IUGG Commission for Climatic and Environmental Change

Dr Tom Beer

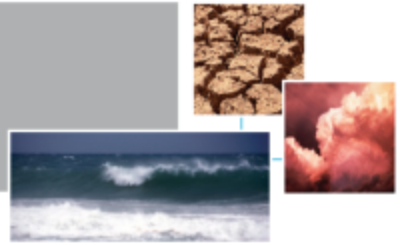
IUGG

activities relevant to

WCRP

6 April 2017

Contents



- IUGG

- Scientific Assemblies
  - IACS – Wellington, NZ 12-14 February 2017
  - IAMAS/IAPSO/IAGA – Capetown, SA 27 August-1 September
  - IAHS – Port Elizabeth, SA 10-14 July 2017

- Major Activities
  - IAHS – Panta Rhei
  - CCEC – Global Change and Future Earth: The GeoScience Perspective

IUGG Eight Constituent Associations

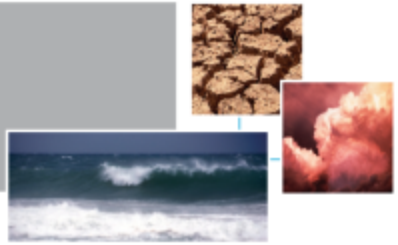
IASPEI

IAVCEI

IAGA

IAG

IUGG Eight Constituent Associations



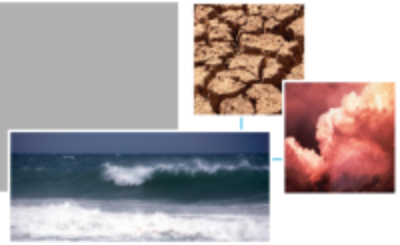
IAPSO

IACS

IAHS AISH

IAMAS

Conferences



Conference Sponsors

IGS

IACS

CliC

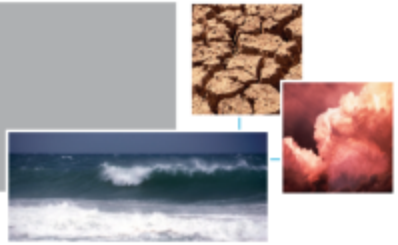
WCRP
World Climate Research Programme

SIRG – Snow and Ice Research Group New Zealand
CONNECTING NEW ZEALAND'S SNOW AND ICE RESEARCH COMMUNITY

250 delegates

25 countries

Conferences



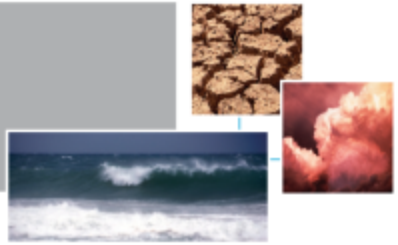
http://www.iapso-iamas-iaga2017.com/

Session M17 on “High Impact Weather and Climate Extremes

Designed to solicit input from WCRP Grand Challenges and WWRP HiWeather

Convenors: Richard Grotjahn, Julia Keller
Co-conveners: Lisa Alexander, Brian Golding, Neil Holbrook,
Richard Swinbank, Xuebin Zhang

Conferences



http://iahs.info/IAHS-2017.do

IAHS « IAHS 2017

IAHS 2017

IAHS 2017 SCIENTIFIC ASSEMBLY

10 – 14 JULY 2017

PORT ELIZABETH, SOUTH AFRICA

"WATER AND DEVELOPMENT: SCIENTIFIC CHALLENGES IN ADDRESSING SOCIETAL ISSUES"

The South African National Committee of the International Association of Hydrological Scientists (SANCIAHS) invites you to participate in the 2017 IAHS Scientific Assembly to be held from July 10-14 in Port Elizabeth, South Africa.
The theme of the meeting is "Water and Development: scientific challenges in addressing societal issues" which is particularly appropriate in the context of an IAHS Scientific Assembly meeting being held for the first time in sub-Saharan Africa and is well aligned with the IAHS Panta Rhei.

