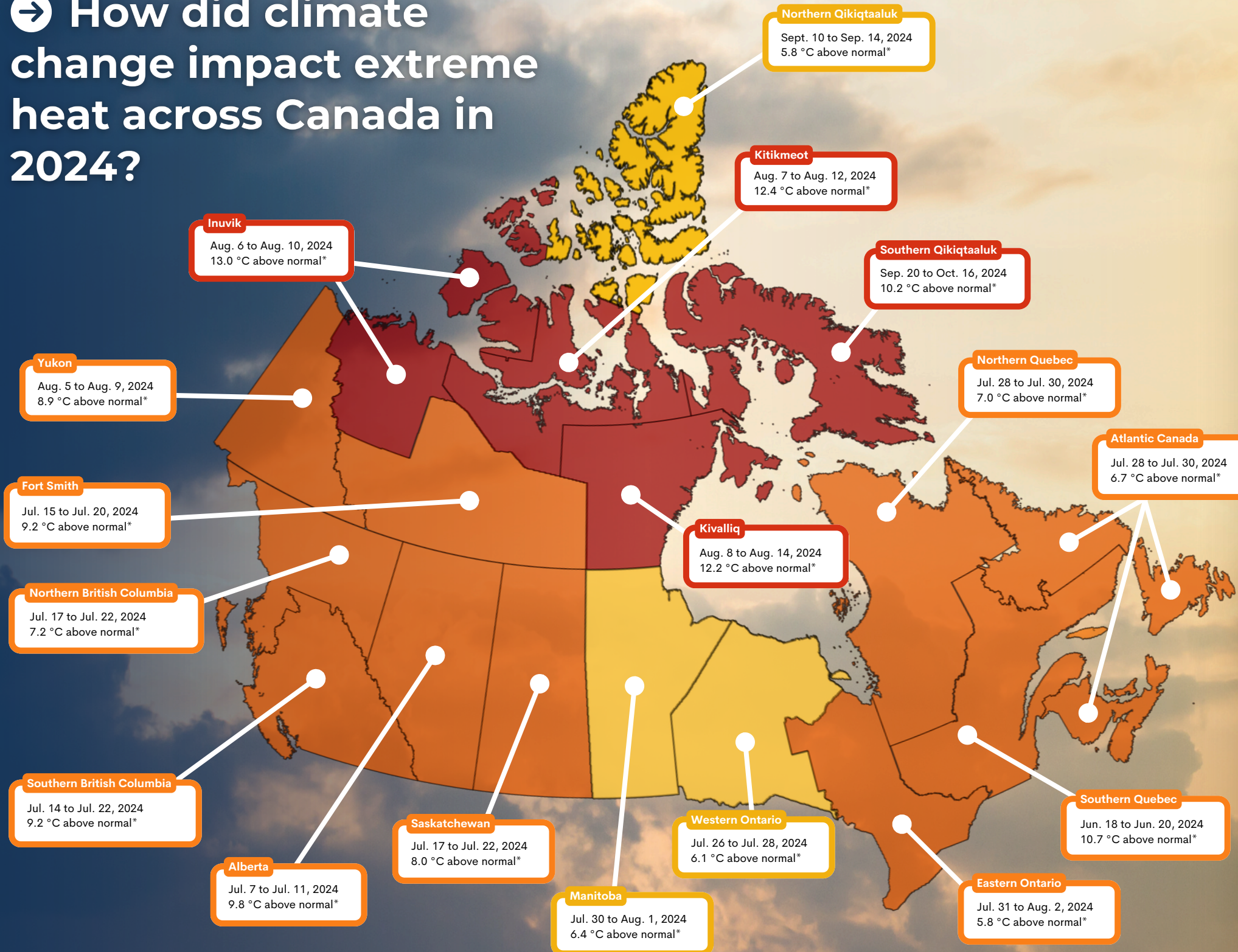


➔ How did climate change impact extreme heat across Canada in 2024?



Rapid Extreme Weather Event Attribution system: top heat events of 2024

Extreme weather event attribution is a climate science approach that explores how events like heat waves, floods, and wildfires are linked to human-caused climate change. By modelling a pre-industrial climate and comparing it to today's climate, scientists can calculate the influence of human activity on extreme events.

Environment and Climate Change Canada's **Rapid Extreme Weather Event Attribution** pilot system determines the link between human-caused climate change and heat events across Canada shortly after they occur. These insights aim to enhance response planning, decision-making, and public understanding of climate impacts.

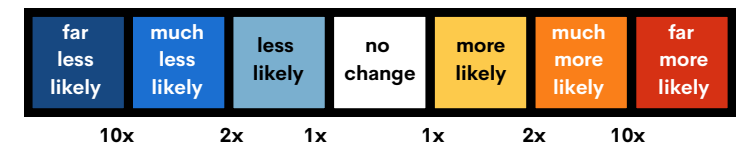
Learn more by visiting the [Rapid Extreme Weather Event Attribution web page](#).

Understanding the Map

The map highlights observed heat events in 2024 that had the largest departures from normal in each of the attribution system's 17 study areas. The **statement of likelihood**, denoted by the map's colours, describes whether the heat event was made more or less likely due to human influence on the climate.

The **probability range** quantifies the likelihood statements, with "much more likely," for example, meaning an event is at least 2x to 10x more likely to occur today compared to a pre-industrial climate.

Change in likelihood of event due to human caused climate change



* This value represents the degrees above normal for the peak high temperature observed during the heat event. "Normal" is defined as the average high temperature over a 31-day period centered on the peak temperature day (15 days before and 15 days after), calculated using 1991–2020 climate data for the region.



In most cases, the likelihood of a heat event happening in your region will further increase in the future. Visit [ClimateData.ca](#) to learn more about future climate changes, explore interactive maps, and analyze how extreme heat events become more frequent and severe.