

From: Mike Hulme <m.hulme@uea.ac.uk>
To: "Noguer, Maria" <mnoguer@meto.gov.uk>, 'tar10 ' <tar10@egs.uct.ac.za>
Subject: Re: Precipitation map for the Box
Date: Fri, 30 Jun 2000 08:08:12 +0100

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Dear Chapter 10,

Sorry I missed out on the meeting.

In general I like the proposed Figure and suggested Box contents (and I particularly agree that the diversity of downscaling methods and results precludes using them as a basis of consolidated regional conclusions). I also agree with others that it looks better with the +- signs included. However, there are 2-3 points that concern me, mostly from the perspective of climate scenarios (Chapter 13 - and also Chapter 9).

- it needs to be made very clear if any numbers are cited in the Box (e.g. 2-6degC for continental warming) that these refer to only *one* forcing scenario, namely 1% p.a.

- rather than talk about GHG and SUL I would suggest the more conventional nomenclature of GG and GS (the SUL runs are not just SUL forcing of course, which might give that impression).

- another very important caveat concerns the GS (SUL) results - these all stem from IS92a type aerosol forcing a la IPCC SAR. Most of the new SRES forcings used in TAR and Chapter 9 for example have much smaller or even positive SO4 forcing relative to 1990. In principle this could actually switch the sign of the precip. changes in some regions. There is the danger of inconsistency here between Chapter 9 (TAR aerosol effects) and Chapter 10 Box (SAR aerosol effects) if this is not carefully explained. For example, in CAM and JJA it appears that aerosols switch the P change from 'strongly negative' to being 'uncertain' - but this is only for IS92a aerosol forcing: it is not a conclusion that would be valid for SRES aerosol forcing!

- as Filippo says, another key uncertainty not represented in the Box is forcing uncertainty - again, Chapter 9 present a wide range of Tglobal results, part of which relates to prior assumptions about which SRES forcing materialises. We do a disservice if we give the impression in Chapter 10 Box that these regional responses are independent of what future forcing materialises. For example, under the lowest SRES forcing (B1) the precip. response in some regions would revert back to being very small and therefore indistinguishable from noise.

- with regard to temperature and Filippo's comment, Chapter 9 has global maps of T change, averaged across the standard set of AOGCM experiments (ranges are also shown). This is in effect the information being sought-for by readers of Chapter 10 is it not. I would have thought that back-references in the Box to Figure 9.9 would be sensible.

See you all in Victoria,

Mike

At 14:35 27/06/00 +0100, Noguer, Maria wrote:

>Dear all,

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>Here are two examples that Paul has put together regarding the map of
>changes in precipitation drawn from Figure 10.5

>Do you think it works? Please send me any suggestions that you may.

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> <<Fig01a.pdf>> <<Fig01b.pdf>>

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>Regards,

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>Maria

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