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Welcome to EU-MACS second Newsletter

By Elisa Jiménez Alonso, Acclimatise

Since the last time you heard from us, our consortium has been very busy. In our [Outputs](#) section on the EU-MACS website, you will see that three new deliverables were uploaded and are ready for you to read. All three reports are setting the scene for the rest of the EU-MACS research. They analyse the current conditions of the climate services market, how resourcing and quality assurance of climate services work, and the existing data infrastructures of climate services.



These reports will be used as a basis to engage with stakeholders and (potential) climate services users in our target sectors: tourism, finance, and urban planning. We want to find out why they are or are not using climate services, and how we can encourage them to start using them. In order to do that, however, it will be important for this project to analyse how climate service providers can identify specific user and sector needs. This is also valuable knowledge that will be fed into our sister project [MARCO](#).

But, in this newsletter, we are not only talking about our most recent outputs, which we hope you will find interesting. We also have recaps of recent events project partners attended, like the ECCA conference in Glasgow earlier this summer, and a EU-MACS event in Helsinki. Furthermore, we are presenting a few new Horizon 2020 projects related to climate services, and there is a list of upcoming events you might want to note down in your calendars.

As always, please do follow us on Twitter @EUMACS_H2020, as well as our sister project MARCO @MARCO_H2020.

How European initiatives are boosting the market: the experience of Euporias

Interview with Carlo Buontempo, Manager of the Sectoral Information System of Copernicus Climate Change Service at European Centre for Medium-Range Weather Forecasts (ECMWF)

EU-MACS: *Considerable progresses have been made in recent years regarding climate services. What is the state of the art of climate services and how did it evolve overtime?*

At European level, climate services development and uptake have been promoted through a wide spectrum of activities and funding initiatives. In 2015, the European Commission launched the European Roadmap for Climate Services, a powerful guide to further enhance the potential of climate services in a variety of sectors. This was elaborated by an ad-hoc expert group; its implementation is constantly monitored by a working group that guarantees consistency and identifies barriers and difficulties in its use. The Roadmap successfully integrated findings and results from European programs and initiatives. These helped identifying some crucial bottleneck:

- The need for a user-centric perspective when developing and delivering climate services;
- The demand for a fully interdisciplinary approach to interact with a wider spectrum of users and stakeholders;
- The crucial link between science and policy, providing proof of the usability of climate services in place.

Nowadays, EU-funded projects and Copernicus Climate Change Services (C3S) are supporting the provision of solutions and tailor-made products, putting outputs at service of a multitude of actors

EU-MACS. *How does this change of perspective actually work? How climate services can actually put users at their center?*

Some European initiatives successfully managed to put users at the center of their services provision and contributed to this shift towards tailor-made climate products. Recently concluded projects under the EU's Seventh Framework Program (FP7) provide a relevant example. Within this group, **Euporias** Project (Project ID 308291) aimed at ensuring a more



effective use of seasonal-to-decadal climate forecasts by delivering fully operational prototypes of climate services. Euporias employed a bottom-up approach, interacting with relevant stakeholders to assess users' needs. The project did not identify a specific type of beneficiary for prototypes within the project phase, but rather launched a participatory process to detect those operators that was realistic to reach. The consortium agreed on a set of criteria to evaluate the prototypes. Each partner was then asked to present one of more proposals for a single or multiple prototype. Finally, the consortium contacted a group of external evaluators to choose among the submitted climate prototypes. Out of fourteen ideas, Euporias extracted and ultimately developed five of them.

This change of perspective relies in taking into account the value and the perception of the user even in the design phase of a fully operational product. Climate services are useful only if and when used. By engaging with the users and listening to their actual needs, Euporias created tailor-made services that shaped according to requirements highlighted by beneficiaries..

