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Climate and Human-Driven Impacts on Tropical Rainforests

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Message from the Guest Editors

Tropical rainforests are a treasure trove of biodiversity. However, intensifying anthropic pressure and associated land cover changes have led to large-scale forest loss. These rainforests influence the terrestrial climate system through exchanges of energy, carbon dioxide, and water between the earth's surface and the atmosphere. In addition to providing water vapor to the environment through evapotranspiration, influencing general circulation in the tropics, and contributing to regional precipitation, tropical rainforests play an important role in the global carbon cycle.

Climate-change-induced increases in temperature and reductions in precipitation are triggering forest degradation, with some parts of tropical rainforests already becoming a carbon source. Additionally, climate extremes are also impacting these forests, which are losing resilience. To develop a comprehensive understanding of the complex forest-climate extremes interactions, it is necessary to focus on different processes affecting biodiversity loss and ecosystem services.

We look forward to receiving all aspects of your contributions to our joint Special Issue in *Climate* and *Fire*.



