

# Research Projects



Ongoing and new research projects using IMOS data

## Bluewater and Climate

Foraging ecology of emperor penguins in summer and potential overlap with fisheries, Australian Antarctic Division, Barbara Wienecke, Jerry Kooyman, Yvon Le Maho, Graham Roberston, 2000-2013, Partner Institution(s): Scripps, CNRS France

Climate variability and change program, Centre for Australian Weather and Climate Research , Antarctic Climate and Ecosystems Cooperative Research Centre, Steve Rintoul

Sea level rise program, Centre for Australian Weather and Climate Research , Antarctic Climate and Ecosystems Cooperative Research Centre, John Church

POAMA development: improving seasonal climate forecasting for Australia , Bureau of Meteorology, Oscar Alves, Harry Hendon

Global carbon project, Rob Jackson, Nebojsa Nakicenovic, 2001-2020, Partner Institution(s): International Geosphere-Biosphere Programme (IGBP); International Human Dimensions Programme on Global Environmental Change (IHDP); World Climate Research Programme (WCRP)

Australian climate change science program: ocean processes and change, Department of Climate Change and Energy Efficiency, Commonwealth Scientific Industrial Research Organisation, Steve Rintoul, Susan Wijffels, Bernadette Sloyan, 2003-2010

BlueLink II/III - ocean forecasting for Australia: Bluelink global program, Centre for Australian Weather and Climate Research , Bureau of Meteorology, Helen Beggs, Gary Brassington, David Griffin, Peter Oke, Eric Schulz, 2003-2013

BlueLink II/III - ocean forecasting for Australia: Bluelink regional program, Centre for Australian Weather and Climate Research , Bureau of Meteorology, Helen Beggs, Gary Brassington, David Griffin, Peter Oke, Eric Schulz, 2003-2013, Partner Institution(s): Royal Australian Navy

BlueLink II/III - ocean forecasting for Australia: Bluelink littoral zone program, Centre for Australian Weather and Climate Research , Bureau of Meteorology, Helen Beggs, Gary Brassington, David Griffin, Peter Oke, Eric Schulz, 2003-2013, Partner Institution(s): Royal Australian Navy

Ocean control of carbon dioxide oceans change program, Antarctic Climate and Ecosystems Cooperative Research Centre, Tom Trull

Winter foraging success of Southern Ocean predators in relation to stochastic variation in sea-ice extent and winter water formation, University of Tasmania, Mark Hindell, Mike Fedak, Iain Field, Christophe Guinet, Rob Harcourt, Clive McMahon, John Van Den Hoff, 2006-2012, Partner Institution(s): University of St Andrews, Macquarie University, CNRS France, Charles Darwin University, Australian Antarctic Division, Funding: Australian Antarctic Division

Predator research survey and monitoring in support of CCAMLR's management of the krill fishery, Australian Antarctic Division, Colin Southwell, Louise Emmerson, 2006-2012, Funding: Australian Antarctic Division

Winter foraging locations of Southern Ocean predators - sub Antarctic islands, University of Tasmania, British Antarctic Survey, Mark Hindell, Mary-Anne Lea, Phil Trathan, 2007-2011, Partner Institution(s): AAD, Funding: Australian Antarctic Division

GHRST tropical warm pool diurnal variability project, Centre for Australian Weather and Climate Research , Bureau of Meteorology, Helen Beggs, Leon Majewski, Pierre LeBorgne, Gary Wick, Sandra Castro, Carol Ann Clayson, Chelle Gentemann, Rachel Weihs, Peter Steinle, Paul Sandery, Vaughan Barass, Chris Tingwell, Matthew Martin, Partner Institution(s): NOAA, CSIRO, University of Colorado, Meteo-France, Met Office, Florida State University, Remote Sensing Systems, University of Edinburgh, Funding: BLUElink, Bureau of Meteorology

Controls on carbon uptake, Commonwealth Scientific Industrial Research Organisation, Bronte Tilbrook, 2008-2019, Partner Institution(s): Tom Trull; Elizabeth Shadwick

Pacific climate change science program; oceans component - ocean change, variability and sea level rise, Department of Climate Change and Energy Efficiency, Commonwealth Scientific Industrial Research Organisation, Centre for Australian Weather and Climate Research , University of New South Wales, John Church, Susan Wijffels, Jaci Brown, Alexander Gupta, 2009-2012, Partner Institution(s): Pacific Island Countries

Micronekton, Commonwealth Scientific Industrial Research Organisation, Rudy Kloser, 2009-2015, Funding: CSIRO

Response of pteropods to ocean acidification, University of Tasmania, Antarctic Climate and Ecosystems Cooperative Research Centre, Donna Roberts, William Howard, Stephen Bray, Tom Trull, 2009-2012, Partner Institution(s): ACE CRC, Department of Climate Change

Marine and Climate Data Discovery and Access Project (MACDDAP) NeAT Project, University of Tasmania, Nathan Bindoff, 2009-2011, Partner Institution(s): UTAS, BoM, CMAR, Architecta

Coastal CO2 data from Southern Surveyor used for determining the uptake of CO2 and acidification in Australia's regional seas and the South Pacific, Commonwealth Scientific Industrial Research Organisation, Bronte Tilbrook, Mareva Kuchinke, Richard Matear, Andrew Lenton, 2009-2011, Partner Institution(s): Ausaid, DCCEE