EU-MACS. *Recent reports and studies often point out communication issues with the users? Is this really an obstacle? Do climate services constitute an effective tool to overcome them?*

Communication is as important as results and prototypes themselves. Tailor-made climate services and products have the potential to bridge scientific knowledge and policy-making, by interacting with intermediate and final users. The research for a clear and effective way to translate complex concepts into readable and operational information is the core pillars of Copernicus Climate Change Services (C3S), too. This is an innovative initiative built around a climate data store and a sectoral information system in which will made an unprecedented volume of high quality information on the past, present and future evolution of the climate e and its societal impacts freely available to anyone for any sort of application.

Reports from recent events

ECCA2017, European Conference on Climate Change Adaptation, in Glasgow, United Kingdom (05-09/06/2017)

The European Conference on Climate Change Adaptation reached its third edition in 2017 and self-confirmed as one of the top events in Europe. The aim of the conference was to present the work that has been done across Europe on adaptation and to stimulate the debate, proposing new solutions, steps ahead and engaging the relevant stakeholders.

The event reached out practitioners, policy-makers, decision takers and academics and represents perhaps the most relevant venue to discuss about adaptation in Europe. A specific set of sessions was dedicated to climate services. Among them, on Wednesday, June the 7th, EU-MACS, MARCO and SECTEUR, in collaboration with PLACARD, jointly organised a session named "Providing a fit-for-purpose climate service for Europe: users' and purveyors perspectives".

The session was co-chaired by Maria Noguer (SECTEUR coordinator) and Francesca Larosa (CMCC). Approximately fifty people, working and engaging in various sectors, attended the session. The session started with a talk from two key guests: Roger Street (UKCIP) and Carlo

Buontempo (ECMWF), who presented the state of the art of climate services in Europe and introduced the Roadmap for Climate Services and Copernicus Climate Change Services.

The session was managed using an interactive format to give participants the opportunity to share their experiences: attendees were asked to provide inputs according to their sectoral experience. In particular, the session explored the marketability and the user requirements of six sectoral services: Agriculture & Forestry, Coastal areas, Health, Infrastructure, Insurance and Tourism.

Participants also highlighted the main barriers in developing and using climate services. Inputs were fully incorporated in Deliverable 1.2 of the project (description below). The session fostered cooperation between the three projects and allowed the creation of new synergies. Being near completion SECTEUR was able to share results of the work done to date and to present the main characteristics of users benefiting of climate services.

EU-MACS was also represented through several posters, as part of a large and well-structured display of posters. ECCA2017 introduced a novelty in the structure of the event: the Business day and the Innovation day, that were run in parallel to the conferences sessions. Start-up representatives, large corporations, firms and companies provide interesting insights on their requirements and use of climate information. Their point of view is crucial to design tailor-made products and services, stimulating the market and creating new windows of opportunities.

Francesca Larosa, Fondazione Eni Enrico Mattei (FEEM) and Euro-editerranean Centre on Climate Change, Venice



EU-MACS Seminar “Towards Climate Services based on demand and guided by science” in Helsinki, Finland (19/06/2017)

The first seminar of EU-MACS managed to attract a varied audience, including quite some representatives from the three focus sectors, finance, tourism and urban planning. The Finnish Meteorological Institute (FMI) hosted the meeting, attended by 42 participants. Furthermore the presentations were streamed and live followed by many experts. The material can be found [here](#).

Apart from presentations about the first results from EU-MACS the programme offered in particular space to representatives from the user segments urban planning, finance and tourism, via own presentations, a panel discussion and through a presentation from the SECTEUR project. There was a large consensus that climate services, although as such mostly of very good scientific quality, have been so far suffering from inadequate user orientation. In future development efforts there should be more emphasis on all the aspects of interaction with users, in order to make search and selection of climate services easier, to better listen to (potential) users, to discuss matters (also) in terms of concepts relevant to the user, to ensure scientific rigour – yet, without bothering users with these technicalities, to apply quality and appropriateness metrics which are relevant for the user and the use context, to accommodate rigour, sophistication and complexity commensurate with the technical use conditions of a user.

Susanna Kankaanpää (Helsinki Region Environmental Services Authority HSY) showed HSY has already been an active user of climate services, and reprocesses – with the aid of experts – the different types of information into risk and vulnerability maps. She warned that climate service providers have often still a rather strong R&D oriented habitus, whereas user satisfaction should be an important driver in their motivational structure.

