

CTD Summary

EX2301, CTD 002, April 22, 2023

This form contains metadata information summarizing individual vessel CTD (conductivity, temperature, depth) casts in support of ocean exploration objectives. All CTD data are archived with the National Centers for Environmental Information (NCEI). For CTD-specific or expedition-specific inquiries, contact ex.expeditioncoordinator@noaa.gov. For assistance with data access, contact ncei.info@noaa.gov.

General Expedition and CTD Information

Expedition Name	Shakedown + EXPRESS West Coast Exploration
Project ID	EX2301
CTD Cast Date (UTC)	April 22, 2023
CTD Number	CTD002
Expedition Coordinator	Thomas Morrow, NOAA Ocean Exploration
CTD Operator	CST Charlie Wilkins
Science Lead	Alexis Weinnig, USGS
Science Lead	Paige Koenig, WWU
General Area Descriptor	Eastern Pacific Ocean, U.S. Pacific Northwest
Site Name	
CTD Cast Purpose	Water column profile

CTD Cast Location, Depth, and Time

Locations are the ship's position. Coordinates are referenced to the World Geographic System, 1984.

Deployment Latitude (decimal degrees)	45.3672
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Deployment Longitude (decimal degrees)	-125.0365
Deployment Time (UTC)	20:51:35
CTD Max Depth (meters)	1001.635
Recovery Latitude (decimal degrees)	45.61192
Recovery Longitude (decimal degrees)	-125.03648
Recovery Time (UTC)	21:35:20

Environmental Sensor Information

Sensors are calibrated yearly or more frequently as required. Calibration information and files are stored with the sensor data.

Data Type	Sensor Name	Collected (Yes/No)	Data Issues/Notes
Depth	SBE-9plus (SN 0905)	Y	
Conductivity 1	SBE-4 (SN 3449)	Y	
Conductivity 2	SBE-4 (SN 3456)	Y	
Temperature 1	SBE-3 (SN 5001)	Y	
Temperature 2	SBE-3 (SN 5017)	Y	
Dissolved Oxygen	SBE-43 (SN2100)	Y	
Turbidity	ECO-FLNTU	N	
Oxygen Reduction Potential	PMEL (SN EX-02)	Y	

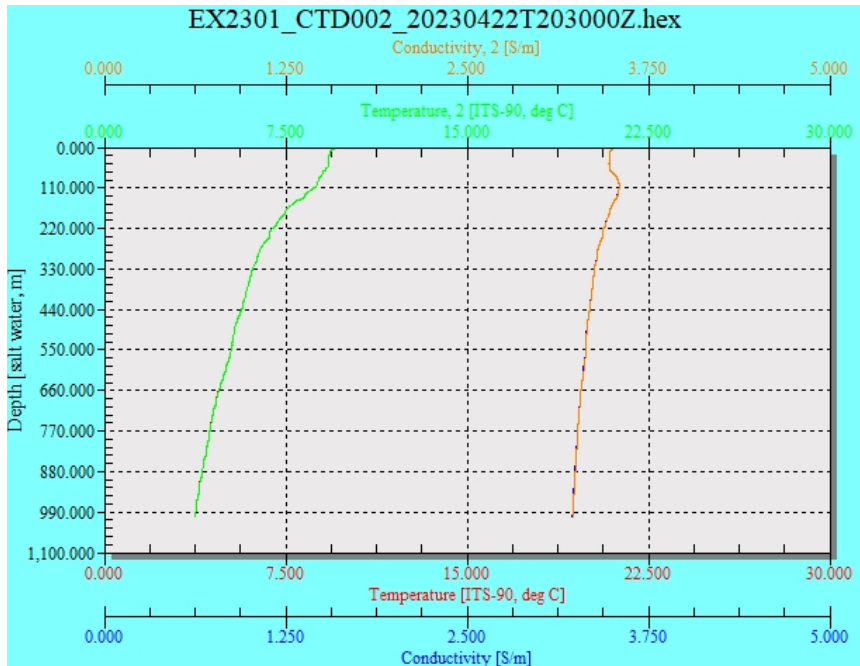


Figure 1: Temperature (°C)(green line) and conductivity (S/m)(orange line) profiles

