**Cruise Report: AX8 Dec 2008**

**Ship Rider:** Zoë Gebhardt

a) **XBTs deployed:** 277

b) **Drifters deployed:** Eight drifters were deployed as follows.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Drifter No.** | **Drifter ID** | **Reset Date** | **Reset Time** | **Deployment Date** | **Deployment Time** | **Latitude** | **Longitude** | **Comments** |
| 1 | 41640 | 04/01/09 | 20:32 | 04/12/09 | 03:55 | 17o 30.03 S | 003o 18.40 W | All fine |
| 2 | 41664 | 04/12/09 | 23:25 | 04/13/09 | 01:15 | 13o 00.02 S | 008o 04.19 W | All fine |
| 3 | 41601 | 04/13/09 | 07:45 | 04/13/09 | 11:43 | 10o 49.43 S | 010o 17.34 W | All fine |
| 4 | SVP I-XDGS300034012761910Iridium Drifter | 04/13/09 | 19:45 | 04/13/09 | 20:25 | 08o 57.68 S | 012o 05.93 W | All fine |
| 5 | 41870 | 04/14/09 | 00:41 | 04/14/09 | 10:13 | 06o 00.60 S | 014o 55.33 W | All fine |
| 6 | 42596 | 04/14/09 | 18:48 | 04/15/09 | 00:45 | 02o 57.63 S | 017o 49.79 W | All fine |
| 7 | 41662 | 04/15/09 | 00:45 | 04/16/09 | 07:36 | 03o 08.46 N | 023o 37.88 W | All fine |
| 8 | 41595 | 04/16/09 | 07:30 | 04/16/09 | 22:02 | 06o 02.34N | 026o 24.93 W | All fine |

c) **Profiling floats deployed:** Eight floats were deployed as follows.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Float No.** | **Float ID** | **Reset Date** | **Reset Time** | **Deployment Date** | **Deployment Time** | **Latitude** | **Longitude** | **Comments** |
| 1 | 922/84845 | 04/09/09 | 14:32 | 04/09/09 | 18:55 | 29o 03.80 S | 010o 55.45 E | All fine |
| 2 | 903/84826 | 04/0909 | 21:24 | 04/10/09 | 05:42 | 27o 00.05 S | 008o 06.45 E | Float made whirring noise approx. every 30 sec until bladder inflated. |
| 3 | 899/84822 | 04/10/09 | 22:58 | 04/11/09 | 06:25 | 22o 01.21 S | 001o 48.74 E | All fine |
| 4 | 915/84838 | 04/11/09 | 21:15 | 04/12/09 | 03:50 | 17o 30.05 S | 003o 18.40 W | Float made whirring noise approx. every 30 sec until bladder inflated. |
| 5 | 917/84840 | 04/12/09 | 23:41 | 04/13/09 | 01:09 | 13o 00.11 S | 008o 04.01 W | All fine |
| 6 | 913/84836 | 04/13/09 | 19:45 | 04/13/09 | 20:25 | 08o 57.68 S | 012o 05.93 W | All fine |
| 7 | 916/84839 | 04/14/09 | 00:31 | 04/14/09 | 10:11 | 06o 00.60 N | 014o 55.33 W | All fine |
| 8 | 914/84837 | 04/12/09 | 23:27 | 04/15/09 | 15:12 | 00o 03.75N | 020o 35.00 W | Float made whirring noise approx. every 30 sec until bladder inflated. |

d)  **Equipment tools and supplies needed:** None

e) **Problems:** The primary auto-launcher worked smoothly, the pins were regularly sprayed with silicon. On the 19th of April at approximately 20:00 the pin of tube four stopped responding and could not be extended. This was most likely due to an electrical fault that has occurred on this auto-launcher’s tube four in the past. Since this was during the low density leg and there were only four days remaining I continued to use the primary auto-launcher with only seven tubes.

f**) Recommendations:** The auto launcher will be sent in for repairs.

g) **Other narrative:** The ship had to stop for 12hrs on the 19th April due to engine problems.

h) **Ship contact:** Captain Iain Ross

email: ziggyg48@hotmail.com

**Summary of cruise AX80409 between Cape Town and Newark**

AX80409 was conducted aboard the M/V Safmarine Oranje. The ship departed Cape Town on the 02nd April and reached anchor outside Newark on the 25th April. However, the XBT line only began on the 09th of April, since the ship was anchored at Saldahna Bay for a week having repairs done.

In total 277 XBTs were deployed. Intermediate density deployments commenced from 32o18.16S. High density measurements were started at 10oS. Intermediate density deployments were resumed from 10oN until 20oN. For the remainder of the cruise low density measurements were made at a rate of four per day.

On departure from Cape Town the wind was fairly strong however at Saldahna Bay it was relatively calm. The conditions on leaving Saldanha Bay were calm and this resulted in a low failure rate and fairly accurate profiles from 32oS to 10oS. Three probes were faulty and thus would not load. Over the equator and during the high density leg, there were strong winds and scattered showers which resulted in a five bad drops, where spiking occurred. During the second intermediate density leg intermittent showers continued, winds were very strong resulting in six bad drops where spiking occurred. Four probes were faulty and would not load. On reaching 20 N the ship experienced engine problems and stopped for approximately 12hrs for repairs. During the low density leg winds were calmer and rain was sporadic and gentle towards the end, however there were four bad drops where spiking occurred.