

Template A2. A list of all dissemination activities

Publications:

John, V. and J. Schulz, 2014: Preparing the European Climate Data Records for the Copernicus Climate Change Monitoring Service. *Copernicus Observer*, Issue #8. [available at <http://newsletter.copernicus.eu/issue-08/article/preparing-european-climate-data-records-copernicus-climate-change-monitoring>]

Su, Z., Timmermans, W.J. and Zeng, Y., 2013: 2nd collocation meeting of EC FP7, ESA, and EUMETSAT ECV projects, 15-16 May 2013, Brussels, Belgium. Meeting report, GEWEX News, 23(3), pp. 10-11.

Schulz J., V. John, A. Kaiser-Weiss, C. Merchant, D. Tan, E. Swinnen and R. Roebeling, 2015: European Climate Data Record Capacity Assessment. *Geoscience Data Journal*, submitted.

Gregow, H., K. Jylha, H. M. Makela, T. Manninen, A. K. Kaiser-Weiss, F. Kaspar, P. Poli, D. G. H. Tan, A. Obregon, Z. Su. 2015: Worldwide survey of awareness and needs concerning reanalyses and climate services. BAMS (submitted 18.6.2015) has been assigned to Editor Arthur DeGaetano.

Kaiser-Weiss, A., F. Kaspar, V. Heene, M. Borsche, D. G. H. Tan, P. Poli, 4 A. Obregon, H. Gregow. 2015. Comparison of regional and global reanalysis near-surface winds with station observations over Germany. Accepted for publication in *Advances in Science and Research*.

Presentations:

John, V., Rob Roebeling, Jörg Schulz, 2014: Tools for CDR Maturity Assessment. 5th Meeting of the EUMETSAT Working Group on Data Set Generation, EUMETSAT Headquarter, Darmstadt, Germany.

Höck, H., A. Kaiser-Weiss, J. Schulz, V. John, F. Kaspar, M. Stockhause, F. Toussaint, M. Lautenschlager, 2015: Maturity Matrices for Quality of Model- and Observation-Based Data Records in Climate Science. Poster EGU2015-10158 at EGU conference.

Kaspar, F., J. Schulz, A. Kaiser-Weiss, V. John, R. Roebeling, A. Obregon, 2013: A maturity index concept for climate datasets. 9th EUMENET Data Management Workshop "Climate Data supporting Climate Services" (6-8 November 2013, El Escorial, Spain).

Kaspar, F., 2014: The CORE-CLIMAX Maturity Matrix Concept. 9th National GCOS Coordination Meeting, 5./6. November 2014, Offenbach, Germany.

Kaspar, F., 2014: Climate Data Management at DWD - Recent Activities. Coordination Meeting of German Climate Data Centres, 18. September 2014, Hamburg Germany.

Schulz, J., A. N. Arslan, J.-C. Calvet, V. John, A. Kaiser-Weiss, F. Kaspar, C. Merchant, T. Manninen, A. Obregon, P. Poli, R. Roebeling, E. Swinnen, D. Tan, C. Tote, Y. Zeng, 2015: System Maturity Assessment. Copernicus Workshop on Climate Observation Requirements, ECMWF, Reading, UK.

Schulz, J., 2014: Scientific and Process oriented Evaluation of Climate Data. ECMWF Climate Change Service Workshop, ECMWF, 17-18 February 2014, Reading, UK.

Schulz, J., 2014: Report on the CORE-CLIMAX Project (Establishing Common Procedures for Climate Observation). EUMETSAT-ECMWF Bilateral Meeting, ECMWF, Reading, UK.

Schulz, J., 2014: Scientific and Process oriented Evaluation of Climate Data (Results of The CORE-CLIMAX Assessment Workshop). 1st Meeting of the CEOS-CGMS Working Group Climate, EUMETSAT, Darmstadt, Germany.

Schulz, J., 2014: EUMETSAT activities related to space-based observations. GCOS AOPC XIX, JRC, Ispra, Italy.

Schulz J., [Viju John](#), Andrea Kaiser-Weiss, Rob Roebeling, Andre Obregon, Else Swinnen, Carolien Tote, Ali Nardir Arslan, Jean-Christophe Calvet, Hilppa Gregow, Terhikki Manninen, Paul Poli, Bob Su, David Tan, Wim Timmermans, and Yijian Zeng, 2014: FP-7 CORE-CLIMAX: How to ensure sustainable, transparent, and traceable generation of climate data records?, EMS Conference, Prague, Czech Republic.

