Data Update to the Actuaries Climate Index

Long-term measure of extreme climate conditions reached a new high in winter 2019–20

Washington, D.C., Arlington, VA, Schaumburg, IL, and Ottawa, ON (August 26, 2020) — A multiyear trend of increasing climate condition measurements from the United States and Canada continues, reaching a new high in winter 2019–20, the latest Actuaries Climate Index quarterly data release shows.

The Actuaries Climate Index’s key metric of a seasonal five-year moving average presents a composite measure of long-term changes across an array of observed weather extremes and sea levels in the two countries. It has steadily climbed from its most recent cyclical low of 0.70 in 2015 to a new high of 1.17 for the moving average in winter 2019–20. Although the latest increase in the moving average is marginal, it is 0.07 above the previous winter and reflects that the extreme climate conditions tracked by the index – high and low temperatures, heavy rain, drought, high wind, and sea level – continue to move away from the reference period norms since inception in 1961.

“The ACI’s five-year moving average is a composite value reflecting the consistently growing change in measured values for the heavy rainfall, sea level, and extreme high and low temperature components that are fueling the overall trend toward extreme conditions seen in the latest data,” says Doug Collins, Chair of the Climate Index Working Group. “While we should
not expect the five-year average to always increase, if changes in climate indicators continue on their current course, the general trend in the Actuaries Climate Index is likely to be upward.”

The Actuaries Climate Index is based on analysis of seasonal data from neutral, scientific sources for six index components collected since 1961. The index measures changes in these components for the United States and Canada combined and by region. Combining six components over a five-year measurement period, the index’s moving average smooths out monthly and seasonal fluctuations for a meaningful measurement of long-term climate trends.

The index, sponsored by the American Academy of Actuaries, the Canadian Institute of Actuaries, the Casualty Actuarial Society, and the Society of Actuaries, is designed to provide actuaries, public policymakers, and the general public with objective data about changes in the frequency of extreme climate conditions over recent decades.

Updated values are posted quarterly on ActuariesClimateIndex.org as data for each meteorological season become available.

About the Sponsoring Organizations

The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

The Canadian Institute of Actuaries (CIA) is the national, bilingual organization and voice of the actuarial profession in Canada. Our more than 6,000 members are dedicated to providing actuarial services and advice of the highest quality. The Institute holds the duty of the profession to the public above the needs of the profession and its members.

The Casualty Actuarial Society (CAS) is a leading international organization for credentialing and professional education. Founded in 1914, the CAS is the world’s only actuarial organization focused exclusively on property and casualty risks and serves over 9,000 members worldwide. Professionals educated by the CAS empower business and government to make well-informed strategic, financial and operational decisions.
With roots dating back to 1889, the Society of Actuaries (SOA) is the world’s largest actuarial professional organization with more than 30,000 actuaries as members. Through research and education, the SOA’s mission is to advance actuarial knowledge and to enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business and societal challenges. The SOA’s vision is for actuaries to be the leading professionals in the measurement and management of risk.

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