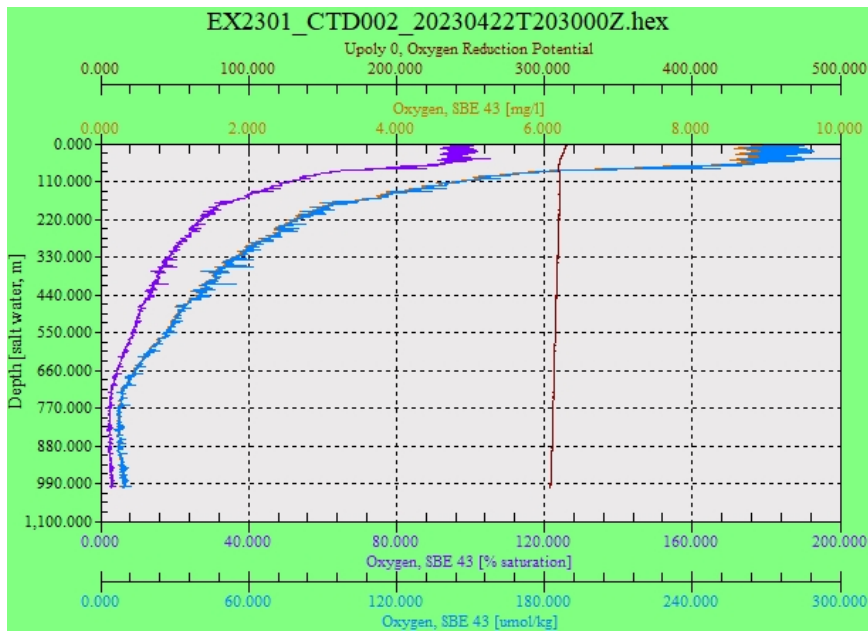


Figure 2: Oxygen saturation (% saturation) (purple line), oxygen concentration (umol/kg) (blue line), and oxygen reduction potential (brown line) profiles

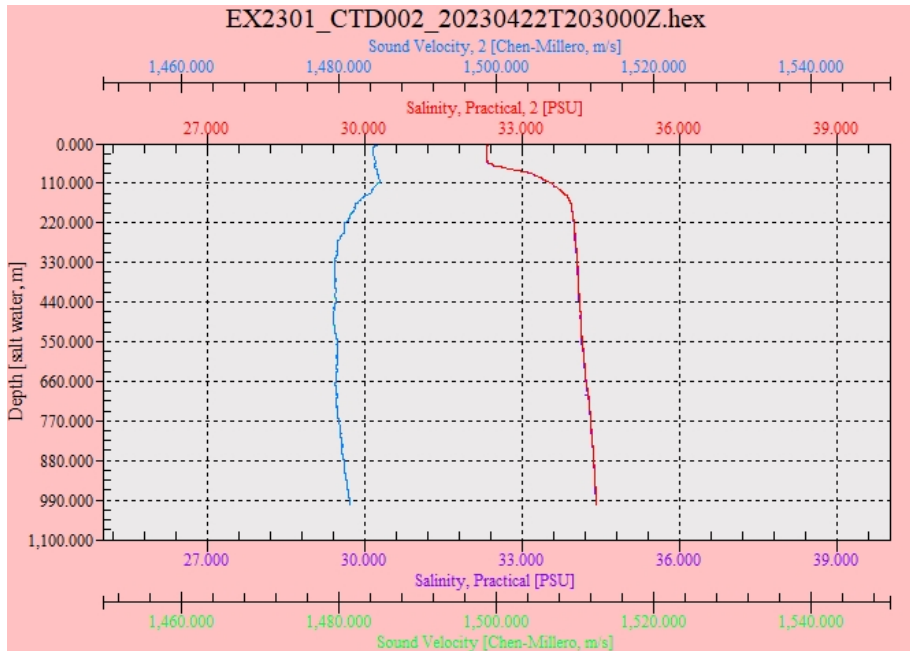


Figure 3: Sound velocity (Chen-Millero, m/s)(blue line) and salinity (PSU)(red line) profiles

Water Sample Collections

N/A

Direct inquiries to:

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