



ΠΑΝΕΠΙΣΤΗΜΙΟ  
ΠΑΤΡΩΝ  
UNIVERSITY OF PATRAS



Programme of the  
**13th EUMETNET Data Management Workshop 2021**

Patras, Greece, October 25 – 27, 2021

**Organizer:** Laboratory of Atmospheric Physics, University of Patras (LAPUP)

## Topics

- Data rescue: investigation, cataloguing, digitization, imaging.
- Climate observations: standards and best practices, definition of climatological day, mean values.
- Metadata: WMO Information System (WIS), INSPIRE, climate networks rating guides
- Quality control: automatic/manual of climate time-series, on-line data, real-time observations.
- Homogenization of climate time-series from sub-daily to monthly scale, homogenization methods, assessment of inhomogeneity.
- Archiving: retention periods, depository, climate service centres and data collections for scientific and public use, databases, data access, user interface, data distribution.
- Energy Meteorology: Weather data for the needs of renewable energy power plants.

## Scientific Committee

- Enric Aguilar (URV)
- Athanassios Argiriou (LAPUP)
- Ingeborg Auer (ZAMG)
- Dan Hollis (UKMO)
- Yolanda Luna (AEMET)
- Dubravka Rasol (DHMZ)
- Ole Einar Tveito (MetNo)

## Local Organizing Committee

- Athanassios Argiriou (LAPUP)
- Andreas Kazantzidis (LAPUP)
- Ioannis Kioutsioukis (LAPUP)
- Anna Mamara (Hellenic National Meteorological Service)
- Vasileios Salamalikis (LAPUP)

Day 1, Monday October 25<sup>th</sup>, 2021

(Time: Eastern European Summer Time = UTC + 3 h)

11:00	11:20	Welcome addresses
11:20	12:00	Communication of revised climate information - Open discussion

### Session 1 - Climate Observations & Monitoring, Chairperson: Ingeborg Auer

12:00	12:20	Yosef Yizhak, Israel Meteorological Service	Times and temperatures are changing: Fitting together percentile-based extreme temperature indices seamlessly
12:20	12:40	José A. Guijarro, AEMET	Uncertainties of observed surface temperature trends: the case of the Balearic Islands
12:40	13:10	<b>Break</b>	
13:10	13:20	Andrés Chazarra, AEMET	Temporal evolution of the Koeppen-Geiger climate zones in Spain (1951-2020)
13:20	13:40	Monika Lakatos, OMSZ	Analysis of sub-daily precipitation extremes in Hungary
13:40	14:00	Frank Kaspar, DWD	Climate monitoring in Germany: Overview of recent improvements
14:00	14:20	Mary Curley, Met Éireann	Production of Met Éireann's 1991-2020 solar climate normals for Ireland
14:20	14:30	Ladislav Markovič, Slovak Hydrometeorological Institute	Poster: New Slovak climatological normals for the period 1991 – 2020
14:30	15:00	Discussion on Session 1	
15:00	15:30	<b>Break</b>	

### Session 2 - Datasets, Chairperson: Yolanda Luna

15:30	15:50	Gerard van der Schrier, KNMI	A gridded European global dataset based on in-situ observations
15:50	16:10	Semjon Schimanek, SMHI	Copernicus European regional reanalysis
16:10	16:30	Olivér Szentes, OMSZ	Long-term gridded temperature and precipitation data series in Hungary
16:30	17:00	<b>Break</b>	
17:00	17:20	Gerard van der Schrier, KNMI	Poster: Developments in ECA&D and the E-OBS dataset
17:20	17:50	Discussion on Session 2	
		<b>End Day 1</b>	

Day 2, Tuesday October 26th, 2021

(Time: Eastern European Summer Time = UTC + 3 h)

### Session 3 - Data Rescue, Chairperson: Dubravka Rasol

11:00	11:20	Anita Paul, ZAMG	Digitalization of long time series Klagenfurt (1830-1948)
11:20	11:40	Erik Engström, SMHI	Advances in the data rescue and digitization of historical wind speed observations in Sweden: the WINDGUST project
11:40	12:00	Stefan Brönnimann, Univ. Bern	Rescue of 18th and early 19th century global meteorological data
12:00	12:20	Agnieszka Wypych, Jagiellonian University, Krakow	Digitization of meteorological data archives collected in Lesser Poland region from the 19th to the mid-20th century
12:20	12:40	Marc Prohom-Duran, Meteorological Service of Catalonia	Data rescue of climate and hydrologic data from electric power stations archives in the Catalan Pyrenees
12:40	13:00	<b>Break</b>	
13:00	13:10	Martyn Sutner, Met Office	Poster: Data rescue and digitisation projects at the Met Office and INAM (Mozambique National Institute of Meteorology)
13:10	13:20	Romain Ingels, RMI	Poster: Digitizing observations of precipitation and temperature extremes from the meteorological reports of the Royal Meteorological Institute (1881-1900) by volunteer citizen scientists
13:20	13:50	Discussion on Session 3	

### Session 4 - Quality Control, Chairperson: Yosef Yizhak

13:50	14:10	Vincent Cheng, Environment and Climate Change Canada	A quality control system for historical in situ precipitation data
14:10	14:30	Martyn Sutner, Met Office	New quality control systems for marine observations at the Met Office
14:30	15:00	<b>Break</b>	
15:00	15:20	Michel Journée, RMI	Quality control of solar radiation data from Belgian synoptic and low-cost stations
15:20	15:40	Petr Stepanek, Global Change Research Institute	Data quality control and homogenization of various meteorological elements in the Czech Republic for purposes of a new climatological normal
15:40	16:10	Discussion on Session 4	

**End Day 2**

Day 3, Wednesday October 27th, 2021

(Time: Eastern European Summer Time = UTC + 3 h)

### Session 5 - Homogenization, Chairperson: Ole Einar Tveito

11:00	11:20	Peter Domonkos	Time series homogenization with the ACMANTv5 software package
11:20	11:40	Bertrand Cedric, RMI	Homogenization of the Belgian historical precipitation time series
11:40	12:00	Moritz Buchmann, WSL	Evaluation of break detection methods for snow data series
12:00	12:30	<b>Break</b>	
12:30	12:50	Gernot Resch, Univ. Gratz	Homogenizing snow depth observations in the Alps
12:50	13:10	José A. Guijarro, AEMET	Testing the value of reanalyses as references for the homogenization of climate series
13:10	13:30	Barbara Chimani, ZAMG	Austrian Data of Sunshine Duration
13:30	14:00	<b>Break</b>	
14:00	14:20	L. Magnus Joelsson, SMHI	Homogenisation of monthly temperatures of the Swedish observational network 1860-2020
14:20	14:40	Discussion on Session 5	

### Session 6 - Energy Meteorology, Chairperson: Dan Hollis

14:40	15:00	Pavel Zahradníček, Global Change Research institute	Long-term experience with complex meteorological service for power companies in the Czech Republic
15:00	15:30	<b>Break</b>	
15:30	15:50	Frank Kaspar, DWD	The potential of regional reanalyses for applications in the energy sector: Examples from Germany's national meteorological service
15:50	16:10	Discussion on Session 6	
16:10	17:00	<b>General conclusions of the workshop, Chairperson: Barbara Chimani</b>	
		<b>End of the event</b>	