Panta Rhei Working Groups links to IAHS Commissions

1. Hydro-meteorological extremes: Decision making in an uncertain environment - Chair: Adrián Pedrozo-Acuña
2. Large dams, society, and environment - Chair: Bellie Sivakumar
3. Thirsty future: energy and food impacts on water - Chair: Ana Mijic
4. Changing biogeochemistry of aquatic systems in the Anthropocene - Chair: Hong-Yi Li
5. Transdisciplinarity - Chair: Tobias Krueger
6. Natural and man-made control systems in water resources - Chair: Ronald van Nooijen
7. Water and energy fluxes in a changing environment - Chair: Maria J. Polo
8. Epistemic uncertainties - Chair: Paul Smith
9. Comparative water footprint studies - Chair: Arjen Y. Hoekstra
10. Hydrologic services and hazards in multiple ungauged basins - Chair: Hilary McMillan
11. Understanding flood changes - Chair: Alberto Viglione
12. Physics of hydrological predictability - Chair: Alexander Gelfan
13. Mountain hydrology - Chair: Shreedhar Maskey
14. Large sample hydrology - Chair: Vazkén Andreassian
15. Socio-hydrologic modeling and synthesis - Chair: Veena Srinivasan
16. Sustainable water supply in a urban change - Chair: Tatiana Bibikova
17. Water footprint of cities - Chair: Alfonso Mejia
18. Evolving urban water systems - Chair: Alfonso Mejia
19. Changes in flood risk - Chair: Heidi Kreibich
20. Anthropogenic and climatic controls on water availability (ACCuRAcy) - Chair: Attilio Castellarin
21. Floods in historical cities - Chair: Alberto Montanari
22. Prediction under Change (PUC) - Chair: Hafzullah Aksoy
23. Data-driven Hydrology - Chair: Elena Toth
24. Modeling Hydrological Processes and Changes - Chair: Yangbo Chen
25. Resilience-based management of natural resources: the fundamental role of water and soil in functional ecosystems - Chair: David Finger
26. Integrating history, social conflicts and hydrology: From semi pristine to highly modified hydrological systems - Chair: Victor Rosales Sierra
27. Drought in the Anthropocene - Chair: Anne Van Loon
28. Water scarcity assessment: methodology and application - Chair: Junguo Liu
29. Improving Hydrological Systems Knowledge - Chair: Jun Xia
30. Process-based hydrologic modeling for decision making - Chair: Chaopeng Shen

ICCE, Continental Erosion

ICCLAS, Coupled Land-Atmosphere System

ICGW, Groundwater

ICRS, Remote Sensing

ICSH, Statistical Hydrology

ICSIH, Snow and Ice Hydrology

ICSW, Surface Water

ICT, Tracers

ICWQ, Water Quality

ICWRS, Water Resources Systems

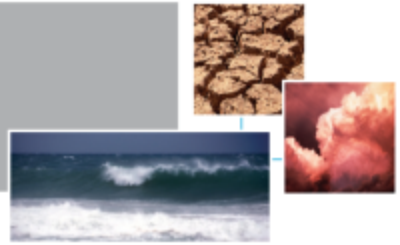
Panta Rhei
Everything Flows
IAHS
AISH

IUGG Commission on Climate and Environmental Change

Second Announcement
http://www.ccec-iugg.org/

2016 | October 24-25 | CCEC, IAG, IUGG | Luxembourg, Luxembourg |
2nd Workshop of the IUGG Union Commission on Climatic and Environmental Change |
Website: (http://www.ccec-iugg.org/content/2nd-ccec-workshop-21102016-22102016-minutes-and-presentations)

Editors – Global Change and Future Earth

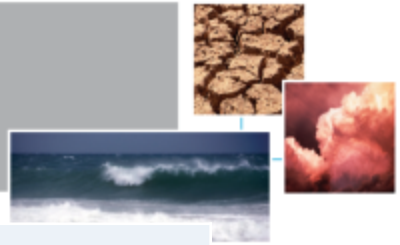


- Tom Beer, Chair CCEC; Director of Safe System Solutions
- Jianping Li, Dean of the College of Global Change and Earth System Science (GCESS), Beijing Normal University China;
- Keith Alverson, Director, UNEP International Environmental Technology Centre, Osaka, Japan.

