

National mooring network



Research Projects

Reef Rescue Marine Monitoring Program, Reef and Rainforest Research Centre, Britta Schaffelke, 2005-2013, Partner Institution(s): GBRMPA, AIMS, James Cook University, CSIRO, the Northern Fisheries Centre of the Queensland Department of Employment, Economic Development and Innovation and the National Research Centre for Environmental Toxicology at the University of Queensland, Funding: Caring For Our Country

WAMSI Node 1: Southwest Australia marine ecosystem, Commonwealth Scientific Industrial Research Organisation, University of Western Australia, John Keesing, Ming Feng, D Slawinski, 2006-2011

Early warning and assessment system for thermal stress on the GBR, Marine and Tropical Sciences Research Facility, O Hoegh-Guldberg, Scarla Weeks, Ray Berkelmans, Craig Steinberg, 2006-2010

WAMSI Node 2: Leeuwin Current dynamics and variability, Commonwealth Scientific Industrial Research Organisation, University of Western Australia, Ming Feng, D Slawinski, Liejun Zhong, 2006-2011

A hydrodynamic/biogeochemical modelling facility for S.A., South Australian Research and Development Institute, John Middleton, 2008-2011, Partner Institution(s): Marine Innovation S.A., Flinders University, Funding: Marine Innovation S.A.

Hydrodynamics at the Whole-of-GBR Scale, Australian Institute of Marine Science, Commonwealth Scientific Industrial Research Organisation, Richard Brinkman, M Herzfeld, 2009-2010, Partner Institution(s): MTSRF and GBRMPA

eAtlas, Australian Institute of Marine Science, Katrina Fabricius, 2009-2013, Partner Institution(s): JCU, GBRMPA, Funding: National Environmental Research Program (NERP), Marine and Tropical Sciences Research Facility (MTSRF)

Carrying Capacity for Spencer Gulf, South Australian Research and Development Institute, John Middleton, 2009-2012, Partner Institution(s): Fisheries research and Development Corporation, Flinders University, Funding: South Australian Research and Development Institute

Modeling of source-sink relation of western rock lobster recruitment, Fisheries Research & Development Corporation, N Caputi, Ming Feng, E Weller, 2009-2011, Partner Institution(s): Department of Fisheries, CSIRO

Receiving Water Quality Modelling, Australian Institute of Marine Science, Commonwealth Scientific Industrial Research Organisation, Richard Brinkman, M Herzfeld, 2009-2011, Partner Institution(s): GBRMPA, MTSRF, Funding: Marine and Tropical Sciences Research Facility (MTSRF)

Ocean-reef interactions as drivers of continental shelf productivity in a changing climate, University of Western Australia, University of New South Wales, Anya Waite, Moninya Roughan, Charitha Pattiaratchi, Jonne Kotta, Helen Orav-Kotta, 2010-2012, Funding: ARC

Long-term changes in gelatinous plankton in Australia, Griffith University, Kylie Pitt, 2010-2011, Partner Institution(s): US National Center for Ecological Analysis and Synthesis

Environment effects of western rock lobster recruitment, Fisheries Research & Development Corporation, N Caputi, Ming Feng, 2011-2013, Partner Institution(s): Department of Fisheries, CSIRO

Importance of Internal Waves in the Stimulation of Primary Productivity at Ningaloo Reef, University of Western Australia, Australian Institute of Marine Science, Ryan Lowe, N Jones, Richard Brinkman, Peter Stratton, 2011-2012, Partner Institution(s): UWA, AIMS, UTas, Funding: ANNIMS

Ocean-shelf exchange with an emphasis on the role of waves, tides, eddies and cross-shelf flows on carbon exchange, University of Western Australia, University of Tasmania, James Cook University, Charitha Pattiaratchi, Roger Proctor, Peter Ridd, 2011-2012, Partner Institution(s): UWA, JCU, AIMS, UTas, CSIRO, UNSW, UTS, SARDI/Flinders, IOC, Proudman Oceanographic Laboratory, University of Southern Mississippi, University of Maryland, Baltic Sea Research Institute, Funding: ANNIMS

WAMSI Node 2: Ningaloo, Australian Institute of Marine Science, University of Western Australia, Jim Falter, Ryan Lowe, Richard Brinkman, Partner Institution(s): AIMS, Funding: Australian Institute of Marine Science, West Australian Marine Science Institution

Portland and NSW data sets acoustic data sets, University of New South Wales, Tracey Rogers, Partner Institution(s): UNSW, Funding: ARC

eReefs, Commonwealth Scientific Industrial Research Organisation, Stuart Minchin, John Stevens, George Cresswell, 2012-2017, Partner Institution(s): CSIRO, AIMS, BoM, GBRMPA, GBR Foundation, DERM QLD

Postgraduate Research Projects

Doctor of Philosophy (PhD), Dynamics and impacts of East Australia Current variability off the sou ... , University of Tasmania, Commonwealth Scientific Industrial Research Organisation; Katy Hill, 2005-2009, Supervisor(s): Steve Rintoul, Ken Ridgway, Richard Coleman

