

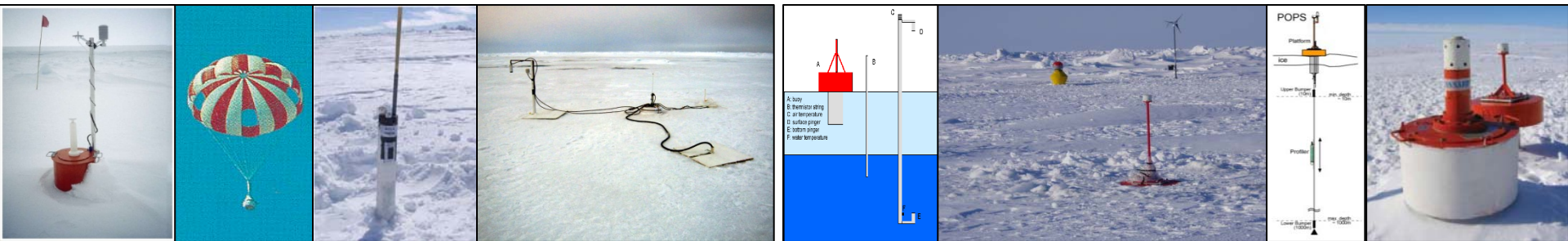


The International Programme for Antarctic Buoys



Report for DBCP-29 Paris, France September 25, 2013

Christian Haas, York University
Ignatius Rigor, University of Washington



IPAB Executive Committee

- Chair: Petra Heil, Australia
- Vice-Chairman: Pablo Clemente-Colon, USA
- Member: Marcel Nicolaus, Germany
- Member: Cathleen Geiger, USA
- Member: Johan Stander, South Africa
- Coordinator: Christian Haas, Canada
- Co-coordinator: Ignatius Rigor, USA

IPAB activities 2012/13/14

Overview

- SIPEX 2012 (September/October, East Antarctica)
- US IPAB deployments in 2012/13
- Polarstern 2013 deployments (June-August, Weddell Sea)
- South African SAWS deployments (10 NOAA SVP-Bs deployed in December/January 2012/13 between 55-60S, 0-30W) (Johan Stander & Santjie DuToit)
- Australian BOM: “The Bureau deploys buoys that it purchases outright plus buoys that we deploy for NOAA as part of the Global Drifter Program. The furthest south that the Bureau would normally deploy its own buoys are about 55S, however we usually deploy 4 buoys for NOAA at about 60S each Austral Summer (early December).” (Graeme Bell)
- ISDM/MEDS continues to archive GTS data (207855 (321607*) messages from 99 (132*) buoys in 2012/13)(Bruce Bradshaw)

Report on the South African 2013 National Drifting Weather Buoy Programme

The following report details progress of the South African National Drifting Weather Buoy Programme for the International Programme for Antarctic Buoys for the intersessional period 2012/2013, up to 30 June 2013. A total of 10 SVP-B drifters were deployed during this period.

Drifting Weather Buoy Deployments

Deployments 2012/2013

| Argos ID | Date of deployment | Latitude | Longitude |
|----------|--------------------|----------|-----------|
| 109278 | 2012-12-12 | 55.0°S | 000.0°E |
| 109218 | 2012-12-13 | 60.0°S | 000.7°E |
| 109277 | 2013-01-19 | 59.6°S | 020.0°W |
| 109216 | 2013-01-20 | 59.5°S | 025.0°W |
| 109269* | 2013-01-20 | 59.5°S | 027.3°W |
| 109273 | 2013-01-21 | 56.0°S | 032.0°W |
| 109214 | 2013-01-23 | 55.0°S | 030.0°W |
| 109268 | 2013-01-25 | 57.6°S | 015.0°W |
| 109275 | 2013-01-25 | 58.4°S | 010.0°W |
| 40304** | 2013-01-25 | 59.2°S | 005.0°W |

