



Dutch Government Expert Panel on Uncertainty Communication in the IPCC AR5 WG I SPM

**PBL Netherlands Environmental Assessment Agency
Bilthoven branch, room W 0.30-32
17 and 18 June 2013**

Programme

Aims

- To contribute to the Dutch Government's comments on the Final Government Distribution of the Summary for Policymakers of the IPCC WG I AR5 report, with a focus on uncertainty communication (day one)
- To write a joint editorial with our evaluation of the quality of the uncertainty communication in the SPM of IPCC WG I AR5, including an evaluation of the uncertainty guidance, and options for improvement (day two).

Monday 17 June 2013 – Comments on uncertainty communication in IPCC WG I SPM

9:00 – 9:15	Arrival & coffee
9:15 – 9:45	Round of introductions Opening remarks by Arthur Petersen (Chief Scientist PBL, meeting chair) and Pieter Boot (Head of PBL's Dept. of Climate, Air and Energy)
9:45 – 10:00	Presentation of IPCC uncertainty guidance note and aim for day one by

Arthur Petersen

- 10:00 – 10:20 Uncertainty qualifiers in SPM statements based on Chapter 2 [Observations: Atmosphere and Surface] – Geert Jan van Oldenborgh
The reviewer takes 10 minutes to present comments on how the uncertainties in the main body of the chapter are reflected in the SPM statements, while making reference to the uncertainty guidance and, where possible, proposing alternative text based on the chapter. We then have 10 minutes to discuss the comments. We may decide to spend less time on particular chapters and more on others, depending on our interest! So this schedule is just tentative.
- 10:20 – 10:40 Uncertainty qualifiers in SPM statements based on Chapter 3 [Observations: Ocean] – Wilco Hazeleger
- 10:40 – 11:00 -- Break --
- 11:00 – 11:20 Uncertainty qualifiers in SPM statements based on Chapter 4 [Observations: Cryosphere] – Erik Min
- 11:20 – 11:40 Uncertainty qualifiers in SPM statements based on Chapter 5 [Information from Paleoclimate Archives] – Peter Huybers
- 11:40 – 12:00 Uncertainty qualifiers in SPM statements based on Chapter 6 [Carbon and Other Biogeochemical Cycles] – Han Dolman
- 12:00 – 12:20 Uncertainty qualifiers in SPM statements based on Chapter 7 [Clouds and Aerosols] – Bert Holtslag
- 12:20 – 13:30 -- Lunch --
- 13:30 – 13:50 Uncertainty qualifiers in SPM statements based on Chapter 8 [Anthropogenic and Natural Radiative Forcing] – Bram Bregman
- 13:50 – 14:10 Uncertainty qualifiers in SPM statements based on Chapter 9 [Evaluation of Climate Models] – Leonard Smith
- 14:10 – 14:30 Uncertainty qualifiers in SPM statements based on Chapter 10 [Detection and Attribution of Climate Change: From Global to Regional] – David Stainforth
- 14:30 – 14:50 Uncertainty qualifiers in SPM statements based on Chapter 11 [Near-term Climate Change: Projections and Predictability] – Henk Dijkstra
- 14:50 – 15:10 -- Break --
- 15:10 – 15:30 Uncertainty qualifiers in SPM statements based on Chapter 12 [Long-term Climate Change: Projections, Commitments and Irreversibility] – Erica Thompson
- 15:30 – 15:50 Uncertainty qualifiers in SPM statements based on Chapter 13 [Sea Level Change] – Hans Visser
- 15:50 – 16:10 Uncertainty qualifiers in SPM statements based on Chapter 14 [Climate Phenomena and their Relevance for Future Regional Climate Change] – Jouni Räisänen
- 16:10 – 17:00 Wrap-up of first day. Follow-up towards Dutch Government's comments
Can we come up with some common themes, and prioritise the comments, also for the more general evaluation of tomorrow? On which issues would we advise the Dutch Government to take a strong position?
- 17:00 – 19:00 -- Break -- [international guests will be driven to Malie Hotel]
- 19:00 – 22:00 Dinner in Utrecht

Tuesday 18 June 2013 – General evaluation of uncertainty communication by IPCC AR5 WG I and options for improvement

- 9:00 – 9:15 Arrival & coffee
- 9:15 – 9:30 Summary of main comments from yesterday and aim for day two by Arthur Petersen
- 9:30 – 10:45 Deepened discussion on main comments on SPM, with a view to arrive at more general conclusions on uncertainty communication
- 10:45 – 11:05 -- Break --
- 11:05 – 12:20 Room for brief presentations by participants on uncertainty assessment and communication by IPCC WG I
- 12:20 – 13:30 -- Lunch --
- 13:30 – 15:00 General discussion on uncertainty communication and uncertainty guidelines
- 15:00 – 15:20 -- Break --
- 15:20 – 16:00 Wrap-up of whole meeting. Follow-up towards joint editorial

