

Sea water property changes in the Southern ocean



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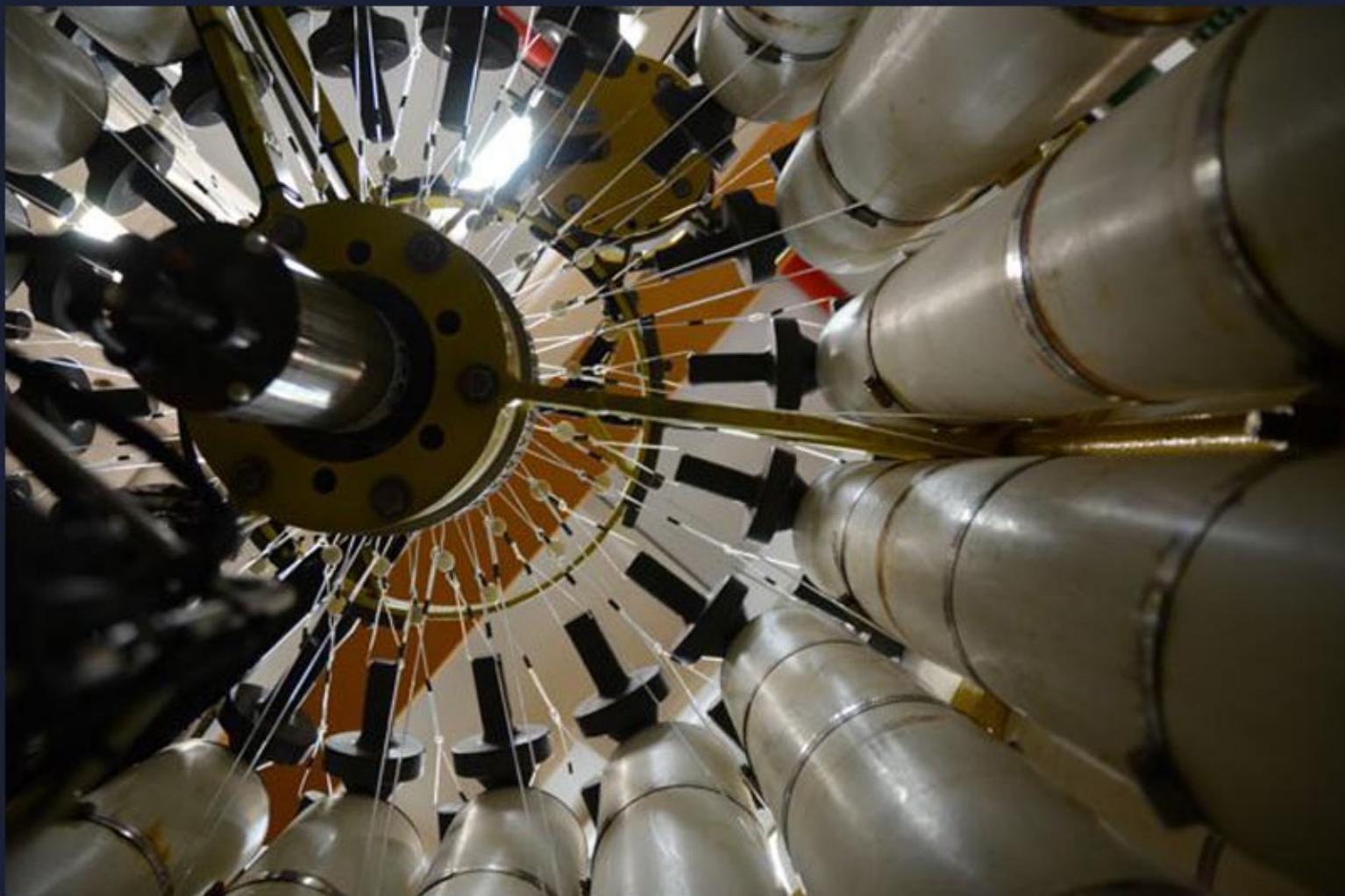
Dr. Jim Swift
Scripps Institution of Oceanography



