



**IPCC Working Group II Scoping Meeting:  
Possible Special Report on  
“Extreme Events and Disasters: Managing the Risks”  
Oslo, Norway • 23-26 March 2009**

**Monday, 23 March 2009**

08:00 **Registration**

09:00 **Welcoming Remarks**

- To be determined

09:30 **Background and Goals for the Meeting**

- **Vicente Barros**, IPCC Working Group II Co-Chair  
and Chair of Extremes Scoping Meeting Science Steering Group

09:45 **Framing the Science**

- *Disaster Risk Reduction Strategies: The United Nations Perspective*  
**Margareta Wahlström**, UN Assistant Secretary General for Disaster Risk Reduction
- *Trends in Climate Related Disasters*  
**Tom Karl**, NOAA / National Climatic Data Center

10:30 **Coffee Break**

11:00 **Framing the Science (continued)**

- *Social, Institutional, and Human Context*  
**Karen O'Brien**, University of Oslo,  
Global Environmental Change and Human Security Project
- *Panel Discussion*

11:45 **Session 1: Current Status of International Frameworks - Expectations for a Special Report**

- *UNFCCC Post-2012 Negotiations and the Nairobi Work Programme on Adaptation*  
**Roberto Acosta Moreno**, UNFCCC Secretariat,  
Adaptation, Technology, and Science Program
- *Lessons Learned on Risk Management and Data Availability*  
**Madeleen Helmer**, International Red Cross / Red Crescent Climate Centre
- *Discussion*

12:30 **Lunch**

**13:30 Session 2: Climate Change and Disaster Risk**

- *The Detection and Attribution of Extreme Events Changes*  
**Francis Zwiers**, Environment Canada
- *Trends in Extreme Events*  
**Neville Nicholls**, Monash University
- *Projection of Changes in Extremes by Very High Resolution Atmospheric Models*  
**Akio Kitoh**, Meteorological Research Institute
- *Discussion*

**14:45 Session 3: Impacts of Weather and Climate-Related Extremes**

- *Social and Economic Impacts*  
**Jose Marengo**, INPE / Centro de Ciencias do Sistema Terrestre
- *Impacts on Agriculture, Food Security, and Ecosystems*  
**Jose Moreno**, Universidad de Castilla – La Mancha
- *Impacts on Coastal Systems and Low-Lying Islands*  
**Roger McLean**, University of New South Wales
- *Discussion*

**16:00 Coffee Break****16:20 Session 4: Risk Management – Adaptation and Disaster Preparedness**

- *Strategies for Reducing Risks – Lessons Learned from Africa*  
**Coleen Vogel**, University of Witwatersrand
- *Insurance and Other Financing Responses*  
**Gordon McBean**, The University of Western Ontario,  
Institute for Catastrophic Loss Reduction
- *Disaster Management and Emergency Preparedness*  
**Franklin MacDonald**, University of the West Indies,  
Institute for Sustainable Development (tbc)
- *Adaptation and Poverty Reduction: Governance, Tools, and Practice*  
**Tom Mitchell**, University of Sussex,  
Institute of Development Studies
- *Discussion*

**18:00 General Discussion and Plan for the Rest of the Meeting**

- **Vicente Barros**, Chair of Extremes Scoping Meeting Science Steering Group

**18:15 Adjourn****18:30 Reception (tbc)**

**Tuesday, 24 March 2009****09:00 Introduction to Breakout Groups**

1. Climate-related extreme events and observed changes
2. Observed impacts of extreme events on the natural and human environment
3. Vulnerability to extreme events, drivers, trends, and distribution
4. Current practice in reducing vulnerability and disaster risk
5. Future projections of extreme events and disasters
6. Strategies for reducing the risks related to future extreme events
7. Towards a sustainable and resilient future

