

**Extracts:**

Even the deepest portion of the Arctic Ocean is therefore not isolated from surface events in the seas to the south. The details of the deep lateral exchange are completely conjectural, however: Is the flow large or small? Does it occur in broad bands or slender ribbons? Is it confined to a thin near-bottom sheet, or is it a thick layer? Is it highly variable in time, or is it relative constant?

We do not know very much about the cause of variability (salt and heat), nor about its consequences.

So far we have not said anything about what happens to the Atlantic water within the Arctic Ocean. This situation is rather like a black box, for which we may know something about the input function but have neglected the response function. Until we determine the internal circuitry of the box, we shall not be able to make any useful analyses and predictions.

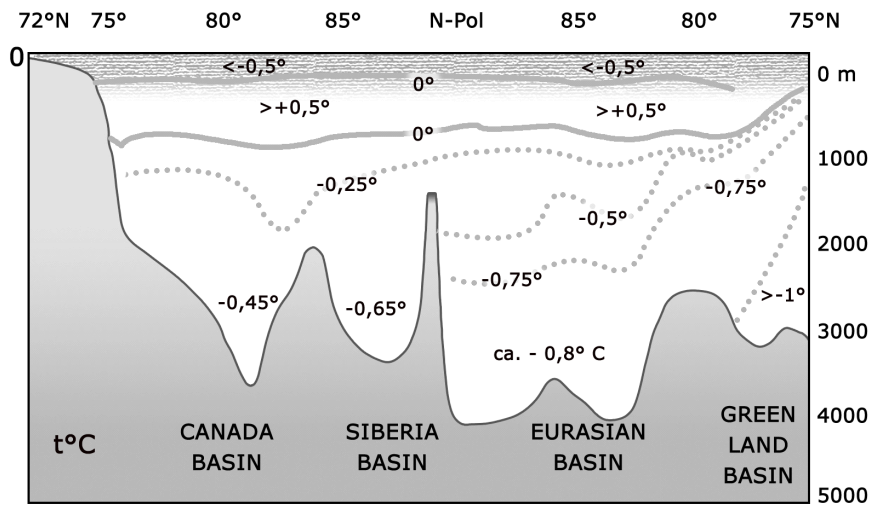
The consequences of such onshore fluxes of salt and heat are not clear, but what is clear is the events in the north Atlantic can be transmitted years later to the shore of the far Pacific side of the Arctic Ocean.

It may well be, for example that in the long run the Eskimos in Alaska will care considerably what the European puts into the Irish Sea.

It is important to point out that we know next to nothing about the deep circulation of the Arctic Ocean.

A rather direct Atlantic influence is therefore pervasive in the Polar basin, from the shelves to the abyss.

Exploring the fate of the water within the Arctic Ocean is one of the most important tasks we can set ourselves			
Where does it go?	How fast?	How and where and when does it lose its heat & salt?	
In what quantity?	With what variability?	At what rates?	By which mechanisms?



Source: Knut Aagaard (1982)

www.arctic-warming.com

In many respects, the oceanography of the Arctic Ocean is at the point it was in the Atlantic 60 years ago, prior to the great modern oceanographic expeditions.