Schulz, J., Viju John, Andrea Kaiser-Weiss, Chris Merchant, André Obregon, Rob Roebeling, 2014: Scientific and Process oriented Evaluation of Climate Data (Results of The FP-7 CORE-CLIMAX Project). CLIP-C Portal Design Workshop, KNMI, 18 November, De Bilt, The Netherlands.

Schulz, J., 2013: Towards an Assessment of the European ECV CDR Capability. ESA CCI CMUG Integration-3rd Meeting, Hamburg, Germany.

Schulz, J., 2013: Sustained Climate Data Record Generation at EUMETSAT. NOAA Climate Data Record Programme Conference, Asheville, USA

Schulz, J., Rob Roebeling, Roger Huckle, Tim Hewison, Viju John, Alessio Lattanzio, 2013: Towards Improved Climate Data Records for Climate System Analysis and Climate Services. 2013 EUMETSAT METEOROLOGICAL SATELLITE CONFERENCE, 19th AMERICAN METEOROLOGICAL SOCIETY AMS SATELLITE METEOROLOGY, OCEANOGRAPHY, AND CLIMATOLOGY CONFERENCE, Vienna, Austria.

Su, Z., [J. Schulz](#), Y. Zeng, D. Tan, H. Gregow, W. Timmermans & the CORE-CLIMAX Team, 2015: CORE CLIMAX Results Overview. ESA CCI CMUG Integration-5th Meeting, Norrkoping, Sweden.

Zeng, Y., Su, Z., and Timmermans, W., 2014: Overview of CORE-CLIMAX and Evolution of System Maturity Matrix. Invited presentation at the 37th Committee on Earth Observation Satellites Plenary Meeting, Feb. 2014, Frascati, Italy.

Zeng, Y., Su, Z., Timmermans, W., Timmermans, J., Boer, B., 2014: Coordinating earth observation data validation for REanalysis for CLIMATE ServiceS: CORE-CLIMAX. Invited presentation on at GEO European projects'workshop-7, Barcelona, Spain.

ECCA-Conference 14.5.2015 highlights of in depth survey results of WP5 related to sectors Water, Energy, Agriculture and Forests as part of important activities in climate services, GFCS and the work carried out by the Finnish Meteorological Institute Climate Service Centre, presented by H. Gregow. <http://www.coreclimax.eu/?q=Presentations>

EMS 2014, Prague 6-10 Oct 2014. Hilppa Gregow, Kirsti Jylhä, Hanna Mäkelä, Andrea Kaiser-Weiss, Andre Obregon, Frank Kaspar, David Tan, Paul Poli. Defining User Needs in Copernicus Climate Change Services (C3S).

International Symposium for Data Assimilation 2014 Andrea Kaiser-Weiss motivated the reanalysis session and discussion at the International Symposium for Data Assimilation (24-28 February 2014, Munich, Germany) with the results of the Core-Climax user questionnaire.

Conference in Fall 2013 A. Kaiser-Weiss (DWD) participated at the Coordinated Regional Climate Downscaling Experiment (CORDEX) conference to learn from the experiences of the climate community with their dynamical and statistical downscaling methods, and their means of comparing regional and global models.

American Geophysical Union, Fall Meeting 2014, 15-19 Dec 2014: Session NG32A: Reanalysis: Evaluation and Intercomparison I: Kaspar, F.; Kaiser-Weiss, A.; Obregon, A.; Borsche, M.: Exploring reanalysis application for the purposes of climatological applications at regional scale (<https://agu.confex.com/agu/fm14/meetingapp.cgi#Paper/6119>).

Posters:

Andrea K. Kaiser-Weiss, Michael Borsche, Vera Heene and Frank Kaspar: User-oriented evaluation and post-processing of global and regional reanalysis. Copernicus Workshop on Climate Observation Requirements: Defining content for the Climate Data Store. ECMWF, Reading, UK. 29 June – 2 July 2015. (<http://www.ecmwf.int/sites/default/files/COP-OBS-WS-Kaspar.pdf>)

Frank Kaspar, Andrea K. Kaiser-Weiss, Vera Heene, Michael Borsche, and Jan Keller: Evaluation of representativeness of near-surface winds in station measurements, global and regional reanalysis for Germany. EGU2015-11318. European Geosciences Union General Assembly 2015. Vienna, Austria, 12-17 April 2015. (<http://meetingorganizer.copernicus.org/EGU2015/EGU2015-11318.pdf>)

Andrea K. Kaiser-Weiss, André Obregón, Michael Borsche, David Tan, Paul Poli, Liselotte Bach, Vera Heene, Hilppa Gregow and Frank Kaspar: Using feedback statistics for evaluating global and regional reanalyses - an example approach applied to wind data. EMS2014-540, EMS/ECAC Prague 6-10 Oct **2014**.