I am holding a bottle for Carbon 14 while standing next to the rosette



Niskin bottle seen from above



Lanyards web keep the bottles open durign deployment

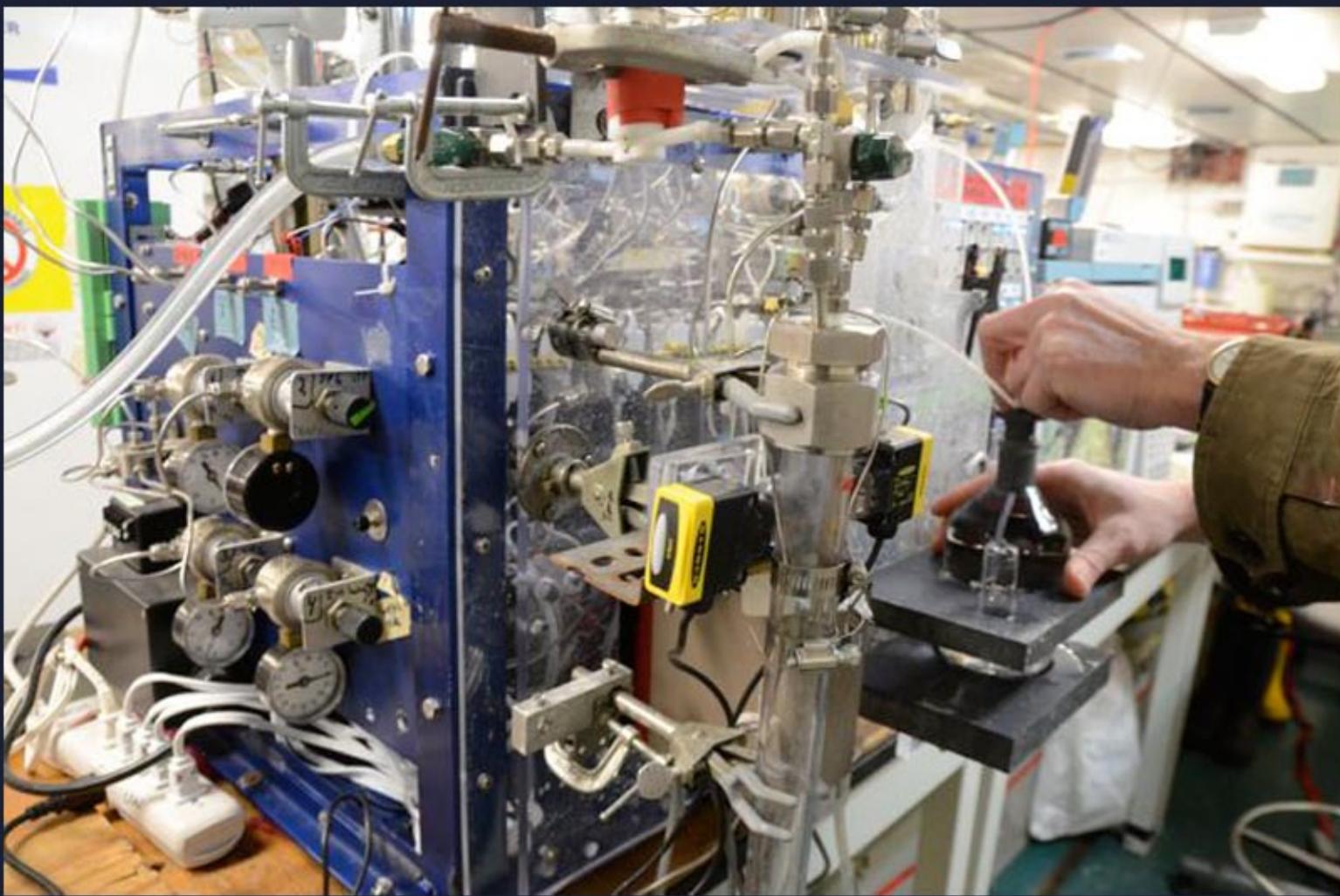


Rosette deployment





Sampling the rosette

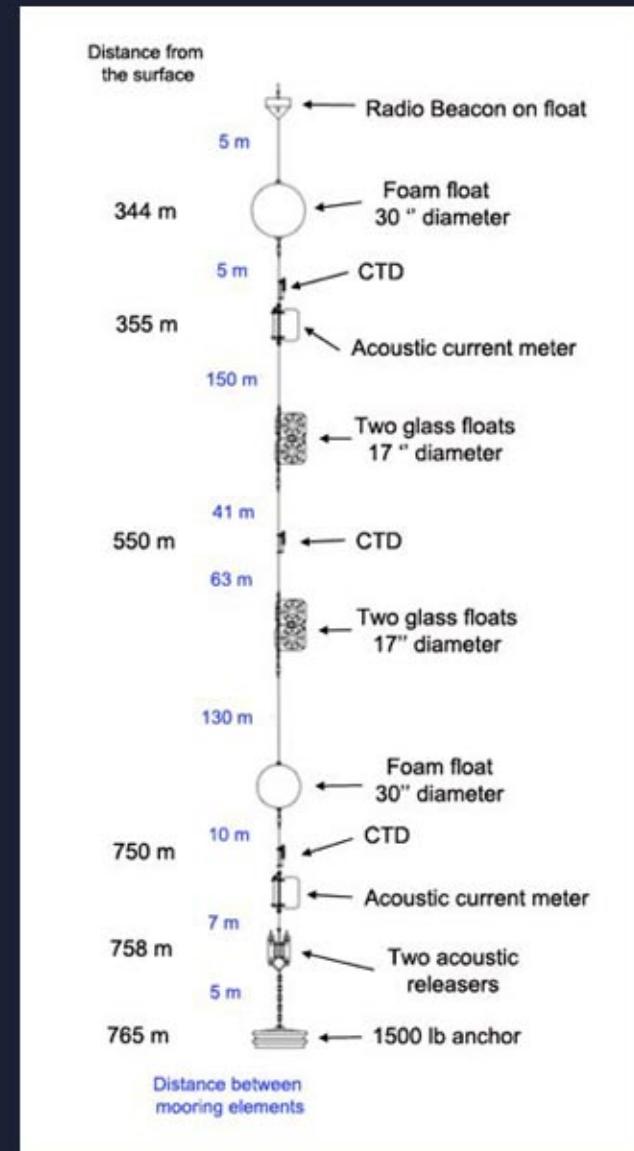


