

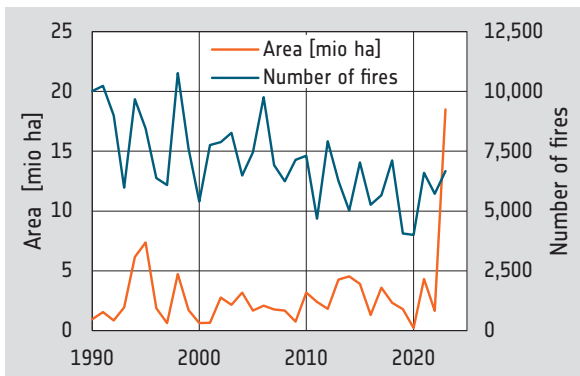


### British Columbia, Canada

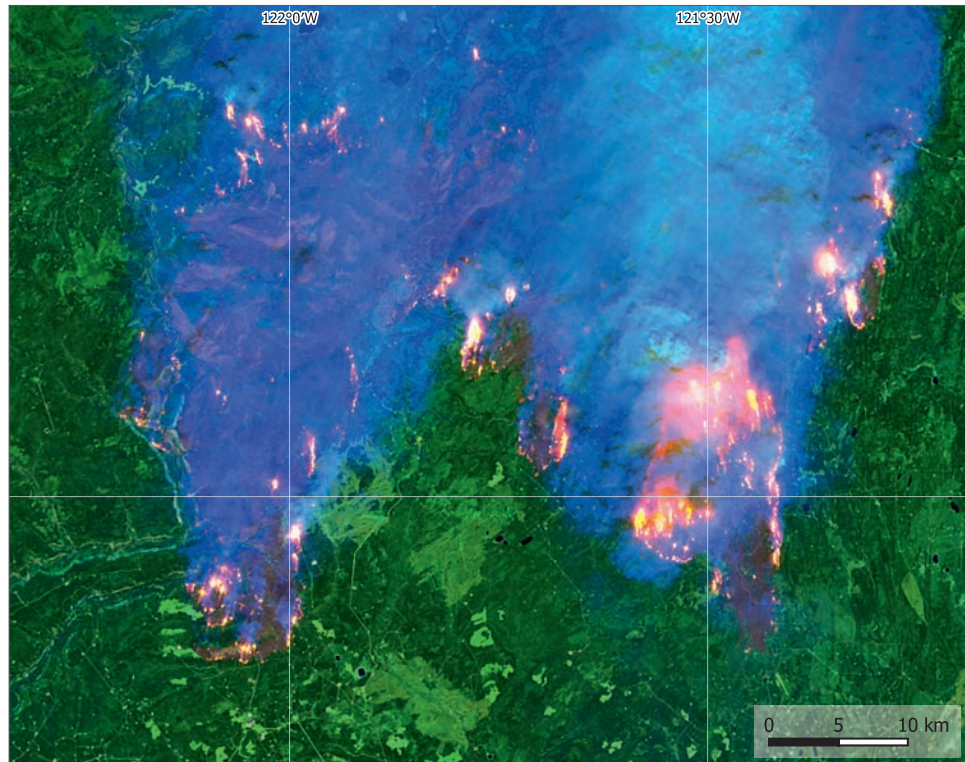
Forest fires are a recurring concern in the Canadian province of British Columbia. Forest fires occur when vegetation, dry conditions, and other factors combine, resulting in uncontrolled flames that spread across large areas.

In 2023, forest fires in Canada during the first half of the year have affected an area of 48,000 km<sup>2</sup>, compared to the area of 21,000 km<sup>2</sup> burned during an average year. Climate change is assumed to have played a significant role, creating hotter and drier conditions that increase the risk of fire ignition and spread. Lightning strikes and human activities, such as campfires and negligence, have also been contributing factors.