Andrea K. Kaiser-Weiss, André Obregón, Michael Borsche, David Tan, Paul Poli, Liselotte Bach, Vera Heene, Hilppa Gregow and Frank Kaspar: National climate services - what can we gain from reanalyses? The Climate Symposium 2014, Darmstadt, 13-17 Oct **2014**.

Jokinen, P., Gregow H., Venäläinen, A., Laaksonen, A. Influence of resolution on storm studies. EGU **2014**.

Gregow, H., Obregon, A., Kaiser-Weiss, A., Kaspar, F., Jylhä, K., Kekki, S. Use of reanalysis and other weather and climate data - questionnaire survey. EMS **2013**, EMS/ECAM Reading 9–13 September 2013

Abstracts:

Andrea K. Kaiser-Weiss, André Obregón, Michael Borsche, David Tan, Paul Poli, Liselotte Bach, Vera Heene, Hilppa Gregow and Frank Kaspar: Using feedback statistics for evaluating global and regional reanalyses - an example approach applied to wind data. EMS2014-540, EMS/ECAC Prague 6-10 Oct **2014**.

Andrea K. Kaiser-Weiss, André Obregón, Michael Borsche, David Tan, Paul Poli, Liselotte Bach, Vera Heene, Hilppa Gregow and Frank Kaspar: National climate services - what can we gain from reanalyses? The Climate Symposium 2014, Darmstadt, 13-17 Oct **2014**.

An abstract entitled “Defining User Needs in Copernicus Climate Change Services” by Hilppa Gregow the WP5 team was accepted to be presented in the 14th EMS Annual Meeting & 10th European Conference on Applied Climatology (ECAC) on 06 – 10 October **2014** | Prague

<http://meetingorganizer.copernicus.org/EMS2014/EMS2014-411.pdf>

An abstract entitled “Impact data in weather & climate services” by Jokinen&Gregow was accepted to be presented in the 14th EMS Annual Meeting & 10th European Conference on Applied Climatology (ECAC) on 06 – 10 October **2014** | Prague [http://meetingorganizer.copernicus.org/EMS2014/EMS2014-](http://meetingorganizer.copernicus.org/EMS2014/EMS2014-427.pdf)

[427.pdf](http://meetingorganizer.copernicus.org/EMS2014/EMS2014-427.pdf)

A paper update entitled “Use and Applications of Reanalysis Surveyed” was submitted to the Climate Services Partnership (CSP) July quarterly newsletter <http://www.climate->

[services.org/sites/default/files/CSPNewsletter_July2014.pdf](http://www.climate-services.org/sites/default/files/CSPNewsletter_July2014.pdf)

Jokinen, P., Gregow, H., Venäläinen, A., Laaksonen, A. **2014**. Influence of resolution on storm studies. Vol. 16, EGU2014-14299. <http://meetingorganizer.copernicus.org/EGU2014/EGU2014-14299.pdf>

Gregow, H., Jylhä, K., Mäkelä, H., Kaiser-Weiss, A., Obregon, A., Tan, D., Poli, P. and Kaspar, F. Defining User Needs in Copernicus Climate Change Services. EMS/ECAC Prague 6-10 Oct 2014.

Jokinen, P., and Gregow H. 2014. Impact data in weather & climate services. Vol. 11, EMS2014-427, 2014, EMS/ECAC Prague 6-10 Oct 2014.

Meetings:

ET- Climate meeting De Bilt, Netherlands 3-5.4.2013 “The CORE-CLIMAX Project and the importance of closing the water cycle and soil conditions for seasonal forecasts in Europe”

<http://www.coreclimax.eu/?q=Presentations> presented by Hilppa Gregow

ET-Climate meeting Krakow, Poland 23.-25.4.2014, presented by H. Gregow.

