



Photo: Marcos Escalier | flickr

### Welcome to the CSP newsletter summer 2017 edition!

As always, you will find news on activities, publications, and events collected from the climate services community.

Spring's edition featured much about the ICCS5, the Fifth International Conference on Climate Services in Cape Town earlier this year. The CSP secretariat is glad to announce that the comprehensive conference report was just printed, and is waiting for you to download it at the CSP webpage:

http://www.climate-services.org/iccs/iccs5/

Enjoy reading!

2

# letter from the CSP secretariat climate extremes

Recently, extreme weather conditions are again in the news around the world. Examples are heat waves and droughts in combination with wildfires, the widespread occurrence of heavy precipitation, thunderstorms and flooding, and exceptionally severe monsun rainfall and hurricanes. Many of these events are connected with the losses of lives, and all caused large damages.

The public perceives extreme events as parts of the climate system that have a direct, potentially strong negative impact on their lives, also in wealthy regions with predominantly moderate climate and weather patterns.

A recent study<sup>1</sup> showed that key drivers of fire in Southern Europe are summer droughts, while antecedent climate conditions play a relatively minor role.

Furthermore, a study<sup>2</sup> on weather extremes and climate change by the World Weather Attribution (WWA)<sup>3</sup> group found that heat wave frequency has already significantly increased over southern Europe.

Moreover, the WWA researchers could show that the changes are linked to human influence on climate – addressing the question of attributability of climatic events to anthropogenic climate change, as opposed to natural variability.

Also other extremes such as cold spells, snow events, thunderstorms, tornados, and precipitation events have the potential to negatively affect the environment and human livelihood and economy, as they impact the security of energy, water, agriculture, and thus food, human health and lives, and the transport, tourism, and forestry sectors. A sound understanding of extremes and their impacts in the current climate, as well as the best possible projection of future development under a warming climate, is a clear need to enable societies to manage hazards and to adapt to increasing risks.

Collecting, producing and extracting the relevant data for those who are potentially affected by climate extremes, analyzing and interpreting them thoroughly, and visualizing and communicating the results of the analysis appropriately, are pieces of the puzzle that helps supporting society with information on climate and weather extremes.

This is one key task of climate services and could be a major theme for the CSP for the next years. Already today, within the CSP information around climate extremes and best practices to minimize associated risks are shared. During the next years, CSP could take the initiative together with WCRP's regional activities and Future Earth's Knowledge Action Networks to enhance our understanding about extreme weather in a changing climate and to support the society to cope with them.

# Daníela Jacob

Director of Climate Service Center Germany (GERICS)

<sup>1</sup> https://www.nature.com/articles/s41598-017-00116-9

<sup>2</sup> https://wwa.climatecentral.org/

<sup>3</sup> An international partnership between Climate Central, the University of Oxford Environmental Change Institute, the Royal Netherlands Meteorological Institute, the University of Melbourne and the Red Cross Red Crescent Climate Centre

# note from the CSP secretariat ICCS5 update

### ICCS5 report

The CSP secretariat is glad to announce that the report on the Fifth International Conference on Climate Services (ICCS5) in Cape Town earlier this year is finalised, and can be downloaded at This is more than double of the annual per capita emissions of Africa (1.1 tonnes in 2015; source: Global Carbon Atlas) and more than half of the global mean annual per capita emissions (4.9 tonnes in 2015; source: Global Carbon Atlas).

<image><image><section-header><section-header><section-header><section-header><section-header><text><text><text><text><text><text>

http://www.climate-services.org/iccs/iccs5/



It features reports from the scientific sessions and gives information on the programme of the event, participants, market place contributions and side events, along with summaries of the outcomes of the conference and results from the online evaluation which was conducted after the meeting. We hope you enjoy reading.

## CO<sub>2</sub> offsetting

Moreover, the  $CO_2$  emissions related to the flights to the conference were offset by GERICS. The balancing is achieved by a reforestation project in San Juan de Limay in Nicaragua. The project is certificated by Plan Vivo certificates.

Although we  $CO_2$ -balanced the conference we would like to raise a critical voice here. The conference caused additional  $CO_2$ -emissions of almost 540 tonnes, which is about 2.5 tonnes of  $CO_2$  for each participant.