Research program: mechanisms and attribution of past and future ocean circulation change, ARC Centre of Excellence for Climate System Science, Nathan Bindoff, Andrew Hogg, Matthew England, Dietmar Dommenget, David Karloy, Peter Strutton, Richard Matear, Anthony Hirst, Scott Power, Stephen Griffies, 2010-2017, Partner Institution(s): University of Tasmania, Australian National University, University of New South Wales, University of Melbourne, CSIRO Centre for Marine and Atmospheric Research, Geophysical Fluid Laboratory USA

NWP marine flux validation in the Australian region, Bureau of Meteorology, Eric Schulz, 2010-2012

Ocean carbon and acidification, Commonwealth Scientific Industrial Research Organisation, Bronte Tilbrook, 2010-2011, Partner Institution(s): DCCEE

Mixing parameters in the Southern Ocean determined by inverse methods, Commonwealth Scientific Industrial Research Organisation, Andrew Meijers, Trevor McDougall, Bernadette Sloyan, 2010-2012

CSIRO Marine and Atmospheric Research SST products - testing use of IMOS HRPT AVHRR L2P products for production of CMAR SST composite products , Commonwealth Scientific Industrial Research Organisation, David Griffin, Partner Institution(s): Bureau of Meteorology

Building long-term climate quality air-sea flux record in Southern Ocean, Bureau of Meteorology, Eric Schulz

Net community production in the Australian sector of the Southern Ocean, Nicolas Cassar, 2010-2014, Partner Institution(s): CSIRO, Princeton University, Duke University

Southern Ocean productivity and CO2 exchange under current and future climate regimes, University of Tasmania, Peter Strutton, 2010-2014, Funding: ARC Future Fellowship

Australian climate change science program: sea level rise, Department of Climate Change and Energy Efficiency, Commonwealth Scientific Industrial Research Organisation, John Church, Susan Wijffels, 2010-2011

CO2 program, University of Tasmania, Tom Trull, Partner Institution(s): UTAS, CSIRO, AAD, Funding: ACECRC

Pelagic ecosystem linkages in a changing Southern Ocean, Australian Antarctic Division, University of Tasmania, Macquarie University, Steve Nicol, Nick Gales, Mark Hindell, Rob Harcourt, 2011-2014, Funding: ARC Super Science Fellowship

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Air-sea interaction and seasonality of the mixed layer in the Subantarctic Zone, University of New South Wales, Commonwealth Scientific Industrial Research Organisation, Steve Rintoul, Bernadette Sloyan, Matthew England, 2011-2012, Partner Institution(s): Marvin Alfaro - Fullbright Scholar

Collating existing pressure data for the Commonwealth marine area, Piers Dunstan, 2011-2015, Funding: National Environmental Research Program (NERP)

Southern ocean carbon cycle, Bronte Tilbrook, 2011-2012, Partner Institution(s): AAD, UTAS, Funding: Australian Antarctic Division, CSIRO

Calibration of the clumped-isotope technique in marine biogenic carbonates, and its eventual application to paleothermometry and paleo-oceanography, University of California, Aradhna Tripathi

NERP and NESP marine biodiversity hub, Australian Institute of Marine Science, Charles Darwin University, Commonwealth Scientific Industrial Research Organisation, Geoscience Australia, University of Tasmania, Museum Victoria, University of Western Australia, NSW DPI, NSW OEH, Nicholas Bax, 2011-2021, Funding: Department of the Environment

Including IMOS HRPT AVHRR L2P SST in Global 1 km SST analysis (G1SST), North American Space Agency Jet Propulsion Laboratory, Yi Chao, Partner Institution(s): NASA JPL, Funding: National Aeronautics and Space Agency (NASA)

Surface Ocean CO<sub>2</sub> Atlas (SOCAT), D Bakker, Partner Institution(s): UEA, NOAA, CSIRO, plus 47 others

Ocean carbon and acidification, Bronte Tilbrook, Andrew Lenton, Partner Institution(s): AIMS, UQ, USyd, UNSW, UWA, NOAA(USA) NIES(Japan), IPSL(France), Funding: Australian Climate Change Science Program (ACCSP), CSIRO

Ocean carbon and acidification in Australian regional seas and the Southern Ocean, Commonwealth Scientific Industrial Research Organisation, Bureau of Meteorology, Bronte Tilbrook, Andrew Lenton, Partner Institution(s): CSIRO, BOM, Funding: Australian Climate Change Science Program (ACCSP)

Australian Cal/Val of sentinel-3 sea surface height project ID: 13680, University of Tasmania, Chris Watson, Neil White, John Church, Partner Institution(s): CSIRO, Funding: ESA - European Space Agency

Zooplankton atlas of Australia, University of Tasmania, Kerrie Swadling, 2012-2012, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

Project 318950 'A global network of permanent sites for calibrating satellite altimetry missions', Stelios Mertikas, 2012-2016, Partner Institution(s): Watson, C.S. UTAS. Et al., Funding: European Union 7th Framework Marie Curie Actions: International Research Staff Exchange Scheme FP7-PEOPLE-2012 IRSES