**09:30 Breakout Groups**

1. *Climate-Related Extreme Events and Observed Changes*
  - Definitional issues concerning extreme events, climate variability, and severity of events
  - Nature, frequency, intensity, and duration of present-day climate-related extreme events
  - Trends in extreme events including regional distribution and disaster hotspots
  - Attribution of the observed changes
2. *Observed Impacts of Extreme Events on the Natural and Human Environment*
  - Interpretation of the links between extreme events, relevant hazard phenomena and disasters, and their impacts on ecosystems and the built environment
  - Complex phenomena, non-linearity, and the role of spatial scale
  - Ecological, economic, and social impacts of climate-related disasters and wider implications for human security and assistance, development, and equity
  - Relevant climate-related events (e.g., heat waves, droughts, floods, and hurricanes)
3. *Vulnerability to Extreme Events, Drivers, Trends, and Distribution*
  - The nature of the disaster process—social and institutional factors, in particular vulnerability arising from poverty, unplanned settlements, environmental degradation, etc.
  - Vulnerability of ecosystems, natural resources, and human societies
  - Future vulnerability related to development pathways
  - Societal dimensions of risk, including spatial planning and land-use change
  - Processes and patterns of risk accumulation
  - Coping capacities, perception of risk, multiple stressors
  - Particular vulnerable groups, regions, sectors, and systems
4. *Current Practice in Reducing Vulnerability and Disaster Risk*
  - Policies, tools, and practices by governments and institutions (relevant sectors to include agriculture and food security, human health, water management, energy investments, settlements and infrastructure, coastal zones, urban areas)
  - Community-level risk reduction and adaptation by region, and experience with technologies and coping practices, local and traditional knowledge
  - Case studies from particularly vulnerable ecosystems, sectors, and communities by region
  - Assessment of adequacy of current practice
  - Assessment of costs of implementation of current practices

5. *Future Projections of Extreme Events and Disasters*
  - Future frequency and strength of extreme events, including new hazards, implications of climate variability, complex extremes, and regional differences
  - Possibilities for downscaling on local level and long-term forecast of extreme events
  - Projected trends in disaster occurrence and regional distribution
  - Projected trends in key vulnerabilities of human and biophysical systems
6. *Strategies for Reducing the Risks Related to Future Extreme Events*
  - Planning and development (increasing resilience and capacity to cope and adapt, mapping of risks, sectoral and cross-sectoral approaches)
  - Disaster management and emergency preparedness, monitoring and early warning, recovery and rehabilitation
  - Lessons learned from current risk management and adaptation practices
  - Integrating risk reduction and adaptation at institutional, national, regional, and local levels
  - Measures by institutions and humanitarian organizations
  - Costs, benefits, social and environmental consequences, global and aggregate impacts
  - Costs related to risk-reduction practices for adaptation
7. *Towards a Sustainable and Resilient Future*
  - Integration of disaster risk reduction and adaptation into planning and actions at national, regional, and local levels
  - Synergies between short-term coping and long-term planning
  - Integration of disaster risk, climate change mitigation, and development strategies
  - Impacts of future climate change and implications for regional, local, and sectoral development, access to resources, equity, and sustainable development
  - Implications of climate-related risks on achievement of Millennium Development Goals

10:30 **Coffee Break**

11:00 **Breakout Groups (cont.)**

12:30 **Lunch**

14:00 **Plenary**

15:00 **Coffee Break**

15:30 **Breakout Groups**

17:00 **Adjourn**

**Wednesday, 25 March 2009**

09:00 **Plenary: Challenges and Opportunities for a Special Report**

- Availability of relevant literature
- Survey of comparable or related efforts
- Key participants

10:30 **Coffee Break**

11:00 **Plenary: Structure and Outline for the Candidate Special Report**

12:30 **Lunch**

14:00 **New Breakout Groups to Address Structure and Outline**

16:00 **Coffee Break**

16:30 **Plenary: Reports from Breakout Groups**

[consider need for new or rearranged breakout groups]

17:30 **Adjourn**

**Thursday, 26 March 2009**

09:00 **Breakout Groups**

- White papers
- Early publications
- Potential Special Report outline
- Potential Special Report authors
- Potential Special Report timeline / planning

