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

Video: The North Atlantic's Ocean Desert

URL: https://vimeo.com/album/2234713/video/58199975 [01:35]

Description

Dr. Eric Lindstrom explains why the salinity maximum in the North Atlantic is referred to as an "ocean desert".

Transcript

These high salinity regions around the globe are associated with areas of high evaporation and low precipitation. Generally we're making denser water, and it's a downwelling regime. These are sort of the deserts of the ocean. The biologists characterize them as oligotrophic waters. They're not highly productive waters. There's not a lot of plankton in the waters like in coastal waters. It's very blue and clean so to speak. That's a difference. It's an association with the salinity, but not caused by the salinity. It's just part of the general climate of the ocean there. Another aspect of this evaporation and this creation of denser water is that water mass is actually formed in the centers of these high salinity regions called subtropical underwater. We often characterize this water which then sinks and is underneath the surface waters at the tropics as a river of salt. This evaporation is creating a water mass which in some ways you can think of as source waters for the salty river underlying other parts of the ocean.