Jianping Li, Guoxiong Wu, Keith Alverson, Tom Beer

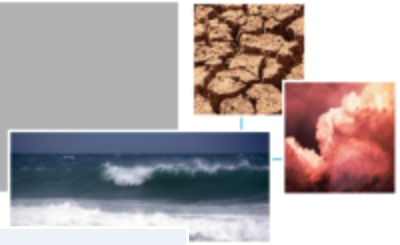
Authors Meeting

Global Change and Future Earth



	1	Future Earth and Planetary Issues			
1	1.1	Climatic and Environmental Change	Dr.	Tom	Beer
2	1.2	Future Earth and Expected Mega-Changes	Engineer	Serhat	Sensoy
3	1.3	Global change and space weather	Dr.	Eigil	Friis-Christensen
4	1.4	Climate issues from the planetary perspective and insights for the Earth	Dr	Athena	Coustenis
	2	Future Earth and Geodetic Issues			
5	2.1	Satellite Hydrology and Future Earth	Prof.	Michael	Sideris
6	2.2	Geodesy in a Warmer World	Dr	Tonie	van Dam
7	2.3	Future Earth and the Cryosphere	Dr	Ian	Allison
8	2.5	Geographical Research and Future Earth	Prof.	Mike	Meadows
	4	Future Earth and the Earth's Fluid Environment			
9	4.1	Water Security: Integrating Lessons Learned for Water Quality, Quantity and Sustainability.	Dr	Elaine	Faustman
10	4.2	A coupled decadal-scale air-sea interaction theory: the NAO-AMO-AMOC coupled mode and its impacts	Prof.	Jianping	Li
11	4.3	Observed sea level rise and Future Earth	Dr	Anny	Cazenave
12	4.4	Ocean circulation - knowns and unknowns	Prof	Harry	Bryden

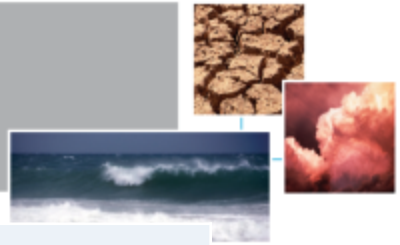
Global Change and Future Earth



	5	Future Earth and Regions			
13	5.1	Asian Hydrological Perspective for Global Change and Future Earth	Prof.	Makoto	Taniguchi
14	5.3	Africa's broken Food Systems : unravelling the hidden fortune under climate change	Dr	Richard	Munang
	6	Future Earth and Urban Environments			
15	6.1	Nutrition, Urban Environments and Future Earth.	Dr	Godwin	Ndossi
16	6.2	Nutrition Science and Future Earth?	Prof.	Mark	Wahlqvist
18	6.4	Integrating DRR and Mega cities	Prof.	R.B.	Singh
	7	Future Earth and Food Security			
19	7.1	Agriculture, food security and Future Earth.	Dr	Bruce	Campbell
20	7.2	The contribution of Food Engineering to achieve Global Food Security	Emer. Prof. Dr.	Walter	Spiess
21	7.3	Supply chains and Future Earth	Dr	Albert	McGill
22	7.4	Impact of Global Climate Change on Nutrition Security – A Multidimensional Challenge	Emer. Prof. Dr.	Ibrahim	Elmadfa
23	7.5	Marine systems, food security and Future Earth	Dr	Beth	Fulton

CAMBRIDGE
UNIVERSITY PRESS

Global Change and Future Earth



	8	Future Earth, Risk, Safety and Security			
24	8.1	Integrated Disaster Risk and Future Earth	Dr.	Jane	Rovins
25	8.2	Geophysical Tools, Challenges and Perspectives Related to Natural Hazards, Climate Change and Food Security:	Prof.	Jaime	Fucugauchi
26	8.3	Climatic consequences and agricultural impacts of nuclear conflicts	Dr.	Brian	Toon
27	8.4	Reducing Spring Flood Risk in Rural Northern Communities through Advances in Ice Jam and Flood Mitigation, Disaster Preparedness, Response, and Recovery	Ms.	Katya	Kontar
28	8.5	Linking seismic and volcanic risk analysis to sustainable development	Dr	Alik	Ismail-Zadeh
	9	Future Earth, Climate Change and Global Change			
29	9.1	Future Earth's Ocean	Prof. Dr.	Martin	Visbeck
30	9.2	Future Earth: its implication and importance for Asia	Prof.	Tetsuzo	Yasunari
31	9.3	Geothermal Energy and Future Earth	Prof.	Ladislaus	Rybach