11:30 **Concluding Plenary**

13:00 **Adjourn**

14:00 **Meeting of Small Integration Team**

**Extremes SR Scoping Meeting Participant List  
12 February 2009**

Name	Institution	Country
<b>SPEAKERS</b>		
Helmer, Madeleen	International Red Cross / Red Crescent Climate Centre	The Netherlands
Karl, Thomas	NOAA/National Climatic Data Center	United States
Kitoh, Akio	Meteorological Research Institute, Japan Meteorological Agency	Japan
MacDonald, Franklin	University of the West Indies, Institute for Sustainable Development	Jamaica
Marengo, Jose	INPE / Centro de Ciencias do Sistema Terrestre	Brazil
McBean, Gordon	The University of Western Ontario, Institute for Catastrophic Loss Reduction	Canada
McLean, Roger	University of New South Wales	Australia
Mitchell, Thomas C.	University of Sussex, Institute of Development Studies	United Kingdom
Moreno, Jose	Universidad de Castilla – La Mancha	Spain
Moreno, Robert Acosta	UNFCCC Secretariat, Adaptation, Technology, and Science Program	Cuba
Nicholls, Neville	Monash University	Australia
O'Brien, Karen	University of Oslo, GECHS Project	Norway
Vogel, Coleen	University of Witwatersrand	South Africa
Wahlstrom, Margareta	UN Assistant Secretary General for Disaster Risk Reduction	Sweden
Zwiers, Francis	Environment Canada	Canada
<b>STEERING GROUP</b>		
Abdulla, Amjad	Ministry of Environment, Energy & Water	Maldives
Barros, Vicente	CIMA- FCEN Ciudad Universitaria	Argentina
Boncheva, Antonina Ivanova	Universidad Autonoma de B.C.S.	Mexico
Christophersen, Oyvind	Norwegian Pollution Control Authority	Norway
Jouzel, Jean	Université de Versailles Saint-Quentin	France
Mokssit, Abdalah	Direction de la Météorologie Nationale	Morocco
Raholijao, Nirivololona	Applied Research Service	Madagascar
Smith, Neville	Bureau of Meteorology	Australia
Zwiers, Francis	Environment Canada	Canada
<b>SCOPING MEETING INVITEES</b>		
Aggarwal, Pramod Kumar	Indian Agricultural Research Institute	India
Agyemang-Bonsu, William K.	Environmental Protection Agency	Ghana
Aldunce, Paulina	University of Chile	Chile
Alexander, David	University of Florence	Italy
Allen, Myles	Oxford University	United Kingdom
Angeles, Manuel	Universidad Autónoma de Baja California Sur	Mexico
Barret, Ko	NOAA	United States
Basher, Reid	UN International Strategy for Disaster Reduction	New Zealand
Bates, Bryson	CSIRO	Australia
Bayer, Joanne	International Institute for Applied Systems Analysis (IIASA)	Austria
Benson, Charlotte	Private consultant	United Kingdom
Birkmann, Joern	United Nations University, Institute for Environment and Human Security	Germany
Bojariu, Roxana	National Meteorological Administration	Romania
Burkett, Virginia	USGS	United States
Burton, Ian	Environment Canada	Canada
Calvo, Eduardo	IRENA, Comisión Nacional de Cambio Climático	Peru

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Camilloni, Ines	CIMA / University of Buenos Aires	Argentina
Cardona, Omar	Universidad Nacional de Colombia	Colombia
Carter, Tim	Finnish Environment Institute	Finland
Cheong, Tae Sung	National Emergency Management Agency	Korea
Collymore, Jeremy	Caribbean Disaster Emergency Response Agency	Barbados
Daschkeit, Achim	Federal Environment Agency, Climate Change Division	Germany
De Smedt, Sylvie	Ministry of sustainable development - General direction of disaster risk reduction - Natural and hydrologic risks Department	France
Dokken, David	University Corporation for Atmospheric Research	IPCC Working Group II
Downing, Thomas E.	SEI	United Kingdom
Dunpath, Balraj H.J.	Met Department	Mauritius
Ebi, Kris	Private consultant	United States
Elgizouli, Ismail Abdel Rahim	Higher Council for Environment & Natural Resources	Sudan
Ershova, Anastasia	State Hydrological Institute	Russia
Faust, Eberhard	Munich Reinsurance Company, Munich, Germany	Germany
Field, Chris	Carnegie Institution	IPCC Working Group II
Fordham, Maureen	Northumbria University	United Kingdom
Fujibe, Fumiaki	Meteorological Research Institute, Japan Meteorological Agency	Japan
Gao, Ge	National Climate Center, CMA	China
Goldammer, Johan	Max Planck Institute	Germany
Guha-Sapir, Debarati	Université catholique de Louvain	Belgium
Hallegatte, Stephane	CIREN and Météo-France	France
Hatfield, Jerry	National Soil Tilth Laboratory	United States
He, Lifu	National Meteorological Center, CMA	China
Hiraishi, Taka	NIES	Japan
Holloway, Ailsa	University of Cape Town	South Africa
Jansen, Eystein	Bjerknes Centre for Climate Research	Norway
Jones, Phil	University of East Anglia	United Kingdom
Jylhä, Kirsti	Finnish Meteorological Institute	Finland
Kanae, Shinjiro	Tokyo Institute of Technology / The University of Tokyo	Japan
Kanikicharla, Krishna Kumar	Indian Institute of Tropical Meteorology	India
Kawai, Hiroyasu	Port and Airport Research Institute	Japan
Kazama, So	Graduate School of Environmental Studies, Tohoku University	Japan
Klein, Albert	Royal Netherlands Meteorological Institute	Netherlands
Klein, Richard J.T.	Stockholm Environment Institute	Sweden
Kolmannskog, Vikram	Norwegian Refugee Council	Norway
Koppe-Schaller, Christina	Deutscher Wetterdienst (DWD)	Germany
Kovats, Sari	London School of Hygiene and Tropical Medicine	United Kingdom
Krug, Thelma	INPE	Brazil
Kuchment, Lev	Russian Academy of Sciences	Russia
Kull, Daniel	International Federation of Red Cross and Red Crescent Societies	Switzerland
Lin, Zhaohui	Institute of Atmospheric Physics, Chinese Academy of Sciences	China
Marigi, Samwel O.O.	Kenya Meteorological Department	Kenya
Maskrey, Andrew	ISDR	United Kingdom
Mearns, Linda	National Center for Atmospheric Research	United States

