Cast 59

Station 57

January 24, 07:22:05

77 35.94, -178 48.30

655 m depth

This station (RISN1) is the second station on a north to south part of sampling in front of the Ross Ice Shelf.

The surface mixed layer is 65 m deep with a surface temperature of -0.4C. There is a layer of high fluorescence from 0 to 60 m with a value of about 15 mg/m^3.

The temperature declines to freezing at about 200 m depth. From 250 to 350 m depth there is a layer of slightly elevated temperature and depressed oxygen associated with CDW.

A deeper layer from 450 to 550 m has temperatures below freezing indicating ISW. There is a definite increase in the vertical salinity gradient starting at 450 m.