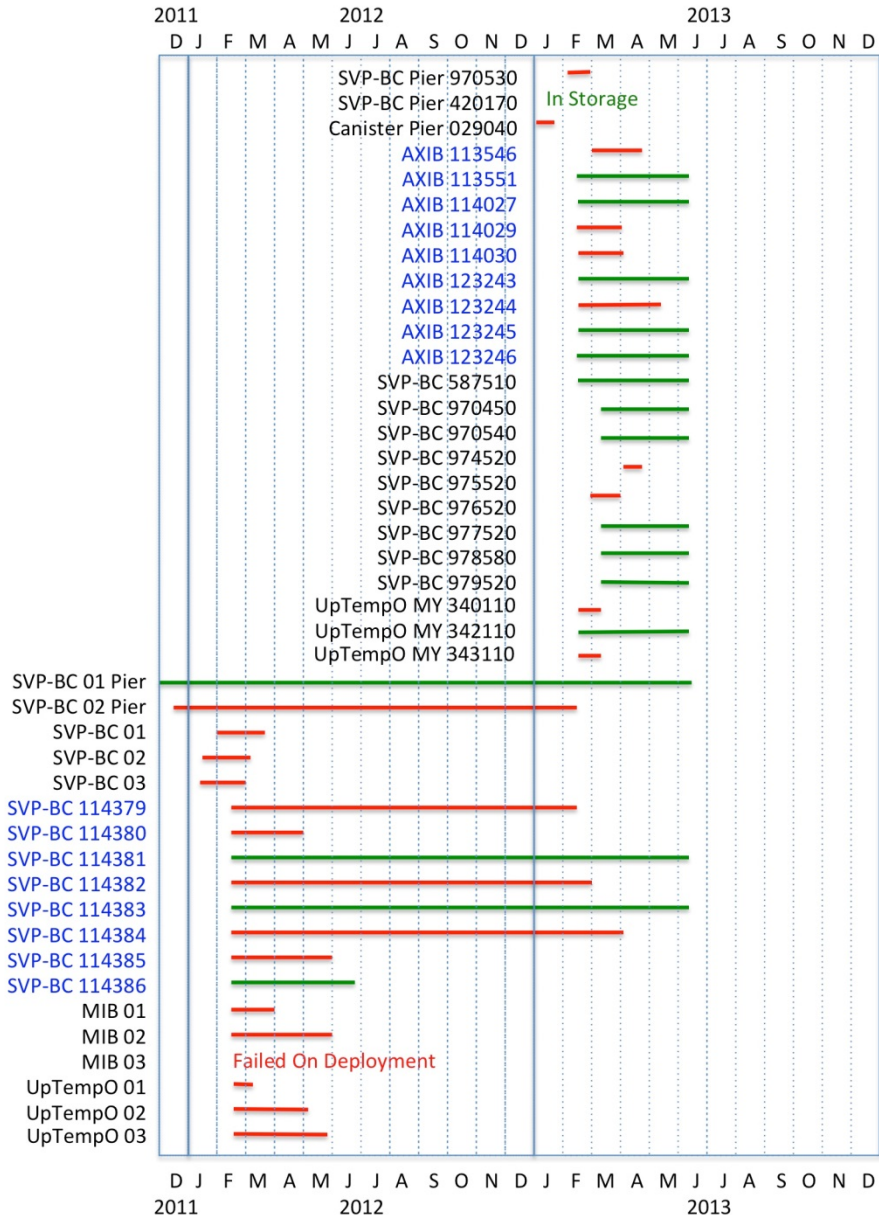
*Buoy on South Thule → **Redeployment of 2012 buoy on South Thule. Deployed without a drogue.

Partnerships

NOAA supplied South Africa with all the buoys deployed in the Southern Ocean. We thank them for this. South African Weather Service (SAWS) covered the customs and courier costs.

All the buoys were deployed from the SA Agulhas II on her annual buoy deployment cruise during the summer logistical cruise to Antarctica. The ship is managed by the Department of Environmental Affairs (DEA). The actual deployments were done by personnel of SAWS.

USIABP Drifting Buoy Time Lines



- Argos buoys shown in blue, Iridium in black.
- 2012: Bimodal survival, 3 are still reporting
- 2013: Lost a 7 NPB buoys immediately, and both pier buoys.
- Overall: 15 of 42 Buoys reporting.

USIABP

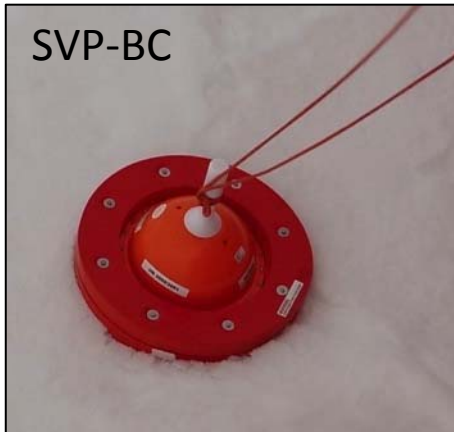
1. Data are posted on GTS, and available from IPAB.apl.washington.edu.

1. **2011 – 2012 Deployments**

- First-year of funding (9/1/2011).
- Logistics: McMurdo Helicopters and N.B. Palmer.
- 19 buoys deployed: 3 MIB, 3 UpTempO, 13 SVP-BC.
- 3 SVP-BC currently reporting.

3. **2012 – 2013 Deployments**

- First Year deploying “XIB” Sea Ice Buoys.
- Deployed 23 buoys: 9 XIBs, 3 UpTempOs, 10 SVPs, and 1 Ice Canister.
- Logistics
 - Helicopters from McMurdo
 - Amundsen and Ross Seas: N. B. Palmer
 - 12 buoys currently reporting.



