



## Overview of fires

Outline the extent of the 2019-2020 fires in NSW.

## Causes of the fires

What lit the fires?

How does climate change impact on the fire season?

How did each of these climate drivers affect the fire season?

- Indian Ocean Dipole
- Southern Annular Mode
- El Niño Southern Oscillation (ENSO)

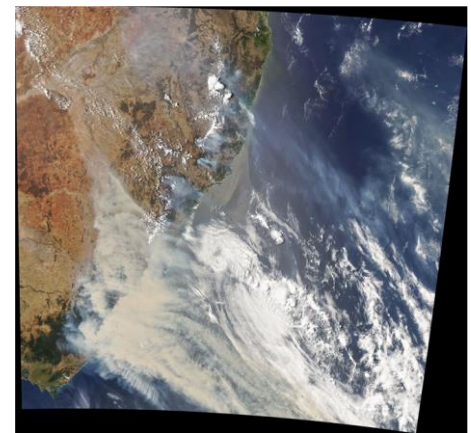
What other factors led to the catastrophic fires?

## Impact on local ecosystems

What ecosystems were particularly hard hit by the fires?

How did the fires impact individual species?

Outline the effects of fire thunderstorms and erosion/runoff.



January 1, 2020 image from Landsat 8 of fires in southeastern Australia (J Stevens, NASA Earth Observatory, public domain).



Fire danger sign (Mattinbgn 2014, Creative Commons)



## Contribution of human activity

Could more hazard reduction burning have prevented or reduced damage from the fires?

What is the role of Aboriginal cultural burning?

What challenges were faced by firefighters?

What do you think is the most important action to be taken to prevent further disasters like the 2019-2020 bushfires? Justify your answer.



Water bombing helicopter in action  
(Aussie Oc 2015, Creative Commons)