Doctor of Philosophy (PhD), Sea surface circulation in the GBR and adjacent Coral Sea, James Cook University; Severine Choukroun, 2005-2010, Supervisor(s): Peter Ridd, Richard Brinkman; Partner Institution(s): AIMS@JCU

Doctor of Philosophy (PhD), Ocean Dynamics of Spencer Gulf: a numerical study, University of New South Wales, South Australian Research and Development Institute; Carlos Teixeira, 2006-2010, Supervisor(s): John Middleton

Doctor of Philosophy (PhD), Coastal upwelling and its effects on marine microbial processes, Flinders University; James Patterson, 2008-2011, Supervisor(s): Laurent Seuront, Jim Mitchell

Doctor of Philosophy (PhD), Impact of physical forcings (upwelling/downwelling) and nutrients availability on the space-time dynamics of picophytoplankton communities, Flinders University; Virginie van Dongen-Vogels, 2008-2011, Supervisor(s): Laurent Seuront, Sophie Leterme, Justin Seymor, Jim Mitchell

Doctor of Philosophy (PhD), Marine productivity off Ningaloo, University of Western Australia; Cecile Rousseaux, Supervisor(s): Anya Waite, Peter Thompson

Doctor of Philosophy (PhD), Water Mass Connectivity and Mixing: isotope and hydrographic analyses, Australian National University, South Australian Research and Development Institute; Laura Richardson, 2009-2013, Supervisor(s): John Middleton, Brad Opdyke

Doctor of Philosophy (PhD), Physical processes along the Rottneest continental shelf, University of Western Australia; Thisara Welhena, 2009-2012, Supervisor(s): Charitha Pattiaratchi, Ming Feng; Partner Institution(s): CSIRO; Funding: West Australian Marine Science Institution , University of Western Australia

Doctor of Philosophy (PhD), Implications of climate change for the oceanography of the Great Barrier Reef Ecosystem, University of Queensland; Ana Redondo-Rodriguez, Supervisor(s): Scarla Weeks, J Lough, Ray Berkelmans; Partner Institution(s): AIMS

Doctor of Philosophy (PhD), Hydrodynamic modelling and larval transport in reef systems, James Cook University; Paulina Cetina-Heradia, Supervisor(s): Sean Connelly, Peter Ridd, Richard Brinkman

Masters degree, Acoustic identification and tracking of marine megafauna, Curtin University, Chalmers University of Technology; Benjamin Trimoreau, 2010-2011, Supervisor(s): Rob McCauley, Alexander Gavrilov, Chandra Salgado Kent

Doctor of Philosophy (PhD), Oceanographic factors promoting aggregations of plankton feeding mega-fauna of Indian Ocean: the case study of Perth Canyon and Ningaloo Reef., University of Western Australia; Olga Bondarenko, 2011-2014, Supervisor(s): Charitha Pattiaratchi, Sasha Gavrilov; Partner Institution(s): AIMS

Book

Book Chapters

Ganachaud, As, Sen Gupta, A, Orr, JC, Wijffels, S, Ridgway, K, Hemer, MA, Maes, C, Steinberg, C, Tribollet, AD, Qiu, B, Kruger, J 2010, Observed and Expected Changes to the Pacific Ocean, in JD Bell (eds.), Vulnerability of Fisheries and Aquaculture in the Pacific to Climate Change

Roughan, M, Suthers, I, Meyers, G 2010, The Australian Integrated Marine Observing System and the regional implementation in New South Wales, in Y You, A Henderson-Sellers (eds.), Climate Alert: Climate Change Monitoring and Strategy, Sydney University Press, Sydney, pp.299-312

Community White Papers / Technical Papers

Brainard, RE, Bainbridge, S, Brinkman, R, Eakin, CM, Field, M, Gattuso, J-P, Gledhill, D, Gramer, L, Hendee, J, Hoeke, RK, Holbrook, O, Hoegh-Guldberg, O, Lammers, M, Manzello, D, McManus, M, Moffitt, R, Monaco, M, Morgan, J, Obura, D, Planes, S, Schmitt, RJ, Steinberg, C, Sweatman, OJ, Vetter, KB, Wong, KB; 2010, An International Network of Coral Reef Ecosystem Observing Systems (I-CREOS), Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 2), Venice, Italy, 21-25 September 2009, doi:10.5270/OceanObs09.cwp.09

Conference Proceedings

Lynch, T, McLaughlin, D, Hughes, D, Cherry, D, Critchley, G, Allen, S, Pender, L, Thompson, P, Richardson, A, Coman, F, Steinberg, C, Terhell, D, Roughan, M, Seuront, L, McLean, CM, Brinkman, GW, Meyers, G 2008, A National Reference Station infrastructure for Australia – using telemetry and central processing to report multi-disciplinary data streams for monitoring marine ecosystem response to climate change, Proceedings of the IEEE Oceans 2008 Conference, Quebec, Canada, September 2008, Quebec City

Bainbridge, S, Steinberg, C, Heron, M, Rigby, P 2009, The role of observation systems in coral reef monitoring and management, Proceedings of the 2009 Joint Assembly of the American Geophysical Union, Toronto 2009, Toronto