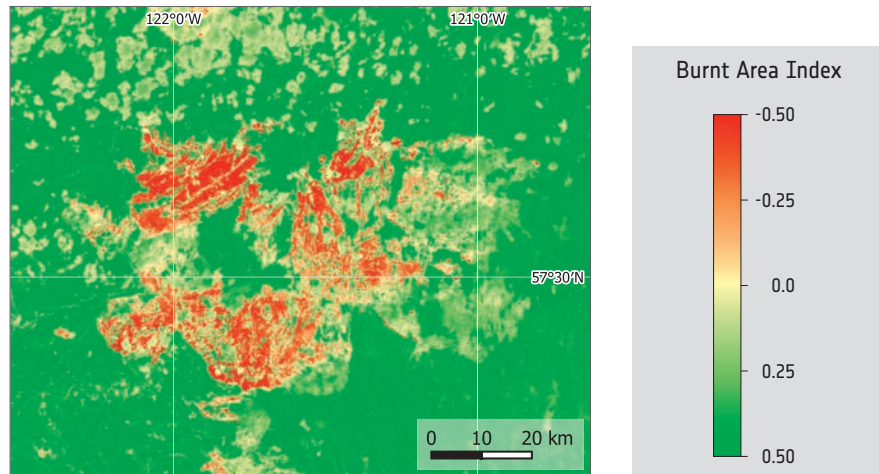
The impacts of forest fires are far-reaching. They pose a threat to wildlife habitats, degrade air quality, and damage watersheds. Particles released into the air can travel thousands of kilometres. Forest fires affect local communities, disrupt transportation, and impact the economy, particularly the timber industry.



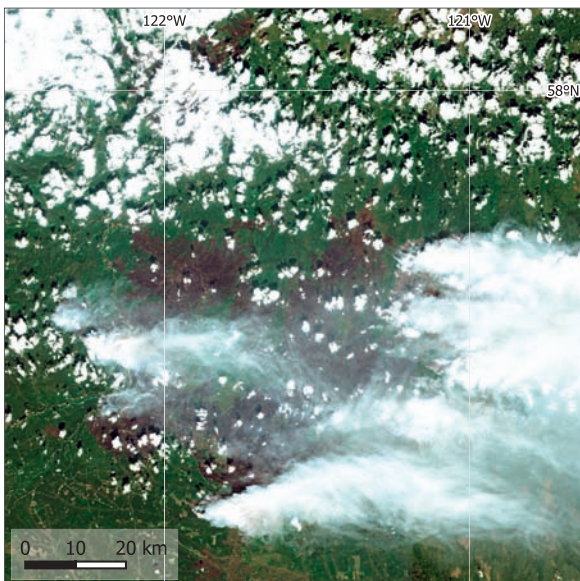
7. Number of forest fires and burned area per year in Canada. In 2023 the burned area has increased dramatically.



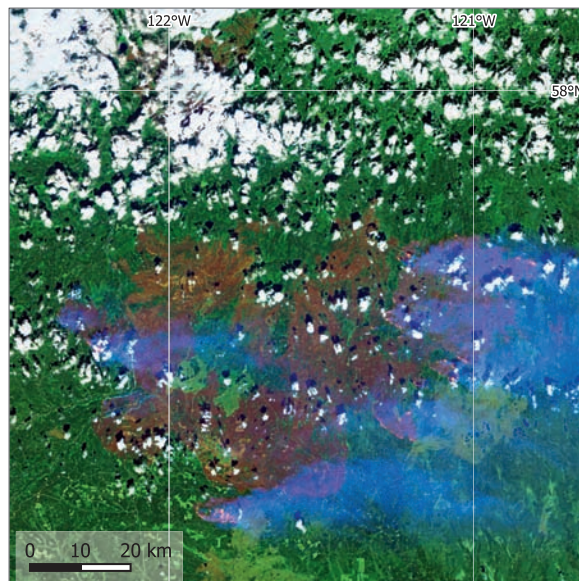
8. False-colour infrared detail image of a fire front in British Columbia. Data: Sentinel-2, 2023-05-18.



9. Burnt area index of a forest fire in British Columbia. Data: Sentinel-2, 2023-06-07.



10. True colour visualisation of a forest fire in British Columbia. Data: Sentinel-2, 2023-06-07.



11. Smoke-penetrating false-colour infrared image of a forest fire in British Columbia. Data: Sentinel-2, 2023-06-07.



12. Large forest fires can be very difficult to combat.