

**Salinity Processes in the Upper Ocean Regional Study**  
**NASA Jet Propulsion Laboratory**  
**Video Transcripts**

**Video: A Delicate Balance**

**URL:** <https://vimeo.com/58193860> [01:27]

**Description**

Dr. Raymond Schmitt responds to a question from the media about the effects of salinity on the ocean conveyor belt.

**Transcript**

Let me talk about the conveyor belt first. That's a fairly complex question. The idea is that the conveyor belt has warm waters coming up in the Gulf Stream and entering the North Atlantic, losing their heat to the atmosphere, getting cold and dense and sinking, and then returning underneath to the tropics in the Atlantic.

Now the idea is that the glacial melt could freshen that water and make it less dense and less likely to sink. But we're looking at another part of the system that feeds the warm water sources that are heading northward. We're finding that those are getting saltier. It may work out that the higher salinities that we are seeing in the subtropical underwater that Eric mentioned could counteract the freshening due to more precipitation and glacial melt at high latitudes. So it is a delicate balance. What we think now is that it's not too likely that the conveyor belt is going to shut down any time soon. It might slow down a little bit from general warming, but we're not going to see a shutdown such as happened in the past.