PARTICIPANTS

Panel members

1. Professor **Bram Bregman**, Royal Netherlands Meteorological Institute (KNMI), Faculty of Science, Radboud University Nijmegen [atmospheric chemistry; climate science & policy; Dutch focal point IPCC WG I]. *Suggested chapters: 6, **8***
2. Professor **Henk Dijkstra**, Institute for Marine and Atmospheric research Utrecht (IMAU), Utrecht University [dynamical systems; physical oceanography]. *Suggested chapters: 3, **11***
3. Professor **Han Dolman**, Department of Hydrology and Geo-environmental Sciences, VU University Amsterdam [ecohydrology; boundary-layer meteorology; biogeochemical cycles]. *Suggested chapters: 5, **6***
4. Professor **Wilco Hazeleger**, Royal Netherlands Meteorological Institute (KNMI) & Meteorology and Air Quality Group, Wageningen University [climate dynamics; climate modelling; physical oceanography]. *Suggested chapters: **3**, 12*
5. Professor **Bert Holtslag**, Meteorology and Air Quality Group, Wageningen University [boundary-layer meteorology]. *Suggested chapters: **7**, 8*
6. Professor **Peter Huybers**, Department of Earth and Planetary Sciences, Harvard University [climate dynamics, paleoclimate]. *Suggested chapters: 4, **5***
7. Dr **Erik Min**, Royal Netherlands Meteorological Institute (KNMI) [climate statistics]. *Suggested chapters: **4**, 13*
8. Professor **Arthur Petersen** (chair), PBL Netherlands Environmental Assessment Agency, Centre for the Analysis of Time Series, London School of Economics and Political Science (LSE) & Department of Environmental Policy Analysis, VU University Amsterdam [methodology; science & policy; philosophy of climate science]. *Suggested chapters: all*
9. Dr **Jouni Räisänen**, Department of Physical Sciences, University of Helsinki [climate modelling]. *Suggested chapters: 11, **14***
10. Professor **Leonard Smith**, Centre for the Analysis of Time Series, London School of Economics and Political Science (LSE) [dynamical systems; statistical analysis of large computer models]. *Suggested chapters: **9**, 10*
11. Dr **David Stainforth**, Centre for the Analysis of Time Series, London School of Economics and Political Science (LSE) [climate modelling]. *Suggested chapters: **10**, 14*
12. Dr **Erica Thompson**, Centre for the Analysis of Time Series, London School of Economics and Political Science (LSE) [climate modelling]. *Suggested chapters: 2, **12***
13. Dr **Geert Jan van Oldenborgh**, Royal Netherlands Meteorological Institute (KNMI) [climate dynamics; climate statistics; IPCC AR5 WG I: LA Ch. 11, Editor Annex I]. *Suggested chapters: **2**, 7*
14. Dr **Hans Visser**, PBL Netherlands Environmental Assessment Agency [statistics]. *Suggested chapters: 9, **13***

The numbers represented proposed chapter assignments (in bold: assigned primary reader).

Other participants

15. Mr **Ronald Flipphi**, MSc, Directorate for Climate, Air and Noise, Ministry of Infrastructure and the Environment [representative for Dutch focal point IPCC; Dutch focal point WG III]
16. Dr **Leo Meyer**, PBL Netherlands Environmental Assessment Agency [Head, Technical Support Unit IPCC AR5 Synthesis Report]
17. Ms **Ewelina Sienkiewicz**, MSc, Centre for the Analysis of Time Series, London School of Economics and Political Science (LSE) [climate modelling]

SPM Sections and chapters on which they are based (Draft October 2012)

