

RESEARCH CONFERENCES

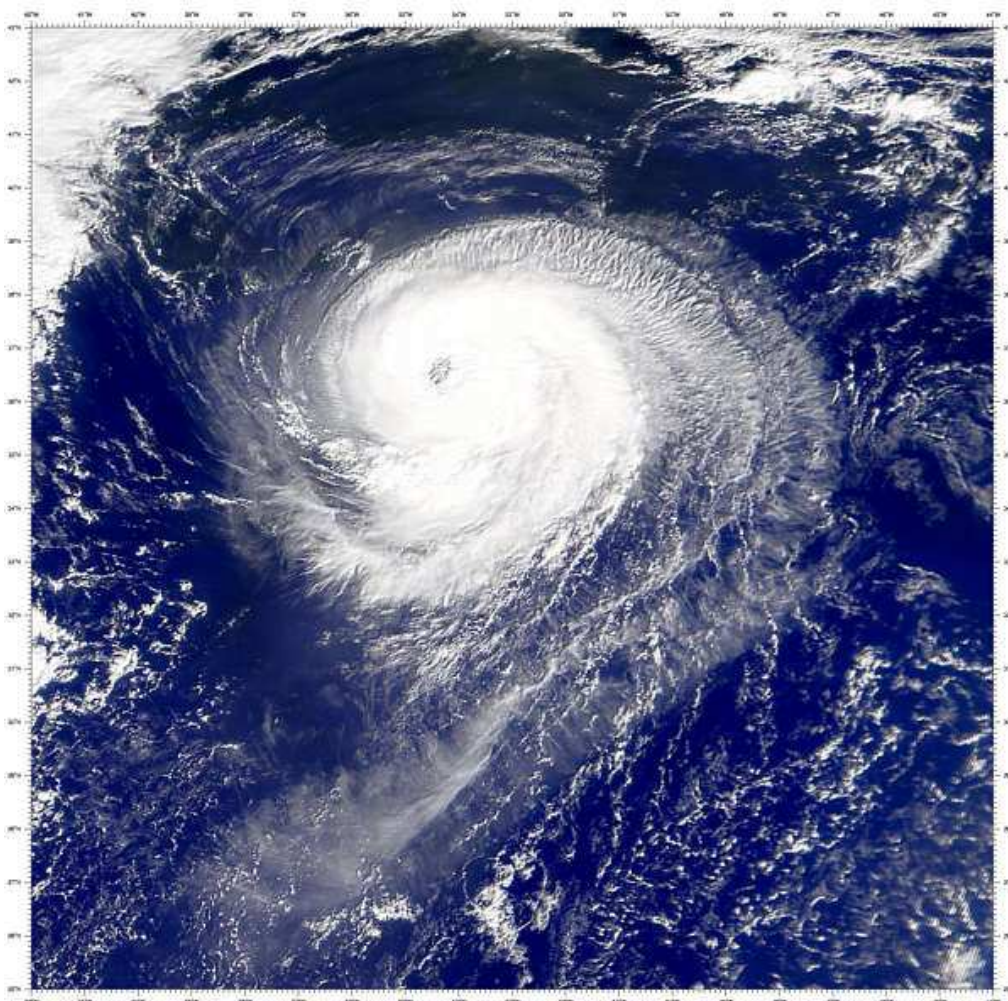
ESF-COST High-Level Research Conference

Extreme Environmental Events

Selwyn College • Cambridge • United Kingdom
13 - 17 December 2010

Chair: **Dr. Andrew Parnell**, School of Mathematical Sciences,
University College Dublin, IE

www.esf.org/conferences/10345



Final Programme

Monday 13 December

Noon/Early afternoon	Check-in Registration at the ESF desk
15:30-16:00	Coffee break
16:00-16:15	<i>Words of Welcome</i>
16:15-16:30	<i>Presentation of ESF and COST</i>

Session 1

16:30-17:15	Renato Vitolo University of Exeter, UK <i>Hydrometeorological extremes: Clustering, robustness and predictability</i>
17:15-18:00	Philippe Naveau IPSL-CNRS, FR <i>Applying Multivariate Extreme Value Theory to Environmental Data</i>
18:00-19:00	Dinner

Short Talks

Chaired by: Petra Friederichs, University of Bonn, DE

19:00-19:15	Sophie Fukutome Federal Office of Meteorology and Climatology, MeteoSwiss, CH <i>Automating Peak-over-Threshold with the Information Matrix test</i>
19:15-19:30	Didier Dacunha-Castelle Université Paris Sud (Orsay), FR <i>Models of non linear time series whose extremes values are bounded. Application to temperatures</i>
19:30-19:45	Lasse Juhani Makkonen Technical Research Centre of Finland, FI <i>Have we underestimated climate extremes?</i>
19:45-20:15	Discussion
20:15-21:30	Welcome Drinks