USIABP

XIB

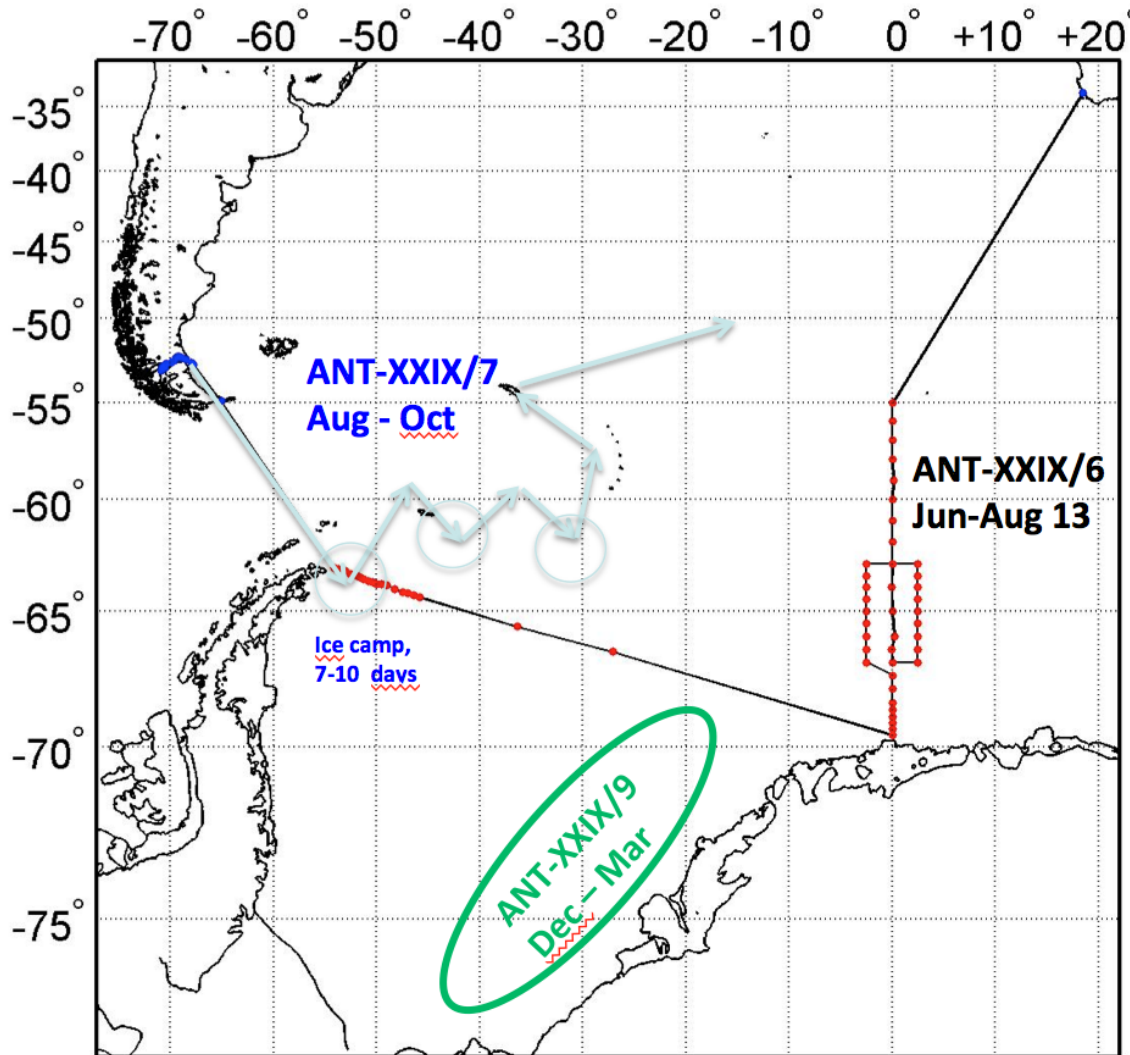
“Seasonal Ice Buoys”



- 4. Plan to deploy 30 SVP-B and 13 other buoys from German ice breaker Polarstern in July – August 2013.**
- 5. We welcome suggestions and collaboration.**
- 6. Acknowledgements: NSF, NOAA, & NASA.**