Having this in mind, we – as organisers of the ICCS5, but also we as part of the global climate service community – have to ask ourselves if the format of an annual or bi-annual face-to-face meeting is still the right way to proceed in the future or if we should aim for less frequent face-to-face meetings and instead use innovative, web-based concepts to meanwhile facilitate the experience and knowledge exchange. In view of the pace of climate change, and the urgency with which we need to reduce carbon emissions, this is definitely an issue which the CSP secretariat should consider with respect to the staging of future conferences. We would therefore be very interested in hearing your views on this issue.

# **Global Framework for Climate Services**

# Workshop in Offenbach, Germany, June 2017

The Scoping Workshop for the design and development of a Help Desk for the Global Framework for Climate Services (GFCS) was held in Offenbach, Germany, on 19 to 20 June 2017. The workshop was jointly organized by the GFCS Office and the Deutsche Wetterdienst (DWD) with support from the GFCS HelpDesk Steering Committee, which includes GFCS Office, DWD, the World Bank, the National Oceanic and Atmospheric Administration, United Stated Agency for International Development, the United Kingdom's Met Office, World Health Organization, Meteo Swiss, the World Meteorological Organization, and the Tanzania Meteorological Agency. The workshop brought together a group of experts to identify gaps and barriers to understanding climate services and national level implementation, as well as to share lessons learned from existing platforms. The workshop helped outline the content and format for the design of the Help Desk for the GFCS. A task team was formed to support the GFCS on the development of a HelpDesk demo that will be available by the end of the year.

For more information:

http://www.gfcs-climate.org/node/1045

For more GFCS updates please visit: http://www.gfcs-climate.org/



Photo: GFCS

# WMO Workshop on Global Review of Regional Climate Outlook Forums

# Workshop in Guayaquil, Ecuador, June 2017

On the occasion of the Regional Climate Outlook Forum (RCOF) concept completing two decades of successful implementation, WMO is organizing an International Workshop on Global Review of RCOFs, to undertake a comprehensive review of the RCOF process, examining all aspects of the interpretation, creation and dissemination of regional climate outlooks as handled through the RCOFs, particularly in the light of the recent achievements and given the higher expectations and requirements of stakeholders in more actionable climate information tailored to their needs. The Global RCOF Review 2017 is built upon two similar reviews that were conducted in 2000 in Pretoria (South Africa), and in 2008 in Arusha (Tanzania), and will provide an opportunity to evaluate the development of RCOF concept since the last review.

For more information and regular updates, please visit

http://www.wmo.int/pages/prog/wcp/wcasp/meetings/workshop\_rcofs.php.

# Red Cross Red Crescent Climate Centre

# Training events, flood prevention, and an award

The Red Cross Red Crescent (RCRC) Climate Centre teamed up with Malagasy Red Cross to adapt climate games for the local context to enable community members to 'experience' climate impacts in a safe environment and develop their own solutions.

It was part of a project in the country's north-west Sofia region, supported by the German Red Cross, aimed at strengthening the resilience and disaster management capacity of more than 30,000 people in an area prone to floods and cyclones.

It organises disaster simulations and field schools for farmers, and distributes equipment including canoes and warning flags, and holds training sessions on health, nutrition and climate adaptation.

A collaboration between scientists at the European Centre for Medium-Range Weather Forecasts (ECMWF) and the RCRC Climate Centre looked into how forecasts of flash floods can help communities. The death toll from such events can be high, especially in less developed countries which may lack effective warning systems and have limited capacity to respond.

Flash floods are a priority of the ECMWF, as part of the Copernicus Emergency Management Service.

In February, the Togolese and German Red Cross, the RCRC Climate Centre and other partners shared in the 'Edge of Government Award' made to Togo's Ministry of the Environment at the World Government Summit in Dubai for joint groundbreaking work on forecast-based financing.

The following month, climate scientists from several international agencies, ending a three-day conference in Nairobi, released a detailed study of the Kenyan drought whose main message was: prepare for more.