Plankton dynamics down the Australian east coast, University of Tasmania, Gwyn Griffiths, 2012-2013

Revisiting wave-induced mixing and current effects: observations and modelling based on the Southern Ocean Flux Station, Swinburne University, Commonwealth Scientific Industrial Research Organisation, Bureau of Meteorology, Alexander Babanin, Mark Hemer, Eric Schulz, 2012-2014, Funding: CSIRO

Phytoplankton atlas of Australia, University of Tasmania, Gustaaf Hallegraeff, 2012-2015, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

Long-term changes in Vibrio bacteria, Luigi Vezzulli, 2012-2013, Funding: CSIRO

The IMOS plankton ecosystem assessment report, Commonwealth Scientific Industrial Research Organisation, Anthony Richardson, 2012-2013, Funding: CSIRO

BLUElink III - OceanMAPS v2.1 validation, BOM Queensland Regional Office, Helen Beggs, 2012-2012, Funding: Royal Australian Navy

Validating the upgrade of Bureau NWP from APS0 to APS1, Bureau of Meteorology, National Oceanography Centre, Eric Schulz, Simon Josey

High-latitude validation of OAFflux, Bureau of Meteorology, Woods Hole Oceanographic Institute, Eric Schulz, Lisan Yu

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Coastal carbon collaboration cluster, Commonwealth Scientific Industrial Research Organisation, Andy Steven, 2012-2015, Partner Institution(s): CSIRO, UTS, UWA, SCU, JCU, UNSW

High seas acoustic and biological sampling, Commonwealth Scientific Industrial Research Organisation, Rudy Kloser, 2012-2015, Funding: CSIRO, Sealords NZ

Global spread of Vibrios with climate change, University of Genoa, Luigi Vezzulli, 2013-2014

Observations of remarkable eastward flows in the South Indian Ocean, University of Tasmania, Nathan Bindoff, Julian McCreary, Ryo Furue, Ming Feng, Jessica Benthuisen, Catia Domingues, 2013-2016, Partner Institution(s): CSIRO, University of Hawaii, Funding: ARC Discovery Project

Southern Ocean circulation and water mass formation in a warming world, Antarctic Climate and Ecosystems Cooperative Research Centre, Commonwealth Scientific Industrial Research Organisation, Steve Rintoul, Matthew England, 2013-2018, Partner Institution(s): UNSW, CSIRO, QNLM, Funding: Australian Antarctic Sciences Program, Australian Climate Change Science Program (ACCSP), ACECRC

Great Australian Bight collaborative science program, South Australian Research and Development Institute, Tim Ward, 2013-2016, Partner Institution(s): Marine Innovation South Australia (MISA), CSIRO, British Petroleum, SARDI

GPS4SeaLevel, University de la Rochelle, University of Tasmania, A Santamaria-Gomez, Chris Watson, Matt King, Guy Wopplemann, 2013-2017, Funding: European Union 7th Framework Marie Curie Actions: International Research Staff Exchange Scheme FP7-PEOPLE-2012 IRSES

In-depth analysis of the EAC and ITF mooring arrays and computation of mass, heat and salt time-series transports from collected data, Bernadette Sloyan, Ken Ridgway, Susan Wijffels, Rebecca Cowley, 2013-2014, Funding: Australian Climate Change Science Program (ACCSP)

Remote sensing in support of marine environmental monitoring, Curtin University, David Antoine, 2013-2016

Southern Ocean Network of Acoustics (SONA), British Antarctic Survey, Sophie Fielding, 2013-2016, Funding: Natural Environment Research Council (UK)

Altimetry for real time applications and climate studies relevant to Australia: application to EUMETSAT/CNES DSP/OT/12-2118 for membership of the Ocean Surface Topography Science Team (OSTST), Commonwealth Scientific Industrial Research Organisation, David Griffin, John Church, Neil White, Ken Ridgway, Chris Watson, Richard Coleman, 2013-2016

Autonomous benthic observing system, University of Western Australia, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Australian Institute of Marine Science, Department of Primary Industries, NSW, Stefan Williams, Oscar Pizarro, Gary Kendrick, Neville Barrett, Russ Babcock, Andrew Heyward, Alan Jordan, Partner Institution(s): University of Sydney, Funding: ARC LIEF

Sensor based estimates of ocean productivity, Commonwealth Scientific Industrial Research Organisation, Tom Trull, 2013-2017, Funding: CSIRO, ACECRC, University of Tasmania

Autonomous platforms and biotagging data: a new approach for understanding variability and change across the Antarctic Ocean/sea-ice climate system, University of Tasmania, Guy Williams, 2013-2017, Funding: ARC Future Fellowship

Near real-time modelling of Bass Strait for EPA Victoria, John Andrewartha, 2013-2014

Grass of the oceans: quantifying biodiversity, environmental and climatic connectivity from a decade-long capture of Southern Ocean diatoms, Macquarie University, Andres Rigual-Hernandez, Leanne Armand, Tom Trull, Stephen Bray, 2013-2015, Partner Institution(s): UTAS-CSIRO-ACECRC, Funding: Australian Antarctic Sciences Program

Phytoplankton variability in the Indian Ocean, Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, 2014-2015, Funding: CSIRO