Bainbridge, S, Steinberg, C, Heron, M, Furnas, M 2010, Integrating Observation Systems: An Example from the Great Barrier Reef, Proceedings of the IEEE Oceans 2010 Conference, Sydney, May 2010, Sydney

Lynch, T, McLaughlin, D, Hughes, D, Darby, I, de Boer, P, Marouchos, A 2010, Overview of CSIRO Oceanographic Moorings, IEEE Proceedings Oceans 2010 - Seattle, Seattle

Hughes, D, Lynch, T, Pender, L, Sherlock, M 2010, A Robust Satellite telemetry system for IMOS moorings, Proceedings of the IEEE Oceans 2010 Conference, Sydney, May 2010, Sydney

Dushaw, BD, Au, W, Beszczynska-Muller, A, Brainard, RE, Cornuelle, B, Duda, T, Dzieciuch, M, Forbes, A, Freitag, L, Gascard, J-C, Gavrilov, A, Gould, J, Howe, B, Jayne, SR, Johannessen, OM, Lynch, JF, Martin, D, Menemenlis, D, Mikhalevsky, P, Miller, JH, Moore, SE, Munk, W, Nystuen, J, Odom, RI, Orcutt, J, Rosaby, T, Sagen, H, Sandven, S, Simmen, J, Skarsoulis, E, Southall, B, Stafford, K, Stephen, R, Vigness-Raposa, K, Vinogradov, S, Wong, KB, Worcester, P, Idquo, A 2010, A Global Ocean Acoustic Observing Network, Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 2), Venice, Italy, 21-25 September 2009, Venice

Hughes, D, Lynch, T 2010, Update on Australia's National Reference Stations, IEEE Proceedings Oceans 2010 - Seattle, Seattle

Jaffres, JBD, Heron, M, Middleditch, A, Steinberg, C 2010, Waves in the Southern Great Barrier Reef, Proceedings of the IEEE Oceans 2010 Conference, Sydney, May 2010, Sydney

In Press

Weeks, S, Bakun, A, Congdon, BC, Fledman, GC, Steinberg, C, Hoegh-Guldberg, O 2009, Ocean dynamics and seabird foraging during the 2005-06 coral bleaching event on the southern Great Barrier Reef, Marine Ecology Progress Series

Heron, SF, Steinberg, C, Heron, M, Mantovanelli, A, Jaffres, JBD, Skirving, WJ, McAllister, F, Bainbridge, S 2010, Advances Observing Physical Oceanographic Impacts on Coral Reefs of the Southern Great Barrier Reef, Australia, EOS American Geophysical Union

Baird, ME, Oke, PR, Everett, JD, Griffin, DA, Doblin, M, Pender, L, Suthers, I 2011, Surface flooding of a cold-core eddy by a shallow arm of the East Australian Current; observations of a gravity current in a mesoscale eddy, Journal of Geophysical Research - Oceans

van Dongen-Vogels, V, Seymor, J, Middleton, J, Mitchell, J, Seuront, L 2011, Shifts in picophytoplankton community structure influenced by changing upwelling conditions, Estuarine and Coastal Shelf Sciences

Hughes, D, Lynch, T 2011, Technical development of the Australian National Reference Stations, Sea Technology

Journals

Middleton, J, Bye, JAT 2007, A review of the shelf-slope circulation along Australia's southern shelves: Cape Leeuwin to Portland, Progress in Oceanography, vol. 75, no. 1, pp. 1-41, doi:10.1016/j.pocean.2007.07.001

Brinkman, R, Steinberg, C, Bird, J 2008, Physical Oceanography and the Corals of Scott Reef - Patterns of Disturbance and Dynamics of Recovery, EOS Transactions, vol. 89, no. 23

Steinberg, C, Andrefouet, S, Brinkman, R, Choukroun, S, Heron, SF, Herzfeld, M, Skirving, WJ, Weeks, S 2008, The Physical oceanography of Heron Island, Great Barrier Reef, EOS Transactions, vol. 89, no. 23, Abstract OS52A-04

Steinberg, C, McLean, CM, McAllister, F, Choukroun, S, Brinkman, GW 2008, The Development of a Great Barrier Reef Ocean Observing System to Monitor the Western Boundary Currents of the Coral Sea and Impacts on the Great Barrier Reef, EOS Transactions, vol. 89, no. 23, Abstract OS44A-01

Ling, S, Johnson, C, Frusher, SD, Ridgway, K 2009, Overfishing reduces resilience of kelp beds to climate-driven catastrophic phase shift, Proceedings of the National Academy of Sciences of the United States of America, vol. 106, no. 52, pp. 22341-22345, doi:10.1073/pnas.0907529106

Feng, M, Waite, A, Thompson, P 2009, Climate variability and ocean production in the Leeuwin Current system off the west coast of Western Australia, Journal of the Royal Society of Western Australia, vol. 92, pp. 67-81

