

Special Issue

Remotely Sensed Estimates of Fire Radiative Energy

Message from the Guest Editors

Heat produced from fire, often measured as heat yield (MJ kg⁻¹), is thermal energy transferred via conduction, convection, vaporization, and radiation, and provides a metric of the total potential energy released if complete combustion of the fuel occurs. It is the radiative component estimated from Earth observing (EO) satellite sensors, providing synoptic monitoring of this global fire phenomenon. Advances in sensors and algorithms have continued to evolve, and the application of FRP and FRE have expanded, but questions of accuracy, precision, and uncertainty still remain. Specific topics include, but are not limited to:

- FRP/FRE and fire behavior or spread modeling;
- FRP/FRE and smoke plume dynamics;
- Biomass consumption using FRP/FRE;
- Emissions estimates using FRP/FRE and maximum FRP;
- Disaster assessments using maximum FRP;
- Novel approaches to estimate FRP and FRE;
- Laboratory and field assessments of FRP/FRE;
- Sources of variability in radiative fraction;
- FRP/FRE and vegetation mortality and recovery;
- Inter-sensor comparisons of FRP/FRE approximation;
- Blended product development;
- Uncertainty analysis;
- Product validation;
- Sensor development.

Guest Editors

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Dr. Patrick H. Freeborn

Deadline for manuscript submissions

closed (31 December 2022)



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About the Journal

Message from the Editor-in-Chief

Fire is an international open-access journal about the science, policy, and technology of fires and how they interact with communities and the environment. *Fire* seeks to provide a forum to help the fire science community convey how we can live with fire in a changing world. *Fire* seeks submissions from interdisciplinary studies that take a pyrogeography perspective of fires occurring in natural, cultural, and industrial landscapes and how they interact with communities in the science-policy interface. *Fire's* Editorial Board are widely recognized international leaders. The journal emphasizes quality and innovation and has a rigorous peer-review process. I strongly recommend *Fire* for the rapid publication of your innovative research publications and case studies.

Editor-in-Chief

Dr. Grant Williamson

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