

Meta Data Report

PI:	Rik Wanninkhof
Person(s) filing report (if different than PI):	K. F. Sullivan, R. D. Castle
Operation description (be verbose):	Underway pCO2 system (Built by General Oceanics - GO)
Start Time (hh:mm:ss, UTC):	13:15:00
Start Date (dd/mm/yy; UTC):	03/01/08
Start latitude (signed, decimal):	-52.404000
Start longitude (signed, decimal):	-66.675000
Event-log event number (if applicable)	GO107-RB0802
Expected operation duration:	Entire Cruise
Expected initial data products:	xCO2 in surface water and atmosphere
Expected distributed data products, and time-frame for distribution:	In situ fugacity of CO2 in air and surface water and delta fCO2, ~6 months after end of cruise.
Other operation notes	Method: infrared absorption of dried gas using Licor 6262. Equilibrator volume ~2 L. Air intake on bow mast at ~8 meters. The system makes 3 standard gas measurements, 5 ambient air, and 55 equilibrator headspace measurements every 2.6 hours. Standard gases are from NOAA/ESRL in Boulder and are directly traceable to the WMO scale. Concentrations are 289.06, 370.90, and 411.42 ppm. The system records the Licor millivolt and um/mol, H2O millivolt and mm/mol, cell temperature and pressure, equilibrator temperature, and gas and water flows. In addition, a deck box containing a GPS and Druck barometer is connected to the system which also records these values.
Post-operation comments/assessment	

Operation Log

Time, date	event
03/01/08 13:15:00	System startup.
03/02/08 00:38:13	Shut down system to retrieve Licor calibration constants.
03/02/08 00:50:19	Restarted system.
04/04/08 11:20:00	Computer froze (blue screen of death) - 24 minutes of data lost.
04/04/08 23:51:00	Computer froze again - 14.5 hours of data lost.
04/05/08 21:25:00	GPS feed failed.
04/08/08 16:38:00	System stopped briefly to restart GPS feed.