

## GDAC Post-Cruise Metadata form Platform

*Return to GDAC, BODC, Joseph Proudman Building, 6 Brownlow Street, Liverpool, L3 5DA*

*E-mail: ezm@bodc.ac.uk*

<b>Cruise Name:</b> <i>[any identifier (acronyms), including technical name]</i>	AU0703, SAZ-Sense (“Sensitivity of the subantarctic to environmental change”)	
<b>Platform Name and type:</b> <i>RSV Aurora Australis</i> <i>[vessel, mooring, satellite, towed vehicle,]</i>		
<b>Project:</b> SAZ-Sense, ACE CRC, Australian Antarctic Science project #2720 <i>[associated project or program name related to funding]</i>		
<b>Lead Nation:</b> Australia		
<b>Chief scientist (Lead scientist / Principal Investigator) contact details</b>		
<b>Name:</b> Brian Griffiths	<b>Email:</b> Brian.Griffiths@csiro.au	<b>Phone:</b> (61) 3 6232 5338
<b>Mailing Address:</b> CSIRO Division of Marine and Atmospheric Research GPO Box 1538, Hobart, Tasmania Australia 7001		
<b>Co-Chief scientist contact details:</b> <i>[GEOTRACES point of contact if different from Chief scientist]</i>		
<b>Name:</b> Dr Andrew Bowie	<b>Email:</b> Andrew.Bowie@utas.edu.au	<b>Phone:</b> (61) 3 6226 2509
<b>Mailing Address:</b> Antarctic Climate & Ecosystems CRC University of Tasmania Private Bag 80, Hobart, TAS 7001, Australia		
<b>Cruise Details</b>		
<b>Start Port and Country:</b> Hobart, Australia	<b>Start date:</b> 21 January 2007	
<b>End Port and Country:</b> Hobart, Australia	<b>End Date:</b> 19 February 2007	
<b>Location:</b> <i>[general description of study area; map if possible]</i> Diamond grid in subantarctic and polar frontal waters south of Tasmania (Australia); map attached		
<b>Cruise Overview:</b> <i>[proposal abstract]</i> The overall objective is to characterize Southern Ocean marine ecosystems, their influence on carbon dioxide exchange with the atmosphere and the deep ocean, and their sensitivity to past and future global change including climate warming, ocean stratification, and ocean acidification from anthropogenic CO <sub>2</sub> emissions. In particular we plan to take advantage of naturally-occurring, persistent, zonal variations in Southern Ocean primary production and biomass in the Australian Sector to investigate the effects of iron addition from natural sources, and CO <sub>2</sub> addition from anthropogenic sources, on Southern Ocean plankton communities of differing initial structure and composition.		
<b>Intercalibration:</b> <i>[Scheme to ensure intercalibration of results to GEOTRACES requirements e.g. use of SaFe standards, collaborative sampling. Please provide details of how each element was calibrated to meet the requirements of the GEOTRACES programme]</i>		
Use of SAFe standards Intercalibration for Fe between University of Tasmania (Australia) and University of Otago (New Zealand) laboratories		

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<b>Anticipated list of parameters to be submitted to GDAC:</b> <i>Key parameters listed please list any other parameters measured and the PI contact</i>		
<b>Trace elements:</b> <input checked="" type="checkbox"/> Fe <input checked="" type="checkbox"/> Al <input checked="" type="checkbox"/> Zn <input checked="" type="checkbox"/> Mn <input checked="" type="checkbox"/> Cd <input checked="" type="checkbox"/> Cu <input checked="" type="checkbox"/> Other, CSV-Fe <input checked="" type="checkbox"/> Other, Co <input type="checkbox"/> Other	<b>Contact for each element (PI); [name and email]</b>  Andrew Bowie, <a href="mailto:Andrew.Bowie@utas.edu.au">Andrew.Bowie@utas.edu.au</a> Andrew Bowie, Ed Butler Ed Butler, Michael Ellwood, <a href="mailto:ellwood@ems.anu.edu.au">ellwood@ems.anu.edu.au</a> Ed Butler, <a href="mailto:Ed.Butler@csiro.au">Ed.Butler@csiro.au</a> Ed Butler, <a href="mailto:Ed.Butler@csiro.au">Ed.Butler@csiro.au</a> Ed Butler, <a href="mailto:Ed.Butler@csiro.au">Ed.Butler@csiro.au</a> Enitan Ibisani, <a href="mailto:eibisanmi@chemistry.otago.ac.nz">eibisanmi@chemistry.otago.ac.nz</a> Michael Ellwood, <a href="mailto:ellwood@ems.anu.edu.au">ellwood@ems.anu.edu.au</a>	<b>Internationally calibrated (Yes or No)</b> yes SAFe reference yes SAFe reference yes SAFe reference yes SAFe reference yes SAFe reference yes SAFe reference no yes
<b>Radioactive isotopes:</b> <input type="checkbox"/> <sup>230</sup> Th <input type="checkbox"/> <sup>231</sup> Pa <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other		
<b>Stable isotopes:</b> <input type="checkbox"/> $\delta^{15}\text{N}$ <input checked="" type="checkbox"/> $\delta^{13}\text{C}$ <input type="checkbox"/> Other	Tom Trull, <a href="mailto:Tom.Trull@utas.edu.au">Tom.Trull@utas.edu.au</a>	To be confirmed
<b>Radiogenic isotopes:</b> <input type="checkbox"/> Nd isotopes <input type="checkbox"/> Pb isotopes <input type="checkbox"/> Other		
<b>Other parameters:</b> Particulate trace metals by synchrotron, Phoebe Lam, <a href="mailto:pilam@whoi.edu">pilam@whoi.edu</a> Fe bioreporter, Christel Hassler, <a href="mailto:Christel.Hassler@uts.edu.au">Christel.Hassler@uts.edu.au</a>		
<b>List CTD hydrographic parameters</b> <i>[sensors including make; salinity, temperature, oxygen, nutrients etc]</i> Salinity, temperature, pressure (depth); conductivity, oxygen and calibrated versus Winkler titrations of samples, fluorescence, light transmission; ADCP, Major nutrients silicate, nitrate, phosphate, ammonia Mark Rosenberg, <a href="mailto:Mark.Rosenberg@utas.edu.au">Mark.Rosenberg@utas.edu.au</a>		
<b>Particles/Aerosols:</b> Suspended particulate trace metals (in situ McLane pumps), Andrew Bowie Sinking particulate trace metals (PPS3/3 sediment traps), Andrew Bowie Aerosols, Thibaut Wagener, <a href="mailto:twagener@ifm-geomar.de">twagener@ifm-geomar.de</a>  Elements include: Fe, Al, Zn, Mn, Cd, Cu, Co, Ni, Ag, Pb		
<b>List Underway data:</b> <i>[Met data, navigation hull mounted sensors including make and model]</i> Meteorology dataset, weather forecasts, bathymetry, GPS, continuous underway measurements and database of sea-surface salinity, temperature, pCO <sub>2</sub>		
<b>Is there a national data centre: (name and contact)</b> <i>[If not GDAC should be used]</i>		