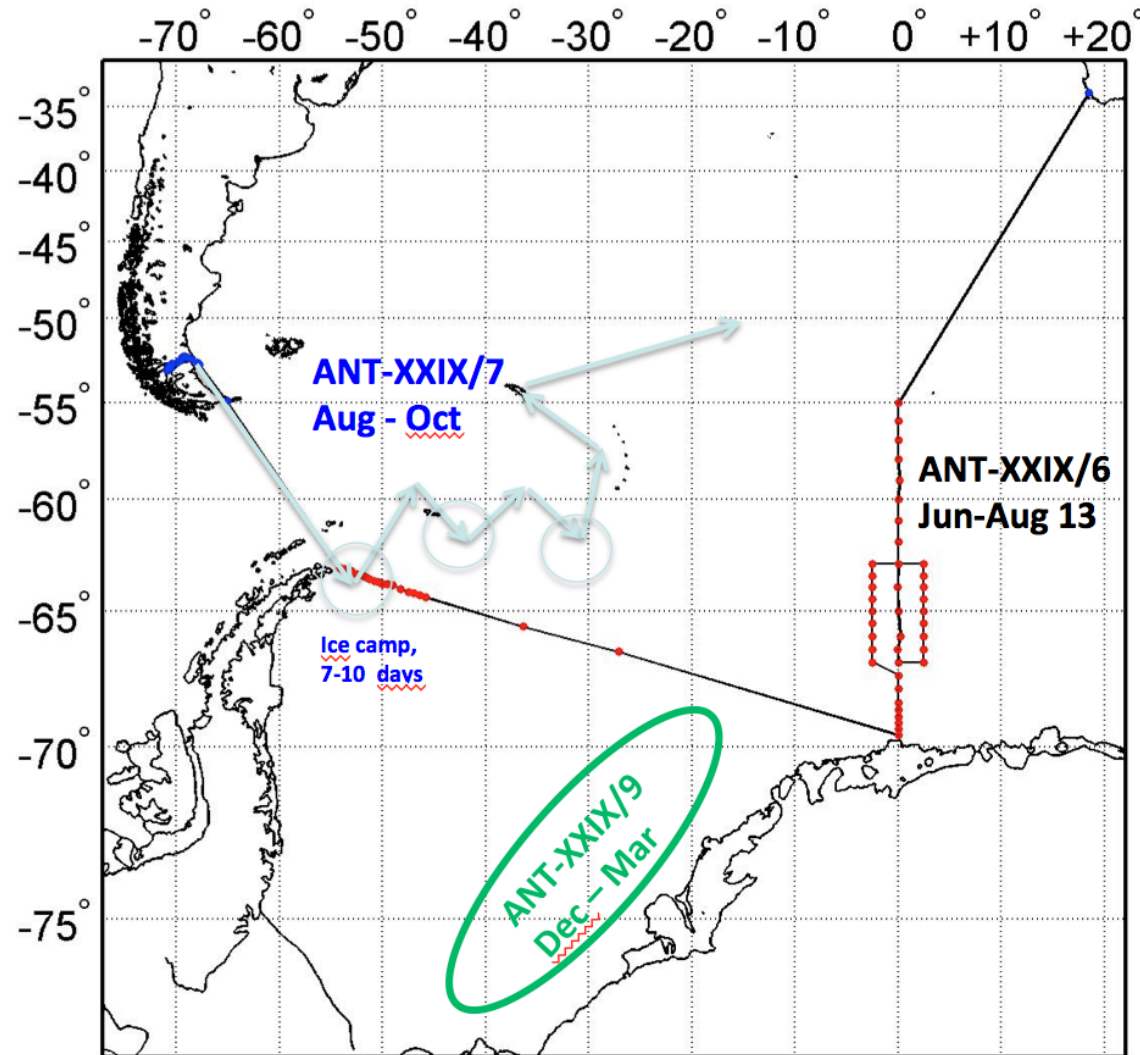
AWI Polarstern Winter Cruise

Interdisciplinary Cruises



- Sea Ice Observations
 - Thickness
 - Physical properties
- Snow Observations
 - Depth & Redistribution
 - Properties
 - Optics & Energy budget
- Auton. observations
 - Buoys