International phytoplankton functional type intercomparison working group, Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, 2014-2015, Partner Institution(s): NASA, ESA, NOAA, EUMETSAT, JAXA, KIOST, AWI, CNRS/LOV, CSIR, PML, U. Maine, U. Hokkaido, U. Lisboa, U. Sao Paulo, IRD, U. Richmond, Pixalytics, Michigan Tech., WHOI,

Funding: IOCCG

Australian national shelf reanalysis, Emlyn Jones, Moninya Roughan, Tim Moltmann, Andreas Schiller, Peter May, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

NOV-7279-DV\_3653 regional calibration of Envisat at Bass Strait, Noveltis, Mathilde Cancet, 2014-2014, Partner Institution(s): Dr Christopher Watson (University of Tasmania), Funding: ESA - European Space Agency

Southern ocean carbon cycle postdoctoral fellow, University of Tasmania, Paula Conde-Pardo, 2015-2018, Funding: ACECRC

DP150100615 quantifying sea-level trends and extremes along Australia's coastal margin, University of Tasmania, Matt King, 2015-2018, Partner Institution(s): Dr Christopher Watson (UTAS), Dr John Church (CSIRO), Dr Xiaoli Deng (U Newcastle), Dr John Hunter (UTAS), Prof Richard Coleman (UTAS), Dr Ole Anderson (TU Denmark), Funding: ARC Discovery Project

CSIRO OCE Postdoctoral: climate drivers of ocean change, Commonwealth Scientific Industrial Research Organisation, Damien Irving, Susan Wijffels, John Church, Nathan Bindoff, 2015-2018, Funding: CSIRO

The Southern Ocean boundary layer: winds, turbulence, sea spray and clouds, Monash University, Steve Siems, Partner Institution(s): Manton (Monash), Belusic (Monash), Sullivan (NCAR), Keywood (CSIRO), Schulz (BOM), Funding: ARC Discovery Project

CAPRICORN: clouds, aerosols, precipitation, radiation and atmospheric composition over the Southern Ocean (Ship component of SOCRATES), Bureau of Meteorology, Alain Protat, 2015-2018, Partner Institution(s): Schofield (Melb Uni), Franklin (CSIRO), Keywood (CSIRO), Siems (MONASH), Alexander (AAD)

CARS, synTS and SSS, Commonwealth Scientific Industrial Research Organisation, Madeleine Cahill, J Lovell, Funding: CSIRO

Linking phytoplankton to fisheries using zooplankton size spectra, University of New South Wales, Iain Suthers, Laura Richardson, Mark Baird, Sagulenko Evgeny, 2015-2018, Partner Institution(s): ARC Discovery Project, Funding: University of New South Wales, ARC Discovery Project

Satellite detection of marine pollution in the Great Barrier Reef, Commonwealth Scientific Industrial Research Organisation, David Blondeau-Patissier, 2016-2019, Funding: Advance Queensland Fellowship

NESP Earth systems scienceHub: changing oceans and Australia's future climate, University of Tasmania, Susan Wijffels, Bernadette Sloyan, Steve Rintoul, Andrew Hogg, Nathan Bindoff, Helen Phillips, 2016-2019, Funding: Department of Education, Employment and Workplace Relations, CSIRO, University of Tasmania, Australian National University

Assessing satellite SST as a potential data source to replace temperature data from tide gauges to populate ballast water exchange risk tables, Fisheries, Forestry and Quantitative Sciences Branch ABARES, Rupert Summerson

NESP Earth systems science hub: coastal hazards in a variable and changing climate, Commonwealth Scientific Industrial Research Organisation, Allison McInnes, Y Zhang, Mark Hemer, 2016-2019, Funding: Department of Education, Employment and Workplace Relations, CSIRO Ocean and Atmosphere Flagship

Using NFLUX to force an Indonesian area ocean model with validation of its SST forecasts using IMOS ship SST and fluxes, Naval Research Lab, University of New Orleans, Charlie Barron, Jackie May, Silvia Gremes-Cordero, C Rowley

CSIRO Decadal Forecasting Project, Commonwealth Scientific Industrial Research Organisation, Richard Matear, 2017-2027, Funding: CSIRO

Data analysis and a feasibility study of the prediction of statistical spectral levels of ocean ambient noise on short time scales, Alexander Gavrilov, Rob McCauley, Christine Erbe, 2017-2018, Funding: Defence Science and Technology Group

Southern Ocean nanoplankton response to CO<sub>2</sub> (SONAR-CO<sub>2</sub>), Commonwealth Scientific Industrial Research Organisation, National Institute of Water and Atmospheric Research, University of Salamanca, University of Lisbon, Andres Rigual-Hernandez, 2017-2019, Funding: European Union Marie Curie Fellowship

Surface wind mixing in ocean models, University of New South Wales, Australian Defence Force Academy, Robin Robertson, 2017-2017, Funding: Defence Science and Technology Group

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The role of the Southern Ocean in sea level change, Commonwealth Scientific Industrial Research Organisation, Xueban Zhang, Xianyao Chen, John Church, Matt King, 2017-2019, Funding: The Centre for Southern Hemisphere Oceans Research (CSHOR)

Sonar performance prediction tools and autonomous undersea detection systems for Australian waters, Rob McCauley, Alexander Gavrilov, Christine Erbe, 2017-2018, Funding: Defence Science and Technology Group

