

Cruise: EX1041

Ship: Explorer of the Seas

Dates: Dec 1 – Dec 9, 2010

Expocode: 33KF20101128

Chief Scientist: NA

Equipment: Underway samples from bow intake

Total number of stations:

Corresponding Underway pCO₂ datafile:

<http://www.aoml.noaa.gov/ocd/gcc/explorer/ex1041/ex1041.csv>

Sample Collection

The discrete samples were collected by Shailer Cummings at the bow intake of the Explorer of the Seas.

DIC:

7 locations, 7 samples each 500-ml, no duplicate samples

Sample_ID#: 11,1-6

Run on Aoml2 (SOMMA #2)

PI: Dr. Rik Wanninkhof

Analyzed by: Robert Castle

TAlk:

7 locations, 7 samples each 500-ml, no duplicate samples

Sample_ID#: 11,1-6

PI: Dr. Rik Wanninkhof

Analyzed by: Dr. Leticia Barbero

Sample Analysis

DIC:

Analysis date: 2/3/2011 to 2/3/2011

Coulometer used: AOML2 (SOMMA #2)

Blank: min=21.8 counts/min

CRM # used and assigned value (include both DIC and salinity):

Meas CRM	cert CRM	meas sal	cert sal	batch
1985.03	2000.44	33.742	33.326	85

Run time: min=8 min; max = 11 min; average = 9 min

Reproducibility: NA

CRM, salinity and HgCl₂ correction applied: Salinity correction was applied using SOMMA salinity

Remarks-

The volume correction was applied due to added HgCl₂ (Measured DIC*1.00037).

The first CRM of each cell was used for a CRM correction.

Talk:

Analysis date: 08/5/2011

Titration system used: Open cell

CRM # used and assigned value:

Meas CRM	cert CRM	batch
2148.61	2184.03	85

Reproducibility: NA

CRM correction applied. The first and last CRMs were used for the CRM correction.

Remarks-

For alkalinity measurement, CTD salinity was used. For bottle #5 no salinity is available, so there is no alkalinity value.

Comments

UPDATE:

Between March and June of 2021, all of the data for the discrete samples was put into a uniform format. The supporting information was checked for accuracy, especially the expocode, date, time, and positions.