

1. To harvest Antarctic ice, drill a [m] deep hole into the ice sheet and separate the ice core into shorter segments. Store these segments and transport them to the lab bench, a hot wire will be wrapped around the core inside a gas chamber to systematically melt the core. Then, perform mass spectrometry on the gas in the chamber corresponding to the segment. Knowing that deeper air bubbles inside the ice have older air, the ratio of oxygen isotopes in the gas can be calculated to graph the average air temperature versus time (which is thought to be correlated with average atmospheric temperature when air bubbles were trapped in the ice).