The study says that there is a detectable 'climate signal' – a measure of the influence of human-induced climate change – in the atmospheric temperatures behind the drought. Data showed that temperatures were "higher than they would have been without the influence of climate change," but the team found no strong influence of climate change on rainfall in Kenya.

Also in Nairobi the International Conference on Climate Risk Management, intended to inform the 'AR6' assessment report on the global climate, was hosted by the Kenya Red Cross Society and convened jointly by the IPCC and the RCRC Climate Centre.

It brought together people from more than 35 countries with a scientific background and both co-chairs of IPCC Working Group II: Dr Debra Roberts from South Africa and Dr Hans-Otto Pörtner from Germany.

An embryonic phase of the relationship between dam operators and humanitarians concerned with downstream impacts was welcomed by the Secretary General of the Ethiopian Red Cross Society, Frehiwot Worku.

She was speaking in Addis Ababa at the World Hydropower Congress, which was held in Africa for the first time. "Dam-related flood-risk management would be an addition to our humanitarian work to mitigate risk to communities," she told the meeting.

A Red Cross side-event organized by the International Federation of Red Cross and Red Crescent Societies (IFRC), the RCRC Climate Centre and the Global Facility for Disaster Reduction and Recovery gathered governments, disaster managers, dam operators, researchers and other experts to explore new ways to manage the risk of floods downstream from dams.

As part of the Greater Jakarta Resilience programme, supported by the American Red Cross, the Indonesian Red Cross provided computers and other assistance for a training workshop so they could familiarize with online government information about weather and fishing grounds.

Red Cross youth volunteers assisted 25 fishermen paired with a relative with a smartphone in a module designed by the RCRC Climate Centre on the use of forecasts, as part of its contribution to Partners for Resilience work in Indonesia.

Finally, at the end of May, the Bangladesh Red Crescent Society distributed a humanitarian cash grant to 2,300 households threatened by Cyclonic Storm Mora, then over the east-central Bay of Bengal and intensifying.

The households in the coastal district of Noakhali received a grant of 5,000 taka (60 euros) as part of the forecast-based financing (FbF) programme, supported by the German government and the German Red Cross with technical support from the RCRC Climate Centre.

### Acclimatise

### New toolkit released

Acclimatise has just released a new Green Climate Fund (GCF) proposal toolkit, with support from the Climate and Development Knowledge Network (CDKN). This toolkit is an essential reading for project proponents, accredited entities (AEs) and national designated authorities (NDAs) who would like some guidance on GCF proposal requirements.

For more information, please find the toolkit flyer under:

http://acclimatise.uk.com/network/article/acclimatise-launches-gcf-proposal-toolkit-on-how-to-develop-successful-proposals-for-the-green-climatefund

## Production of knowledge packages

Furthermore, Acclimatise and CDKN produced four knowledge packages for the Caribbean, each of them includes a policy brief, a video, and an infographic:

- Caribbean climate adaptation the role of government: https://cdkn.org/2017/02/caribbean-climate-adaptation-the-role-ofgovernment/?loclang=en\_gb
- Climate risk to Caribbean prosperity: https://cdkn.org/2017/02/climate-risk-caribbean-prosperity/?loclang=en\_gb
- Climate data for the Caribbean: https://cdkn.org/2017/03/feature-climate-datacaribbean/?loclang=en\_gb
- Adapting to climate change at the local level: https://cdkn.org/2017/03/feature-adaptingclimate-change-local-level/?loclang=en\_gb

Acclimatise led a user engagement on behalf of NOAA's NCEI to find out how different industries are using NCEI data in their daily work, each success story includes a report, a video, and an infographic:

- NOAA's weather data helps U.S. retailers stay ahead of the competition: http://acclimatise.uk.com/network/article/ noaas-weather-data-helps-us-retailers-stayahead-of-the-competition
- Taking cover: How NOAA's weather data supports the US reinsurance sector: http://acclimatise.uk.com/network/article/taking-cover-how-noaas-weather-data-supportsthe-us-reinsurance-sector

EU-wide online survey launched: your opportunity to shape the Copernicus Climate Change Service (C3S)



Climate model data play a key role in informing climate change adaptation strategies. To ensure that the climate model data is delivered to different users in the best possible way, the C3S project "Data Evaluation for Climate Models" (DECM), aims to understand the requirements of current and potential future users, with regard to climate model data and resulting climate information products.