1. Introduction
2. Observation of Changes in the Climate System (Ch. 2, 3, 4, 5, 6, 14)
 - a) Atmosphere Observations (Ch. 2)
 - b) Ocean Observations (Ch. 3)
 - c) Cryosphere Observations (Ch. 4)
 - d) Sea Level Observations (Ch. 3)
 - e) Observation of Carbon and Other Biogeochemical Quantities (Ch. 3, 6)
 - f) Long-Term Perspective from Paleoclimate Records (Ch. 3, 5, 13)
3. Drivers of Climate Change (Ch. 2, 5, 6, 8)
4. Understanding the Climate System and its Recent Changes (Ch. 3, 4, 6, 7, 8, 9, 10, 11, 12, 13)
 - a) Evaluation of Climate Models (Ch. 3, 4, 9, 10, 11, 12, 13)
 - b) Climate Processes and Feedbacks (Ch. 6, 7)
 - c) Detection and Attribution of Climate Change (Ch. 10)
 - d) Key Metrics Characterizing Anthropogenic Climate Change (Ch. 8, 12)
5. Projections of Global and Regional Climate Change (Ch. 6, 8, 9, 11, 12, 13, 14)
 - a) Near-Term Projections: Atmosphere (Ch. 11)
 - b) Near-Term Projections: Ocean (Ch. 11)
 - c) Near-Term Projections: Cryosphere (Ch. 11)
 - d) Long-Term Projections: Temperature (Ch. 8, 12)
 - e) Long-Term Projections: Atmospheric Circulation (Ch. 11, 12)
 - f) Long-Term Projections: Water Cycle (Ch. 12)
 - g) Long-Term Projections: Climate Phenomena (Ch. 9, 14)
 - h) Long-Term Projections: Ocean (Ch. 12, 13)
 - i) Long-Term Projections: Cryosphere (Ch. 12)
 - j) Long-Term Projections: Sea Level (Ch. 13)
 - k) Long-Term Projections: Carbon and Other Biogeochemical Cycles (Ch. 6)
 - l) Long-Term Projections: Climate Stabilization, Commitment and Irreversibility (Ch. 12, 13)

Chapters and Annexes

- Ch. 1: Introduction
[CLAs: *Ulrich Cubasch (Germany) & Donald Wuebbles (USA)*]
- Ch. 2: Observations: Atmosphere and Surface
[CLAs: *Dennis L. Hartmann (USA), Albert Klein Tank (Netherlands) & Matilde Rusticucci (Argentina)*]
- Ch. 3: Observations: Ocean
[CLAs: *Monika Rhein (Germany) & Stephen R. Rintoul (Australia)*]
- Ch. 4: Observations: Cryosphere
[CLAs: *Josefino C. Comiso (USA) & David G. Vaughan (UK)*]
- Ch. 5: Information from Paleoclimate Archives
[CLAs: *Valérie Masson-Delmotte (France) & Michael Schulz (Germany)*]
- Ch. 6: Carbon and Other Biogeochemical Cycles
[CLAs: *Philippe Ciais (France) & Christopher Sabine (USA)*]
- Ch. 7: Clouds and Aerosols
[CLAs: *Olivier Boucher (France) & David Randall (USA)*]
- Ch. 8: Anthropogenic and Natural Radiative Forcing
[CLAs: *Gunnar Myhre (Norway) & Drew Shindell (USA)*]
- Ch. 9: Evaluation of Climate Models
[CLAs: *Gregory Flato (Canada) & Jochem Marotzke (Germany)*]
- Ch. 10: Detection and Attribution of Climate Change: From Global to Regional
[CLAs: *Nathaniel Bindoff (Australia) & Peter Stott (UK)*]
- Ch. 11: Near-term Climate Change: Projections and Predictability
[CLAs: *Ben Kirtman (USA) & Scott Power (Australia)*]
- Ch. 12: Long-term Climate Change: Projections, Commitments and Irreversibility
[CLAs: *Matthew Collins (UK) & Reto Knutti (Switzerland)*]
- Ch. 13: Sea Level Change
[CLAs: *John A. Church (Australia) & Peter U. Clark (USA)*]
- Ch. 14: Climate Phenomena and their Relevance for Future Regional Climate Change
[CLAs: *Jens Hesselbjerg Christensen (Denmark) & Krishna Kumar Kanikicharla (India)*]
- Annex I: Atlas of Global and Regional Climate Projections
[Editorial Team: *Mat Collins (Chapter 12, Chair of Editorial Team), Julie Arblaster (Chapter 12), Jens Hesselbjerg Christensen (Chapter 14), Jochem Marotzke (Chapter 9), Geert Jan van Oldenborgh (Chapter 11), Scott Power (Chapter 11), Markku Rummukainen (Chapter 9) & Tianjun Zhou (Chapter 14)*]
- Annex II: Climate System Scenario Tables
[Editorial Team: *Michael Prather (Chapter 11, Chair of Editorial Team), Greg Flato (Chapter 9), Pierre Friedlingstein (Chapter 12), Chris Jones (Chapter 6), Jean-François Lamarque (Chapter 8), Hong Liao (Chapter 7) & Phil Rasch (Chapter 7)*]
- Annex III: Glossary
[Editor: *Serge Planton (France)*]