Step 1. Download the CTDTURBO GitHub library (found here: <https://github.com/wherediddavidgo/ctdTURBO>) to your computer. Download and install the Arduino IDE and the following libraries: Wire, RTClib, Adafruit\_SleepyDog, SPI, SD, OneWire, DallasTemperature, MS5803\_14, SoftwareSerial, and Adafruit\_VCNL4010.

Step 2. Use the microUSB cable to connect the Adalogger on the assembled system to your computer. Open the Serial Monitor and set baud rate to 9600. Set *sleepDuration\_seconds* to 0 for continuous sampling. For intermittent data collection (recommended to save power in long-term environmental deployments) set *sleepDuration\_seconds* to the desired duration between sampling periods in seconds. Set *samples\_per\_wake* to the desired number of samples per sampling period. Upload the code. If successful, the serial monitor will produce a continuous readout of sensor data. Flip the slide switch on the circuit board to allow the unit to run off battery power and disconnect from the computer. For accurate timekeeping, the code must be reuploaded every time the sensor loses power, e.g. when the sensor is turned off between deployments.

Step 3. For field deployment, remove the wingnut from the pressure fitting and wrap the threads with Teflon tape. Screw the wingnut back on. Push the circuit board into the pipe, insert the removeable cap, and screw it on tight. Wrap the gap between the cap and pipe with electrical tape.