The DECM project is part of the Copernicus Climate Change Service (C3S, see https://climate.copernicus.eu) which is operated by the European Centre for Medium-range Weather Forecasts (ECMWF) on behalf of the European Commission. The aim of C3S is to inform policy development in Europe with regard to climate change, to improve the planning of mitigation and adaptation strategies, and to promote the development of new services with benefits for society. For this purpose, C3S is developing a Climate Data Store which will make climate information freely available to users from 2018 onwards. This also includes state-of-the-art climate model data and information products, e.g. written reports, tables, and visualisations.



Within this context, you are invited to complete a EU-wide online survey and express your opinions and needs regarding climate model data and derived information products. The results of the survey will inform the development of the Climate Data Store, and help design an easy to use service that offers scientifically sound climate change information.

The survey (also listed in the surveys' section on page 11) takes approximately 15 minutes to complete and can be accessed here: https://www.esurveycreator.com/s/DECM. All information that you supply will be analysed anonymously and treated confidentially. We would very much appreciate it if you could take the time to complete the survey and help shape the development of the Copernicus Climate Change Service.

For more information on the project please visit https://climate.copernicus.eu

## H2020 project Blue-Action visited GERICS

A joint workshop took place of the H2020 project Blue-Action and the Climate Service Center Germany (GERICS) in Hamburg in July 2017 with the aim of developing and exploring climate services for the Northern Hemisphere.



Arctic Impact on Weather and Climate

Between 2017 and 2021, the Blue-Action team plans to develop and value climate services for ski tourism, extreme weather risks, resource extraction, temperature-related mortality, and marine fisheries in the Northern Hemisphere.

The Blue-Action project met GERICS during a two day seminar in July to explore opportunities for collaboration on climate services across the two organisations. GERICS shortly introduced the CSP's activities, as the Blue-Action team was interested in learning about the CSP to explore other examples of climate service development, understand how climate data is turned into 'information', and share examples of successful (and less successful) services which have been developed. Blue-Action: Arctic Impact on Weather and Climate is funded by the EU Horizon 2020 programme, and specifically by the Blue-Growth BG-10-2016 call, "Impact of Arctic changes on the weather and climate of the Northern Hemisphere". The project contributes to the implementation of the Trans-Atlantic Ocean Research Alliance and to the EU's Blue Growth Agenda and its long term strategy to support sustainable blue growth in the marine and maritime sectors as a whole.

More information can be found under http://www.blue-action.eu/index.php?id=3498

... or follow BlueAction on Twitter.



Photo: Chiara Bearzotti

# CSPQUARTERLY September 2017

# recent publications selection of the latest publications from the CSP community

**Title:** Energy Exemplar to the User Interface Platform (UIP) of the Global Framework for Climate Services

**Author(s):** World Meteorological Organisation (WMO), Global Framework for Climate Services (GFCS)

**Summary:** This Exemplar explains how improved climate services can benefit the energy sector. It illustrates a vision as to how the development and application of targeted climate products and services through the Global Framework for Climate Services (GFCS) can help improve efficiency and reduce risk associated with hydro-meteorological hazards affecting energy systems. The main focus of this Energy Exemplar is to address climate services needed to support:

1. Greater climate resilience and adaptation across the sector, due to its fundamental importance for development;

2. The important role of efficiency and reduction of energy consumption with consequent emissions reduction in support of mitigation targets;

3. The growing renewable sub-sector, given the apparent climate sensitivity of renewables on the one hand and the policy priority accorded to them due to their GHG emissions reduction benefits on the other.