- Thompson, P, Baird, ME, Ingleton, T, Doblin, M 2009, Long-term changes in temperate Australian coastal waters: implications for phytoplankton, *Marine Ecology Progress Series*, vol. 394, pp. 1-19, doi:10.3354/meps08297
- Steinberg, C, McAllister, F, McLean, CM, Brinkman, GW, Pitcher, C, Luetchrford, J, Rigby, P 2009, The Great Barrier Reef Ocean Observing System Mooring array: Monitoring the Western Boundary Currents of the Coral Sea and Impacts on the Great Barrier Reef, *EOS Transactions*, vol. 90, no. 22, OS32A-06
- Petrusevics, P, Bye, JAT, Luick, J, Teixeira, CEP 2010, Summer sea surface temperature fronts and elevated chlorophyll-a in the entrance to Spencer Gulf, South Australia, *Continental Shelf Research*, vol. 31, no. 7-8, pp. 849-856, doi:10.1016/J.csr.2011.02.009
- Roughan, M, Morris, BD, Suthers, I 2010, NSW-IMOS: An Integrated Marine Observing System for Southeastern Australia, *IOP Conference Series: Earth and Environmental Science*, vol. 11, no. 1, doi:10.1088/1755-1315/11/1/012030
- Weeks, S, Bakun, A, Steinberg, C, Brinkman, R, Hoegh-Guldberg, O 2010, The Capricorn Eddy: a prominent driver of the ecology and future of the southern Great Barrier Reef, *Coral Reefs*, vol. 29, no. 4, pp. 975-985, doi:10.1007/s00338-010-644-z
- Heron, SF, Steinberg, C, Heron, M, Mantovanelli, A, Jaffres, JBD, Skirving, WJ, McAllister, F, Rigby, P, Wisdom, D, Bainbridge, S 2010, Advancing Ocean Monitoring near Coral Reefs, *EOS Transactions*, vol. 91, no. 41, pp. 369-380, doi:10.1029/2010E0410001
- Katsumata, K, Wijffels, S, Steinberg, C, Brinkman, R 2010, Variability of the semidiurnal tides observed on the Timor Shelf, *Journal of Geophysical Research - Oceans*, vol. 115, doi:10.1029/2009JC006071
- Bainbridge, S, Steinberg, C, Heron, M 2010, Integrating Observations: an example from the Great Barrier Reef Why Integration matters and why achieving Integration is harder than it looks - lessons from the Reef, *Sea Technology*, vol. 51, no. 8, pp. 33-38
- Berkelmans, R, Weeks, S, Steinberg, C 2010, Upwelling linked to warm summers and bleaching on the Great Barrier Reef, *Limnology and Oceanography*, vol. 55, no. 6, pp. 2634-2644, doi:10.4319/10.2010.55.6.2634.
- van Dongen-Vogels, V, Seymor, J, Middleton, J, Mitchell, J, Seuront, L 2011, Influence of local physical events on picophytoplankton spatial and temporal dynamics in South Australian continental shelf waters, *Journal of Plankton Research*, vol. 33, no. 12, pp. 1825-1841, doi:10.1093/plamkt/fbr077
- Baird, ME, Suthers, I, Griffin, DA, Hollings, B, Pattiaratchi, C, Everett, JD, Roughan, M, Oubelkheir, K, Doblin, M 2011, The effect of surface flooding on the physical-biogeochemical dynamics of a warm-core eddy off southeast Australia, *Deep Sea Research Part II*, vol. 58, pp. 592-605, doi:10.1016/j.dsr2.2010.10.002
- Roughan, M, MacDonald, HS, Baird, ME, Glasby, TM 2011, Modelling seasonal and interannual variability in a Western Boundary Current and its impact on coastal connectivity, *Deep Sea Research Part II*, vol. 58, no. 5, pp. 628-644, doi:10.1016/J.dsr2.2010.06.009
- Everett, JD, Baird, ME, Suthers, I 2011, Three-dimensional structure of a salp swarm of *Thalia democratica* within a cold-core eddy of southeastern Australia, *Journal of Geophysical Research - Oceans*, vol. 116, C12046, doi:10.1029/2011JC007310
- Feng, M, Caputi, N, Penn, J, Slawinski, D, de Lestang, S, Pearce, A 2011, Ocean circulation, Stokes drift and connectivity of western rock lobster population, *Canadian Journal of Fisheries and Aquatic Sciences*, vol. 68, pp. 1182-1196
- Johnson, C, Banks, S, Barrett, N, Cazzasus, F, Dunstan, P, Edgar, G, Frusher, SD, Gardner, C, Helidoniotis, F, Hill, K, Holbrook, N, Hosie, G, Last, P, Ling, S, Melbourne-Thomas, J, Miller, K, Pecl, G, Richardson, A, Ridgway, K, Rintoul, S, Ritz, D, Ross, J, Sanderson, C, Shephard, S, Slotwinski, A, Swadling, K, Taw, N 2011, Climate change cascades: shifts in oceanography, species' ranges and marine community dynamics in eastern Tasmania, *Journal of Experimental Marine Biology and Ecology*, vol. 400, no. 1-2, pp. 17-32, doi:10.1016/j.jembe.2011.02.032
- Thompson, DP, Bearham, D, Graham, F, Eagle, JV 2011, High latitude, deeper water coral bleaching at Rottneest Island, Western Australia, *Coral Reefs*, vol. 30, no. 4, pp. 1107-1107, doi:10.1007/s00338-011-0811-x