Esko Kivisaari (Finance Finland / EU High Level Expert Group on Sustainable Finance HLEG) underlined that the finance sector is both an important enabler of sustainable development in relation to applied financing mechanisms and assessments of risks and opportunities, as well as an important beneficiary of timely and

adequate information on environmental risks, both for the sake of the stability of the financial system and as input to sustainable transformation in the finance sector. This sustainable transformation offers also an excellent opportunity to re-establish economic growth after the prolonged debt crisis. The HLEG should produce concrete proposals for the EU strategy on sustainable finance by the end of 2017. Climate service providers should realise that the finance sector sees climate as part of a broader set of environment and policy related risks and - even more so - opportunities.



Marta Bruno Soares (Leeds University) presented highlights from the COPERNICUS C3S SECTEUR project, which focused on needs of Climate services users, how these can be best served. As is found in the EU-MACS study SECTEUR also shows that so far the climate services field has been so far quite dominated by research and some other highly professional users. This is supposed to change, but that means that the ranking of user needs may well change in the next couple of years.

Users can be also climate service providers, and this may evolve further in the future. Benefits of climate services should be really clear before users engage. SECTEUR is compiling a large repository of (types of) user needs. This repository will be valuable for projects like EU-MACS and MARCO and climate services development and piloting projects. The EU-MACS Deliverables D1.1 (Review and analysis of Climate Service markets and conditions), D1.2 (Assessment of the existing resourcing and quality assurance of current climate services, and D1.3 (Current Data Infrastructures for Climate Services) will be downloadable from the Outputs section of the website [at this section](#).

Adriaan Perrels, Finnish Meteorological Institute (FMI), Helsinki, Finland

***EU-MACS workshop on Urban Planning:
"Building a safe, healthy and sustainable
Helsinki", Helsinki, Finland (19/06/2017)***

Seven experts from various urban planning organizations in Helsinki gathered at the Finnish Meteorological Institute on the 20th of June to participate in the first EU-MACS stakeholder workshop. The focus of the workshop was on the role of climate services in urban planning, particularly in Helsinki.

The stakeholders represented providers and users of climate services; both the public and private sector were represented. This was the first of a series of workshops that will be organized during EU-MACS, not only in urban planning, but also with stakeholders in the finance and tourism sectors. The workshop consisted of three connected parts which used different approaches and methods. The first part was based on stakeholder interviews conducted during winter and spring 2017 in Helsinki, and coordinated by IRSA. The interviews resulted in Fuzzy Cognitive Maps, representing stakeholders' mental models on the primary and secondary impacts of climate change on Helsinki, and the workshop participants provided further input to the analysis.

The idea was to verify the understanding of climate change impacts obtained in the interviews. Also, the role of different climate change adaptation measures were discussed, and their importance in impact reduction. The main discussion points were the role of different climate services in supporting adaptation in Helsinki.

Several points were raised, but the preliminary conclusions are that climate services need to be integrated into existing urban planning tools, and those different needs for climate services in different stages of the urban planning process exist. A lively discussion among participants ensued during the Living Lab exercise coordinated by ENoLL.

The group was divided into two with the aim to imagine being a citizen of Helsinki, build a persona for the imaginary citizen and think of how they would use climate services in their everyday life. For instance, the citizen's role as an information provider for climate services

was discussed in both groups and was seen as an important part of future prospects. The third part of the workshop was based on Constructive Technology Assessment approach and coordinated by Twente University.

Four climate service market scenarios, based on previous research done in EU-MACS, were presented to the participants, who then suggested modifications to the scenarios, and identified different concrete examples of climate services for each scenario. Different barriers to the use of climate services were discussed by giving points to each service based on their perceived doability and desirability.



Urban planning clearly needs integrated and customised climate information, but it could also be the most challenging task for climate service providers and purveyors.

