

Dataset Expocode	91AH20160715
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Dataset	Funding Info: Department of Science and Technology, CSIR Parliamentary Grant, SANAP, NRF Initial Submission (yyyymmdd): 20170115 Revised Submission (yyyymmdd):
Campaign/Cruise	Expocode: 91AH20160715 Campaign/Cruise Name: SOSCEXIV_WINTER2016 Campaign/Cruise Info: Platform Type: CO2 Instrument Type: Equilibrator-IR or CRDS or GC Survey Type: Research Cruise Vessel Name: SAAgulhasII Vessel Owner: Vessel Code: 91AH
Coverage	Start Date (yyyymmdd): 20160715 End Date (yyyymmdd): 20160727 Westernmost Longitude: 5 W Easternmost Longitude: 18 E Northernmost Latitude: 33 S Southernmost Latitude: 52 S Port of Call: Cape Town
Sea Surface Temperature	Location: 5m below surface, ships hull Manufacturer: SBE Model: SBE-38 Accuracy: 0.001 (°C if units not given) Precision: 0.001 (°C if units not given) Calibration: Serialnumber: 38425330275 Comments:
Sea Surface Salinity	Location: Manufacturer: Model: Accuracy: Precision:

Calibration:**Comments:****Atmospheric
Pressure****Location:** Ship bridge**Normalized to Sea Level:** yes**Manufacturer:** Vaisala**Model:** Baro Pressure**Accuracy:** 0.15hpa (hPa if units not given)**Precision:** 0.2hpa (hPa if units not given)**Calibration:** yes, calibration number CSANAS1956.998**Comments:****Atmospheric CO2****Measured/Frequency:****Intake Location:****Drying Method:****Atmospheric CO2 Accuracy:** 0.5 uatm**Atmospheric CO2 Precision:** 0.5 uatm**Aqueous CO2
Equilibrator Design****System Manufacturer:****Intake Depth:** 5**Intake Location:** ship hull**Equilibration Type:** spray/shower**Equilibrator Volume (L):** 3**Headspace Gas Flow Rate (ml/min):** 100**Equilibrator Water Flow Rate (L/min):** 3**Equilibrator Vented:** Yes**Equilibration Comments:****Drying Method:** >99%**Aqueous CO2
Sensor Details****Measurement Method:** IR**Method details:****Manufacturer:** LICOR**Model:** LICOR-7000**Measured CO2 Values:** xCO2(dry)**Measurement Frequency:** 60**Aqueous CO2 Accuracy:** 1 uatm**Aqueous CO2 Precision:** 0.5 uatm**Sensor Calibrations:** LICOR IR sensor is calibrated using a range 4 of calibration gases calibrated by the Global Atmospheric Watch station at Cape Point, traceable to reference standards from NOAA**Calibration of Calibration Gases:** Ship**Number Non-Zero Gas Standards:** 3**Calibration Gases:**

Cape Point Weather Station (South African Weather Services),

Comparison to Other CO2 Analyses:**Comments:****Method Reference:****Equilibrator
Temperature Sensor****Location:** Resistance Thermometer, inserted inside the equilibrator**Manufacturer:** Fluke**Model:** Fluke 1521 (5610-6)**Accuracy:** 0.01 (°C if units not given)**Precision:** 0.01 (°C if units not given)**Calibration:** Yes, documentation available**Comments:**

**Equilibrator
Pressure Sensor**

Location: Attached to equilibrator cap/lid
Manufacturer: SETRA
Model: SETRA239
Accuracy: 74 (hPa if units not given)
Precision: 20 (hPa if units not given)
Calibration: yes,
Comments:

**Additional
Information**

Suggested QC flag from Data Provider: NA
Additional Comments:
Citation for this Dataset:
Other References for this Dataset: