

UERRA

Outreach and Dissemination

WP 7

Year 3 ½ - 4

Per Undén, Coordinator UERRA

Management Support Team

Outreach and impact

UERRA becomes more known

Regional reanalyses being used more

UERRA is discussed in connection with C3S

UERRA is continued in the C3S Regional RA

Communication via the uerra.eu webportal

Web site maintained and extended

- Home page with announcements about meetings and Newsletter
- Project overview, general information
 - Basic documents DoW Part A and Part B
 - All deliverables
- Work Packages, details
- Meetings, past and future, GA s WS s , MST meetings External meetings
 - Announcements, reports, presentations
- Publications
 - Deliverable reports – many more of these
 - **Papers** - **Meetings' presentations**
- Information, General Outreach,
 - *Project information presentations*
 - *will be data and products (links)*
 - *External meetings*
- More, Events, Calender **Data and links !**

Other Meetings 2017

EMS Meeting Dublin 4-8 September

EGU Meeting Wien April

African climate services WS

- M24, delayed, took place November 2017
- Participating in Climate services WS in Marocko, Marrakesh
- Climate service providers in Africa

ICR 5 – International Reanalysis Conference, Roma, 13-17 November

Scientific papers

- Bach, Liselotte, Christoph Schraff, Jan D. Keller, Andreas Hense: Towards a probabilistic regional reanalysis system for Europe: evaluation of precipitation from experiments, *Tellus A: Dynamic Meteorology and Oceanography* Vol. 68 , Iss. 1, 2016.
- Borsche, M, A. K. Kaiser-Weiss, P. Undén, and F. Kaspar: Methodologies to characterize uncertainties in regional reanalyses. *Adv. Sci. Res.*, 12, 207-218, 2015 www.adv-sci-res.net/12/207/2015/doi:10.5194/asr-12-207-2015. <http://www.adv-sci-res.net/12/207/2015>
- Borsche, M., Kaiser-Weiss, A.K., and Kaspar, F.: Wind speed variability between 10 and 116 m height from the regional reanalysis COSMO-REA6 compared to wind mast measurements over Northern Germany and the Netherlands. *Adv. Sci. Res.*, 13, 151–161, doi: 10.5194/asr-13-151-2016, 2016.
- Cram, T. A., Compo, G. P., Yin, X., Allan, R. J., McColl, C., Vose, R. S., Whitaker, J. S., Matsui, N., Ashcroft, L., Auchmann, R., Bessemoulin, P., Brandsma, T., Brohan, P., Brunet, M., Comeaux, J., Crouthamel, R., Gleason, B. E., Groisman, P. Y., Hersbach, H., Jones, P. D., Jonsson, T., Jourdain, S., Kelly, G., Knapp, K. R., Kruger, A., Kubota, H., Lentini, G., Lorrey, A., Lott, N., Lubker, S. J., Luterbacher, J., Marshall, G. J., Maugeri, M., Mock, C. J., Mok, H. Y., Nordli, O., Rodwell, M. J., Ross, T. F., Schuster, D., Srnec, L., Valente, M. A., Vizi, Z., Wang, X. L., Westcott, N., Woollen, J. S. and Worley, S. J. 2015. The International Surface Pressure Databank version 2. *Geoscience Data Journal*, 2: 31–46. DOI: 10.1002/gdj3.25.
- Ionita M., Boroneant C., Chelcea S. 2015. Seasonal modes of dryness and wetness variability over Europe and its connections with large scale atmospheric circulation and global sea surface temperature. *Climate Dynamics* DOI: 10.1007/s00382-015-2508-2.
- Isotta, F. A., Frei, C., Weilguni, V., Perčec Tadić, M., Lassègues, P., Rudolf, B., Pavan, V., Cacciamani, C., Antolini, G., Ratto, S. M., Munari, M., Micheletti, S., Bonati, V., Lussana, C., Ronchi, C., Panettieri, E., Marigo, G. and Vertačnik, G.: The climate of daily precipitation in the Alps: development and analysis of a high-resolution grid dataset from pan-Alpine rain-gauge data. *Int. J. Climatol.*, 34(5), 1657-1675, doi: 10.1002/joc.3794, 2014.
- Kaiser-Weiss, A. K., Kaspar, F., Heene, V., Borsche, M., Tan, D. G. H., Poli, P., Obregon, A., and Gregow, H.: Comparison of regional and global reanalysis near-surface winds with station observations over Germany, *Adv. Sci. Res.*, 12, 187-198, doi:10.5194/asr-12-187-2015, 2015.

Scientific papers

Lang, T.J., Pédeboy S., Rison W., Cervený R.S., Montanyà J., Chauzy S., MacGorman D.R., Holle R.L., Ávila E.E., Zhang Y., Carbin G., Mansell E.R., Kuleshov Y., Peterson T.C., Brunet M., Driouech F., and Krahenbuhl D.S. 2017. WMO World Record Lightning Extremes: Longest Reported Flash Distance and Longest Reported Flash Duration Bulletin of the American Meteorological Society. DOI: <http://dx.doi.org/10.1175/BAMS-D-16-0061.1>

Lehoczky A., Sobrino J.A., Skokovic D., Aguilar, E. 2017. The Urban Heat Island Effect in the City of Valencia: A Case Study for Hot Summer Days Urban Science. DOI:10.3390/urbansci1010009

Lehoczky A., Sobrino J.A., Skokovic D., Aguilar, E. 2017. The Urban Heat Island Effect in the City of Valencia: A Case Study for Hot Summer Days Urban Science. DOI:10.3390/urbansci1010009

Pérez-Zanón, N., Sigró, J., Domonkos, P., and Ashcroft, L. 2015. Comparison of HOMER and ACMANT homogenization methods using a central Pyrenees temperature dataset. Adv. Sci. Res. DOI: 10.5194/asr-12-111-2015

Potopová, V., Boroneanț, C., Mozný, M., Soukup, J. 2015. Driving role of snow cover on soil moisture and drought developing during the growing season in the Czech Republic. International Journal of Climatology., DOI: 10.1002/joc.4588.

Skansi M., King, J., Lazzara, M., Cervený R., Stella J., Solomon S., Jones P., Bromwich, D., Renwick, J., Burt, C., Peterson T., Brunet M., Driouech F., Vose R., Krahenbuhl D., 2017. Evaluating highest-temperature extremes in the Antarctic. Eos DOI:10.1029/2017EO068325

Soci, Cornel, Bazile, E., Besson, F and Landelius, T.: High-resolution precipitation re-analysis system for climatological purposes. Tellus A 2016, 68, 29879, <http://dx.doi.org/10.3402/tellusa.v68.29879>

Thorne P. W., R. J. Allan, L. Ashcroft, P. Brohan, R.J.H Dunn, M. J. Menne, P. R. Pearce, J. Picas, K. M. Willett, M. Benoy, S. Bronnimann, P. O. Canziani, J. Coll, R. Crouthamel, G. P. Compo, D. Cuppett, M. Curley, C. Duffy, I. Gillespie, J. Guijarro, S. Jourdain, E. C. Kent, H. Kubota, T. P. Legg, Q. Li, J. Matsumoto, C. Murphy, N. A. Rayner, J. J. Rennie, E. Rustemeier, L. C. Slivinski, V. Slonosky, A. Squintu, B. Tinz, M. A. Valente, S. Walsh, X. L. Wang, N. Westcott, K. Wood, S. D. Woodruff, S. J. Worley. 2017. Towards an integrated set of surface meteorological observations for climate science and applications. Bulletin of the American Meteorological Society, early on-line view. DOI: <http://dx.doi.org/10.1175/BAMS-D-16-0165.1>

Conference presentations

Abida, Rachid and E. Bazile, 2016: Estimating uncertainties in regional surface reanalyses under UERRA project. EMS conference, Trieste 12-16 September 2016.

Aguilar, E., P. Stepanek , V.C.K. Venema, R. Auchmann, F.D. dos Santos Silva, E. Engström, A. Gilabert, Z. Kretova, J.A. Lopez-Díaz, Y. Luna Rico, C. Oria Rojas, M. Prohom, D. Rasilla, M. Salvador, G. Vertacnik, and Y. Yosefi. 2105. Description of the bias introduced by the transition from Conventional Manual Measurements to Automatic Weather Station through the analysis of European and American parallel datasets. (+ Australia, Israel & Kyrgyzstan), oral presentation at the 15th EMS Annual Meeting & 12th European Conference on Applications of Meteorology (ECAM) | 07–11 September 2015 | Sofia, Bulgaria.

Ashcroft, L., J.R. Coll, P. Domonkos, M. Castellà and M. Brunet. 2015. Rescue and Quality Control of Sub-Daily Observations: An Iberian Case Study. Poster presentation at the International Symposium CLIMATE-ES 2015: Progress on climate change detection and projections over Spain since the findings of the IPCC AR5. Tortosa, Spain, 11-13 March 2015.
http://www.climaes2015.urv.cat/wp-content/uploads/2015/02/CLIMA2015_2_LindenAshcroft.pdf

Ashcroft L., J.R. Coll, M. Castellà, P. Domonkos, E. Aguilar, J. Sigró and M. Brunet. 2015. Rescue and quality control of European subdaily data. Poster presentation at the 15th EMS Annual Meeting & 12th European Conference on Applications of Meteorology (ECAM) | 07–11 September 2015 | Sofia, Bulgaria: <http://meetingorganizer.copernicus.org/EMS2015/EMS2015-636.pdf>

Bach, L.: Accounting for uncertainty in regional reanalyses – employing probabilistic verification for identifying an enhanced configuration of the reanalysis system for COSMO-EN-REA12, 5th International Conference on Reanalysis (ICR5), Rome, 13.-17.11. 2017.

Bazile, Eric, C. Soci(*), M. Coustau(*), F. Besson, M. Lafaysse, E. Martin, Y. Durand, P. Lassègues, F. Mounier(*), J.F. Mahfouf , J.M. Soubeyroux, F. Taillefer, A.L. Gibelin, S. Morin, T. Landelius & P. Unden (SMHI) et ... : From EURO4M to UERRA. CNRM Seminar Toulouse 10th December 2014 (French).

Bazile, Eric, R. Abida, C. Soci(1), A. Verrelle, C. Szczypa, P. Le Moigne, 2017: A 50-year precipitation analysis over EUROPE at 5.5km within the UERRA project. Poster at EGU Conference Vienna, 24-28 April 2017.

Conference presentations

Bazile, Eric, R. Abida, C. Szczypka, A. Verrelle, P. Le Moigne & C. Soci (*), 2017: A 50 year surface analysis over Europe at 5.5km within the UERRA project. EMS Conference Dublin, 4-8 September 2017.

Bazile, Eric, R. Abida, C. Szczypka, A. Verrelle, P. Le Moigne & C. Soci (*), 2017: A 50 year surface analysis over Europe at 5.5km within the UERRA project. Poster at the 5th International Conference on Reanalysis Roma 13-17 November 2017.

Besselaar, Else van den, Gerard van der Schrier, Phil Jones, and Ge Verver. Developments to the E-OBS gridded dataset across Europe (solicited). Oral presentation at the Copernicus Workshop on Climate Observation Requirements, Reading, UK, 29 June – 2 July 2015.

Borsche, M. : Evaluation of radiation from CM SAF satellite data against regional reanalysis, Trieste, EMS 12.-16. Sept 2016.

Borsche, M.: Evaluating global radiation of regional reanalyses over Europe against the satellite-derived SARA dataset, 5th International Conference on Reanalysis (ICR5), Rome, 13.-17.11. 2017.

Brunet M., Linden Ashcroft, Joan Ramon Coll, Alba Gilabert, Mercè Castellà, Phil Jones, Albert Klein-Tank and Per Uden. 2015. Enhancing availability, accessibility and quality of land-surface/station-based climate time-series: the EURO4M and UERRA experiences and their links. Poster presentation at the Copernicus Workshop on Climate Observation Requirements, Reading, UK, 29 June – 2 July 2015. <http://www.ecmwf.int/sites/default/files/COP-OBS-WS-Brunet.pdf>

Cornes, Richard and P. Jones 2015. Historical (Surface) Weather Observations for Global Reanalysis. Oral presentation at the Copernicus Workshop on Climate Observation Requirements, Reading, UK, 29 June – 2 July 2015. <http://www.ecmwf.int/sites/default/files/COP-OBS-WS-Jones.pdf>

Kaspar, F.: Regionalisierung: Interpolation und modell-basierte Reanalysen, Thüringer Landesanstalt für Umwelt und Geologie, Jena, 7.4.2016

Kaspar, Frank: „Modellbasierte Re-Analysen.“ Nationaler Copernicus Nutzer-Fachworkshop, Deutscher Wetterdienst, Offenbach, 22. - 23 . November 2016, http://www.dwd.de/DE/klimaumwelt/copernicus_workshop/programm/_node_tagungsprogramm.html

Conference presentations

Kaspar, F. Use of Regional Reanalysis in Climate Monitoring, Visit of Korean Meteorological Agency to Deutscher Wetterdienst, Offenbach, 5.12.2016.

Kaspar, F. : Regional reanalyses for Europe and Germany based on DWD's COSMO model. An overview with focus on the evaluation of wind fields, Fraunhofer-Institut für Windenergie und Energiesystemtechnik, Kassel: 8.3.2017

Kaspar, F. : An overview on regional reanalysis activities based on the COSMO model, 5th International Conference on Reanalysis (ICR5), Rome, 13.-17.11. 2017.

Klein-Tank, A. 2015. High-resolution regional observations and products. Oral presentation at the Copernicus Workshop on Climate Observation Requirements, Reading, UK, 29 June – 2 July 2015: <http://www.ecmwf.int/sites/default/files/COP-OBS-WS-Klein-Tank.pdf>

Gilabert, A.; Brunet, M.; Lopardo, G.; Merlone, A.; Aguilar, E.; Solé, G.; Roggero, G.; Berithlia, F.; Jones, P. An exploratory analysis of the impact of the changeover to automatic weather stations considering the primary national standards calibration procedures: Observatori de l'Ebre case study. International Symposium CLIMATE-ES 2015, 11-13 March 2015, Tortosa, Spain.

Lussana, Cristian, Barbara Casati, Hilde Haakenstad, Thomas N. Nipen, and Ivar A. Seierstad A comparison between observed and modeled precipitation at different spatial scales on the Norwegian mainland-

Le Moigne, Patrick, C. Szczypta, A. Verrelle, E. Bazile and R. Abida, 2017: On the use of the 50-year high-resolution UERRA re-analysis for a hydro-meteorological application over Europe. 5th International Conference on Reanalysis Roma 13-17 November 2017

Niermann, D.: Comparison of wind fields from European regional reanalyses from the UERRA project and COSMO-REA6, 5th International Conference on Reanalysis (ICR5), Rome, 13.-17.11. 2017.

Soci, Cornel and E. Bazile, 2014: Estimation of uncertainties in an European high resolution surface re-analysis under UERRA project. EMS Conference Praha 6-10 October 2014.

Conference presentations

Soci, Cornel and E. Bazile, 2015: Uncertainties estimation in the background and surface analysis under UERRA project. Aladin-Hirlam workshop Helsingor (Dk), 13-16 April 2015

Soci, Cornel and E. Bazile, 2015: Uncertainties estimation in the background and surface analysis under UERRA project. EMS Conference, Sofia, 7-11 September 2015

Szczypta, Camille, P. Le Moigne, B. Decharme, A. Verrelle, E. Bazile and R. Abida, 2016: Setup and first evaluation of the coupled hydro-meteorological MESCAN-SURFEX-TRIP modelling system over Europe. EMS conference, Trieste 12-16 September 2016.

Undén, Per, M. Brunet, D. Barker, A. Kaiser-Weiss, A. Klein Tank and P.D. Jones, 2015: The regional reanalysis activities in UERRA to support Copernicus Climate Change Services, 15th EMS Annual Meeting & 12th ECAM Conference, 9 September 2015, Sofia, Bulgaria

Undén, Per, M. Brunet, D. Barker, A. Kaiser-Weiss, A. Klein Tank and P.D. Jones, 2015: Development of the regional UERRA reanalysis systems and the output validation. Oral presentation at the 15th EMS Annual Meeting & 12th European Conference on Applications of Meteorology (ECAM), 9 September 2015, Sofia, Bulgaria.

Undén, Per, M. Brunet, D. Barker, A. Kaiser-Weiss, A. Klein Tank and P.D. Jones, 2016: UERRA regional reanalyses and uncertainties, poster presentation at the 26th ALADIN/HIRLAM Workshop/All Staff Meeting, Lisbon, 4-7 April 2016

Undén, Per, Andrea Kaiser-Weiss (DWD), Manola Brunet (URV), Richard Renshaw (Met Office), Eric Bazile (Meteo-France), Gé Verver, Else van den Besselaar, Albert Klein Tank (KMNI), Phil Jones (UEA) and UERRA partners, 2016: UERRA - Uncertainties in Ensembles of Regional ReAnalyses. Poster at EGU conference, Vienna, 17-22 April 2016.

Undén, Per, Martin Ridal, Esbjörn Olsson, Heiner Körnich, Jenelan Bojarova, Ulf Andrae, SMHI (Sweden), 2016: UERRA Regional Reanalysis Systems development and production for pre-operational Copernicus Climate Change Services, Nordic Meteorological Meeting, Stockholm 24 August 2016.

Conference presentations

Undén, Per, Manola Brunet, Richard Renshaw, Andrea Kaiser-Weiss, Else van den Besselaar, and Phil Jones. UERRA regional reanalysis products, data services, quality and user interaction

Undén, Per, Manola Brunet, Richard Renshaw, Andrea Kaiser-Weiss, Else van den Besselaar, Gé Verver, Albert Klein Tank, and Phil Jones. UERRA Regional Reanalysis systems developments and production for pre-operational Copernicus climate change services

Undén, P.: UERRA Regional reanalysis production with data rescue and Quality control and evaluation of uncertainties at the EMS 2017 conference in Dublin, Ireland. 4 September 2017.

Undén, P. : Seminar SMHI on the UERRA project - observations, reanalyses, data, ensembles and surface analyses, evaluation results and uncertainties. SMHI, Norrköping, 24 October 2017.

Undén, P. : Poster about UERRA Reanalyses and DA systems and observations with ensembles at ICR5 in Rome, 14 November 2017.