The first workshop gave detailed new insights for EU-MACS and will guide the coming urban planning work. The aim is to understand how climate services are used in different stages of the urban planning process by different actors, who provide and who uses climate services, and what are the barriers and enabling factors in this process that could lead to realistic business models and governance frameworks.

To get a hands-on understanding of these questions, two European cities, Helsinki and Bologna, the capital of the Emilia-Romagna region in northern Italy, were chosen as case study cities. The first results from the urban planning sector are reported in a deliverable to be published in early autumn.

*Karoliina Pilli-Sihvola, Finnish Meteorological
Institute (FMI), Helsinki, Finland*

Outputs of the project

In each NL we present a brief summary of outputs of the project, namely the produced deliverables.

Deliverable 1.1 - Review and analysis of Climate Services market conditions

Deliverable 1.1 - Review and Analysis of Climate Service (CS) Market Conditions is, among other deliverables of WP 1, one part of the project's baseline and serves as input to the demonstration cases in WP 2 to 4. Deliverable 1.1 aims at providing a snapshot of the current market structures, presenting the actors involved, their role in developing, providing and using climate services, the main market barriers and drivers. Finally, it aims at showing the main achievements in the past years in terms of scientific progresses and innovations.

D1.1 shows that many different actors are engaged in the development, provision and use of climate related products. It became clear that there is no clear-cut differentiation between most of the actors as they have hybrid roles. These actors do have different backgrounds, for instance in science or consulting, that lead to specific strengths and weaknesses and the role they (could or could not) play based on them. This seems to be more important than a clear and straightforward categorization of actors. Barriers were assessed in six domains, i.e. political framing, economic conditions, social, technical and scientific, and ethical factors as well as legal and regulatory requirements.

Basically, economic and technological / scientific barriers seem to be most influential, while ethical aspects are least important. In terms of scientific progress and innovations major steps forward can be identified. First, the database and the observation facilities to gather these data have been improved significantly. Second, the computing capacities needed to handle these data have been improved. Third, advancements in modelling allow providing information with a higher resolution. The main drivers and their roles that steer the whole arena of climate services are identified. These could be either general developments, e.g. there is currently a momentum for environmental and climate issues, or political or politically established actors such as European

Commission, JPI Climate or the Climate-KIC.

Deliverable 1.2 - Existing resourcing and quality assurance of current Climate Services

Deliverable 1.2 discusses (1) encountered business models and resourcing for CS provision, (2) quality assurance of CS provision, and (3) the significance of legislation in creating demand for CS. Regarding business models, D1.2 found that the greater part of current climate services (CS) related activities is realized under non-market conditions. Resource use for Climate Services research, development and piloting seems as yet much larger than for actual Climate Services delivery. Linked to this trend, public funding of climate services activities has been hitherto clearly more significant than private funding, but this can change significantly as more CS become operational and more user segments get activated. Therefore, the market is still relatively young and highly accessible. D1.2 shows that the optimal business model is constituted by the public-private partnerships, which seem a very suitable organisation type for CS delivery or for CS brokerage, enabling a broad and malleable collection of skills and data.

Deliverable 1.2 shows that quality assurance is not only a matter of control, but just as much as communication. The more a CS involves tailoring, non-climate data, advice and training, or the more the user lacks expertise in climate and/or risk analysis the more QA should go beyond the statistical properties and origins of the climate data, and consider also linking feasibility with non-climate data as well as the service delivery process. Broad scoped QA (beyond climate data properties) greatly benefits from or even requires interactive approaches such as co-design of the CS with the user – the so-called open model. Quality uncertainty of CS concerns both the performance uncertainty (partly covered with traditional QA) and the product fit uncertainty (addressed by broad scoped QA). Many CS providers are aware of the need for broader scoped QA, but point at the lack of available – applicability proven – indicators. Broad scoped QA is relevant in supporting innovation in climate services, too.