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12 February 2009**

Mechler, Reinhard	IIASA	Austria
Menéndez-Duarte, Rosana	Oviedo University	SPAIN
Merz, Bruno	Helmholtz Centre	Germany
Midgley, Pauline	University of Bern	IPCC Working Group I
Miyan, Alimullah	South Asian Disaster Management Center	Bangladesh
Mortsch, Linda D.	Environment Canada	Canada
Munthali, Gray K.	Meteorological Services	Malawi
Narayanan, Krishnan	Indian Institute of Technology Bombay	India
Ngari, Arona	President WMO Region V	Cook Islands
Oki, Taikan	Institute of Industrial Science, The University of Tokyo	Japan
Ouldabba, Abdelaziz	National Meteorological Service	Morocco
Pavan, Valentina	ARPA-SIMC	Italy
Pearce, Tony	Emergency Management Australia	Australia
Pelling, Mark	King's College London	United Kingdom
Perez, Rosa T.	Manila Observatory, Ateneo de Manila University Campus	Philippines
Peterson, Garry	Stockholm University	Sweden
Pettersen, Marit	Norwegian Pollution Control Authority	Norway
Pretel, Jan	Czech Hydrometeorological Institute	Czech Republic
Radunsky, Klaus	Umweltbundesamt	Austria
Rahimi, Mohammad	I.R. of Iran Meteorological Organization	Iran
Schipper, Lisa	SEI	Sweden
Seguin, Bernard	INRA	France
Semenov, Vladimir	Institute of Atmospheric Physics	Russia
Seneviratne, Sonia I.	ETH Zurich	Switzerland
Silva Dias, Maria Assuncao F.	CPTEC/INPE - Center for Weather Forecast and Climate Studies/ National Institute for Space Research	Brazil
Spiegel, Andreas	Swiss Reinsurance Company	Switzerland
Street, Roger B	Oxford University	United Kingdom
Suarez Rodriguez , Avelino G.	Institute of Ecology and Systematic, Cuban Environmental Agency	Cuba
Sygna, Linda	GECHS Project	Norway
Takahashi, Kiyoshi	National Institute for Environmental Studies	Japan
Teteya, Joël - Urbain	National Met. Service	Central African Republic
Tierney, Kathleen	University of Colorado	United States
Tignor, Melinda	University of Bern	IPCC Working Group I
Tokar, Sezin	USAID	United States
Unganai, Leonard	Environmental Management Agency	Zimbabwe
van Lanen, Henny A.J.	Centre for Water and Climate, Wageningen University	Netherlands
Wibig, Joanna	University of Lodz	Poland
Wittwer, Caroline	SCHAPI (National center for hydrometeorological and flood forecasting)	France
Wratt, David	NIWA	New Zealand
Zerefos, Christos	Academy of Athens	Greece





