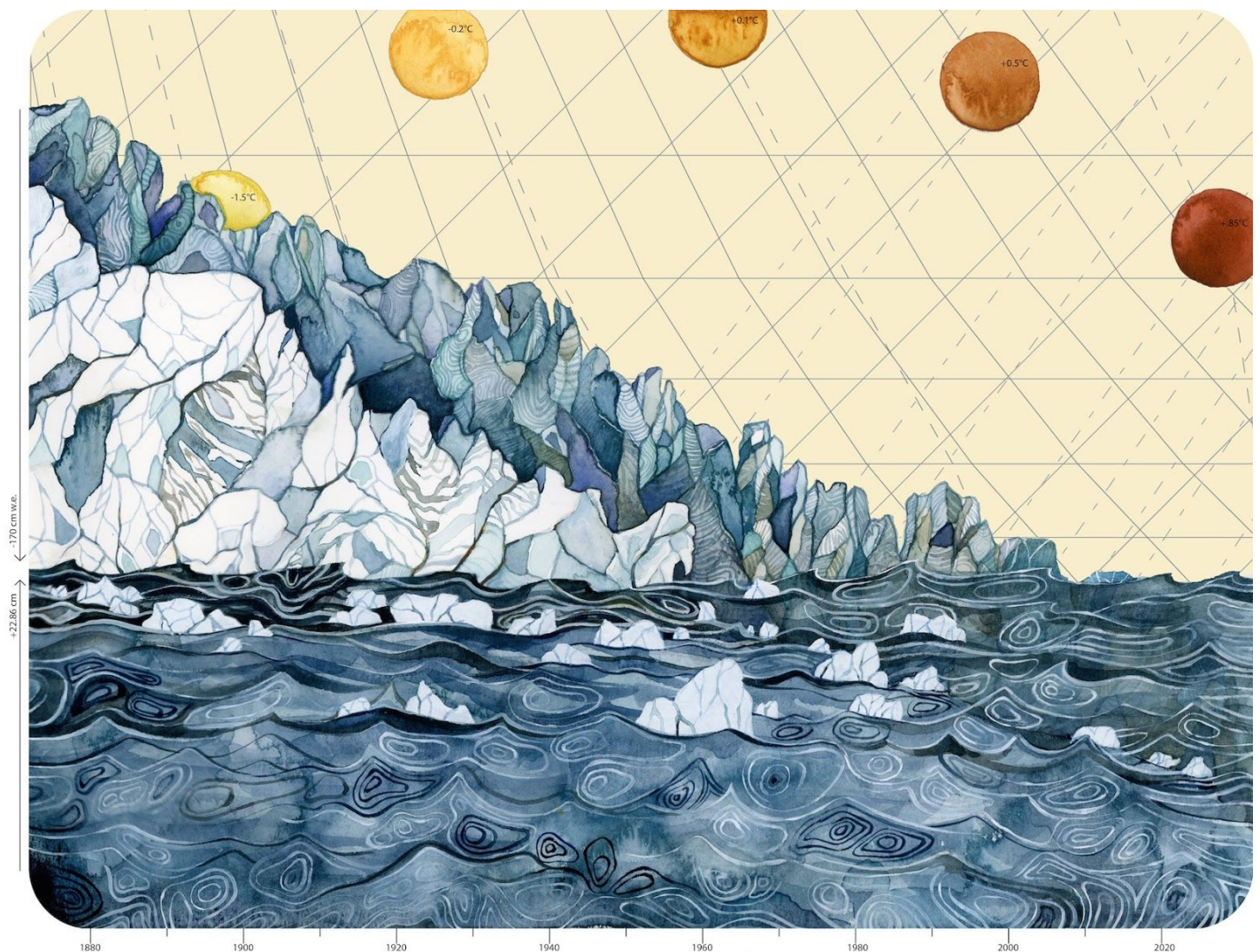


Climate Change Data: Watercolor on Paper

Jill Pelto

Jill Pelto (www.jillpelto.com) is a young artist and scientist based outside of Portland, Maine. She holds a M.S. studying the Antarctic Ice Sheet and climate change in 2018 and B.A. degrees in Studio Art and Earth Science from the University of Maine. Pelto's artwork has been featured in Smithsonian, PBS NewsHour, National Geographic, and on the cover of TIME Magazine.



What do you want viewers to know about this work to effectively understand it?

Climate Change Data uses multiple quantities: the annual decrease in global glacier mass balance, global sea level rise, and global temperature increase. I wanted to convey in an image how all of this data must be compared and linked together to figure out the fluctuations in Earth's natural history. One of the reasons scientists study what happened in the past is to understand what may happen now as a result of human-induced climate change. I represented this by illustrating that glaciers are melting and calving, sea levels are rising, and temperatures are increasing. The numbers on the left y -axis depict quantities of glacial melt and sea level rise, and the suns across the horizon contain numbers that represent the global increase in temperature, coinciding with the timeline on the lower x -axis.

Many are discouraged by the data portrayed in your works — what do you say to these people?

It has been a tumultuous year, but underlying currents of positive action are surfacing rapidly. It depicts a critical grouping of global climate data dictating our present and future action. The reality of this data may be frightening, but there are messages for hope within.

This year, the impact of the novel coronavirus will lead to a reduction in global CO₂ emissions, and renewable energy consumption will continue to increase. It is critical we leverage these trajectories as a sign of our collective potential to support local environmental action for global change today. This includes addressing the disproportionate effects of climate change on marginalized peoples.

Why are works like yours important in the sciences?

A scientist's primary objective is to do the research and publish the research. A lot of scientists do use communication skills as part of their work, but some don't. Research is a scientist's full-time job, but at the same time, there is a lot of pressure for them to be good at public speaking, social media, and so on. Not everyone has all of those skills. I think there should be more outside communicators in science. Art and communication have always been important passions for me, even stronger than my love of scientific research. I was

happy to complete my studies and become a scientist, but most important for me is to have the time to do the work of communication. That can mean not continuing as a full-time scientist—at least, that’s what it meant for me.

Using striking visuals to create an emotional connection really clicks with some people. While scientific data depicts what’s there, too, it’s hard to connect with it emotionally or know what it means for your life. By making art about a topic, it becomes a part of our culture. Art has always been used as a tool for communicating the things that matter to us and define our lives.

What do you want people to do after viewing your work?

I hope it’s something that gets people thinking, whether about what they see depicted, or whatever topics are most important in their lives. Right now, with the pandemic, we’re all living through a stressful situation that is bringing out a lot of different things in different people. Some people have been able to use this situation to reflect and tune in in a different way. Activism is taking off because people cannot wait for the slow pace of change any longer, and activism helps you learn better how your impact matters. I really hope that a lot of people are awakening to the power of their individual actions—which is the only thing that leads to larger collective action. Individual action may feel limited, but when amassed together, it forces change. I hope that my work has enough of an emotional connection to help set that chain of events going, and inspire others to take action.

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Interview Courtesy of Jill Pelto. Some excerpts previously published at JillPelto.com, TIME.com, and blogs.ei.columbia.edu.