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Metadata has been submitted to the Australian Antarctic Data Centre (AADC, <http://data.aad.gov.au/>), as the cruise was an approved Australian Antarctic Science project (#2720), and also achieved at a CSIRO website for the project (<http://www.marine.csiro.au/datacentre/saz-sense>; contact Di Davies, [Diana.Davies@csiro.au](mailto:Diana.Davies@csiro.au))

**Other relevant information:**

Website: <http://www.marine.csiro.au/datacentre/saz-sense>

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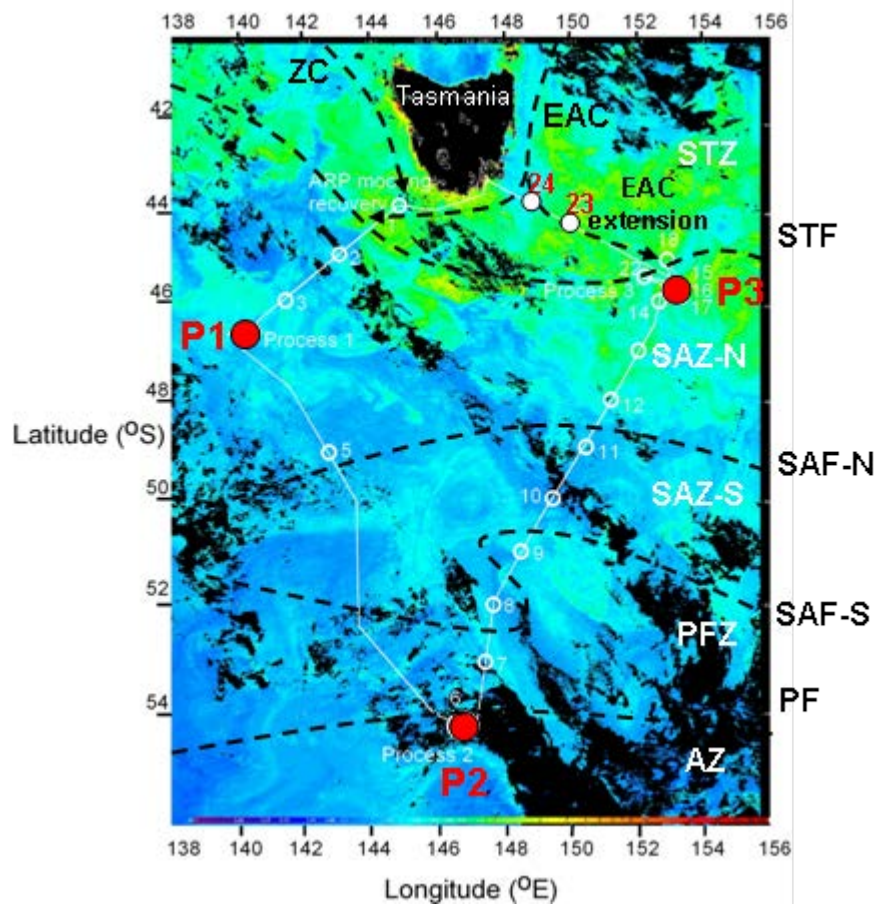


Figure 1. SAZ-Sense voyage track and station locations superimposed on ESA Meris satellite ocean color composite image from 5-11 February 2007.