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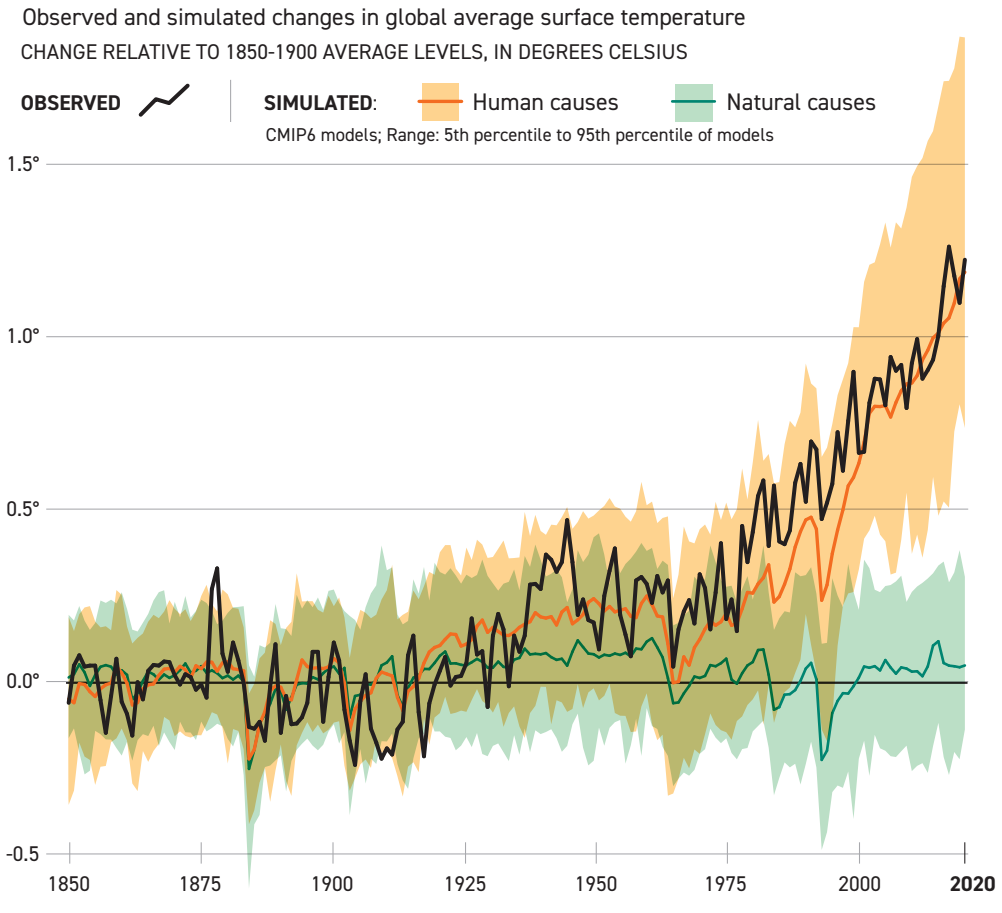
Visualizing key takeaways from the IPCC's dire climate report

The rapid onslaught of climate change is — without doubt — the result of human activities, according to the latest report from the Intergovernmental Panel on Climate Change. Updated observations and more highly refined climate models confirm what climate scientists have warned about for years: Greenhouse gases from combustion of fossil fuels, agriculture and deforestation are driving increases in global surface temperatures, fueling drought, wildfires, torrential downpours and stronger storms; melting ice sheets; and warming and acidifying the oceans. The report says global warming has already advanced to the point where many of its effects will take hundreds of years to reverse, but the catastrophic effects of even higher temperatures can be curbed only by immediate and rapid reduction of greenhouse gas emissions.

Observations and climate models confirm that climate change is the result of human activities