<http://www.knmi.nl/~verver/EUMETNET/Reports/Krakow/pdf/9.CORE%20Climax.pdf>

Teleconference on 10 December 2014 from 2-3pm Eastern Standard Time with NOAA/CIRES

<http://cpo.noaa.gov/ClimatePrograms/ModelingAnalysisPredictionsandProjections/MAPPTaskForces/ClimateReanalysisTaskForce.aspx>, participated by Paul Poli, ECMWF.

Coordination meeting covering 3 Core-Climax visits was held at ECMWF on 11-13 November 2014, involving 15 participants from 7 different institutions ECMWF finalized preparations and hosted the “Core-Climax Coordination Meeting Towards Exchanging Reanalysis Observation Feedback and Blacklists” organized in the framework of WP5, from 11 to 13 November 2014. The meeting attracted a large audience, including from the project itself (EUMETSAT) but also from other interested entities such as China Meteorological Administration, U.K. Met Office, and Japan Meteorological Agency.

Workshops:

CORE-CLIMAX ECV Capacity Assessment Workshop, 21-23 January 2014, EUMETSAT Head Quarters, Darmstadt Germany. Major workshop for WP2 with more than 40 participants of the CORE-CLIMAX maturity assessment.

ECMWF workshop on Copernicus Climate Services 17.-18.2.2014 An invited keynote presentation was ordered from Hilppa Gregow to be given at the ECMWF workshop on Copernicus Climate Services 17.-18.2.2014 in Reading. It entitled “Outreach and Dissemination: Experience with Core-Climax”. Hilppa Gregow prepared the presentation together with CORE-CLIMAX project coordinator Prof. Bob Su.

Workshops on the Development of the Copernicus Climate Change Service at ECMWF: Workshop on the Climate Data Store (ECMWF, Reading, UK. 3 to 6 March 2015) ;participated by Frank Kaspar, DWD.

Workshop on Climate Observation Requirements: “Defining content for the Climate Data Store” (ECMWF, Reading, UK. 29 June – 2 July 2015);participated by Frank Kaspar, DWD.

Capacity Building:

1st Capacity Building Workshop (**D6-65**), 19-20 March at FMI premises, Helsinki, Finland:

“Requirements on data sets for climate research and climate services - survey results”, Kirsti Jylhä / Hanna Mäkelä, FMI

“Combining reanalysis, in situ and impact data in a storm-related climate service”, Pauli Jokinen, FMI

“Analyzing deep low pressures with combined in situ and model-based datasets for climate change service”, Matti Kämäräinen, FMI

“Lightning location data usage in operational weather monitoring and climatological studies”, Antti Mäkelä, FMI

“Gridded historical temperature datasets and time series analysis in climate change detection”, Santtu Mikkonen, UEF / Hanna Mäkelä, FMI

“Reanalyses products and data assimilation for Climate Services”, David Tan, ECMWF.

“Which data are suitable for your application? - Support tools & info to make choices”, Viju John, Rob Roebeling, Joerg Schulz, EUMETSAT.

“Introduction to CM SAF climate datasets and their ordering system, Aku Riihelä & Terhikki Manninen, FMI

“Introduction to Copernicus and ESA climate datasets”, Kari Luojus, FMI

“Validation principles of land products”, Jean-Christophe Calvet, Meteo-France

“Some case studies in validation strategies”, Tanis Cemal Melih, FMI

“Challenges of surface albedo validation, Examples of European products: GlobAlbedo (ESA-CCI) and CLARA-A1-SAL (CM-SAF)”, Terhikki Manninen, Aku Riihelä, FMI

“Aerosol-CCI products, validation practices and results”, Gerrit de Leeuw & Larisa Sogacheva, FMI

2nd Capacity Building Workshop (D6-66), 10 October at ESM/ECAC conference, Prague, Czech Republic:

“Which data is out there?”, Bob Su, ITC-University of Twente

“Re-analyses products and data assimilation for Climate Services”, David Tan, ECMWF

“Which data are suitable for your application? - Support tools & info to make choices”, Viju John, Rob Roebeling, Joerg Schulz, EUMETSAT

“Combining and utilizing data sets in a storm-related climate service”, Pauli Jokinen, FMI

“Extreme El Nino events: What’s the price?”, Iakovos Barmpadimos, SCOR

“Waiting for the rain: Drought frequency in France”, Iakovos Barmpadimos, SCOR

“Climate scenarios at the local scale”, Albert Klein-Tank, KNMI

Visibility on websites (apart from the project’s own website):

