



### 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

End Day 1

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

11:00	11:20	Welcome addresses					
11:20	12:00	Denis Stuber, Christina Lief, Expert Team on Data Requirements for Climate Services (ET-DRC) WMO	Overview of the ET-DRC WMO activities				
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	Break					
13:10	13:30	Andrés Chazarra, AEMET	Temporal evolution of the Koeppen-Geiger climate zones in Spain (1951-2020)				
13:30	13:50	Monika Lakatos, OMSZ	Analysis of sub-daily precipitation extremes in Hungary				
13:50	14:10	Frank Kaspar, DWD	Climate monitoring in Germany: Overview of recent improvements				
14:10	14:30	Mary Curley, Met Éireann	Production of Met Éireann's 1991-2020 solar climate normals for Ireland				
14:30	14:40	Ladislav Markovič, Slovak Hydrometeorological Institute	Poster: New Slovak climatological normals for the period 1991 – 2020				
14:40	15:00	Discussion on Session 1					
15:00	15:30	Break					
Session 2	- Datase	ets, Chairperson: Yolanda Luna					
15:30	15:50	Gerard van der Schrier, KNMI	A gridded European global dataset based on insitu 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	Break					
17:00	17:10	Gerard van der Schrier, KNMI	Poster: Developments in ECA&D and the E-OBS dataset				
17:10	17:40	Discussion on Session 2					





### 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	13:10	Break				
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	Callum Stone, Met Office	New quality control systems for marine observations at the Met Office			
14:30	15:00	Break				
15:00	15:20	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			
15:20	15:50	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	12:20	Gernot Resch, Univ. Gratz	Homogenizing snow depth observations in the Alps				
12:20	13:00	Break					
13:00	13:20	José A. Guijarro, AEMET	Testing the value of reanalyses as references for the homogenization of climate series				
13:20	13:40	L. Magnus Joelsson, SMHI	Homogenisation of monthly temperatures of the Swedish observational network 1860-2020				
13:40	14:00	Discussion on Session 5					
Session 6 - Energy Meteorology, Chairperson: Dan Hollis							
14:00	14:20	Frank Kaspar, DWD	The potential of regional reanalyses for applications in the energy sector: Examples from Germany's national meteorological service				
14:20	14:30	Petr Stepanek, Global Change Research institute	Poster: Long-term experience with complex meteorological service for power companies in the Czech Republic				
14:30	15:00	Discussion on Session 6					
15:00	15:10	Break					
15:10	16:00	Communication of revised climate information - Open discussion and conclusions of the workshop, Chairperson: Barbara Chimani					

**End of the event**