Finally, Deliverable 1.2 explores legislation

requirements and its role in stimulating demand for Climate Services. Many EU Member States have legislation in place, especially in relation to land use, urban planning, water, and physical infrastructure, that obliges or at least strongly recommends to account for effects of climate change. Yet, the legislation or guidelines leave often a lot of leeway to the sector or regional decision makers how rigorous and with what kind of information the climate change impact and adaptation assessment is carried out, and consequently there is no strict obligation to use climate services or assure a certain quality level of these services – hence standards are set by how the practice develops.

Deliverable 1.3 – Analysis of existing data infrastructure for Climate Services

Deliverable 1.3 explores how the existing climate data infrastructure inhibits or stimulates the European climate services market. The report comprises three individual subtasks based on literature review and the completion of a range of interviews with stakeholders involved in various aspects of the climate data infrastructure domain.

The first subtask involved cataloguing and mapping the relationships of organisations involved in the climate data infrastructure value chain. The second subtask comprised a usability survey designed and carried out on the upstream section of the climate services providers catalogue: organisations that operate in EO satellites and/or weather stations. The third and final subtask explored data infrastructure governance and in particular the governance of problems approach (Hoppe 2010). The task put emphasis on the processual character of data infrastructure governance data infrastructure in Europe as interaction and negotiation.

Infrastructure may often be thought of as the physical structures on which information travels. Deliverable 1.3 expands upon this concept principally through the development of four infrastructure dimensions, including: a) Instrumentation Infrastructure, b) Information Infrastructure, c) Communication Infrastructure and d) Service Infrastructure. Services, as suggested in Deliverable 1.3, can materialise in products that are more than situated activity; services as things to be taken home, implemented, refined or used further “at

home” and perhaps even shared. The quality and fit of a service depend substantially on whether there is anybody on the user side that can engage in communication about data. Therefore, it is of utmost importance to view the climate services infrastructure set-up as one in which users already have their place, instead of being taken as “external factors” to a somewhat closed system. Precisely here, we argue, success or failure of climate services will be determined: in our ability to view and practically embed users as integral and equal partners in the co-construction of climate services.

All Deliverables can be found at the [dedicated section](#) on EU-MACS web-page.

EU-MACS partners

In each NL we will introduce some of the EU-MACS consortium and cooperating partners. Furthermore, we present the most recent innovation actions in the field of climate services.

Acclimatise UK

<http://www.acclimatise.uk.com/>

Acclimatise is a specialist consulting, communications and digital application company providing world-class expertise in climate change adaptation and risk management. We only focus on adaptation, and our work is shaping the adaptation agenda across the world. We bridge the gap between the latest scientific developments and real world decision-making, helping our clients to introduce cost-effective measures to build climate resilience into their strategies, processes and activities. We have offices in the UK, France, India, USA, and the Caribbean and have worked in over 80 countries. Our work covers a variety public and sector sectors, from the extractive industries and financial services to defence and international development. Acclimatise is a climate services provider. We use climate data products and socio-economic information to provide our clients with climate risk and vulnerability assessments, as well as adaptation options and resilience building strategies based on our experience of over more than 10 years working with the latest science and developing best practices across the world.

GERICS

<http://www.climate-service-center.de/>

The Climate Service Center Germany (GERICS) was initiated by the German Federal Government in 2009 as a fundamental part of the German hightech-strategy for climate protection. Since June 2014, GERICS has been a scientific organizational entity of Helmholtz-Zentrum Geesthacht – Zentrum für Material- und Küstenforschung GmbH. GERICS is a think tank for climate services in order to meet these information needs. GERICS develops prototype products in the area of climate services and works in close cooperation with science and practice partners from politics, economy and administration. GERICS actively promotes networking between these actors.

GERICS' director Prof. Dr. Daniela Jacob is appointed as Coordinating Lead Author of the soon to be published IPCC SR 1.5 Degrees. Further activities include participation in H2020 flagship projects EU-MACS and MARCO, networking projects such as Climateurope and the coordination of the EURO-CORDEX initiative.

Recent initiatives

This section presents, recent initiatives and recently funded projects in the field of climate services.

