

# 4th INTERNATIONAL CONFERENCE **ENERGY & METEOROLOGY**

Challenges in Weather, Climate & Water Services for Energy





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#### **POSTER PRESENTATIONS**

There will be two dedicated and interactive poster sessions which will provide ample opportunities to discuss the many high quality poster abstracts we received. Each presenter will have 1 minute to present their poster, standing in front of the poster, followed by 2 minutes for Q&A.

The posters will be displayed for the entire duration of the Conference and the best poster will receive a prize during the award ceremony at the end of the Conference.

## DAY 1 - Tuesday 27 June, 14:00 - 15:45

Chairs: Steve Dorling, University of East Anglia / WEMC

Robert Vautard, LSCE-IPSL

POSTER #	POSTER TITLE	AUTHOR
1	Cloud Classification in All-Sky Images Using Residual Encoding of Local Descriptors	Andreas Kazantzidis
2	On the use of the MODIS collection 6 for aerosol optical properties for solar energy resource estimations over the Mediterranean region	Andreas Kazantzidis
3	Met Office Site-specific Solar Radiation Forecasts for Power Grid Management	Henry Odbert
4	Novel datasets of energy-relevant climate variables based on ERA-Interim reanalysis	Lucien Wald
5	Increasing the accuracy of HelioClim-1 using HelioClim-3	Lucien Wald
6	Clear-sky identification methodology	Daniel Perez-Astudillo
7	Upgrade of the solar monitoring system RaZON+ to full weather station	Joop Mess
8	Details of irradiance characteristics in Central Africa from a network of station data and satellite information	Hans Georg Beyer
9	Comparing methods for cloud cover evaluation in Brazilian Southern region	Eduardo Weide Luiz
10	Solar Resource Databases vs Weighted Means - Results of a global benchmarking effort	Matthias Egler
11	HelioClim-4, or how to build a successful and sustainable business service based on CAMS radiation service	Lucien Wald
12	The analysis of static boundary condition in solar resource assessment by satellite: the role of high-resolution Digital Terrain Model in irradiance downscaling process	Edoardo Geraldi

POSTER #	POSTER TITLE	AUTHOR
13	Evaluation of satellite-based solar irradiance time series for solar thermal site assessment	André Goncalves
14	Solar variability and complementarity over the Iberian Peninsula: climatological perspective for electricity generation	Claudia Gutiérrez Escribano
15	Building up a climate dataset for the European energy sector: contributions and limitations	Isabelle Tobin
16	GERICS Climate Impact Fact Sheets for the energy sector	Elisabeth Viktor
17	A case study to demonstrate the development of climate services to tackle the challenges of climate variability and long-term changes	Caroline Acton
18	A case study based approach to understanding variability and risk in the energy sector	Emma Suckling
19	Estimate Of Solar And Wind Potential (Onshore And Offshore) Technically Feasible For Brazil	Fernando Martins Presented by André Rodrigues
21	A climatology of wind and solar power generation in the UK	Daniel Drew
22	Mid-altitude wind resource characterisation	Stephanie Mann
23	Near-surface and airborne wind resource assessment in the Middle East with high-resolution simulations	Andrew Yip
24	Using high resolution reanalyses to assess solar and wind power variability	Christopher Frank
25	Significant influences on the wind field at height levels above 100m - investigations using a boundary layer model	Manuela Starke
26	Near-surface wind speed trends: uncertainty assessment of reanalysis products	Verónica Torralba Fernández Presented by Llorenç Lledó
27	Turbulence, wind shear and wind gusts assessed by meso-scale model AROME	Sophie Martinoni- Lapierre
28	The wind power potential in low wind speed regions of China	Rong Zhu
29	Developing a weather and wave forecasting tool in support of construction and operations and maintenance of offshore windfarms	Steve Dorling
30	Impacts of extreme events on Italian electric system in the future climate	Riccardo Bonanno

