



A section of the Amazon burns in Novo Progresso, Brazil, in 2019. Fires are likely to ravage larger areas of the forest even if greenhouse-gas emissions fall. Credit: Gustavo Basso/NurPhoto/Getty

CLIMATE SCIENCES · 10 JANUARY 2020

Playing with fire could turn the Amazon into a carbon source

More blazes are forecast for the iconic rainforest as the climate changes, but stringent measures could limit the damage.

Resolute efforts to prevent fires in the Amazon could more than halve the projected greenhouse-gas emissions from forest fires in the region.

Trees store carbon, but burning them releases those stores. To forecast the future of Earth's largest rainforest, Paulo Brando at the University of California, Irvine, and his colleagues modelled how an increasingly warm and dry climate will affect wildfire risk in the southern Brazilian Amazon. They found that, even if global greenhouse-gas emissions are reduced, forest fires will intensify over the next

Get the most important science stories of the day, free in your inbox.



Sign up for Nature Briefing

But the researchers found that greenhouse-gas emissions from Amazon fires can be substantially reduced if further deforestation is avoided, and if fire management is improved in areas that are dependent on slash-and-burn agriculture.

Aggressive efforts to eliminate sources of sparks and to suppress unwanted fires are crucial to prevent the Amazon from turning from a carbon sink to a carbon source, they say.

***Sci. Adv.* (2020)**

Climate sciences

MORE RESEARCH HIGHLIGHTS...

**Get the most important science stories
CONSERVATION BIOLOGY ·**

Sign up for Nature Briefing