Strange looking machine for analyzing CFCs



Fragile environment changing by global warming

Mooring diagram





Mooring recovery



McMurdo Station's airport



My cabin with four bunkbeds



Two hour recess in nine weeks



Skua



Crabeater seals that floated our way



Humpback whales



Adélie penguins at McMurdo Station



Two Adélie penguins



An Emperor penguin on stage



Iceberg at sunset



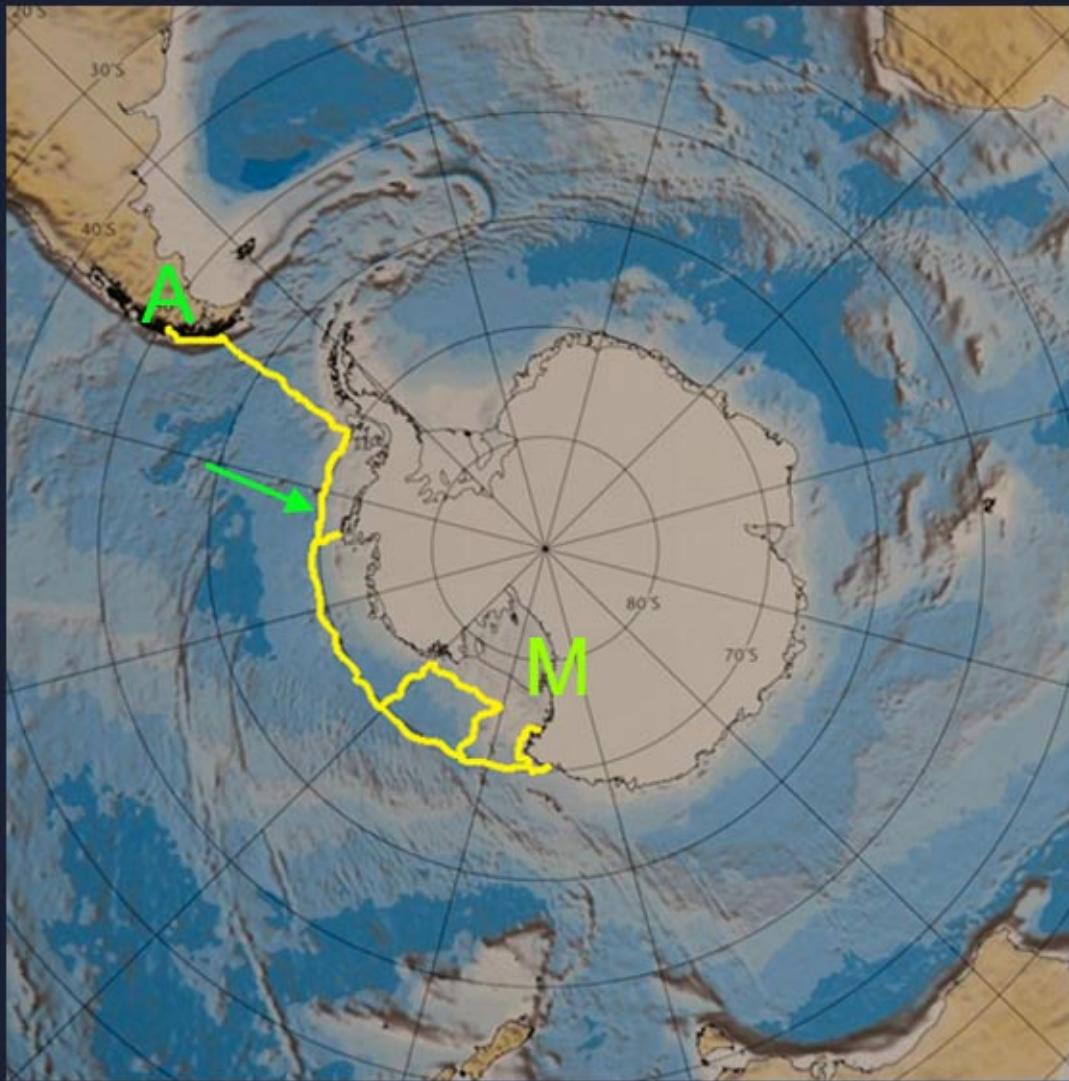
Perigee moon



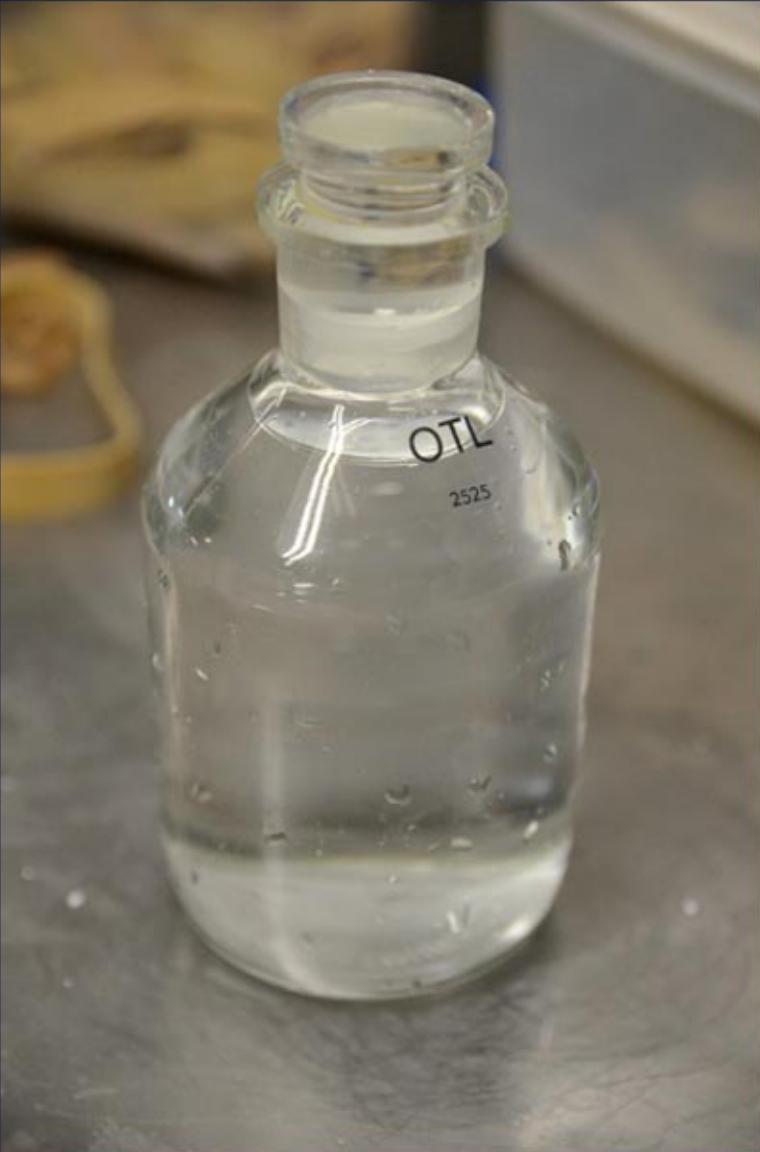
Aurora australis over the Southern Cross constellation



