



# *Climate and Societies in the Mediterranean during the Last Two Millennia*

## *Current State Of Knowledge and Research Perspectives*

**March 8 - 9, 2017, Aix-Marseille University, Aix-en-Provence**  
**(Conference room Georges Duby, MMSH)**

### MARCH 8

9:30 **Opening:** Sophie BOUFFIER, MMSH director/ Xavier DAUMALIN, Director of TELEMME Lab/ Joël GUIOT, Director of Labex Ot\_Med/ Brigitte MARIN, Director of LabexMed

9:45 **General Introduction:** Nicolas MAUGHAN/ Kevin POMETTI

### Session I

## *How To Integrate Solar And Volcanic Forcing In Studies Of Historical Climate-Society Interactions?*

**Chair:** Joël GUIOT (Aix-Marseille University)

10:00 *Volcanism and Variability: The Volatile Nile as Driver of Revolt and Socioeconomic Stress in Ptolemaic Egypt, 305-30 BCE*

Joseph MANNING (Yale University, USA), Francis LUDLOW (University of Dublin, Ireland) *et al.*

10:30 *Climate and societal impacts of a volcanic double event at the dawn of the Middle Ages*

Matthew TOOHEY (GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany)

11:00 *Coffee break*

11:15 *Reassessing the climatic impacts of the 1257 eruption in Europe and in the Northern Hemisphere using historical archives and tree rings*

Sébastien GUILLET *et al.* (Bern University, Swiss)

11:45 *The 1430s: A period of extraordinary internal climate variability during the early Spörer Minimum and its impacts in North-western and Central Europe*

Chantal CAMENISCH (Bern University, Swiss)

12:15 **Questions & discussion**

12:40 *Lunch*

### Session II

## *Sources And Methodologies For Studying Past Climate History: From Natural To Textual Archives*

**Chair:** Nicolas MAUGHAN (Aix-Marseille University)

14:00 *Western Mediterranean climate variability since medieval times*

**Ulf BÜENTGEN** (Swiss Federal Research Institute, Swiss)

14:30 *Towards a methodology for reconstructing outstanding extreme events. The example of 1540*

**Christian PFISTER** (Bern University, Swiss)

15:00 *Drought and Crisis in the Classical Ottoman Empire: New Evidence, Confirmation, and Revisions*

**Samuel WHITE** (The Ohio State University, USA)

**15:30 Coffee break**

15:45 *Multidisciplinary approach to climatic reconstruction. Present research and potentialities in Mediterranean countries (Spain) focusing on hydroclimatic extremes*

**Mariano BARRIENDOS** (University of Barcelona, Spain)

16:15 *The role of textual archives and first instrumental records to detect optimal periods for vector-borne diseases in late 18<sup>th</sup> century Catalonia*

**Kevin POMETTI** (Aix-Marseille University, France)

16:45 *The earliest meteorological observations: Florence and Vallombrosa in the Medici Network (1654-1670)*

**Chiara BERTOLIN** (Norwegian University of Science and Technology, Norway) & **Dario CAMUFFO** (Italian National Research Council, Italy)

**17:15 Questions & discussion**

## MARCH 9

9:00 **Poster session\* (60 min)**

Session III 1<sup>st</sup> part

### *Climate As Catalyst For Subsistence Crises, Epidemics And Violence*

**Chair: Isabelle RENAUDET** (Aix-Marseille University)

10:00 *Late Holocene delta geomorphology and ancient coastal settlements: from Taman Peninsula to the Balearic Islands*

**Mathieu GIAIME et al.** (Aix-Marseille University, France)

**10:30 Coffee Break**

10:45 *Famine, migrations and conflicts 3200 years ago: did climate have an influence on social upheavals?*

**David KANIEWSKI et al.** (University of Toulouse, France)

11:15 *Climate change and the Eastern Roman Empire. Learning from the complex societies of the past*

**Adam IZDEBSKI** (Jagiellonian University, Poland)

**11:45 Questions & discussion**

**12:30 Lunch**

## Session III 2<sup>nd</sup> part

**Chair: Kevin POMETTI** (Aix-Marseille University)

**14:00** *War, economic crisis and plague: teleconnections between Arid Central Asia and the Mediterranean in the thirteenth and fourteenth centuries*

**Bruce CAMPBELL** (Queen's University Belfast, Northern Ireland, UK)

**14:30** *Droughts and Floods in the Spanish Mediterranean during the Little Ice Age. Thoughts and Proposals*

**Armando ALBEROLA** (University of Alicante, Spain)

**15:00** *Coffee Break*

**15:15** *Socio-economic Resilience to Droughts and Energy Transition in Northwestern Mediterranean during the Dalton Minimum*

**Nicolas MAUGHAN** (Aix-Marseille University, France)

**15:45** *The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution*

**Francesca DE CHÂTEL** (Radboud University, The Netherlands)

**16:15** Questions/discussion and conclusion

**17:00** End of the meeting

### Posters\*

1. *A multi-secular database (A.D. 1300-2000) on the historical flood variability in the Lower Rhone Valley*

**Georges PICHARD et al.** (Aix-Marseille University, France)

2. *Historical climate Data Rescue in the Mediterranean area at Météo-France*

**Sylvie JOURDAIN & Émeline ROUCAUTE** (Météo-France, France)

3. *Temperature observations in Bologna, Italy, from 1715 to 1815: three centuries of changing climate and methodological procedures to recover and analyze early instrumental series*

**Chiara BERTOLIN et al.** (Norwegian University of Science and Technology, Norway)

4. *Climate, environment and public health in Catalonia. Endemic and epidemic paludism (1750-1850), from sanitarian policies to environmental issues*

**Kevin POMETTI** (Aix-Marseille University, France)

5. *Recent hydrological variability of the Moroccan Middle-Atlas Mountains inferred from sedimentological and geochemical analyses of lake sediments*

**Guillaume JOUVE et al.** (Aix-Marseille University, France)

6. *Oxygen isotopes from Sudanese mummies as natural archives for reconstructing long-term and seasonal Nile river fluctuations and past climate in Northeast Africa (3700-500 B.P.)*

**Céline MARTIN et al.** (Aix-Marseille University, France)

7. *Assessment of post-industrial sea-level rise acceleration along the Mediterranean coastlines*

**Matteo VACCHI et al.** (Aix-Marseille University, France)

8. *Geoarchaeology of the Danube delta and palaeo-environment of ancient settlements (Histria, Enisala, Babadag and Halmyris)*

**Alexandra BIVOLARU et al.** (Aix-Marseille University, France)

9. *The ancient harbors of cap Bon (Tunisia): geomorphology, climate context and recent discoveries*

**Soumaya TRABELSI et al.** (Aix-Marseille University, France)

**Organizing committee:** Mr. Nicolas MAUGHAN (AMU, I2M)  
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*Le Vésuve en éruption*  
(Joseph TURNER, entre 1817 et 1820)