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[Alaskan Glaciers Grow for First Time in 250 years](#)

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Glacier Bay National Park. Two and a half centuries ago, the entire area was covered by thick sheets of ice. High snowfall and cold weather to blame.

A bitterly cold Alaskan summer has had surprising results. For the first time in the area's recorded history, area glaciers have [begun to expand](#), rather than shrink. Summer temperatures, which were some 3 degrees below average, allowed record levels of winter snow to remain much longer, leading to the increase in glacial mass.

"In mid-June, I was surprised to see snow still at sea level in Prince William Sound", said glaciologist Bruce Molnia. "In general, the weather this summer was the worst I have seen in at least 20 years".

"On the Juneau Icefield, there was still 20 feet of new snow on the surface [in] late July. At Bering Glacier, a landslide I am studying [did] not become snow free until early August."

Molnia, who works for the US Geological Survey, said it's been a "long time" since area glaciers have seen a positive mass balance -- an increase in the total amount of ice they contain.

Since 1946, the USGS has maintained a research project measuring the state of Alaskan glaciers. This year saw records broken for most snow buildup. It was also the first time since any records began being that the glaciers did not shrink during the summer months.

Those records date from the mid 1700s, when the region was first visited by Russian explorers. Molnia estimates that Alaskan glaciers have lost about 15% of their total area since that time -- an area the size of Connecticut.

One of the largest areas of shrinkage has been at the national park of Glacier Bay. When Alexei Ilich Chirikof first arrived in 1741, the bay didn't exist at all -- only a solid wall of ice. From that time until the early 1900s, the ice retreated some 50 miles, to form the bay and surrounding area.

Accordingly to Molnia, a difference of just 3 or 4 degrees is enough to shift the mass balance of glaciers from rapid shrinkage to rapid growth. From the 1600s to the 1900s, that's just the amount of warming that was seen, as the planet exited the Little Ice Age.

Molnia says one cold summer doesn't mean the start of a new climatic trend. At least years like this, however, might mark the beginning of another Little Ice Age.

As *DailyTech* reported earlier, Arctic sea ice this year has also [increased substantially](#) from its low in 2007.