



ECOMS-UDG. A User-friendly Data access Gateway to seasonal forecast datasets allowing R-based remote data access, visualization-validation, bias correction and downscaling

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Seasonal forecasting data from state-of-the-art forecasting systems (e.g. NCEP/CFSv2 or ECMWF/System4) can be obtained directly from the data providers, but the resulting formats, aggregations and vocabularies may not be homogeneous across datasets, requiring some post processing. Moreover, different data policies hold for the various datasets —which are freely available only in some cases— and therefore data access may not be straightforward. Thus, obtaining seasonal climate forecast data is typically a time consuming task.

The ECOMS-UDG (User Data Gateway for the ECOMS initiative) has been developed building in the User Data Gateway (UDG, <http://meteo.unican.es/udg-wiki>) in order to facilitate seasonal (re)forecast data access to end users. The required variables have been downloaded from data providers and stored locally in a THREDDS data server implementing fine-grained user authorization. Thus, users can efficiently retrieve the subsets that best suits their particular research aims (typically surface variables for certain regions, periods and/or ensemble members) from a large volume of information. Moreover, an interface layer developed in R allows remote data exploration, access (including homogenization, collocation and sub-setting) and the integration of ECOMS-UDG with a number of R packages developed in the framework of ECOMS for forecast visualization, validation, bias correction and downscaling.

This unique framework oriented to climate services allows users from different sectors to easily access seasonal forecasting data (typically surface variables), calibrating and/or downscaling (using upper air information from large scale predictors) this data at local level and validating the different results (using observations). The documentation delivered with the packages includes worked examples showing that the whole visualization, bias correction and/or downscaling tasks requires only a few lines of code and are fully reproducible and adaptable to different regions, since the necessary data is available for all ECOMS users and the R packages are freely available. This framework can be easily extended to other projects or initiatives thus providing a flexible solution to the development of climate services.




More information in <http://meteo.unican.es/trac/wiki/udg/ecoms>

PICO CL5.11

CL5.11

Climate Services - Underpinning Science PICO Session

Convener: Alessandro Dell'Aquila 

Co-Conveners: Carlo Buontempo , Paolo Michele Ruti , Melanie Davis 

[Session details](#)

[PICO](#) / Wed, 20 Apr, 13:30–15:00 / 15:30–17:00 / PICO spot 1










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Wednesday, 20 Apr 2016

PICO spot 1

Chairperson: Carlo Buontempo


- | | |
|---|---|
| 13:30–13:40 | EGU2016-9961 |
| PICO1.1 | The Copernicus Climate Change Service (C3S): A European Answer to Climate Change
<i>Jean-Noel Thepaut</i> |
|  | |
| 13:40–13:42 | EGU2016-5274 |
| PICO1.2 | Competencies Framework for Climate Services.
<i>Enric Aguilar</i> and the WMO-CCI Expert Team on Education and Training Team |
|  | |
| 13:42–13:44 | EGU2016-17117 |
| PICO1.3 | ECOMS-UDG. A User-friendly Data access Gateway to seasonal forecast datasets all validation, bias correction and downscaling
<i>Antonio Santiago Cofiño, José Manuel Gutiérrez, Jesús Fernández, Joaquín Bedia, Manuel Maria Eugenia Magariño, and Rodrigo Manzanas</i> |
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| 13:44–13:46 | EGU2016-15396 |
| PICO1.4 | A Climate Information Platform for Copernicus (CLIPC): managing the data flood
<i>Martin Juckes, Rob Swart, Lars Bärring, Annemarie Groot, Peter Thyse, Wim Som de Cer Victoria Bennett</i> |
|  | |
| 13:46–13:48 | EGU2016-7907 |
| PICO1.5 | Enhancing the usability of seasonal to decadal (S2D) climate information – an evidence assessment of sector-specific vulnerabilities
<i>Daniel Funk</i> |
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| 13:48–13:50 | EGU2016-16912 |
| PICO1.6 | Project Ukko – Design of a climate service visualisation interface for seasonal wind
<i>Drew Hemment, Moritz Stefaner, Stephann Makri, Carlo Buontempo, Isadora Christel, Ve Francisco Doblas-Reyes, Paula de Matos, and Jason Dykes</i> |
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| 13:50–13:52 | EGU2016-8108 |
| PICO1.7 | Evaluation of an early warning system for heat wave related mortality in Europe: impact and climate services |
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Rachel Lowe, *Markel García-Díez*, Joan Ballester, James Creswick, Jean-Marie Robine, Frar

