Cast 44

Station 42

January 21, 07:25:41

-76 20.34, 177 37.44

402 m depth

This station (RBNW4) is the fourth of a SE to NW section across Ross Bank.

The surface mixed layer is 25 m thick. Surface temperature is 0.8C. There is an older mixed layer to 50 m depth. The fluorescence peak spans 0 to 50 m with a peak value of 7 mg/m^3 at about 30 m.

Water below 100 m is near freezing with linearly increasing salinity.

There is a Tmax layer (250 to 280 m) with a Tmax of -1.5C at 260m. There is a matching decrease in oxygen indicating CDW.

There is a different vertical salinity gradient on either side of the Tmax layer.

There is a bottom mixed layer (30 m thick) with uniform conditions with lower oxygen than the layer above, indicating a benthic biological oxygen sink.