Link: http://www.gfcs-climate.org/node/737

**Title:** Priority Needs for the Operationalization of the Global Framework for Climate Services (2016–2018)

**Author(s):** World Meteorological Organisation (WMO), Global Framework for Climate Services (GFCS)

**Summary:** The global community is rapidly putting in place measures to protect societies from adverse socioeconomic and environmental impacts caused by extreme weather-, climate- and water-related events, and also to take maximum advantage of any positive benefits of these changes that may exist. However, many projects are being undertaken in isolation, in the absence of mechanisms for alignment of the diverse efforts being made at project level, and without conforming to relevant international standards. This can result in duplication of efforts, which may prove unsustainable or ineffective in the long term. The Global Framework for Climate Services (GFCS) was established to provide a credible, integrative and unique platform for guiding and supporting activities implemented within climate-sensitive investment areas, notably agriculture, energy, disaster risk reduction, human health and water sectors in support of both climate adaptation and mitigation. This publication builds on successful achievements during phase I of the GFCS implementation and will serve as a strategic work plan to guide GFCS implementation in phase II. Link: http://www.gfcs-climate.org/node/1057

# recent publications

# selection of the latest publications from the CSP community



Photo: Susanne Schuck-Zöller

**Title:** Innovation in Climate Services and Capacity Building - Conference report: Fifth International Conference on Climate Services (ICCS5), February 28 - March 2 2017, Cape Town, South Africa. **Author(s):** Blome, T., Hänsler, A., Máñez-Costa, M., Jacob, D. **Summary:** From February 28<sup>th</sup> to March 2<sup>nd</sup> of 2017, the Fifth International Conference on Climate Services (ICCS5) took place in Cape Town, South Africa. The meeting gathered roughly 200 participants from the climate services arena and focussed on "Innovation in Climate Services and Capacity Building", featuring lively dicussions, and facilitating new opportunities for collaboration. The conference report gives insight into the contents and outcomes of the event and can be downloaded at

Link: http://www.climate-services.org/iccs/iccs5

# upcoming events in the climate and climate services community

Annual Meeting: European Conference for Applied Meteorology and Climatology 4 – 8 September 2017 Dublin, Ireland

**Lead organisation(s):** European Meteorological Society.

The conference theme for the 2017 EMS/ECAC conference is 'Serving Society with better Weather and Climate Information'. There are a number of relevant sessions for climate services especially in the Engagement with Society part of the programme. See in particular the ES1 'Bringing Benefits to Society' sessions which include:

- ES1.3 Creating national and regional climate services in Europe through partnerships
- ES1.4 Evaluation and quality assurance of climate services – Methods, criteria and pitfalls
- OSA3.3/ES1.5 The Copernicus Climate Change Service implemented by ECMWF
- OSA3.4/ES1.6 Deriving actionable information from climate prediction on decadal to scenario time scales

Full details about EMS/ECAC 2017 are available here:

http://www.ems2017.eu/home.html.

### 8<sup>th</sup> Water Research Horizon Conference 19 - 20 September 2017 Waelderhaus Hamburg, Germany

**Lead organisation(s):** Water Science Alliance at Technische Universität Dresden, jointly with GERICS, in association with Ritter-Stiftung of Deutscher Stifterverband (Germany).

The 8<sup>th</sup> Water Research Horizon Conference, with its motto "Climate change impacts and rising adaptation needs – Future challenges for water-related research", brings together international and national scientists from various disciplines in order to exchange most recent findings of water-related research in the context of the COP21 and SDG processes. The focus is on understanding climate change impacts on water, as well as related adaptation and mitigation needs considering the 2°C target and the accomplishment of the sixth of the United Nations' Sustainable Development Goals, water.

http://www.watersciencealliance.org/8-wrhc-2017/

### 5<sup>th</sup> International Conference on Reanalysis 13-17 November 2017 Rome, Italy

**Lead organisation(s):** Copernicus Climate Change Service (C3S) and the World Climate Research Programe (WCRP)

Climate research has benefited over the years from the continuing development of reanalysis. The conference will bring together reanalysis producers, observation providers, numerical modellers and the user community to review current reanalysis activities and to discuss user needs for future reanalyses. Interested contributors are invited to submit an abstract and apply to receive travel support.