Tuesday 14 December

Session 2

08:30-9:15	Martin Beniston University of Geneva, CH <i>Current and future extreme climate events in the Alps</i>
09:15-10:00	Hans De Boeck University of Antwerp, BE <i>An experimental study on the interactive effects of heat waves and droughts</i>
10:00-10:30	Coffee break

Short Talks

Chaired by: Hans De Boeck, University of Antwerp, BE

- 10:30-10:45 **Deniz Bozkurt**
Istanbul Technical University, TR
Modeling an extreme precipitation event over the southwest coast of Black Sea : impact of SSTs and cumulus parameterization schemes
- 10:45-11:00 **Frank Kwasniok**
University of Exeter, UK
Predicting extremes in the midlatitudinal atmospheric circulation using regime-dependent statistical modelling
- 11:00-11:15 **Olivia Martius**
University of Bern, CH
On the dynamics of the Russian heat wave and floods in Pakistan in Summer 2010
- 10:15-11:30 **Franziska Strauss**
University of Natural Resources and Life Sciences Vienna, AT
Statistical climate modelling of droughts for Austria and the period 2008-2040
- 11:30-12:00 *Discussion*
- 12: 00-13:45 Lunch

Session 3

- 14:00-14:45 **Anke Jentsch**
Helmholtz Centre for Environmental Research, DE
Climate extremes initiates plant regulating functions while maintaining productivity

Short Talks

Chaired by: Philippe Naveau, IPSL-CNRS, FR

- 14:45-15:00 **Chunsheng Ma**
Wichita State University, US
Extreme value analysis of Kansas temperature data
- 15:00-15:15 **Ewa Bogdanowicz**
Polish Academy of Sciences, PL
The estimation of annual peak flows
- 15:15-15:30 *Discussion*
- 15:30-16:00 Coffee break

Short Talks

Chaired by: Peter Challenor, National Oceanography Centre, UK

- 16:00-16:15 **Ida Bülow Gregersen**
Technical University of Denmark, DK
Identification and modeling of non-stationary tendencies in extreme rainfall
- 16:15-16:30 **Witold Gustaw Strupczewski**
Polish Academy of Sciences, PL
Non-stationary approach to Flood Frequency Modelling and Hydrological Design

- 16:30-16:45 **Christoph Zingerle**
Central Institute of Meteorology and Geodynamics, AT
Regionalization of future extreme hydro-meteorological events in Austria
- 16:45-17:00 **Tieh-Yong Koh**
Nanyang Technological University, SG
Statistical distribution of tropical radiosonde wind data in relation to equatorial wave dynamics
- 17:00-17:15 **Robert Toderascu**
University of Dunarea de Jos, RO
Implementation of a joint modeling system to provide support in the prediction of the extreme environmental events in the Black Sea
- 17:15-17:30 *Discussion*
- 18:00-19:00 *Dinner*

Session 4

- 19:00-19:45 **Gabi Hegerl**
University of Edinburgh, UK
Towards understanding and attributing the causes for changing probability of climate extremes
- 19:45-20:15 *Discussion*

Wednesday 15 December

Session 5

- 08:30-9:15 **Francis Zwiers**
Pacific Climate Impacts Consortium, CA
Detection and Attribution of human influence on temperature and precipitation extremes
- 09:15-10:00 **Janneke Ettema**
University of Twente, NL
Risk Assessment of Hydro-Meteorological hazards in a changing climate (CHANGES-project)
- 10:00-10:30 *Coffee break*

Short Talks

Chaired by: Janneke Ettema, University of Twente, NL

- 10:30-10:45 **Ivan Nijs**
University of Antwerp, BE
Simulating the impact of extreme events on ecosystems with infrared irradiation in the field
- 10:45-11:00 **Christoph Schleip**
Technische Universität München, DE
Extreme event ecology (E3): Long-term changes in phenological extremes over six decades in Germany
- 11:00-11:15 **Beyza Ustaođlu**
Sakarya University, TR
The Possible Effects of Climate Change on Hazelnut Farming in Turkey
- 11:15-11:30 **Vivek Walia**

National Center For Research on Earthquake Engineering
Earthquake surveillance in Taiwan using continuous soil monitoring: A case study

11:30-11:45

Elena Novenko

Russian Academy of Science, RU

Paleoenvironment reconstructions for the south of Valdai Hills (European Russia) as paleo-analogues of possible regional vegetation changes under short-term climatic changes