Reports

Negri, A, Speare, P, Berkelmans, R, Stieglitz, T, Botting, R, Steinberg, C, Brinkman, R, Heron, M, Doherty, P 2010, Douglas Shoal Ship Grounding Survey: RV Cape Ferguson Habitat Damage Monitoring using Multibeam Sonar and Towed Video Assessments, Comments: Final Confidential Report to GBRMPA

Middleton, J, James, C, Luick, J, Goldsworthy, S, Tsolos, A, Teixeira, CEP, Richardson, L 2011, Survey of Sonar Test Sites, Phase 1, Literature Review. Milestone 3: FINAL REPORT

Thesis

Teixeria, CEP 2010, Dynamics of Spencer Gulf: a numerical study

Public Seminars

Allen, S; The Australian National Mooring Network; University of Western Australia Seminar, 23/02/2007 - 23/02/2007, University of Western Australia, Perth, Presenter(s): S Allen

Lynch, T; Functions of the Australian National Reference Stations; CSIRO Marine and Atmospheric Research Seminar, 30/07/2010 - 30/07/2010, Commonwealth Scientific Industrial Research Organisation, Hobart, Presenter(s): Tim Lynch

Lynch, T; Functions of the Australian National Reference Stations; CSIRO Marine and Atmospheric Research Seminar, 04/08/2010 - 04/08/2010, Commonwealth Scientific Industrial Research Organisation, Brisbane, Presenter(s): Tim Lynch

Lynch, T; Functions the Australian National Reference Stations; CSIRO Marine and Atmospheric Research Seminar, 08/09/2010 - 08/09/2010, Commonwealth Scientific Industrial Research Organisation, Perth, Presenter(s): Tim Lynch

Lynch, T; Overview of CSIRO moorings; CSIRO Marine and Atmospheric Research Seminar, 26/11/2010 - 26/11/2010, Commonwealth Scientific Industrial Research Organisation, Hobart, Presenter(s): Tim Lynch

Conferences, Symposia or Workshops

Conference Oral Presentation

Suthers, I; SIMS and the Australian Acoustic Telemetry & Monitoring System; Australian Marine Science Association Conference, 09/07/2007 - 13/07/2007, University of Melbourne, Melbourne, Presenter(s): Iain Suthers

Middleton, J; Physical processes of wind-forced upwelling: time and spaced scales; Scientific Committee on Oceanic Research (SCOR) Deep Ocean Exchange Working Group Meeting, 10/07/2007 - 11/07/2007, Perugia, Presenter(s): John Middleton

Allen, S, Pender, L, Steinberg, C, Middleton, J, Brando, V, Roughan, M; The Australian National Moorings Network. In situ observations for Australian Marine Research; Australian Meteorological and Oceanographic Society (AMOS) Conference, 29/01/2008 - 01/02/2008, Geelong

Steinberg, C, Herzfeld, M, Schiller, A, Feng, M; Downscaling Climate Change to a reef on the GBR: Heron Island case study: Project 2.5i.1; Marine and Tropical Sciences Research Facility (MTSRF) Conference, 28/04/2008 - 01/05/2008, Cairns

Roughan, M, Suthers, I, Pritchard, T; Cross-shelf processes off the coast of NSW; results from the SEAMOS array; 9th International Conference on Southern Hemisphere Meteorology and Oceanography (9ICSHMO), 09/02/2009 - 13/02/2009, Melbourne

Steinberg, C, McAllister, F, McLean, CM, Brinkman, GW, Pitcher, C, Luetchford, J, Rigby, P; The Implementation of a Great Barrier Reef Ocean Observing System to monitor the Western Boundary Currents of the Coral Sea and Impacts on the Great Barrier Reef; 9th International Conference on Southern Hemisphere Meteorology and Oceanography (9ICSHMO), 09/02/2009 - 13/02/2009, Melbourne

Ganachaud, As, Sen Gupta, AS, Steinberg, C, Maes, C; Projected ocean circulation changes to the tropical Pacific over the 21st century; Greenhouse 2009: Climate Change and Resources, 23/03/2009 - 26/03/2009, Perth

Leterme, S, James, C, Luick, J, Middleton, J, van Dongen-Vogels, V, Patterson, J, Seuront, L; Seasonal Variations in Biological Characteristics of the South Australian Shelf Waters – Results from the Southern Australian Integrated Marine Observing System (SAIMOS); European Geosciences Union (EGU) General Assembly, 19/04/2009 - 24/04/2009, Vienna

Steinberg, C, Weeks, S, Berkelmans, R; East Australian Current and Upwelling influences on the Thermal Environment of the Great Barrier Reef; Marine and Tropical Sciences Research Facility (MTSRF) Conference, 28/04/2009 - 30/04/2009, Townsville