CLARA – Climate Forecast enabled knowledge services

CLARA (Climate forecast enabled knowledge services) is a Horizon2020 funded project coordinated by the Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC). The aim of CLARA innovation action is to develop a set of leading edge climate services building upon the newly developed Copernicus Climate Change Services near term forecasts and sectorial information systems (SIS) and sustain their marketability and value. More information can be found [CLARA's web-page](#).

VISCA – Vineyards' Integrated Smart Climate Application

VISCA is a Climate Service (CS) and Decision Support System (DSS) that integrates climate, agricultural and end-users' specifications in order to design medium- and long-term

adaptation strategies to climate change. VISCA will be validated by real demonstration with end-users on three demo sites belonging to three wine stakeholders from Spain, Italy and Portugal, which are included as partners in the consortium (Codorniu, Mastroberardino and Symington). The main objective of VISCA is making South-European wine industries resilient to climate changes, while minimizing costs and risks through an improvement of the production management (quality and quantity of final product). VISCA is coordinated by METEOSIM (Spain). More information can be accessed [here](#).

CLARITY - Integrated Climate Adaptation Service Tools for Improving Resilience Measure Efficiency

Urban areas and traffic infrastructure linking such areas are highly vulnerable to climate change. Smart use of existing climate intelligence can increase urban resilience and generate added value for businesses and society at large. CLARITY will provide an operational eco-system of cloud based climate services to calculate and present the expected effects of CC-induced and -amplified hazards at the level of risk, vulnerability and impact functions. CLARITY will offer what-If decision support functions to investigate the effects of adaptation measures and risk reduction options in the specific project context, and allow the comparison of alternative strategies. Four demonstration cases will showcase CLARITY climate services in different climatic, regional, infrastructure and hazard contexts in Italy, Sweden, Austria and Spain. More information can be found on [CLARITY website](#).

H2020_INSURANCE – Oasis Innovation Hub for Catastrophe and Climate Extreme Risk Assessment

Globally, there is increased concern of the potential impacts of extreme climate events and their impact on loss and damage of people, assets and property as a result of these events. Therefore, natural partners in using climate services to assess risk are the Global Insurance Sector, who are key implementers in increasing societies resilience and recovery of extreme events and who are integral, co-design partners in this programme. This project intends to operationalize a system, called the Oasis Loss Modelling Framework, that

combines climate services with damage and loss information and provides a standardised risk assessment process that can assess potential losses, areas at most risk and quantify financial losses of modelled scenarios. We intend to prove the Oasis LMF system through undertaking a range of demonstrators linked and co-designed to 'real' situations and end-user communities in the insurance, municipalities and business sectors (see list of partners & collaborators). Please, see at the [dedicated web page](#).

PROSNOW - Provision of a prediction system allowing for management and optimization of snow in Alpine ski resorts

The PROSNOW project ambitions to build a demonstrator of a meteorological and climate prediction system from one week to several months ahead applied to snow management, specifically tailored to the needs of the ski industry using a co-design approach. This novel climate service holds significant potential to increase the resilience of socio-economic mountain stakeholders and supports their real-time climate change adaptation potential. PROSNOW will apply state-of-the-art knowledge relevant to the predictability of atmospheric and snow conditions, then develop products well beyond state-of-the-art operational tools. Improved anticipation capabilities at all time scales, spanning from "weather forecast" (up to 5 days typically) to "climate prediction" at the seasonal scale (up to several months), will be achieved through a seamless integration of weather and seasonal prediction products, together with snowpack models, in-situ and remotely-sensed observations and cutting-edge statistical tools in support of the decision making process. The project proposes an Alpine-wide system (France, Switzerland, Germany, Austria and Italy). The project is coordinated by Météo-France. More information can be found [here](#).

Recent publications

Hunt, A., Ferguson, J., Baccini, M., Watkiss, P. & Kendrovski, V. (2017). **Climate and weather service provision: Economic appraisal of adaptation to health impacts.** *Climate Services*, 7, 78-86.

