



THE CTD

CONDUCTIVITY TEMPERATURE DEPTH



Launching A CTD

The CTD is rigged to a cable that transmits information to an on-board computer. The device is hoisted from the deck and submersed allowing the sensors to adjust to the surroundings. The rosette of gray bottles and the CTD are carefully lowered to the ocean's floor. Scientists observe the graphic data relayed by the sensors.

✕ What Is A CTD? ✕

A water sampling device used by oceanographers to provide an instantaneous read out of the water column's properties.

A TRIP TO THE SURFACE OF THE OCEAN

As the CTD ascends to the surface from the sea floor, the device receives electronic signals to fire the bottles and capture the water at that depth.



The firing depths are partially chosen based on real-time data collected during the descent. (See picture, properties below)

Once the CTD arrives at the surface, a crew of researchers in life jackets and hard hats safely lower the package on-board. Polycarbonate or culture bottles are quickly filled with fresh samples from a designated bottle on the rosette and whisked away for

testing. The lanyards attached to the lids of the the rosette bottles are realigned for the next launching.

The Seven Properties Measured From A CTD Sample

1. Salinity
2. Temperature
3. Oxygen
4. Chlorophyll/Fluorescence
5. Light Transmission
6. Pressure

7. Photosynthetically Active Radiation (PAR : Counts photons between near UV and red light)