Observed and simulated changes in global average surface temperature

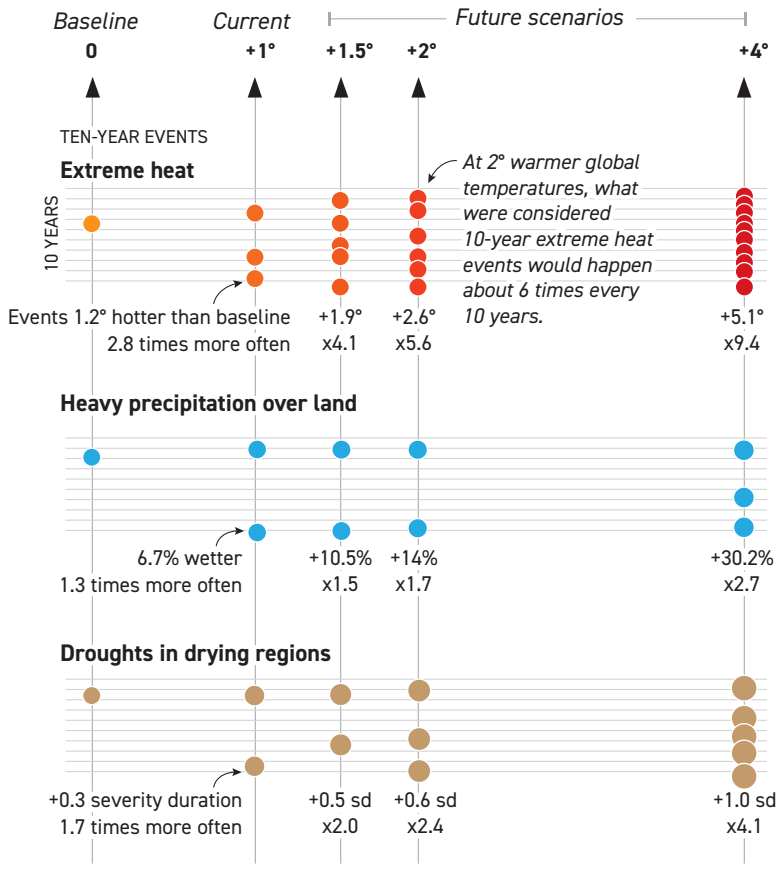
CHANGE RELATIVE TO 1850-1900 AVERAGE LEVELS, IN DEGREES CELSIUS



A hotter world will bring increasingly extreme events

As global average temperatures increase, so will the frequency and intensity of extreme climate events, scientists say.

