

Com o título *Phylogeography of Northeastern Atlantic and of the Mediterranean*, a comunicação foi dedicada à filogeografia da ictiofauna do Atlântico Oriental e do Mediterrâneo Ocidental, desde a crise de salinidade do Messiniano. Vítor Almada começou por referir as dificuldades da aplicação dos modelos filogeográficos terrestres aos organismos marinhos e fluviais, sobretudo porque a capacidade de dispersão no mar é elevadíssima, podendo, por conseguinte, haver maior diversidade genética entre populações do mesmo género presente em dois rios da Estremadura, do que entre populações de um género do Atlântico que se distribuam desde a latitude de Portugal à da Noruega, por exemplo. Nas últimas duas décadas, os investigadores têm-se dado conta do elevado número de endemismos e diversidade na região mediterrânea e do seu papel de importante refúgio glaciário no Pleistocénico.

Também a estrutura genética das populações de peixes do Atlântico e do Mediterrâneo tem sido comparada com sequências de genes, mostrando haver maior diversidade genética nas águas quentes do Mediterrâneo do que no Atlântico. Argumenta-se que esses resultados terão sido, provavelmente, causados tanto pela estrutura de metapopulação do Mediterrâneo como pela redução severa, ou extinção local, de populações nas águas do norte durante as glaciações. Uma avaliação adequada das peculiaridades das populações de peixes do Mediterrâneo exige, no entanto, que sejam comparadas com populações mais ao norte, que foram submetidas a uma pressão mais elevada durante as glaciações. As espécies com filogenias mais robustas, como as piscícolas, constituem excelentes oportunidades para realizar análises filogeográficas comparativas, em que as assinaturas genéticas de eventos paleoclimáticos podem ser detectadas, revelando a sua história demográfica e apelando ao domínio de conhecimentos de paleogeografia para a sua interpretação.

## PORTUGUESE PARTICIPATION IN THE 7<sup>th</sup> CONFERENCE ON BIOMETEOROLOGY

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The 7th Conference on Biometeorology (BioMet-7) was hosted from 12-14 April 2010 at the Meteorological Institute Albert-Ludwigs-University of Freiburg (Germany). The conference had the collaboration of the Expert Committee on Biometeorology of the German Meteorological Society, the Humboldt-University of Berlin, Germany, the Society for the Promotion of Medicine-Meteorological Research in Germany, the International Society of Biometeorology, the German Weather Service and the Central Institute of Meteorology and Geodynamics in Vienna, Austria.

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The Conference provided the opportunity to present and discuss new developments, approaches and methodologies in biometeorology and bioclimatology (the study of the interactions between the atmosphere and the living environment) among more than 100 participants from over 30 countries. The importance of bioclimatology as a discipline that addresses the interactions between the atmosphere and the living environment (at various scales – from daily life events to climate change issues) was enhanced during the conference.

The oral and poster presentations were subdivided into the following fields: agricultural meteorology, animal meteorology, climate change, human-biometeorology, phenology, tourism climatology and urban bioclimate, embodying the broad spectrum of scientific areas that are comprised under bioclimatology and biometeorology.

The team of the CLiMa unit of the Centre for Geographical Studies (CGS), University of Lisbon, took part in the Conference with three oral presentations and one poster.

The presentation by R. Machete (CGS), on the impacts of climate change for tourism in Lisbon Metropolitan Area displayed some preliminary conclusions of the Urban-net project “Urban Tourism and Climate Change” (URBAN/AUR/0003/2008), that is being developed in the CGS in cooperation with the Universities of Ankara and Gothenburg since January 2009. The aim of this project is to assess to what extent climate changes will impact on tourism trends and tourist perceptions, behaviour and preferences, and also how these can influence the attractiveness of urban destinations. R. Machete emphasized, regarding the results of the research, that tourists are aware of climate change, although the extent of concern with the risks that it may entail varies according to respondent’s age and nationality. The possible seasonal shifts determined by mild autumns and winters reinforced by the current trends of short city breaks and considering future climate scenarios were enhanced by the speaker.

A. Lopes (CGE) presented a study on the summer sea breeze influence on human comfort in Funchal (Madeira Island) under the framework of urban climate and tourism planning. This study draws from the research integrated in the European SECOA project (“Solutions for Environmental Contrasts in Coastal Areas” FP7.ENV.2009.2.1.5.1). The Physiologically Equivalent Temperature (PET) was used to evaluate thermal comfort in two groups of days (with sea breezes and hot days) from June to September 2006. The researchers concluded that most of the sites in Funchal are slightly comfortable during breeze days and only shore line and higher green places can be comfortable during hot days. The need for vulnerable tourists to visit higher altitude places, gardens and acclimatized buildings during hot periods in order to prevent thermal stress situations was emphasized by A. Lopes.

The communication entitled “Mortality spatial variations in a small scale during heat waves in Lisbon – who is at risk?” presented by P. Canário (CGS) highlighted the development of a hazard – vulnerability – risk model in order to analyze spatial variations of mortality in extreme thermal events in the Lisbon Metropolitan Area, Portugal. The proposed model lay emphasis on hazard assessment using the Brazilian Regional Atmospheric Modeling System (BRAMS) in order to simulate small scale variations of meteorological features and on the validation of the model results using an urban network of termohigrometers placed in sites with different urban characteristics. Air quality information (ozone and particulate matter) along with meteorological features will constitute the complete hazard information on the study area.