Steinberg, C, McAllister, F, McLean, CM, Brinkman, GW, Pitcher, C, Luetchford, J, Rigby, P; The Great Barrier Reef Ocean Observing System Mooring array: Monitoring the Western Boundary Currents of the Coral Sea and Impacts on the Great Barrier Reef; 2009 Joint Assembly, 24/05/2009 - 27/05/2009, Toronto

Gavrilov, A, McCauley, R, Thomas, F, Klaka, K, Salgado Kent, C, Perry, M, Duncan, A; Acoustic observations of the Australian Marine Observing System; Underwater Acoustic Measurements (UAM): Technologies and Results, 3rd International Conference, 21/06/2009 - 26/06/2009, Nafpilon

Coleman, M, Roughan, M, Connell, S, Gillanders, B, Kelaher, B, Steinberg, P; Contrasting Patterns of Connectivity among Populations of Kelp on Australia's Temperate Reefs; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Coman, F, Davies, C, Delacruz, J, McLeod, DJ, Pritchard, T, Slotwinski, A, Richardson, A; Seasonal, inter-annual, and potential decadal changes in the zooplankton community off Port Hacking, NSW; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Doblin, M, Thompson, P, Hassler, C, Baird, ME, Suthers, I, Ralph, P; IMOS: The bridge between bio-optical data and modelled primary production; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

McCauley, R, Cato, D, Salgado Kent, C, Duncan, A, Parsons, M, Gavrilov, A; The strategic value of sea noise recordings; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Middleton, J, Seuront, L, Luick, J, James, C, Leterme, S, Teixeira, CEP, van Dongen-Vogels, V, Patterson, J; The biophysical landscape of the southern Australian shelves: measurement, modelling, climate and climate change; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Pritchard, T, Krogh, M, de la Cruz, J, Davies, P, Ingleton, T; The legacy of Sydney's long term monitoring stations and prospects for integrated monitoring of coastal waters; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Roughan, M, MacDonald, HS, Baird, ME; Connectivity along the Continental Shelf of southeastern Australia; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Steinberg, C, Heron, SF, Herzfeld, M, Weeks, S, Bainbridge, S, Heron, M, Skirving, WJ; Observing and Modelling the Circulation of the Capricorn Bunker Group, Southern Great Barrier Reef; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Wood, JE, Roughan, M, Tate, P; Upwelling off the Coast of Sydney: Observations from the NSW IMOS Array ; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Lynch, T, Steinberg, C, Brando, V, Roughan, M, Middleton, J, Hughes, D, Feng, M, McCauley, R, McGowen, M, Hill, K, Proctor, R, Allen, S, Meyers, G, Moltmann, T; The Australian National Mooring Network; OceanObs'09 Conference, 21/09/2009 - 25/09/2009, Venice

Steinberg, C, Heron, SF; Oceanography, mechanical damage and wave-induced upwelling; NOAA Coral Reef Watch/UQ Workshop - Satellite monitoring of reef vulnerability in a changing climate, 15/02/2010 - 18/02/2010, Brisbane

Baird, ME, Roughan, M, Morris, BD, Suthers, I; An Integrated Marine Observing System for Southeastern Australia: The East Australian Current and its interaction with coastal environments; Ocean Sciences Meeting, 22/02/2010 - 26/02/2010, Portland

Patterson, J, van Dongen-Vogels, V, Leterme, S, Seuront, L; Viral and bacterial spatial dynamics within coastal upwelling systems; Ocean Sciences Meeting, 22/02/2010 - 26/02/2010, Portland

Roughan, M, MacDonald, HS, Baird, ME, Glasby, TM; Downscaling an eddy resolving model to investigate seasonal and inter-annual variability in coastal connectivity in a Western Boundary Current; Ocean Sciences Meeting, 22/02/2010 - 26/02/2010, Portland

van Dongen-Vogels, V, Seymor, J, Leterme, S, Patterson, J, Seuront, L; Space-time variability of picophytoplankton communities in South Australian shelf waters; Ocean Sciences Meeting, 22/02/2010 - 26/02/2010, Portland

Berkelmans, R, Weeks, S, Steinberg, C; Upwelling linked to warm summers and bleaching on the Great Barrier Reef; Marine and Tropical Sciences Research Facility (MTSRF) Conference, 18/05/2010 - 20/05/2010, Cairns

Brinkman, R, Herzfeld, M, Andrewartha, J, Steinberg, C, Spagnol, S; Hydrodynamics at the whole of GBR scale; Marine and Tropical Sciences Research Facility (MTSRF) Conference, 18/05/2010 - 20/05/2010, Cairns

Congdon, BC, Weeks, S, Steinberg, C; Whirlpools and weight loss: linking seabird foraging success and oceanography in the southern Great Barrier Reef; Marine and Tropical Sciences Research Facility (MTSRF) Conference, 18/05/2010 - 20/05/2010, Cairns

Lynch, T; Functions of the Australian National Reference Stations; Australian Marine Science Association Conference, 05/07/2010 - 08/07/2010, Woolongong, Presenter(s): Tim Lynch

