Changes in Watermass Properties between the North Pole and Ellesmere Island after the 2007 Sea Ice Retreat

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Switchyard and NPEO Stations between Alert and the NP
Outline

- Description of property distributions along the NP/Alert line.

- Review of salinity evolution along the NP/Alert line during the past decade.

- Freshwater component distributions along the NP/Alert line. Freshwater components are calculated from temperature, salinity, nitrate, phosphate, and oxygen isotope data using the Jones et al. (1998) technique for calculating fractions of Atlantic and Pacific water.

- Lateral distribution of freshwater and freshwater components.

- Summary
Oxygen (ml/l)
Pacific Water
Meteoric Water
Sea Ice Melt Water
Freshwater inventory (meters)
Freshwater inventory (meters)
Fraction Pacific Water in Surface Mixed Layer
Fraction Meteoric Water in Surface Mixed Layer
Fraction Sea Ice Melt Water in Surface Mixed Layer

![Fraction Sea Ice Melt Water in Surface Mixed Layer](image)
Freshwater Component Thickness (m)