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ONFIRE DATASET: A DATABASE OF NATIONAL FIRE DATA

[1]Andrina Gincheva, [1]Marco Turco and [2]The ONFIRE group

[1]*Regional Atmospheric Modelling (MAR) Group, Department of Physics, Regional Campus of International Excellence Campus Mare Nostrum (CEIR), University of Murcia, Murcia, Spain.*
[2]**In detail in the same contribution*

Abstract

Understanding the distribution of wildfires in time and space is crucial for effective prevention and mitigation of these devastating events. However, current knowledge is limited due to the exclusion of small fires and the short coverage period provided by global remote sensing datasets. To address this gap, we introduce ONFIRE, a gridded burned area (BA) database of national wildland fire data.
By compiling ground mapping data from national agencies, ONFIRE provides monthly burned area information on a common 1º × 1º grid in five regions: Australia, Europe, Canada, Chile, and the United States. This approach leverages the expertise of local researchers and agencies, ensuring the inclusion of the best available knowledge. ONFIRE serves as a comprehensive and integrated resource for researchers, Non-Governmental Organizations, and governmental agencies studying wildfires.
By complementing the existing gridded burned area data derived from remote sensing, this dataset provides a valuable opportunity to enhance our understanding and evaluation of fire regime changes and the factors that drive them in these regions. Here, we explore the opportunities and limitations associated with utilizing this dataset, as well as we discuss the potential for future extensions of this open-source solution. We particularly encourage researchers and fire agencies to contribute their data to the ONFIRE initiative.

Keywords: burned area, fire database

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