

The bold plan to save a vital ocean current with giant parachutes

Large sea anchors could be used to drag water under a bold plan to keep the Atlantic Meridional Overturning Circulation moving – but some experts are sceptical

By [Madeleine Cuff](#) on June 27, 2025



The plan to maintain the ocean current would involve much larger versions of parachute sea anchors. Ed Dunens (CC BY 2.0)

Shipping tankers, drones and fishing boats could be used to drag giant parachutes through the waters of the Atlantic Ocean as part of a drastic plan to avert catastrophic climate change.

The Atlantic Meridional Overturning Circulation (AMOC) transports warm water from the tropics northwards, helping to keep northern Europe temperate.

However, a rapidly melting Arctic and warming ocean temperatures are weakening the current, with some scientists [fearing it could shut down altogether at some point in the coming century](#). This would plunge oceanic ecosystems into chaos and rapidly cool Europe's climate by several degrees.

Greenhouse gas emissions need to be cut rapidly to reduce the risk of AMOC collapse and other catastrophic climate "tipping points", experts stress. But some are considering other, more radical approaches to keep the current going.

[Stuart Haszeldine](#) at the University of Edinburgh, UK, and [David Sevier](#) of UK water treatment firm Strengite presented one idea at the [Arctic Repair](#) conference in Cambridge, UK, this week. They say that just 35 sea tugboats could be used to pull underwater parachutes, each about the size of half a football pitch, to move enough water to maintain the current. “You can have that very large effect with a very small intervention of energy and equipment,” says Haszeldine.

The parachutes – similar in design to existing sea anchors, which are used to stabilise vessels in inclement weather – would help to propel the water flowing along the surface of the ocean. Each one would feature a hole with a 12-metre diameter in its centre to allow marine life to escape.

Drones, shipping tankers, tugboats or wind kites could be used to drag the parachutes, operating 365 days a year on a rotating-shift basis. “It’s a small but continuous intervention,” says Haszeldine.

Sevier described the idea as a “Hail Mary” to prevent the catastrophic consequences of an AMOC collapse. “This is about buying time,” he argues, for the world to cut emissions enough to stabilise global temperatures at a safe level.

However, the idea has been met with scepticism from leading AMOC researchers. [René van Westen](#) at Utrecht University in the Netherlands points out that differences in water density between cold, salty water and warm, fresher water are key to the downwelling and upwelling motion that sustains the AMOC.

“If [this idea is] possible, they can only maintain the surface layer using the overhead winds,” says van Westen. “The ocean density differences are far more important for the AMOC and hence, I’m not convinced that this can sustain the AMOC.”

[Stefan Rahmstorf](#) at the Potsdam Institute for Climate Impact Research in Germany agrees. “The issue is not to move surface water along horizontally; it is to make it sink down to a depth of 2000 to 3000 meters and flow back to the south as a cold deep current,” he says.

[Meric Srokosz](#) at the UK’s National Oceanography Centre says the proposal is “unlikely to work”, given the challenges of deploying equipment in the ocean in unpredictable weather conditions.

Haszeldine says he welcomes any feedback from other scientists on the idea and hopes ocean and climate modellers will help to investigate the ecological and environmental impacts of the plan. “We believe this to be worth investigating further,” he says.

More broadly, there should be more research focused on climate-intervention strategies to maintain ocean circulation, Haszeldine argues: “I don’t see anyone else working on ocean currents.”