- 13:52–13:54 [EGU2016-16563](#)
PICO1.8 **You Can't Always Get What You Want**
 *Sandro Calmanti*, Lorenzo Bosi, and Peter Hoefsloot
- 13:54–13:56 [EGU2016-9319](#)
PICO1.9 **Seasonal Water Balance Forecasts for Drought Early Warning in Ethiopia**
 Christoph Spirig, Jonas Bhend, and *Mark Liniger*
- 13:56–13:58 [EGU2016-14175](#)
PICO1.10 **Development of a wind energy climate service based on seasonal climate predictio**
 *Veronica Torralba*, Francisco J. Doblas-Reyes, Nicola Cortesi, Isadora Christel, Nube Gonz
- 13:58–14:00 [EGU2016-12384](#)
PICO1.11 **FORWINE – Statistical Downscaling of Seasonal forecasts for wine**
 *Rita M. Cardoso*, Pedro M. M. Soares, and Pedro M. A. Miranda
- 14:00–14:02 [EGU2016-9387](#) | [Presentation](#)
PICO1.12 **Use of Seasonal Forecasts for Dams Management in Spain**
 *Jose Voces*, Eroteida Sanchez, Beatriz Navascues, and Ernesto Rodriguez-Camino
- 14:02–14:04 [EGU2016-18336](#)
PICO1.13 **Measuring the benefits of climate forecasts in predicting PV power production**
 *Matteo De Felice*, Andrea Alessandri, and Maurizio Pollino
- 14:04–14:06 [EGU2016-4941](#)
PICO1.14 **Assessing the role of summer NAO for the seasonal predictability of climate impac**
 *Joaquin Bedia Jimenez*, Carlo Buontempo, Nicola Golding, and Jose Manuel Gutierrez Llo
- 14:06–14:08 [EGU2016-18273](#)
PICO1.15 **Climate Information Systems: Science Underpinning Services** (withdrawn)
Annarita Mariotti, Roger Pulwarty, Juli Trtanj, Dan Barrie, Heather Archambault, Claudia M
- 14:08–14:10 [EGU2016-12607](#)
PICO1.16 **Developing a robust methodology for assessing the value of weather/climate servi**
 *Justin Krijnen*, Nicola Golding, and Carlo Buontempo
- 14:10–15:00 **Interactive Presentations at PICO Screens**


Coffee Break

Chairperson: Alessandro Dell'Aquila

- 15:30–15:32 [EGU2016-7954](#)
PICO1.1 **Outstanding challenges limiting the development of climate services in Europe**
 *Carlo Buontempo*, Marta Bruno Soares, and Felicity Liggins
- 15:32–15:34 [EGU2016-12116](#)
PICO1.2 **Climate Users Interface Platform: some preliminary ideas from EUPORIAS experier**

-  *Carlo Buontempo and Alessandro Dell'Aquila*
- 15:34–15:36 EGU2016-638
PICO1.3 **Impacts of Future Climate Change on Ukraine Transportation System**
 *Inna Khomenko*
- 15:36–15:38 EGU2016-12382
PICO1.4 **Supporting UK adaptation: building services for the next set of UK climate projects**
 *Fai Fung and Jason Lowe*
- 15:38–15:40 EGU2016-15212 | Presentation
PICO1.5 **Using Copernicus earth observation services to monitor climate change impacts and trends**
 *Daniel Becker, Marc Zebisch, Ruth Sonnenschein, Konstanze Schönthaler, and Stefan von Storch*
- 15:40–15:42 EGU2016-14085
PICO1.6 **The weather roulette: assessing the economic value of seasonal wind speed predictions**
 *Isadora Christel, Nicola Cortesi, Veronica Torralba-Fernandez, Albert Soret, Nube Gonzalez*
- 15:42–15:44 EGU2016-7384
PICO1.7 **Making CORDEX accessible to users : cases studies from the Middle East** (withdrawn)
Ghislain Dubois
- 15:44–15:46 EGU2016-3913
PICO1.8 **A simple next-best alternative to seasonal predictions in Europe**
 *Carlo Buontempo and Matteo De Felice*
- 15:46–15:48 EGU2016-6722
PICO1.9 **Assessment of user needs for climate change scenarios in Switzerland**
 *Andreas Fischer, Mark Liniger, and Jacqueline Flückiger-Knutti*
- 15:48–15:50 EGU2016-1634 | Presentation
PICO1.10 **Integrated web system of geospatial data services for climate research**
 *Igor Okladnikov, Evgeny Gordov, and Alexander Titov*
- 15:50–15:52 EGU2016-3005
PICO1.11 **A climatological network for regional climate monitoring in Sardinia.**
 *Alessandro M.S. Delitala*
- 15:52–15:54 EGU2016-5075
PICO1.12 **Is “the perfect model” really needed? - Analysis of the quality level of climate information for agriculture and forestry**
 *Borbála Gálos, Wolf-Uwe Ostler, Péter Csáki, András Bidló, and Oleg Panferov*
- 15:54–15:56 EGU2016-7554
PICO1.13 **Application of geographic information systems in the field of strategic planning in service**
 *Pál Selmeczi, Ágnes Rotárné Szalkai, and Emese Homolya*
- 15:56–17:00 **Interactive Presentations at PICO Screens**