Southern Ocean observations and change, Commonwealth Scientific Industrial Research Organisation, Steve Rintoul, Laura Herraiz-Borreguero, 2017-2019, Funding: The Centre for Southern Hemisphere Oceans Research (CSHOR)

Carbon uptake and chemical change (ACE Project R2.1), Antarctic Climate and Ecosystems Cooperative Research Centre, Tom Trull, Andrew Bowie, 2017-2019, Partner Institution(s): IMOS, CSIRO - MNF, BOM, NOAA, Funding: ACECRC

Indo-Pacific Interbasin exchange, Commonwealth Scientific Industrial Research Organisation, Bernadette Sloyan, Max Nikurahsin, Beatriz Pena-Molino, Helen Phillips, Oceane Richet, 2017-2019, Funding: The Centre for Southern Hemisphere Oceans Research (CSHOR)

Towards large-scale estimates of photosynthetic competency: an assessment of iron stress and other environmental influences on sun-induced fluorescence quenching, Commonwealth Scientific Industrial Research Organisation, Christina Schallenberg, 2017-2018, Partner Institution(s): ACE CRC; CSIRO Oceans and Atmosphere, Funding: Natural Sciences and Engineering Research Council

Southern Ocean Waves Project , Melbourne University, Emmanuel Fontaine, I Young

The role of eastern Antarctic polynyas in global ocean circulation, University of Tasmania, Mark Hindell, Rob Harcourt, Clive McMahon, Steve Rintoul, Esmee Van Wijk, Sophie Bestley, Fabian Roquet, 2018-2021, Partner Institution(s): Macquarie University, CSIRO, SIMS, Stockholm University, Hokkaido University, Funding: ARC Discovery Project

Quantifying the use of Indigenous Marine Protected Areas by threatened bycatch species adjacent to highly productive fishing grounds, Australian Institute of Marine Science, Australian Institute of Marine Science, Charles Darwin University, Vinay Udyawer, Hamish Campbell, Michelle Heupel

Building a southern Australian acoustic telemetry network to monitor the movements and residency of commercially important and threatened species, South Australian Research and Development Institute, Flinders University, Paul van Ruth, Charlie Huveneers, Paul Rogers, Stephern Mayfield, Tim Ward

Using acoustic telemetry to improve marine reserve design: quantifying multispecies movement patterns in an open coastal environment, Macquarie University, Daniel Swadling, Kye Adams, Joni Pini-Fitzsimmons, Nathan Knott, Matt Taylor, Culum Brown

Building services for Australian marine data discovery, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): AAD, AIMS, CSIRO (O&A linkage + OBIS), CSIRO (ALA linkage + OBIS), Geoscience Australia, GreyBits Engineering, SIMS, TERN, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Develop/enhance the Marine Virtual Laboratory (MARVL) to provide the information infrastructure in support of the national ocean modelling system, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): BOM (Oceans), BOM (water), NCI, SARDI, TPAC, UWA, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Mathematical models for Antarctic animal migrations in a changing climate , University of Tasmania, Sophie Bestley, 2018-2021, Funding: ARC Discovery Project

Multi-site foraging habitat use by Weddell seals under different sea-ice conditions, National Institute for Polar Research, Karine Heerah, 2018-2019, Partner Institution(s): Macquarie University Australia, UTas Australia, Paris Museum of Natural History, CNRS France, Funding: Japan Society for the Promotion of Science

## Queensland's Integrated Marine Observing System

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

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

Site Fidelity, localised movement patterns and migrations of manta rays along the Queensland coast, University of Queensland, Mike Bennett, Kathy Townsend, 2007-2009

Study of manta rays within the South East Queensland waters, University of Queensland, Kathy Townsend, 2007-2008, Partner Institution(s): South East Queensland Catchments, Funding: South East Queensland Catchments

Ecological management sub-project - assessing native fish behaviour in response to flow in a dryland river (Moonie R, southwest QLD), eWater CRC, Jon Marshall, Stephen Balcombe, 2007-2010, Partner Institution(s): DERM, Griffith University, Arthur Rylah Insatiate, Monash University

Project Manta – a multidisciplinary study of an iconic species, University of Queensland, Kathy Townsend, Mike Bennett, Anthony Richardson, Scarla Weeks, 2007-2012, Partner Institution(s): CSIRO, Earthwatch, Lady Elliot Island Resort, CRL, Sea World, Redland City Council, SEQ Catchments, Manta Lodge and Scuba Centre

Reef temp project - GBRMPA web tool for predicting coral bleaching , University of Melbourne, Jeffrey Maynard

Dietary ecology and remote sensing as predictive tools for habitat utilisation of the manta ray, *Manta birostris*, Mike Bennett, Kathy Townsend, Scarla Weeks, 2007-2009, Partner Institution(s): Sea World, Funding: Seaworld Research and Rescue Foundation

New tools for managing ecosystem responses to climate change on the Southern Great Barrier Reef, James Cook University, Ove Hoegh-Guldberg, Kenneth Anthony, Andrew Bakun, Brad Congdon, Sophie Dove, Gene Feldman, Mal Heron, Ron Johnstone, Andrew Krockenberger, Laurence McCook, Allan Strong, Paul Marshall, Diane DiMassa, Julian Michael Caley, 2007-2011