To register or for more information, visit the Copernicus Climate Change Service website

http://climate.copernicus.eu/events/5th-international-conference-reanalysis

# CSPQUARTERLY September 2017 HH bound the Http: total the http: total the http: total total

# in the climate and climate services community

# The **Hamburg University of Applied Sciences** (HAW) is announcing several events:

Founded in 2008, the International Climate Change Information Programme (ICCIP) http://www.iccip.net/ is a leading independent organisation in the field of information, communication and technology transfer on climate change daptation. ICCIP is running a major outreach exercise in 2017, which entails a number of scientific events and publications.

https://www.haw-hamburg.de/english.html

World Symposium on Climate Change Adaptation" (WSCCA- 2017) 6 - 8 September 2017 Coimbra, Portugal

Further details and a flyer can be seen at:

https://www.haw-hamburg.de/en/ftz-als/events/ portugal-wscca-2017.html

Symposium on Climate Change and Droughts Resilience in Africa 16 - 18 October 2017 Nairobi, Kenya

**Lead organisation(s):** Strathmore University (Kenya), the Research and Transfer Centre "Applications of Life Sciences" of the HAW, Manchester Metropolitan University (UK) and the International Climate Change Information Programme (ICCIP).

The event will focus on "building resilience to climate change and droughts in Africa", meaning that it will serve the purpose of showcasing experiences from research, field projects and best practice to foster climate change adaptation among countries in the region, with a focus on droughts.

https://www.haw-hamburg.de/en/ftz-nk/events/ drought2017.html

### Universities and Climate Change: The Role of Climate Change Research and Projects in Fostering Climate Action

12 - 13 December 2017 London, UK

**Lead organisation(s):** Manchester Metropolitan University, Queen Mary University of London, HAW Hamburg, under the auspices of the International Climate Change Information Programme (ICCIP).

Many universities across the world perform state- of-the art research on matters related to climate change, both in respect of mitigation, and adaptation. Yet, as shown by the latest 21st Conference of the Parties of the UN Convention on Climate Change (COP 21), held in Paris in December 2015, there is much room for improvements in the role played by universities in the negotiations and in influencing decision-making on a matter of such a global importance.

The event will involve researchers in the field of climate change in the widest sense, not only from traditional climate science, but also from the fields of environment, human geography, business and economics, arts, administration and media studies.

It will focus on the role of climate change research and projects in fostering climate action, and will contribute to the further development of this fastgrowing field.

https://www.haw-hamburg.de/en/ftz-nk/events/ universities2017.html

# Surveys online surveys in the climate services community

### Data Evaluation for Climate Models (DECM)

Within the context of the Copernicus Climate Change Service, the project "Data Evaluation for Climate Models" (DECM) is looking for your opinions and needs regarding climate model data and derived information products (please see also on page 6). The results of the online survey (approx. 15 minutes) will inform the development of a new Climate Data Store which will make climate information freely available to users from 2018 on.

https://www.esurveycreator.com/s/DECM

# MARCO - "MArket Research for a Climate Services Observatory"

The European research project MARCO released a new survey on European climate service providers and their portfolio. The survey aims at getting a better understanding of the current landscape of climate related data, information and tools in order to match this information with expressed user needs. This will help MARCO to identify unmet demands and assess market growth until 2030 in order to explore opportunities for the climate services community as a whole. You can find the survey here:

https://www.esurveycreator.com/s/MARCO



The Climate Services Partnership (CSP) is a platform for knowledge sharing and collaboration to advance climate service capabilities worldwide. CSP members are climate information users, providers, donors, and researchers; though they represent diverse interests, all are actively engaged with climate services through their own programmes and activities. Partners collaborate to develop and improve climate services; they also learn from each other by sharing resources and experiences. The CSP creates a venue to generate new knowledge, establish best practices, and promote a resilient, sustainable, and climate-smart future. More information is also available on our website: www.climate-services.org.

The CSP newsletter is a publication meant to keep all informed of the latest updates of the partnership community. We rely on you for news of your activities, upcoming events, and recent publications.

Editorial board: Tanja Blome, Daniela Jacob, María Máñez Costa, Irene Fischer-Bruns (all GERICS)



To subsrcibe or unsubscribe to the newsletter, email tanja.blome@hzg.de with the subject title "SUBSCRIBE: CSP newsletter" or "UNSUBSCRIBE: CSP newsletter"