



Carlota is currently a PhD candidate at the School of Geography and the Environment (SoGE), University of Oxford, United Kingdom. She is doing research on fire regimes of the Brazilian savannahs in the context of large-scale agricultural expansion and climate change using remote sensing data, statistical analysis and modelling.

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Salle 44, Bâtiment PS1, CIRAD-UMR AMAP,
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Zoom : <https://umontpellier-fr.zoom.us/j/94148129424>

Chasing the climate signal in the Cerrado's patterns of burned area

presented by

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ABSTRACT

The Cerrado, the Brazilian neotropical savanna biome, has experienced large scale agricultural expansion since the 1960s, leading to altered fire regimes and reduced fire activity with growing fragmentation. On the other hand, the Cerrado has become hotter and drier, with increased flammability conditions. Hence, there is a complex interplay between climatic trends and agricultural activities giving rise to diverging trends in burned area across the Cerrado. We explore the effects of climate and the human land-use dominance in a landscape on the Cerrado's burned area using geospatial data on land cover categories and burned area from MapBiomas, and climate re-analysis data. We find that climate influences the extent to which a landscape may burn up to a certain level of human occupancy. When human land uses start to dominate, burned area is limited for all ranges of temperature and precipitation.

KEY WORDS

Tropical savanna, Brazil, fire regimes, land-use, climate change

Invited and animated by:

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Research results

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