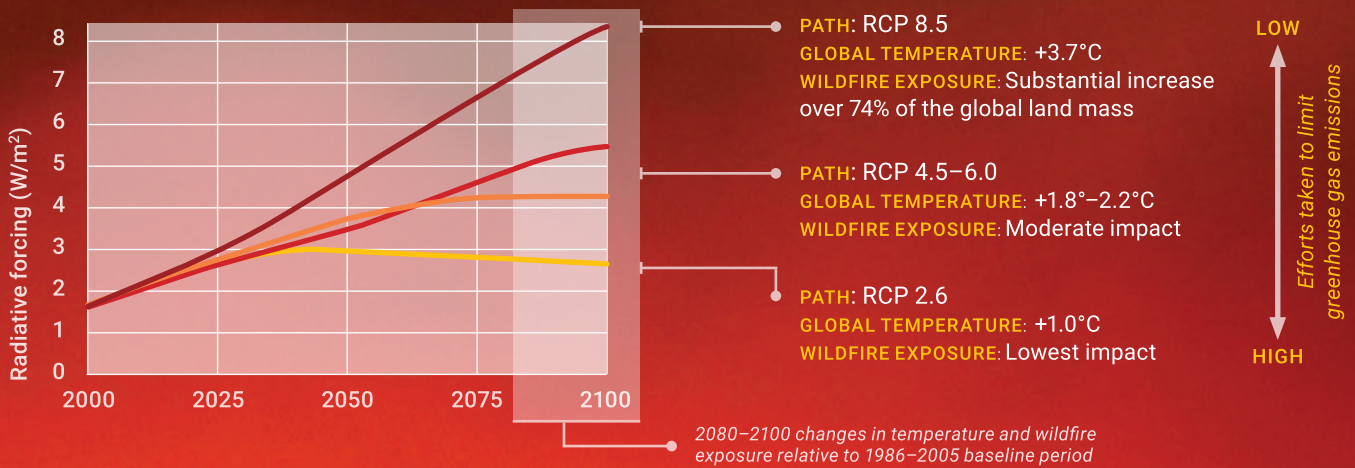


# A World on Fire

The average global temperature reached 17.08°C on 6 July 2023—a record-high day in a record-high month, with temperatures 1.5 degrees warmer than in preindustrial times for a record 16 days. A 2022 United Nations report warned of the potential for considerable increases in the intensity and range of wildfires by the end of this century as temperatures rise. Here we look at some of those predictions. For more on wildfires and how researchers are using optics to help lessen their danger, see this month's cover story (p. 26).

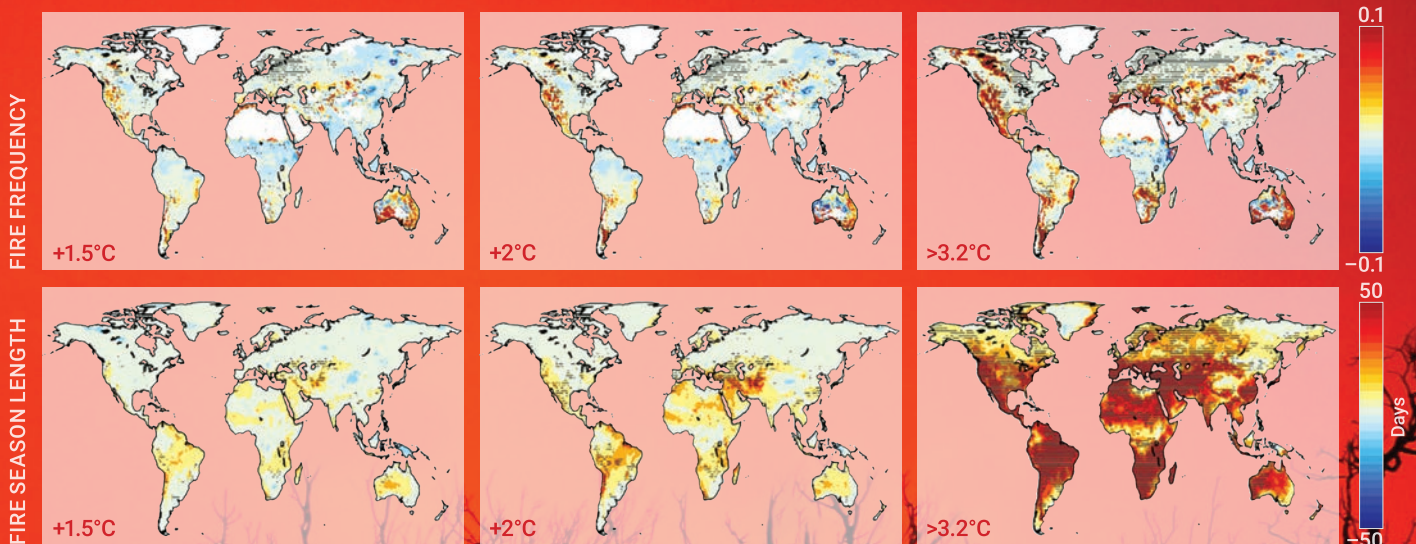
## GLOBAL TEMPERATURE, 2080–2100

Projected average global temperature increases for different Representative Concentration Pathway (RCP) scenarios—trajectories of greenhouse gas concentrations used to model climate change



## CHANGES IN WILDFIRE EXPOSURE, 2080–2100

Projected change in worldwide wildfire frequency and length for different global mean temperature increase scenarios



Sources: 2022 UN report *Spreading Like Wildfire – The Rising Threat of Extraordinary Landscape Fires*; *Environ. Int.*, doi: 10.1016/j.envint.2019.04.025; *N. Engl. J. Med.*, doi: 10.1056/NEJMSr2028985  
Background: J. Sullivan, Getty Images / Infographic: Alessia H. Kirkland