POSTER #	POSTER TITLE	AUTHOR
31	Concurrent wind generation and demand in Ireland with respect to atmospheric patterns - how unusual was winter 2010/11?	Lucy Cradden
32	Test reference year (TRY) in future climate for Croatia	Renata Sokol Jurkovic
33	Daily electricity demand modelling at country level in Europe - The COPERNICUS/ECEM Project approach	Laurent Dubus
34	Towards the assessment of climate change impacts on critical energy infrastructure applied for offshore wind energy	Thomas Remke
35	Rain Attenuation Effects on 2.6 GHz WiMAX Networks Deployment in Ghana	Patrick Fiati
64	Short-term Daily Temperature Forecasts for Energy Consumption Application	Alessandro Ceppi Presented by Raffaele Salerno

### **POSTER PRESENTATIONS**

## DAY 2 - Wednesday 28 June, 14:00 - 15:45

**Chairs:** James Wilczak, NOAA/Earth Systems Research Laboratory Sylvain Cross, Reuniwatt

POSTER #	POSTER TITLE	AUTHOR
36	Switching perspectives: From historical averages to forward-looking estimates of solar resources as a basis for lifetime energy yield predictions of PV power plants	Björn Müller
37	Gridded probabilistic weather forecasts with an analog ensemble	Simone Sperati Presented by Stefano Alessandrini
38	Verification of NWP direct radiation forecasts over Spain	Jose Casado-Rubio
39	Forecasting and Simulation Solar Irradiation Using WRF Model and Refining Statistics for Northeastern Brazil	Fernando Martins Presented by André Rodrigues
40	Integration of WRF weather forecasts into Solar Energy products	Carmen Koehler
41	Gridded solar radiation forecasts from the Met Office 3D cloud nowcast	Henry Odbert
42	Utilising Data Assimilation with the WRF model (WRFDA) to Improve Solar Irradiance Forecasting for Singapore.	Robert Huva
43	Combined CSP - PV plants for MENA Region	Andreas Kazantzidis
44	A combination of post-processing techniques and satellite irradiance data for solar short wave radiation forecasts	Enrico Cesare Maggioni
45	Impact of Targeted Measurements and Next-Generation Prediction Techniques on Short-Term Wind Ramp Forecasting in the Tehachapi Wind Resource Area of California	John Zack Presented by Paulino Tardáguila
46	Proposal of two new criteria to assess solar forecasting performances	Loïc Vallance
47	Probabilistic modelig for forecasting the wind energy resource at the monthly to seasonal timescale in France	Bastien Alonzo
48	Real-time weather forecasting systems for supporting power grid O&M at the State Grid Corporation of China	Yuewei Liu
49	Regional climate model suggests the possible impacts of upstream wind farms on wind speed in Beijing during winter	Hongwei Sun

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POSTER #	POSTER TITLE	AUTHOR
50	Assessing Potential Wind Energy Resources in Saudi Arabia with Skew-t Distribution	Felipe Tagle
51	Data assimilation for better ramp predictions	Jesper Nielsen
52	A first approach to use ensemble forecast of AROME for short-term wind power prediction	Raphaël Legrand
53	Applying Data Assimilation Method to Wind Simulation for Wind Energy Prediction	Wenqing Xu
54	Optimized COSMO-DE Ensemble forecasts for renewable energies and current-carrying capacity	Jonas von Schumann
55	An Analysis of Deterministic Error Scores for Power Forecasting Model Comparison for Renewable Energy Generation	Ruben Jubeh
56	Skill assessment of energy-relevant climate variables in a selection of seasonal forecast models	Philip Bett
57	Worldwide Assessment Of Wind Speed Monthly Forecasts	Nicola Cortesi Presented by Llorenç Lleido
58	Graphical user interface for weather forecast products optimized for the needs of renewable energy industry	Tobias Reinartz
59	Intermittent energy sources availability in case of cold peaks in future climate	Sophie Martinoni- Lapierre
60	Forecasting of winter phenomena impacting the energy sector	Ludovic Bouilloud
61	Predictability of the weather patterns that cause extreme electricity demand in the UK.	Hazel Thornton
62	Modelling electricity and cooling load profiles for domestic customers in Nigeria	Damilola Oluwole
63	Meteorological forecast support for energy trading in the Czech Republic	Pavel Zahradnicek
65	Hourly comparison of numerical weather prediction solar irradiance forecasts in Italy using WRF Solar mesoscale model, ground based stations and the Advanced Model for the Estimation of the Surface Solar Irradiance (AMESIS)	Sabrina Gentile Presented by Saverio Nilo