Morris, BD, Roughan, M, Doblin, M; Variability and boundary current effects on the coastal waters of Sydney, Australia using IMOS data; Australian Marine Science Association Conference, 05/07/2010 - 08/07/2010, Woolongong

Steinberg, C, Heron, SF, Heron, M, Mantovanelli, A, Rigby, P, Weeks, S, Jaffres, JBD, Brinkman, R, Herzfeld, M, Wisdom, D; Advances in Observing Physical Oceanographic Impacts on the Southern Great Barrier Reef, Australia; Australian Marine Science Association Conference, 05/07/2010 - 08/07/2010, Woolongong

Steinberg, C, Brinkman, R, Mantovanelli, A, Herzfeld, M, Heron, M, Weeks, S, McAllister, F, Heron, SF, Wisdom, D, Revelard, A; Advances in Observing and Modelling Physical Oceanographic Impacts on the Southern Great Barrier Reef, Australia; 85th Annual Australian Coral Reef Society (ACRS) Conference, 10/09/2010 - 12/09/2010, Coffs Harbour, Presenter(s): Craig Steinberg

Tilbrook, B; Ocean acidification and the carbonate chemistry of Australian regional seas; Ocean Acidification: Implications for living marine resources in the Southern Hemisphere, 15/06/2011 - 17/06/2011, Canberra, Presenter(s): Bronte Tilbrook

Brinkman, R, Herzfeld, M, Steinberg, C, Andrewartha, J, Condie, S; Simulation of 3-D hydrodynamics, flood plumes and connectivity on the Great Barrier Reef; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): Richard Brinkman

Earp, A, Hanson, CE, Baird, ME, Brando, V, Allen, S, Clementson, L, Daniel, P, Humphries, J, Parslow, J, Ralph, P, Strutton, P, Suthers, I, Thompson, P, Underwood, M, Doblin, M; Calibrating and validating bio-optical signals from ocean sensors; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle

Jones, N; Internal wave climatology at Ningaloo Reef; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): N Jones

Lynch, T, Morello, E, Hughes, D, Steinberg, C, Feng, M, Richardson, A, Thompson, P, Bonham, P, Howell, B, Slawinski, D, James, C, Middleton, J, Davies, C, Rigby, P; Quality control and preliminary results from the IMOS Australian National Reference Stations; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle

McCauley, R; Long term trends in pygmy blue whale use of the Perth Canyon via passive acoustics; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): Rob McCauley

Rossi, V, Roughan, M, Beckley, L, Waite, A; A bio-physical characterization of water masses off Ningaloo reef in May 2010; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): Vincent Rossi

Roughan, M, Morris, BD, Doblin, M, Ingleton, T, Pritchard, T, Suthers, I, Wood, JE; Giving spatial & temporal context to 70 years of oceanographic observations at Port Hacking, NSW; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): Moninya Roughan

Steinberg, C, Rigby, P, McAllister, F, Spagnol, S, Brinkman, R, Jones, N; Current Observations from the Continental Shelves of the Arafura and Timor Seas; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): Craig Steinberg

Wood, JE, Roughan, M, Morris, BD; The origin & variability of cold water events observed off Sydney, NSW; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): J Wood

Conference Poster

Heron, M, Roughan, M, Suthers, I, Banner, MML, Prytz, A, Page, G, Atwater, DP; Monitoring ocean parameters from an HF radar: case study at Coffs Harbour, Australia; 9th International Conference on Southern Hemisphere Meteorology and Oceanography (9ICSHMO), 09/02/2009 - 13/02/2009, Melbourne

Pritchard, T, Krogh, M, Davies, P, Ingleton, T, Suthers, I, Roughan, M; Detecting climate change in the coastal waters off south east Australia – past, present and future; Greenhouse 2009: Climate Change and Resources, 23/03/2009 - 26/03/2009, Perth

James, C, Luick, J, Leterme, S, Middleton, J, Seuront, L; Seasonal Variations in Physical Characteristics of the South Australian Shelf Waters –Results from the Southern Australian Integrated Marine Observing System (SAIMOS); European Geosciences Union (EGU) General Assembly, 19/04/2009 - 24/04/2009, Vienna

Seuront, L, Leterme, S, Middleton, J, Ridgway, K, Doherty, P, Bainbridge, S, Steinberg, C, Suthers, I, Roughan, M, Pattiaratchi, C, Thresher, A, Trull, T, Schulz, E, Wijffels, S, Williams, S, Allen, S, Heron, M, Harcourt, R, Proctor, R, Turner, P, Critchley, G, Richardson, A, Coman, F, Bonham, P, Terhell, D, Thompson, P, Tilbrook, B, Berry, K, Clementson, L, Robert, S, Lynch, T, Furnas, M, Roberts, K, Magierowski, R, Meyers, G; IMOS, an Integrated Marine Observing System for Australia; European Geosciences Union (EGU) General Assembly, 19/04/2009 - 24/04/2009, Vienna

Bainbridge, S, Steinberg, C, Heron, M, Rigby, P; The role of observation systems in coral reef monitoring and management; 2009 Joint Assembly, 24/05/2009 - 27/05/2009, Toronto

