**Cruise:** EX1041

**Ship:**  Explorer of the Seas

**Dates:** Dec 1 – Dec 9, 2010

**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***