**IPCC Working Group II Scoping Meeting:  
Possible Special Report on  
“Extreme Events and Disasters: Managing the Risks”**  
Oslo, Norway • 23-26 March 2009

4 February 2009  
2 PAGES

Johan Goldammer  
Max Planck Institute for Chemistry  
Georges-Köhler-Allee 75  
Freiburg 79110  
GERMANY

Dear Dr. Goldammer –

We have the honor of inviting you to a scoping meeting for a possible IPCC Special Report on “Extreme Events and Disasters: Managing the Risks,” to be held from Monday 23<sup>rd</sup> to Thursday 26<sup>th</sup> March 2009, at the Norwegian Pollution Control Authority (SFT) Conference Centre located at Strømsveien 96, Høfden, Oslo, Norway.

At the 38<sup>th</sup> session of the IPCC Bureau (24-25 November 2008 • Geneva, Switzerland), a Norwegian proposal to undertake a special report on Extreme Events – stressing risk assessment and management – was presented. After deliberation, the Bureau decided to conduct this scoping meeting, to provide support for a future decision on whether to endorse the Special Report. The Bureau requested that the meeting produce a white paper describing process, objectives, and an annotated outline. The outcome of the meeting will provide guidance to the 39<sup>th</sup> session of the Bureau and the 30<sup>th</sup> session of the IPCC (20-23 April 2009 • Antalya, Turkey). A formal decision on undertaking the proposed Special Report will be rendered at the 30<sup>th</sup> session of the IPCC.

The principal objective of the scoping meeting is to explore the feasibility and likely impact of a special report. Registration will start at 8:00 on Monday 23<sup>rd</sup> March, and the meeting will end at 13:00 on Thursday 26<sup>th</sup>. After securing needed context on the first day, subsequent days will be devoted to plenary and breakout groups to develop a picture of the proposed audience, a structure for the proposed Special Report, and an annotated outline. A small group will convene on the afternoon of the last day to consolidate inputs into the aforementioned white paper. The provisional agenda is appended, and additional information can be obtained by visiting the following closed web site:

<http://www.ipcc-wg2.gov/extremes-sr/>  
username = extremes-sr  
password = ipcc\_xtrm

This web site will be populated with the following information, and will be updated on a regular basis as materials become available:

- Pre-registration form

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- Provisional agenda
  - Invitation list
  - Norwegian pre-proposal
  - Speaker abstracts
  - Logistics package.

The closed web site provides a link that will help you determine if a visa is required. The local host will provide a logistics package containing accommodation and transportation details, cost, and other conference details. A broadcast will be sent to all Invited Participants alerting them when this package is posted. Note that you will be responsible for making your own hotel reservation. Be sure to mention "IPCC" and "SFT" when booking a room to secure the negotiated rate. You are encouraged to make your reservations as soon as possible after receiving the logistics announcement broadcast to guarantee the discounted rate.

You are also encouraged to complete the Pre-Registration Form, as only 1 hour is devoted to registration on the morning of the first day. This can be done either on-line via the closed web site or by downloading and completing the posted PDF (sending via fax or return e-mail, as indicated on the hardcopy form). Completing this form in advance will help meeting organizers plan allocation of breakout space.

For nationals of developed countries and/or individuals representing international organizations, their governments are expected to cover all the costs of scoping meeting participation. For nationals of developing countries, and countries with economies in transition, application must be made to the IPCC Trust Fund, administered by the IPCC Secretariat. The IPCC Working Group II Technical Support Unit (TSU) has sent a list of all Trust Fund-eligible invitees to the IPCC Secretariat. Contact information for the Secretariat has been provided within the e-mail serving as cover to this attached invitation, for those invitees eligible for Trust Fund support.

Finally, please confirm your participation in this scoping meeting by sending a reply to the IPCC Working Group II TSU at <ipcc-extremes-RSVP@usgcrp.gov> by **25 February 2009**. Of course, if you have any questions or need further information, please do not hesitate to contact the TSU.

Yours sincerely,



Vicente Barros (Argentina)  
IPCC Working Group II Co-Chair  
Extremes Scoping Meeting Steering Group Chair



Christopher Field (United States of America)  
IPCC Working Group II Co-Chair

Attached:

<ExtremesSR\_Agenda.pdf>