

Greenland's glaciers are on retreat, shrinking at strikingly fast rates -- at least twice as fast as any time over the last 9,500 years.

Researchers with Columbia University's Earth Institute compared modern satellite data with records of glacier growth and decline gleaned from ice cores. Their findings were published last week in the journal Climate of the Past.

"If we compare the rate that these glaciers have retreated in the last hundred years to the rate that they retreated when they disappeared between 8,000 and 7,000 years ago, we see the rate of retreat in the last 100 years was about twice what it was under this naturally forced disappearance," study co-author William D'Andrea, a paleoclimatologist at Columbia's Lamont-Doherty Earth Observatory, explained in a press release.

Scientists were able to measure ancient glacier movements by measuring the levels of silt and sediments trapped in the ice cores collected from a glacial lake. As glaciers move, they grind the bedrock beneath them. The faster the movement, the more sediment, which is washed downstream by the glacier's melt water.

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