Preliminary acoustic monitoring of sharks on the Ribbon Reefs, James Cook University, Michelle Heupel, 2008-2008, Partner Institution(s): Reef Channel, JCU

Project Manta – Ecology and biology of an iconic marine animal, University of Queensland, Commonwealth Scientific Industrial Research Organisation, Kathy Townsend, 2008-2011, Partner Institution(s): Hannan Productions, Redland City Council, Kaufmann Productions, Earthwatch, LEI Eco-Resort, Manta Lodge and Scuba Centre, Consolidated Rutile Limited

Predictive tool for the improved monitoring of the onset and outbreak of coral disease (White Syndrome) in northern Australia , University of Melbourne, Jeffrey Maynard

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)

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

Receiving water quality modelling, Australian Institute of Marine Science, Commonwealth Scientific Industrial Research Organisation, Richard Brinkman, Mike Herzfeld, 2009-2011, Partner Institution(s): GBRMPA, MTSRF, Funding: Marine and Tropical Sciences Research Facility (MTSRF)

Wave climate in the Southern Great Barrier Reef, James Cook University, Mal Heron, Michael Banner, Lucy Wyatt, 2009-2012, Partner Institution(s): Helzel Messtechnik GmbH, Seaview Sensing Ltd

Spatial ecology of inshore predators in tropical marine systems and implications of marine protection zones, Colin Simpfendorfer, Michelle Heupel, David Welch, John Carlson, 2009-2011, Funding: ARC Linkage Project

Innovative Solutions 2, Department of Primary Industries SA, John Luick, 2009-2013, Funding: Fisheries Research and Development Corporation

Plankton dynamics in Moreton Bay, University of Queensland, Griffith University, Anthony Richardson, Funding: ARC

Smart Environmental Monitoring and Analysis Technologies - SEMAT, University of Queensland, Ron Johnstone, 2009-2012, Partner Institution(s): Queensland State Government, Milan Foundation, Torino Foundation., Funding: Queensland Smart State

Analysis and visualisation tools for the interactions of biological and physical processes in the Great Barrier Reef, James Cook University, Michelle Heupel, Roger Proctor, Wiebke Ebeling, 2010-2012, Partner Institution(s): UTAS, JCU , Funding: ANNIMS

Ultra high-resolution SST analysis over the Great Barrier Reef - testing use of IMOS HRPT AVHRR L2P products in the SST analysis system , French Research Institute for Exploration of the Sea, Jean-Francois Poille, Partner Institution(s): Ifremer, Funding: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT)

Event detection and data management using cloud computing based systems for sensor network data, University of Melbourne, Marimuthu Palaniswami, 2010-2011, Funding: ARC

Automated detection and identification of marine organisms using sensor networks, University of Melbourne, Marimuthu Palaniswami, 2010-2011, Funding: ARC

HF radar applications on coral reefs, James Cook University, Mal Heron, Diane DiMassa, 2010-2012, Partner Institution(s): Massachusetts Maritime Academy, Funding: James Cook University, Massachusetts Maritime Academy, Bureau of Meteorology

Presence and residency of inshore teleosts within a scientific research zone, Australian Institute of Marine Science, Michelle Heupel, Mike Cappo

Longitudinal movement of *Tandanus tandanus* in the Pioneer R, QLD: the influence of flow and connectivity, Department of Environment and Resource Management, Jon Marshall, Stephen Balcombe, 2010-2011, Partner Institution(s): Griffith University

Reef rescue marine monitoring program, Commonwealth Scientific Industrial Research Organisation, Vittorio Brando, 2010-2010, Partner Institution(s): AIMS, JCU, Funding: Great Barrier Reef Marine Park Authority

Sub-tropical Queensland great white and bull shark tagging program, Queensland Fisheries, Jonathon Werry, 2010-2015, Partner Institution(s): Griffith University

Inter-annual variability in co-occurring kelp and coral assemblages on subtropical reefs in southeast Queensland, Commonwealth Scientific Industrial Research Organisation, Russ Babcock, 2010-2019, Funding: CSIRO

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

Next generation satellite tools for understanding change in coral reef ecosystems due to multiple global and local stressors, University of Queensland, Ove Hoegh-Guldberg, Sophie Dove, C. Mark Eakin, Ray Berkelmans, Scott Bainbridge, David Wachenfeld, 2011-2016, Partner Institution(s): University of Queensland, Australian Institute of Marine Science, Great Barrier Reef Marine Park Authority, NOAA, Funding: ARC Linkage Project

Understanding climate drivers and predicting the future for coastal Australian ecosystems, University of Tasmania, Peter Strutton, Jayson Semmens, Caleb Gardner, Gary Griffith, 2011-2013, Partner Institution(s): UWA, JCU, Funding: ANNIMS

An integrated examination of the drivers of movements of large filter feeding organisms of high ecotourism value: a case study, University of Queensland, Commonwealth Scientific Industrial Research Organisation, Mike Bennett, Kathy Townsend, Anthony Richardson, Scarla Weeks, 2011-2013, Partner Institution(s): Earthwatch, LEI Eco-Resort, Manta Lodge and Scuba Centre, Consolidated Rutile Limited, CSIRO, Funding: ARC Linkage Project



