



Credit: Philippe Rekacewicz assisted by Cecile Marin, Agnes Stienne, Giulio Frigieri, Riccardo Pravettoni, Laura Margueritte and Marion Lecoquierre.

## EXAMPLES:

- On the 7th of February 2009, temperatures reached record levels in Melbourne Australia, and humidity dropped to a remarkable 6%—the resulting wildfires killed 171 people.<sup>3</sup>
- In Austin, Texas in the summer of 2011, the head of the Texas Forest Service, facing similarly unprecedented conditions, said, "This is unprecedented fire behavior. No one on the face of this Earth has ever fought fires in these extreme conditions."<sup>4</sup>
- Fire is even coming to ecosystems where it's never been observed before in human history. In the last few years, huge fires have raged across the tundra of the Arctic, usually too cold and wet for such events. "Fire has been largely absent from tundra for the past 11,000 or so years, but the frequency of tundra fires is increasing, probably as a response to climate warming," explained Syndonia Bret-Harte, an ecosystem ecologist at the University of Alaska Fairbanks' Institute of Arctic Biology.<sup>5</sup>

1. <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a8pdA6Wy9FOA>

2. <http://www.agu.org/pubs/crossref/1994/94JD00019.shtml>

3. [http://en.wikipedia.org/wiki/Black\\_Saturday\\_bushfires](http://en.wikipedia.org/wiki/Black_Saturday_bushfires)

4. [http://www.cbsnews.com/2100-500202\\_162-20101919.html](http://www.cbsnews.com/2100-500202_162-20101919.html)

5. <http://www.sciencedaily.com/releases/2011/07/110727131407.htm>



The Zaca wildfire of 2007 (pictured here) was the second largest in California's history.

As we warm the planet, wildfires have been on the rise around the globe. In America's Rocky Mountains, the fire-fighting season used to run from June to September—now crews are often on the job from April to November. Those dry areas then get hit by extra lightning—one study found that every extra degree Celsius in temperature increases lightning strikes by 6 percent. And once the fires get going, fighting them can be almost impossible because of the record temperatures and dryness.

**Ken Frederick**, U.S. Bureau of Land Management spokesman and former firefighter

# "WE ARE IN THE MEGA-FIRE ERA."

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