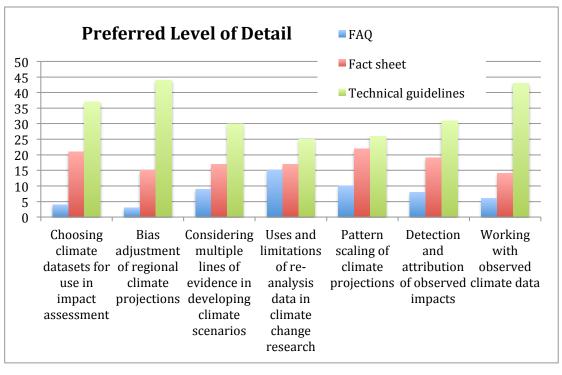
We asked the survey participants to tell us about their priorities for future guidance material that might be made available via the IPCC-DDC by scoring our proposals for additional material from (1: not very useful to 5: very useful).

The proposals for new guidance material topics that were given the highest scores by the survey participants were:

- Working with observed climate data
- Choosing climate datasets for use in impact assessment
- Detection and attribution of observed impacts

Technical guidelines were generally thought to be the most appropriate form to communicate these topics.





## **Parting Comments:**

We asked the survey participants to tell us if they had any final remarks they wished to share, this is what they told us:

"The three choices given above don't seem to be right. They are not exclusive. If we see any information source, all three modes of communication products will be there. We start with extended summary and expand learning into the subject and limitations of the subject. Many times we end up having questions. Then we refer to the FAQs. They are not mutually exclusive."

"The DDC is something seen as authoritative, and so could valuably touch on more subjects. Regional (decision-scale) support is the highest priority."

"Suggest IPCC DDC should be kept updated rather than just a snapshot"

"Improved data resolution is very important for regional climate change studies..."

"It would be a great help if IPCC DDC could provide climate data download on regional or country level"

"Get USA onboard."

"Kindly make batch downloads more easier and user friendly on multiple operating systems like Windows. The data download in CMIP5 may also incorporate shrinking of the data to a specific region so that regional data of GCM may also be downloaded instead of downloading the global data file."

"Data is pretty good!"

"Difficult to answer the questions on the level of detail without examples - where are FAQ, factsheets on the DDC web site?"

"The products provided by the DCC did not undergo the usual multistep review process of the IPCC. For transparency reasons, information on the establishment and on quality control of DDC-products should be included on the web site."

"Data is only as useful as its description - so if provided should have full technical documentation"

## 5. Summary

The results from the user survey have identified a number of opportunities for us to develop and update the IPCC-DDC web site.

- Guide non-academic users towards more information-centric content.
- Provide timely access to IPCC data.
- Demonstrate how important figures in the IPCC assessment reports can be re-created using data from the IPCC-DDC.
- Add more worked examples to the guidance material
- Provide clear and easy to find advice for users who need data at high temporal resolution.
- Provide more regional data and information.
- Improve the data download experience.