Changing ocean temperatures and movements of marine predators: the performance of marine protected areas in a warming ocean, James Cook University, Michelle Heupel, 2011-2015, Funding: ARC Future Fellowship

SeaDroid: low cost, real-time water temperature logging, National Oceanic and Atmospheric Administration, Jim Hendee, Tim Burgess, Scott Heron, Scott Bainbridge, 2011-2012, Partner Institution(s): Australian Institute of Marine Science, Funding: NOAA - National Oceanic and Atmospheric Administration

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

Image-based automated macrobenthic species identification, counting and sizing, University of Sydney, Commonwealth Scientific Industrial Research Organisation, University of Tasmania, Stefan Williams, Oscar Pizarro, Russ Babcock, Matthew Dunbabin, Neville Barrett, 2011-2014, Funding: SIEF Fellowship

Scientific support for managing Australia's marine biodiversity - a national marine biodiversity hub, University of Tasmania, Nicholas Bax, Chris Austin, Russ Babcock, Neville Barrett, Mark Bravington, Brendan Brooke, Julian Michael Caley, Piers Dunstan, Karen Edyvane, Peter Harris, Sarah Jennings, Gary Kendrick, Tim O'Hara, Sean Pascoe, Bob Pressey, Wendy Proctor, Tony Smith, Chris Wilcox, 2011-2015, Partner Institution(s): AIMS, CDU, CSIRO, GA, Museum Victoria, JCU, UTas, UWA, Funding: National Environmental Research Program (NERP)

Space-based national wireless sensor network, University of South Australia, Jeff Kasparian, 2011-2015, Partner Institution(s): CSIRO, Defence Science and Technology Organisation, Australian Institute of Marine Science, Sage Automation, Funding: Department of Industry, Innovation, Science, Research and Tertiary Education

Integration of Autonomous Underwater Vehicles (AUVs) and remote satellite sensing for automated and persistent monitoring, University of Queensland, Chris Roelfsema, Matthew Dunbabin, Russ Babcock, 2011-2013, Funding: CSIRO

Grey nurse shark research and community engagement program, Reef Check Australia, Carley Bansemer, Mike Bennett, Partner Institution(s): Moreton Bay Regional Office of DERM, Uni of Q and Fauna & Flora International Australia (FFI)

Drivers of juvenile shark biodiversity and abundance in inshore ecosystems of the Great Barrier Reef, James Cook University, Australian Institute of Marine Science, Michelle Heupel, Colin Simpfendorfer, Andrew Tobin, 2011-2014, Funding: National Environmental Research Program (NERP)

Maximising the benefits of mobile predators to GBR ecosystems: the importance of movement, habitat and environment, Australian Institute of Marine Science, James Cook University, Michelle Heupel, Colin Simpfendorfer, 2011-2014, Funding: National Environmental Research Program (NERP)

Moreton Bay acoustic consortium, University of Queensland, Commonwealth Scientific Industrial Research Organisation, National Electronics and Computer Technology Centre, Commonwealth Scientific Industrial Research Organisation, Department of Environment and Heritage Protection, Helen Marsh, 2011-2014, Funding: Australian Marine Mammal Foundation

Ocean carbon and acidification, Bronte Tilbrook, Andrew Lenton, Partner Institution(s): AIMS, UQ, USyd, UNSW, UWA, NOAA(USA) NIES(Japan), IPSL(France), Funding: Australian Climate Change Science Program (ACCSP), CSIRO

Shaping integrated monitoring for the Great Barrier Reef World Heritage Area, Paul Hedge, 2011-2015, Funding: National Environmental Research Program (NERP)

Coral sea connections, Australian Institute of Marine Science, A McKinnon, 2011-2014, Partner Institution(s): AIMS, CSIRO, Funding: Australian Institute of Marine Science

White shark population and abundance trends, Bary Bruce, 2011-2015, Funding: National Environmental Research Program (NERP)

Future Reef MAP, Bronte Tilbrook, 2012-2015, Funding: Rio Tinto Alcan, Great Barrier Reef Foundation, CSIRO

Diffusion on the sea surface, James Cook University, Mal Heron, 2012-2014, Funding: ARC

eReefs - enhanced monitoring, Commonwealth Scientific Industrial Research Organisation, Andreas Schiller, 2012-2013, Partner Institution(s): BOM, GBRF, Funding: Great Barrier Reef Foundation, SIEF Fellowship

The potential of using data-logging acoustic receivers to study the movements and residency patterns of dugongs in port environments: a comparison with satellite tracking, James Cook University, Helen Marsh, Partner Institution(s): CSIRO, Funding: Australian Marine Mammal Centre

Additional observations in support of eReefs, Commonwealth Scientific Industrial Research Organisation, Simon Allen, Partner Institution(s): CSIRO, AIMS, IMOS, Funding: CSIRO, Australian Institute of Marine Science, Integrated Marine Observing System (IMOS)

Australian marine microbial biodiversity initiative, Commonwealth Scientific Industrial Research Organisation, Lev Bodrossy, Partner Institution(s): CSIRO, UNSW, UTS, AIMS, SIMS