AWI Polarstern Winter Cruise Deployments 2013/14



- **ANT XXIX/6**

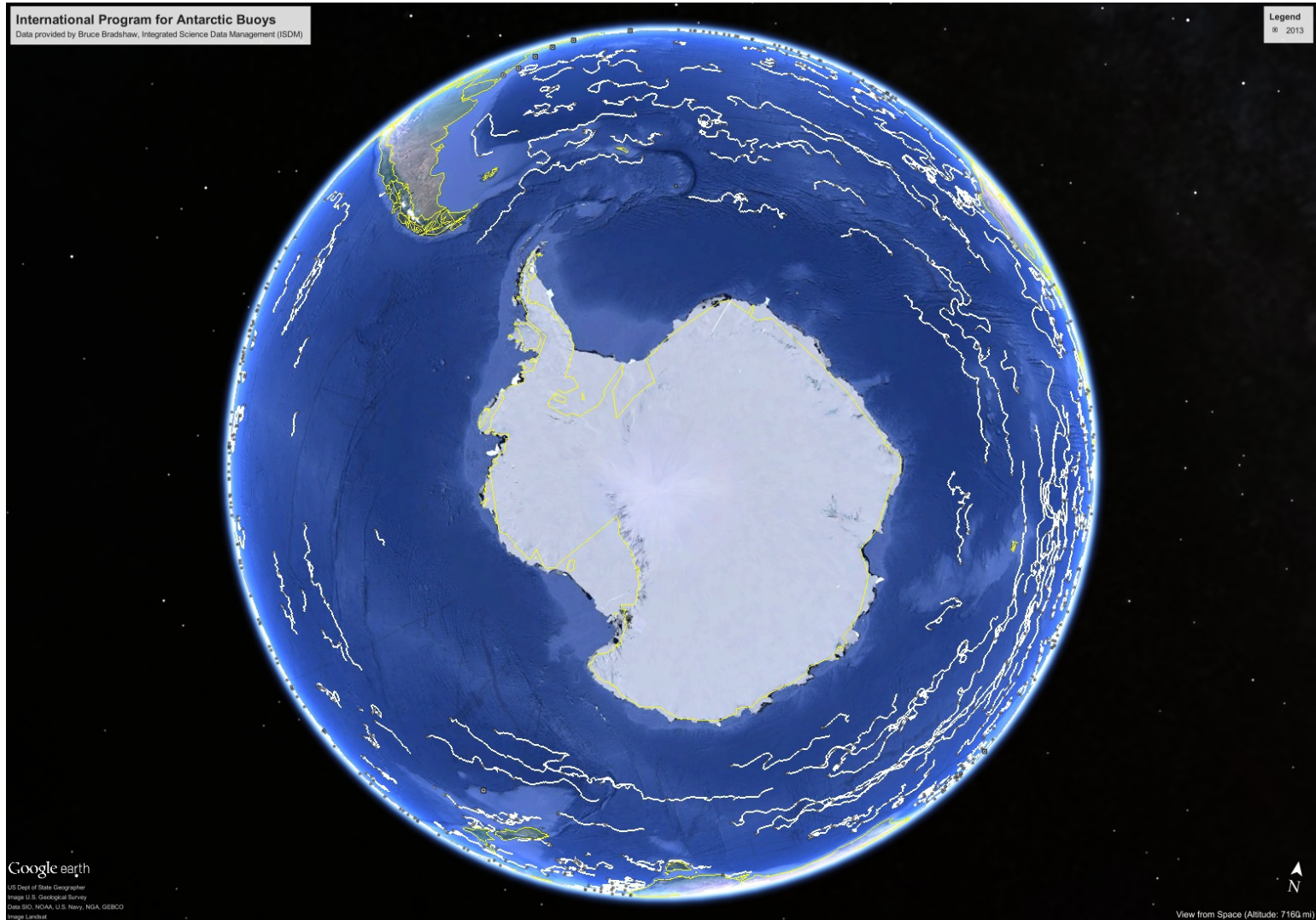
- 4 Snow buoys (AWI)
- 6 Thermistor IMBs (FMI & AWI)
- 30 SVP (NOAA/GDP, USIABP)
- 13 GPS (Ant CRC)
- 3 AWS + IMB (SLF+WHOI)