11:45-12:00

Discussion

12:00-13:45

Lunch

Poster Session

14:00-15:30

Poster Presentations

15:30-16:00

Coffee break

Short Talks

Chaired by: Francis Zwiers, Pacific Climate Impacts Consortium, CA

16:00-16:15

Nicole Estrella

Technische Universität München, DE

Recent and future climate extremes - bivariate changes in temperature and precipitation in Bavaria

16:15-16:30

Erich Fischer

ETH Zurich, CH

Consistent geographical patterns of changes in high-impact European heat waves

16:30-16:45

Sylvie Parey

EDF/R&D, FR

High temperature extreme values in the climate change context : EDF experience

16:45-17:15

Discussion

18:00-19:00

Dinner

Session 6

19:00-19:45

Farrokh Nadim

International Centre for Geohazards, NO

Practical challenges in using statistical methods for predicting extreme events

19: 45-20:15

Discussion

Thursday 16 December

Session 7

08:30-9:15

Petra Friederichs

University of Bonn, DE

Extreme weather and probabilistic forecast approaches

09:15-10:00

Lynn Rothschild

NASA, US

Life in Extreme Environments

10:00-10:30 Coffee break

Short Talks

Chaired by: Gabi Hegerl, University of Edinburgh, UK

10:30-10:45 **Lidia Gaslikova**
GKSS Research Center, DE
Storm surge extremes for present and future and their impact on the insurance losses for the North Sea coastal areas

10:45-11:00 **Johannes Rempfer**
University of Bern, CH
The effect of the exceptionally mild European winter of 2006-2007 on temperature and oxygen profiles in lakes in Switzerland: A foretaste of the future?

11:00-11:15 **Helmi Saidi**
National Council of Research – Institute of Ecosystem Study, IT
The climatic characteristic of extreme precipitations for short-term intervals in the watershed of Lake Maggiore

11:15-11:30 **Wyss Yim**
City University of Hong Kong, HK
Extreme regional precipitation events related to volcanic eruptions

11:30-11:45 **Miguel Mahecha**
Max Planck Institute for Biogeochemistry, DE
Assessing the impact of meteorological extremes on the terrestrial carbon cycle over Europe

11:45-12:00 *Discussion*

12:00-13:45 Lunch

Session 8

14:00-14:45 **Carl Beierkühnlein**
University of Bayreuth, DE
Variability of response to climatic extremes within key species of central European ecosystems

Short Talks

Chaired by: Renato Vitolo University of Exeter, UK

14:45-15:00 **Anastassia Baxevani**
University of Gothenburg, SE
Prediction of Catastrophes in Space and Time

15:00-15:15 **Nicolas Raillard**
Université de Rennes 1, FR
Modelling extreme values of processes observed at irregular time step

15:15-15:30 **Geraldine Wong**
University of Oslo, NO
Methodologies for the spatial and temporal analysis of European droughts

15:30-16:00 Coffee break

Short Talks

Chaired by: Carl Beierkühnlein, University of Bayreuth, DE

16:00-16:15	Juan Gonzalez Consejo Superior de Investigaciones Cientificas (CSIC), ES <i>Role and potential impact of thermophilic microorganisms in temperate terrestrial environments during extreme conditions</i>
16:15-16:30	Staytcho Kolev Bulgarian Academy of Sciences, BG <i>The contribution of the COST-ESSEM activities to the topic of Extreme Environmental Events</i>
16:30-16:45	Juergen Kreyling University of Bayreuth, DE <i>Trajectories of succession impaired by extreme climatic events</i>
16:45-17:00	<i>Discussion</i>
17:00-19:00	Free time
19:00	Get-together & Conference Dinner

Friday 17 December

Session 9

08:30-9:15	Peter Challenor National Oceanography Centre, UK <i>Obtaining extremes from models of future climate</i>
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Short Talks

Chaired by: Lynn Rothschild, NASA, US

09:15-09:30	Nicolas R. Dalezios University of Thessaly, GR <i>Potential Impact of Regional Drought on Vulnerable Agriculture in Greece</i>
09:30-09:45	Piero Lionello University of Salento, IT <i>Extreme in the Mediterranean region (an analysis based on the results of the CIRCE project)</i>
09:45-10:00	Jadranka Sepic Institute of Oceanography and Fisheries, HR <i>Extreme meteorological tsunamis and their environmental impact</i>
10:00-10:30	Coffee break

Session 10

10:30-11:15	Brian Huntley University of Durham, UK <i>Impacts of extreme climatic events upon species and ecosystems</i>
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Forward Look Plenary Discussion

11:15-12:00	<i>Discussion</i>
12:00-13:45	Lunch
From 13:45	Departure