CORE-CLIMAX on FMI webpages <http://en.ilmatietaenlaitos.fi/projects>

FMI research news for public based on published peer reviewed articles (in Finnish):

http://ilmatietaenlaitos.fi/tutkimustoiminta/-/asset_publisher/Dz9C/content/ilmastollisten-uusanalysien-mahdollisuudet-tunnetaan-huonosti?redirect=http%3A%2F%2Filmatietaenlaitos.fi%2Ftutkimustoiminta%3Fp_p_id%3D101_INSTAN-CE_Dz9C%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_count%3D1

Visits:

Visit no.	Plan	Actual visit	Report
D4.1-1	EURO4M	David Tan (ECMWF) visited a EURO4M project partner (KNMI) 25 February - 1 March 2013	VisitbyDavidTant oKNMI2013- Feb.pdf
D4.1-2	European institution	Eric Brun from Meteo-France visited ECMWF, 17-19 November 2014 for Coordination Meeting 1 (CM1)	snow_meeting_r eport.pdf
D4.1-3	NCAR RAL	Paul Poli (ECMWF) visited European Wind Energy Association meeting 25-26 June 2013	VisitbyPaulPolito WindCommunity Jun2013.pdf
D4.2-1	NCAR CISL/RDA	Joey Comeaux from NCAR visited ECMWF 4-28 February 2013	VisitbyJoeyCome aux2013.pdf
D4.2-2	NOAA NCDC	Steve Wanzong from NOAA CIMSS visited ECMWF 9-11 July 2013	report_AMV_coo rdination_meeti ng_20130905.pd f
D4.2-3	NASA Atmospheric Chemistry and Dynamics Laboratory	Matthew Menne from NOAA NCDC visited ECMWF, 17-19 November 2014 for CM1	snow_meeting_r eport.pdf
D4.2-4	Global Runoff Data Centre	Not conducted	
D4.2-5	World Ozone and Ultraviolet Data Centre	David Tan (ECMWF) visited SPARC meeting 29 April - 1 May 2013	VisitbyDavidTant oExeter2013- Q2.pdf
D4.2-6	Russia World Data Centre for Meteorology	Olga Bulygina from Russia World Data Centre was due to visit for CM1 but failed to obtain travel authorization; she participated remotely	snow_meeting_r eport.pdf
D4.2-7	National Snow and Ice Data	Steve Worley from NCAR and also representing National Snow and Ice Data Center visited	snow_meeting_r eport.pdf

	Center	ECMWF, 17-19 November 2014 for CM1	
D4.2-8	Meteo Chile	Jean-Noel Thepaut (ECMWF) visited ICCS3, 4-6 Dec. 2013	Visit_by_JNThepaut_to_ICCS3_PP.pdf
D4.3-1	NOAA STAR	Cheng-Zhi Zou from NOAA was due to visit for CM2 but failed to obtain travel authorization and participated remotely	feedback_and_acklist_meeting_report.pdf
D4.3-2	China Meteorological Administration	Yu Yu from Chinese Meteorological Administration visited ECMWF, 17-19 November 2014 for CM1	snow_meeting_report.pdf
D4.3-3	CHUAN data providers	Hans Hersbach (ECMWF) visited U. Vienna, 20-24 January 2014	VisitbyHansHersbachtouVienna_2014.pdf
D4.3-4	Russia Space Research Institute	Ross Brown from Environment Canada visited ECMWF, 17-19 November 2014 for CM1	snow_meeting_report.pdf
D4.3-5	NASA Headquarters	Jean-Noel Thepaut (ECMWF) visited NASA Headquarters (Obs4MIPs meeting), 29 April - 1 May 2014	Visit_by_JNThepaut_to_NASAHQ_Obs4MIPs.pdf
D4.3-6	NOAA Headquarters	Dave Santek from NOAA CIMSS visited ECMWF 9-11 July 2013	report_AMV_coordination_meeting_20130905.pdf
D5.3-1	UK Met Office	David Tan (ECMWF) visited UK Met Office, 15-19 April 2013	VisitbyDavidTanttoExeter2013-Q2.pdf
D5.3-2	Japan Meteorological Agency	Jack Woollen from NOAA visited ECMWF, 11-13 November 2014, for CM2	feedback_and_acklist_meeting_report.pdf
D5.3-3	NASA Global Modeling and Assimilation Office	Will McCarty from NASA Global Modeling and Assimilation Office visited ECMWF, 11-13 November 2014, for CM2	feedback_and_acklist_meeting_report.pdf