- **ANT XXIX/9**

- 4 Snow buoys (AWI)
- 50 Sonar buoys (AWI)
- “left overs” from leg 6

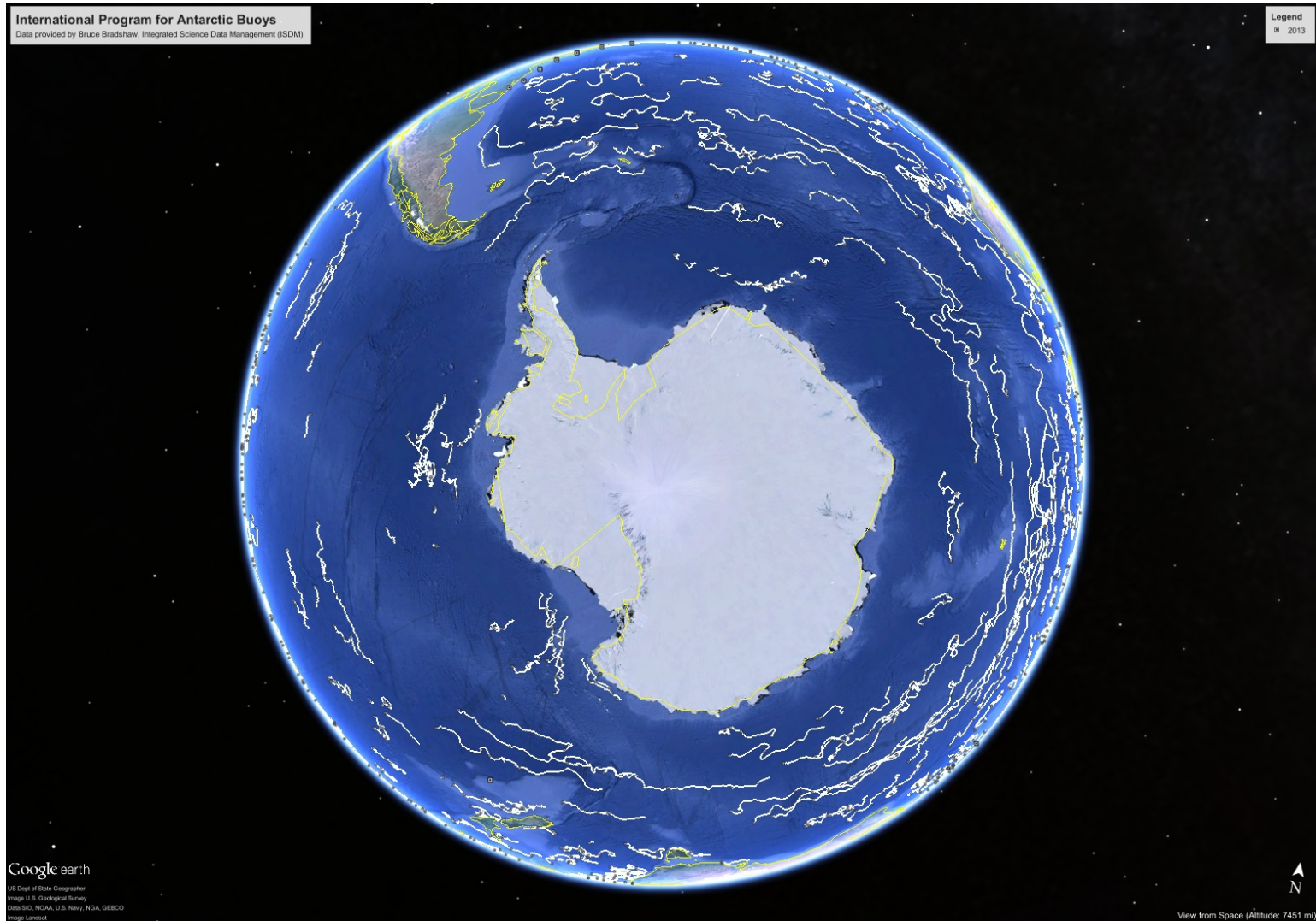
Buoys on GTS at ISDM/MEDS

Courtesy of Bruce Bradshaw

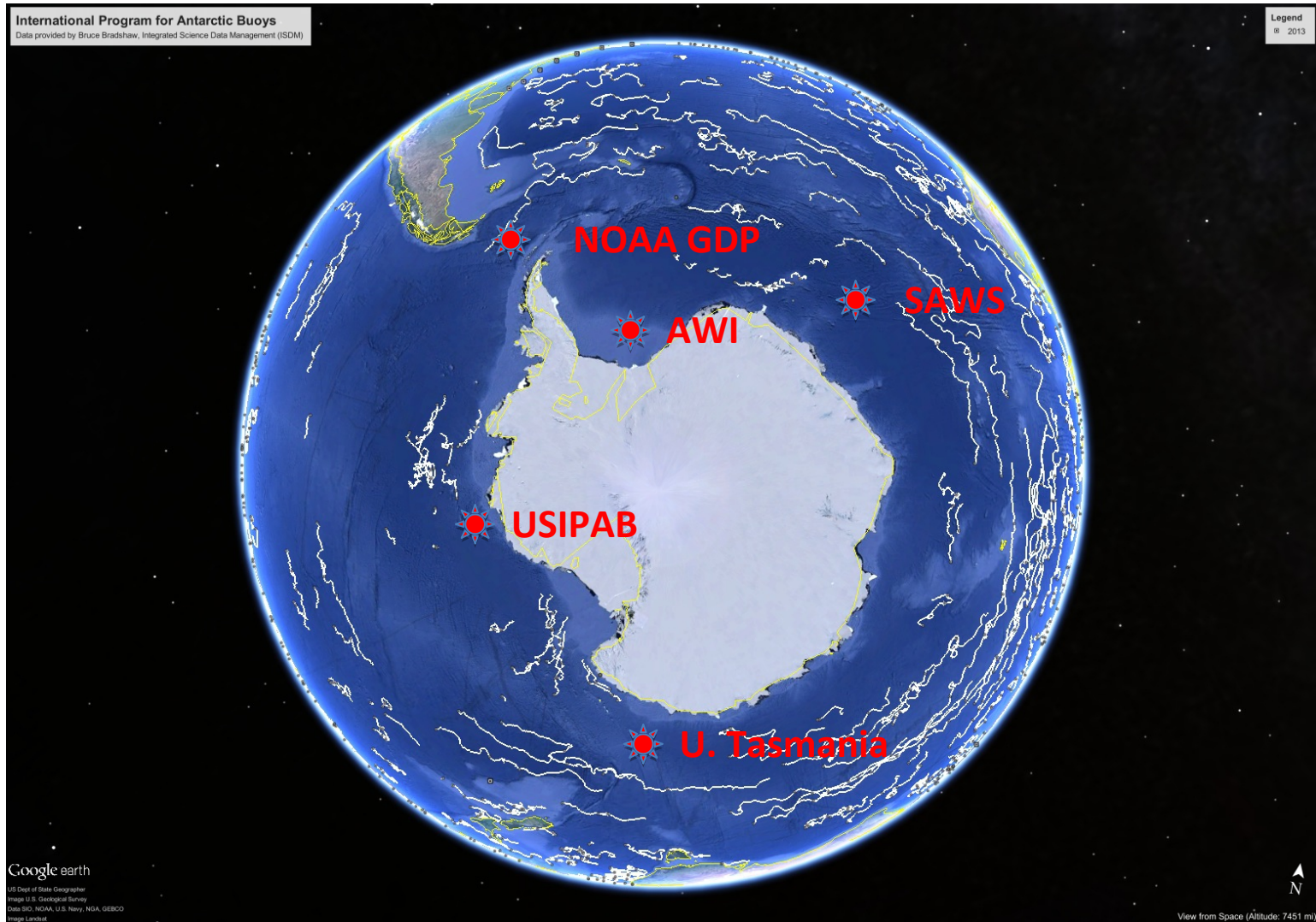


Buoys on GTS at ISDM/MEDS

Courtesy of Bruce Bradshaw



Future Plans – Antarctic



END

SatCom

FIRST ANNOUNCEMENT

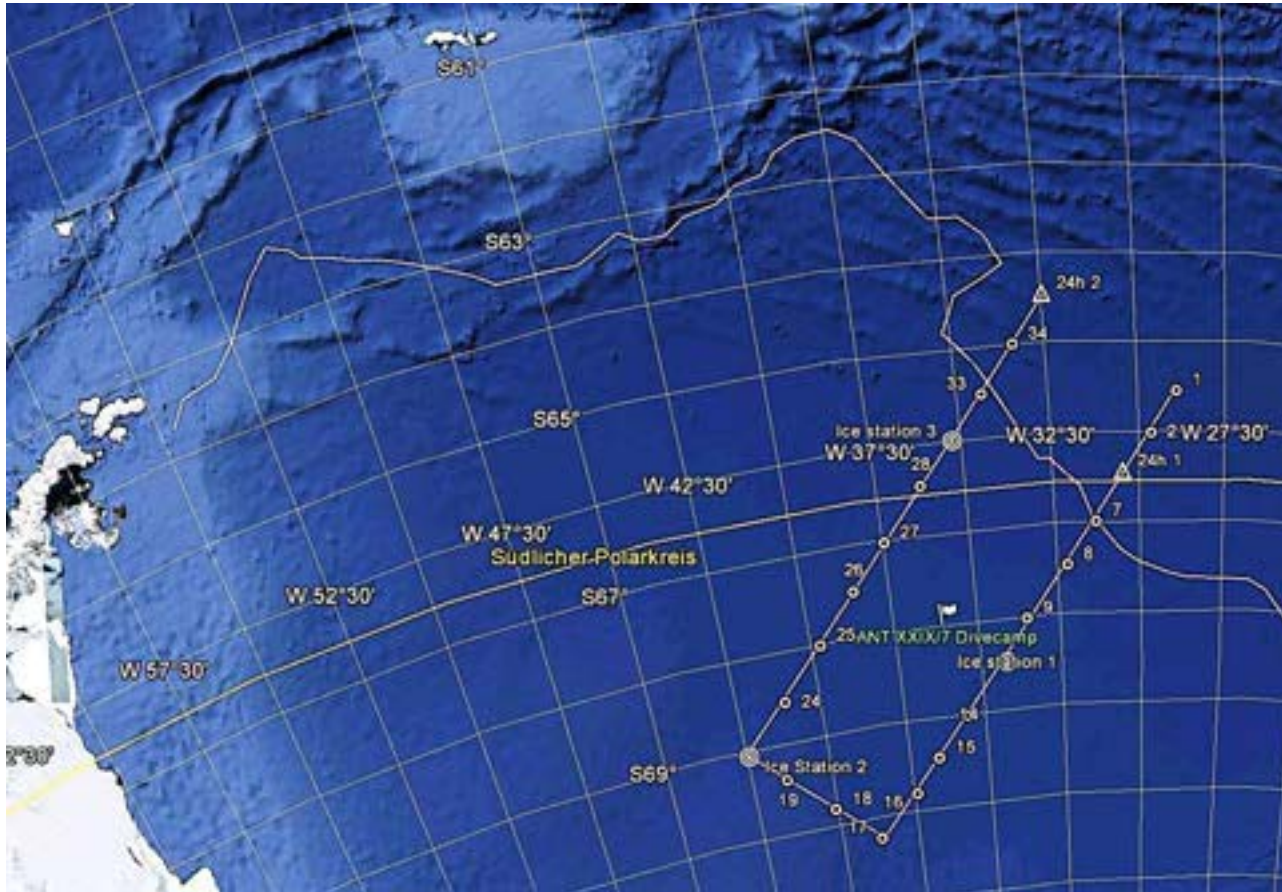
AD HOC INTERNATIONAL FORUM OF USERS OF SATELLITE DATA TELECOMMUNICATION SYSTEMS (SATCOM FORUM)

(IOC of UNESCO headquarters, Paris, France, 3-4 October 2013)

<http://www.jcomm.info/SatCom1>

- What are requirements for Polar Observations?
 - main issues are continuous coverage of high latitudes (90N - Arctic), with sufficient band width
 - amount of data transmitted and how frequent, real time/delayed mode etc?