<https://doi.org/10.1016/j.cliser.2016.10.004>

This paper seeks to demonstrate that the value of climate projection information can be used to derive quantitative estimates of both the costs and benefits of information-based measures introduced to reduce climate-related risks. Specifically, information relating to both longer term climate change and weather variability are combined to identify potential resource implications for health service planning when faced with higher frequencies of heatwaves. A range of climate projection-city combinations are explored in order to test the robustness of the economic justification for heatwave warning systems (HWWS) in Europe – London, Madrid and Prague. Our results demonstrate that in most cases the HWWS option can be justified in the current climate – it is therefore a “no/low regret” option. Our results also show that whilst costs increase slightly under climate change scenarios, benefits of HWWS are likely to increase more steeply in European contexts. However, whilst the majority of cost-benefit analysis (CBA) outcomes are found to be positive, (i.e. economic benefits are greater than economic costs), across alternative climate projection-city combinations, in sensitivity analyses it is possible to generate negative results in certain geographical contexts. Indeed, with respect to this climate change risk, this analysis has identified that the analysis of key uncertainties, such as effectiveness of HWWSs and the valuation of health improvements, is critical in strengthening the case for HWWS implementation.

Pope, E.C.D., Buontempo, C. & Economou, T. (2017). **Quantifying how user-interaction can modify the perception of the value of climate information: A Bayesian approach.** *Climate Services*, 6, 41-47.

<https://doi.org/10.1016/j.cliser.2017.06.006>

The growing attention user relevance is receiving in the context of climate services is giving new light to engagement activities. However, while there is an almost unanimous consensus that these are important to the delivery of usable services, there is relatively little quantitative evidence of their impact on the usefulness of the service or its value as perceived by the users and decision-makers. Using a

simple Bayesian decision theoretic framework, we have analysed how the perceived value of the service changes as a function of the user's belief in the accuracy of the forecast. Based on this, we conclude, that, at least for the generic users adopted for our analysis, 30 or more repeated forecasts may be needed to ascertain the real user value of a predictive service. However, we argue that engagement between users and service providers can play a significant role in modifying the perceived accuracy and value of the service, bringing it closer in line with the objective evaluation. This requires feedback from users on both the specific climate information content and its presentation, alongside exploring the user's attitude to risk. If appropriate engagement can be achieved, this work suggests that it has the potential to alter the overall perceived cost-benefit ratio over a relatively short period of time, enabling users to make best use of the available climate information.

Kaspersen, P.S. & Halsnæs, K. (2017). **Integrated climate change risk assessment: A practical application for urban flooding during extreme precipitation.** *Climate Services*, 6, 55-64. <https://doi.org/10.1016/j.cliser.2017.06.012>

Risk assessments of flooding in urban areas during extreme precipitation for use in, for example, decision-making regarding climate adaptation, are surrounded by great uncertainties stemming from climate model projections, methods of downscaling and the assumptions of socioeconomic impact models. The multidisciplinary character of such risk assessments also requires that research groups and experts from different scientific disciplines combine knowledge and share model outputs. This paper describes an integrated framework and tool, the Danish Integrated Assessment System (DIAS), which has been designed to address the complex linkages between the different kinds of data required in assessing climate adaptation. It emphasizes that the availability of spatially explicit data can reduce the overall uncertainty of the risk assessment and assist in identifying key vulnerable assets. The usefulness of such a framework is demonstrated by means of a risk assessment of flooding from extreme precipitation for the city of Odense, Denmark. A sensitivity analysis shows how the presence of particularly important assets, such as cultural and historical heritage, may be addressed in assessing such risks. The output of the risk assessment for Odense indicates that highly detailed geographical data reduce the overall uncertainty and assist climate adaptation decision-makers in focusing on protecting those assets that

are considered to be relevant in the given context. Also, using an integrated framework such as DIAS enables the relative importance of the different factors (i.e. degree of climate change, assets value, discount rate etc.) to be determined, thus influencing the overall output of the assessment.