Morris, BD, Roughan, M, Suthers, I, Pritchard, T; Cross-shelf Processes off the Coast of NSW; Preliminary Results from the NSW IMOS Array; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Steinberg, C, McAllister, F, McLean, CM, Brinkman, GW, Pitcher, C, Luetchford, J, Rigby, P; The Great Barrier Reef Ocean Observing System: Monitoring the Western Boundary Currents of the Coral Sea and Impacts on the Great Barrier Reef; Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

van Dongen-Vogels, V, Seymor, J, Leterme, S, Seuront, L; Spatial and temporal dynamics in picophytoplankton community structure along a shelf plume (South Australia); Australian Marine Science Association Conference, 05/07/2009 - 09/07/2009, Adelaide

Lynch, T, Steinberg, C, Brando, V, Roughan, M, Middleton, J, Hughes, D, Feng, M, McCauley, R, McGowen, M, Hill, K, Proctor, R, Allen, S, Meyers, G, Moltmann, T; The Australian National Mooring Network; OceanObs'09 Conference, 21/09/2009 - 25/09/2009, Venice

McAllister, F, Steinberg, C, Brinkman, GW, Pitcher, C, Luetchford, J, Rigby, P; The Great Barrier Reef Ocean Observing System Moorings array: Monitoring Coral Sea Impacts on the Great Barrier Reef; OceanObs'09 Conference, 21/09/2009 - 25/09/2009, Venice

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MacDonald, HS, Roughan, M, Baird-Wilkin, M; Coupled physical-biological modelling of eddies off southeastern Australia; Australian Marine Science Association Conference, 05/07/2010 - 08/07/2010, Woolongong

Navong, N, James, C, Leterme, S; Impacts of upwelling events on the phytoplankton communities off the South Australian continental shelf; Australian Marine Science Association Conference, 05/07/2010 - 08/07/2010, Woolongong

Wood, JE, Roughan, M; Wind, Temperature and Current observations from a Long Term Continental Shelf Mooring; Australian Marine Science Association Conference, 05/07/2010 - 08/07/2010, Woolongong

Davies, C, Bonham, P, Coman, F, Lynch, T, Slotwinski, A, Thompson, P, Tonks, M, Richardson, A; Plankton observing in Australia: the Australian National Reference Stations; 5th International Zooplankton Production Symposium, 14/03/2011 - 18/03/2011, Pucon

Kelly, SM, Jones, N, Ivey, GN, Brinkman, R, Lowe, R; Internal tides in the Timor Sea and on the Australian North West Shelf ; Australian Marine Science Association Conference, 03/07/2011 - 07/07/2011, Fremantle, Presenter(s): Samuel Kelly

Symposium Presentation

Andrefouet, S, Muller-Karger, F, Sheng, J, Steinberg, C, Douillet, P, Soto, I, Hatcher, BG, Ouillon, S, Yang, B, Choukroun, S, Dirbeg, G, Kranenberg, C, Moses, C; Interdisciplinary Environmental Assessments of Coral Reefs Using Remote Sensing and Numerical Circulation Models; 11th International Coral Reef Symposium, 07/07/2008 - 11/07/2008, Fort Lauderdale

Weeks, S, Steinberg, C, Congdon, BC; Whirlpools, Hot Water and Hungry Seabirds; 11th International Coral Reef Symposium, 07/07/2008 - 11/07/2008, Fort Lauderdale

Roughan, M, Suthers, I; Measuring the Coastal Ocean off Northern NSW: Coffs Harbour; Climate Change Symposium, 03/06/2009 - 04/06/2009, Melbourne

Workshop Presentation

Steinberg, C, McLean, CM, McAllister, F, Bennet, B, Brinkman, GW, Choukroun, S; GBROOS Mooring Array; GBROOS Workshop, 11/05/2007 - 11/05/2007, Townsville

Steinberg, C, Brinkman, R; The status of Physical Oceanographic research in the GBR; AIMS Acidification Workshop, 11/03/2008 - 11/03/2008, Australian Institute of Marine Science, Townsville

Middleton, J; The Oceanography and SAIMOS for the Bonney Coast; Climate Change Planning Workshop: The Bonney Coast, 04/04/2008 - 04/04/2008, Queenscliff, Presenter(s): John Middleton

Steinberg, C; Climate change in the Australian marine environment; Climate change simulations workshop - Simulations for CMIP5 (IPCC AR5) and the data requirements for Queensland and the wet tropical regions, 20/07/2009 - 21/07/2009, Port Douglas, Presenter(s): Craig Steinberg

Steinberg, C; Throughflow (ITF) and Ningaloo National Reference Station (NRS); WAIMOS Science & Data Uptake Workshop, 25/02/2011 - 25/02/2011, University of Western Australia, Perth, Presenter(s): Craig Steinberg

Steinberg, C, Wijffels, S, Sloyan, B, Hill, K, Moltmann, T; IMOS Timor Leste Indonesian Through Flow Observations; Arafura and Timor Seas Expert Forum Workshop, 24/03/2011 - 24/03/2011, Dili, Presenter(s): Craig Steinberg