Future Plans – Antarctic



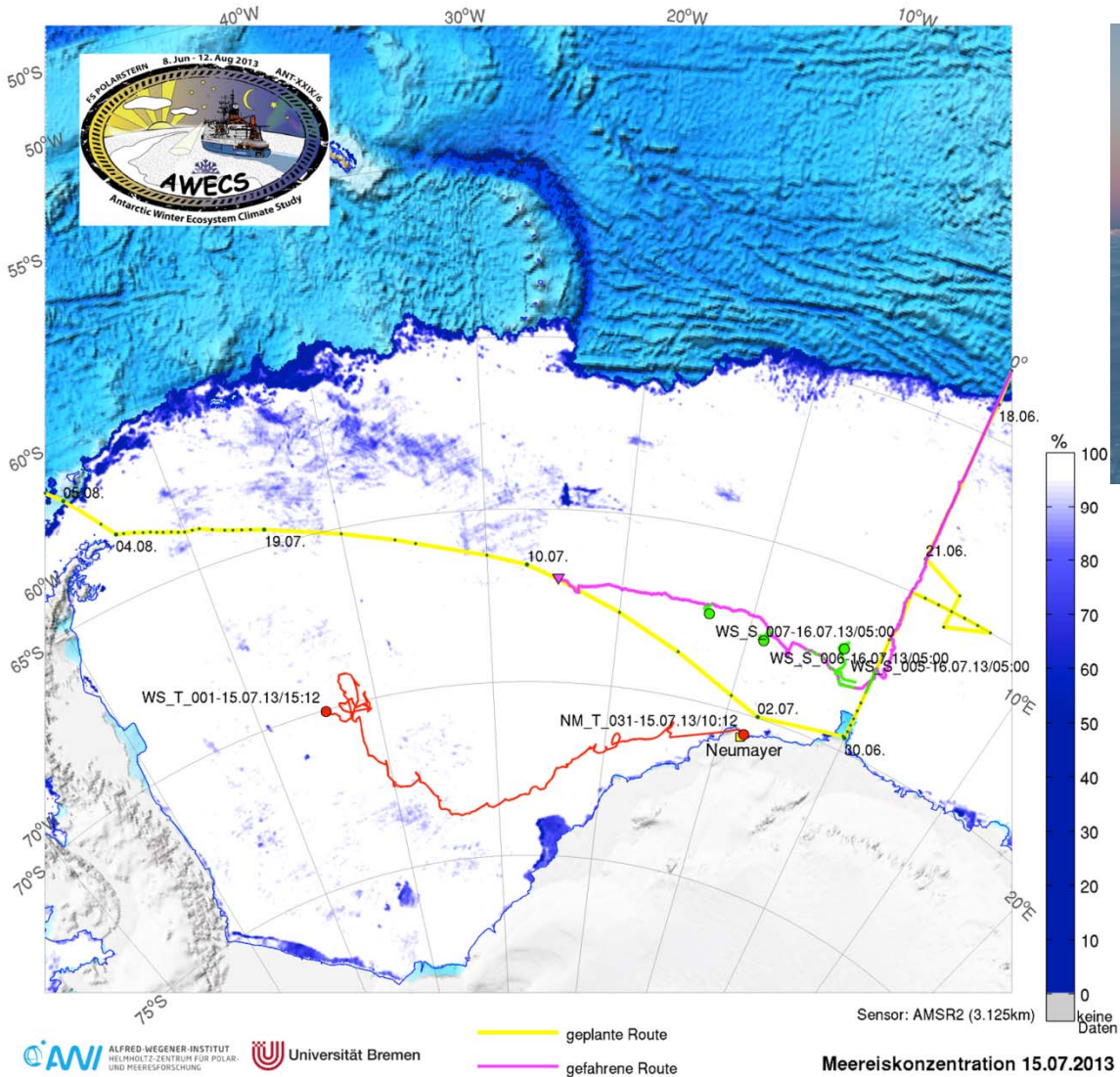
ANT XXX-2
(SIPES)

Nov/Dec 2014

AWI Sea Ice Data – Online

meereisportal.de

Expedition ANT-XXIX-6 (8.6.-12.8.2013) - Position Polarstern 16.07.2013/04:59



Weddell Sea Data 2013