Kotova, L., Manex Costa, M., Rodríguez Pérez, M.J., Whiffin, F., Garrett, N., Bessembinder, J., Buonocore, M., Newton, P. & Hewitt, C. (2017). **The first Climateurope Festival: climate information at your service.** *Climate Services*, 6, 80-81. <https://doi.org/10.1016/j.cliser.2017.07.005>

The Climateurope project is creating and managing a framework to coordinate, integrate and support Europe's research and innovation activities in the fields of Earth-System modelling (ESM) and climate services. The project is described in detail in a News item in this issue, and at www.climateurope.eu. The project is addressed to climate science communities, funding bodies, climate service providers and users. Within the project there is a range of communication and dissemination activities designed to welcome and involve these groups. In this way, climate information is transformed via open and intensive dialogue between these different actors, in contrast to traditional communication through purely scientific conferences and workshops. Climateurope is therefore hosting a number of Festivals between 2017 and 2020, inspired by the motto "Climate information at your service". The first was organized by the Climate Service Center Germany (GERICS) together with the project partners, held from 5th to 7th April 2017 in Valencia, Spain.

Hewitt, C., Garrett & Newton, P. (2017). **Climateurope – coordinating and supporting Europe's knowledge base to enable better management of climate-related.** *Climate Services*, 6, 77-79. <https://doi.org/10.1016/j.cliser.2017.07.004>

As the climate services landscape evolves in Europe, and beyond, it is vital that there is a coordinated and integrated approach, and so the European Commission has funded Climateurope (www.climateurope.eu) as Europe's principal coordination mechanism, with a vision to ultimately help make European

society more resilient to climate-related risks and opportunities, and create greater social and economic value. The Climateurope project consortium of 11 partners already represents a significant step forward in bringing together previously disparate activities, projects and programmes into a coordinated and integrated network. The consortium partners have leading roles in the JPI-Climate, the European Research Area network for climate services, the Climate-KIC, Copernicus Climate Change Service, the European Network on Earth System Modelling, and several major projects and organisations leading in Earth system modelling and climate service.

Next on the agenda

Check the next events for September – November 2017 to stay updated on climate services

EMS Annual Meeting – European Conference for Applied Meteorology and Climatology 2017 @Dublin (Ireland)

Sep 4 – Sep 8

Under the theme “Serving Society with better Weather and Climate Information”, the conference aims at addressing a key challenge for the meteorological and climatological communities, namely how best to harness the wealth of data now available – both observational and modelled – to generate and communicate effectively relevant, tailored, and timely information and services, ensuring the highest quality support for users' decision-making. More information [here](#).

EIP Water Conference 2017 @Porto (Portugal)

Sep 24 – Sep 30

Under the theme “Water Innovation: bridging gaps, Creating Opportunities”, the conference aims at preenting innovative solutions to address major European and global water challenges. At the same time, other issues to be explored will include market opportunities for these innovations, both

within and outside Europe, and how to remove barriers by advancing and leveraging existing solutions. To round up the conference, the programme will also include “WaterMatch” matchmaking, TechTalks, technical tours of Porto's most innovative water facilities and networking receptions. The day before and the the after the conference, several side meetings organised by our EIP Water Action Groups, LIFE, EASME and other partners will also take place at the conference venue. For more information visit the dedicated [web page](#).

PLACARD workshop @ JPI Climate in Brussels (Belgium)

Oct 25 – Oct 26

Workshop “Using strategic narratives to help integrate CCA & DRR”

The workshop will explore the development and use of strategic narratives to integrate climate change adaptation (CCA) and disaster risk reduction (DRR) communities. Attendees: Practitioners, policymakers, scientists and professionals in CCA or DRR

Further information and registration under the [webpage](#).

UN Climate Change Conference (COP23) @Bonn (Germany)

Nov 6 – Nov 17

The conference, officially referred as COP 23/ CMP 13/ CMA 1-2, will take place in Bonn, Germany, hosted by the secretariat of the UN Framework Convention on Climate Change (UNFCCC), and presided over by Fiji. The UNFCCC secretariat and the Government of Fiji are closely working with the Government of Germany, the State of North Rhine-Westphalia and the City of Bonn to ensure a dynamic and successful Conference.

Further information can be found [here](#).

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