Geophysical Research Abstracts Vol. 20, EGU2018-18739-1, 2018 EGU General Assembly 2018 © Author(s) 2018. CC Attribution 4.0 license.



Global-scale analysis of wildfires

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Wildland fire is a prominent phenomenon at global scale and a critical element in the Earth system, linking several drivers as climate, human activity, and fuel structure. Fire activity and fire behaviour are conditioned by natural and anthropogenic factors. Natural factors include vegetation cover, topography, and prevailing weather conditions. In this context, the main objective of this work is to understand the role of the above mentioned bio-physical drivers on wildfire behaviour at global scale. This requires compilation of the available fire behaviour information in a worldwide database, and integrated analysis of variation in fire behaviour characteristics. The results are presented in terms of descriptive statistics illustrating the characterization and synthesis of regional fire patterns, as well as the assessment of the influences of this environmental drivers at the scale of broad vegetation types and biomes.

Acknowledgements

This work is funded by INTERACT project -"Integrative Research in Environment, Agro-Chains and Technology", no. NORTE-01-0145-FEDER-000017, in its line of research entitled BEST, co-financed by the European Regional Development Fund (ERDF) through NORTE 2020 (North Regional Operational Program 2014/2020) and supported by: (i) project FIREXTR- Prevent and prepare society for extreme fire events: the challenge of seeing the "forest" and not just the "trees", co-financed by the European Regional Development Fund (ERDF) through the COMPETE 2020 - Operational Program Competitiveness and Internationalization (POCI Ref: 16702) and national funds by FCT-Portuguese Foundation for Science and Technology (FCT Ref: PTDC/ATPGEO/0462/2014; and, (ii) European Investment Funds by FEDER/COMPETE/POCI— Operational Competitiveness and Internationalization Programme, under Project POCI-01-0145-FEDER-006958 and National Funds by FCT - Portuguese Foundation for Science and Technology, under the project UID/AGR/04033/2013.