CHANGE RELATIVE TO 1850-1900 BASELINE, IN DEGREES CELSIUS

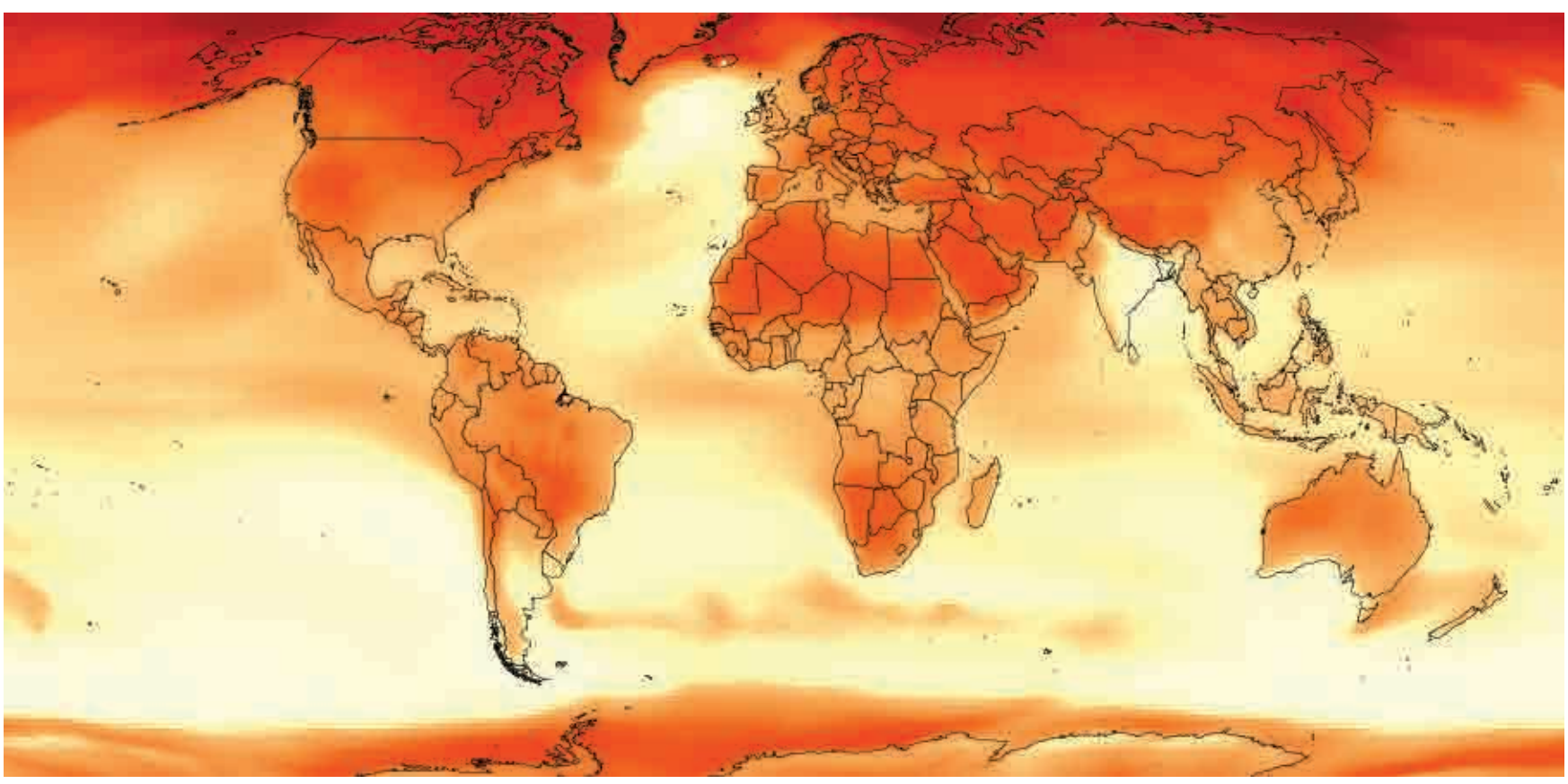


Changes in the Earth's climate are intensifying

The IPCC report foresees the world blowing past the Paris agreement goal to limit warming to 1.5°C — likely between 2030 and 2040. Climate scientists highly recommend achieving net-zero emissions before 2050 to help stave off an even hotter future. As the globe warms further, the water cycle will continue to intensify, increasing both wet and dry extremes.

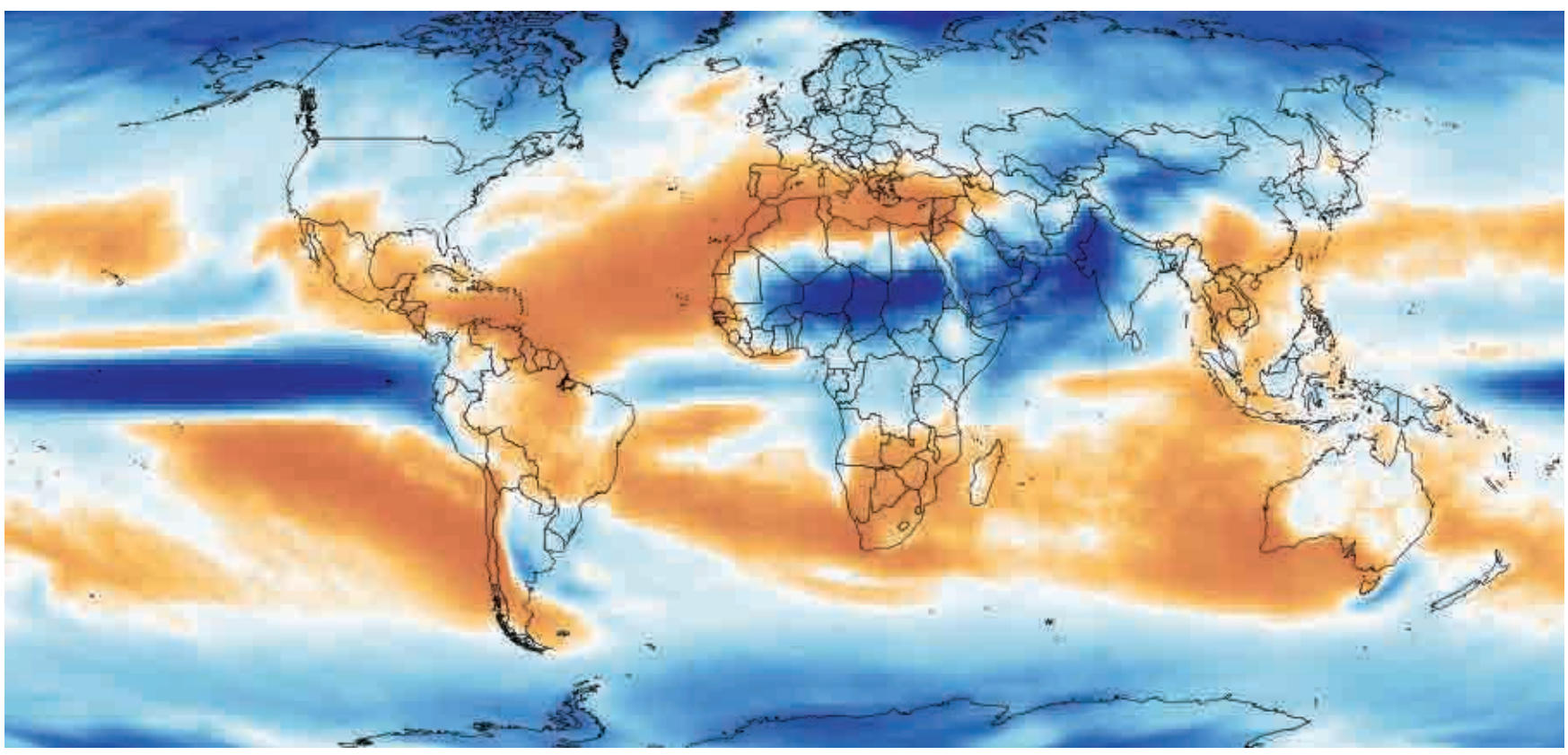
Near-term changes in temperature

At +1.5°C AVERAGE GLOBAL SURFACE TEMPERATURE CHANGE RELATIVE TO 1850-1900 LEVELS



Near-term changes in precipitation

At +1.5°C, CHANGE IN TOTAL ANNUAL PRECIPITATION RELATIVE TO 1850-1900 LEVELS



Source: Intergovernmental Panel on Climate Change

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