Cast 8

Station 7

January 13: 06:20

-76 46, 168 46

808 m depth

This station was chose to be on the eastern side of ice along the western Ross Sea.

There is some structure near the surface with a thin (10 m) surface layer and a thicker (100 m) transition region to water of nearly uniform character (low salinity shelf water). The lowest 100 m has a turbidity increase and a slight salinity increase which could be a bottom intruding denser shelf water variety.

A sharp surface mixed layer is 10 m thick with a peak fluorescence of 9 mg/m^3. Both fluorescence and oxygen decline over the top 50 m of the water column. This layer seems to be an old wind mixed layer.

From 100 m to near the bottom, the water is at surface freezing with salinity between 34.6 and 34.7. This is the lower salinity variety of shelf water.

The bottom 100 m has a layer with increasing salinity and lower oxygen. This layer could be a denser variety of shelf water that is pooling in a low spot.