Steam ahead to solve the puzzle



Ship trajectory for 65 days at sea



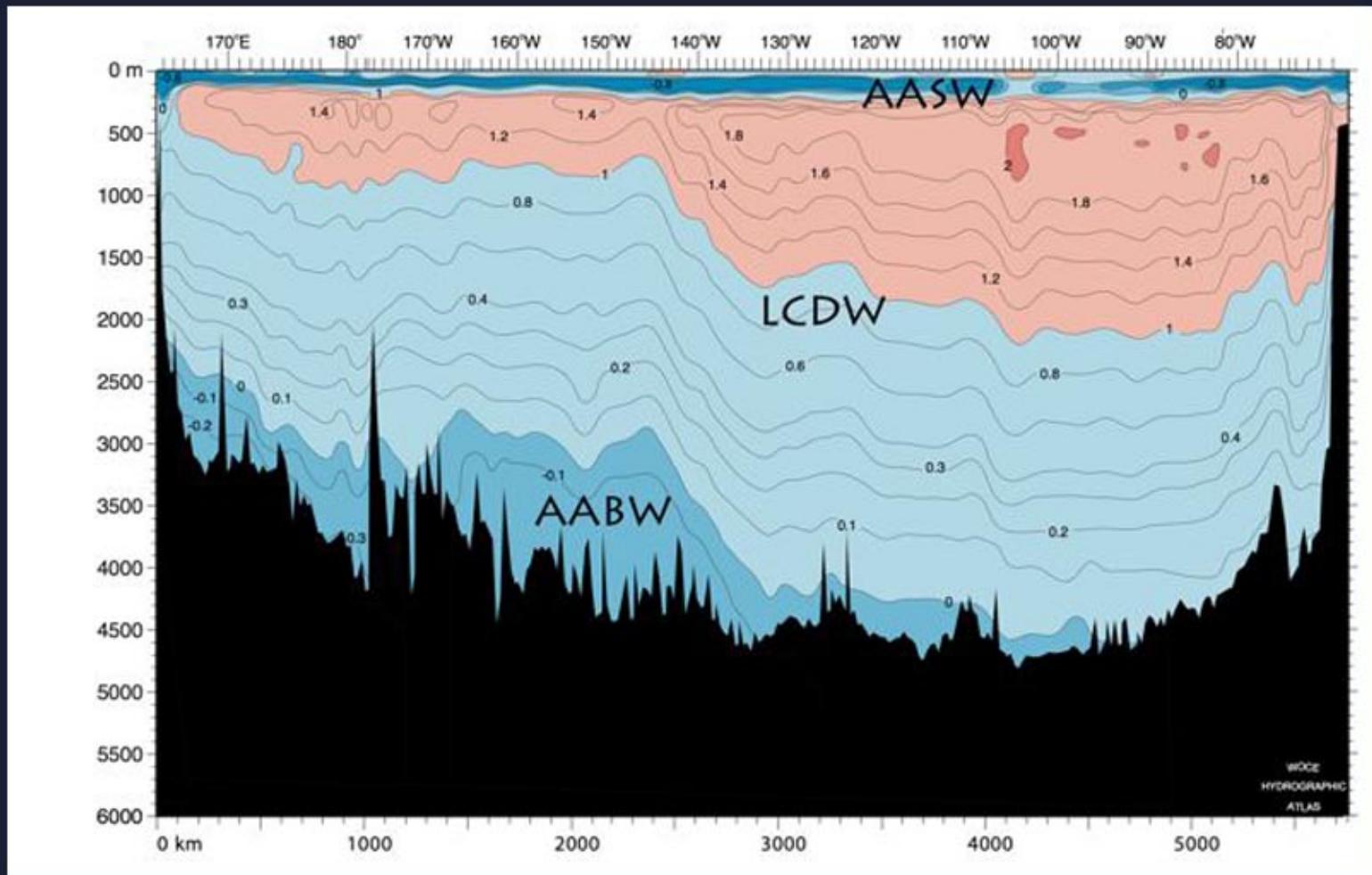
We traveled far to get this,
water at different depths
of the Southern Seas



Vertical profile of a cake



Sampling stations on a cake



Vertical slice of the ocean showing the temperature distribution