Towards and integrated study of the Gladstone marine system, Commonwealth Scientific Industrial Research Organisation, Russ Babcock, R Pillans, 2012-2014, Partner Institution(s): CSIRO, APLNG, Funding: GISERA

Ocean-shelf exchange with an emphasis on the roles of waves, tides, eddies and cross-shelf flows on carbon exchange, University of Tasmania, University of Western Australia, James Cook University, Roger Proctor, Charitha Pattiaratchi, Peter Ridd, 2012-2014, Funding: ANNIMS

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

Phytoplankton atlas of Australia, University of Tasmania, Gustaaf Hallegraeff, 2012-2015, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

Long-term changes in Vibrio bacteria, Luigi Vezzulli, 2012-2013, Funding: CSIRO

Assessing threats to marine biodiversity of the Ningaloo world heritage area, Mathew Vanderklift, Russ Babcock, 2012-2013, Funding: Caring For Our Country

Biological oceanography, University of Western Australia, Australian Institute of Marine Science, Commonwealth Scientific Industrial Research Organisation, Miles Furnas, A McKinnon, Anya Waite, Jim Greenwood, 2012-2015, Partner Institution(s): AIMS, UWA, CSIRO, Funding: Western Australian Marine Science Institution, Australian Institute of Marine Science, CSIRO

The IMOS plankton ecosystem assessment report, Commonwealth Scientific Industrial Research Organisation, Anthony Richardson, 2012-2013, Funding: CSIRO

Critical seabird foraging locations and trophic relationships for the Great Barrier Reef, James Cook University, Brad Congdon, 2012-2015, Partner Institution(s): UQ, AIMS, Funding: Australian Institute of Marine Science

Utilising the Capricorn Bunker HF radar, James Cook University, Lucy Wyatt, 2012-2012

eReefs - ReefTemp Next Generation, Bureau of Meteorology, Great Barrier Reef Marine Park Authority, Claire Spillman, Luke Garde, Oscar Alves, Funding: National Plan for Environmental Information (NPEI)

Resilience of Moreton Bay to climate change: links between nutrient inputs and plankton dynamics, Commonwealth Scientific Industrial Research Organisation, Anthony Richardson, 2012-2013, Partner Institution(s): Griffith University, Healthy Waterways Partnership, Queensland EPA, Funding: ARC Linkage Project

Zooplankton atlas of Australia, University of Tasmania, Kerrie Swadling, 2012-2012, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

South East Queensland integrated terrestrial to oceans research, University of Queensland, Andy Steven, Stuart Phinn, 2012-2013, Funding: Australian National Data Service (ANDS)

Enhanced monitoring in the GBR, Andy Steven, 2013-2016, Funding: Great Barrier Reef Foundation, CSIRO, SIEF Fellowship

eReefs - hydrodynamic modelling validation, BOM Queensland Regional Office, Arthur Simanjuntak, 2013-2014, Partner Institution(s): CSIRO, AIMS, Funding: Bureau of Meteorology

Autonomous benthic observing system, University of Western Australia, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Australian Institute of Marine Science, Department of Primary Industries, NSW, Stefan Williams, Oscar Pizarro, Gary Kendrick, Neville Barrett, Russ Babcock, Andrew Heyward, Alan Jordan, Partner Institution(s): University of Sydney, Funding: ARC LIEF

Climate-driven windblown dust and flood runoff can increase marine fungal diseases by fungal pathogens, University of Tasmania, Gustaaf Hallegraeff, Anthony Richardson, Funding: ARC Discovery Project

A transportable containerised laboratory for rapid cell sorting and high-resolution bioimaging of living aquatic microbes in field locations, University of New South Wales, Macquarie University, University of Western Australia, University of Tasmania, M Doblin, Justin Seymour, Peter Ralph, Saravanamuthu Vigneswaran, Cynthia Whitchurch, Partner Institution(s): University of Technology, Sydney, Funding: ARC LIEF

Physical oceanographic influences on Queensland reef fish and scallops, Queensland Department of Agriculture, Fisheries and Forestry, Tony (Anthony) Courtney, 2013-2015, Partner Institution(s): DAFF-BOM-CARM, Funding: Fisheries Research and Development Corporation

NRS regional WQM fluorescence characterisation, Commonwealth Scientific Industrial Research Organisation, L Clementson, Tim Lynch, 2014-2016, Funding: CSIRO

Upwelling and shelfbreak processes: the role of local and remote forcing in driving GBR exchanges, Australian Institute of Marine Science, Jessica Benthuisen, 2014-2016, Partner Institution(s): eReefs/IMOS, Funding: Australian Institute of Marine Science

A high resolution re-analysis for the East Australian Current, University of New South Wales, University of Hawaii, Colette Kerry, Moninya Roughan, Brain Powell, 2014-2015, Funding: US-NRL

eReefs DA - phase 2, Commonwealth Scientific Industrial Research Organisation, Emlyn Jones, 2014-2015, Partner Institution(s): BOM, AIMS

Australian national shelf reanalysis, Emlyn Jones, Moninya Roughan, Tim Moltmann, Andreas Schiller, Peter May, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

Freshening events and hypersaline conditions in the central Great Barrier Reef, Australian Institute of Marine Science, Jessica Benthuisen

Linking phytoplankton to fisheries using zooplankton size spectra, University of New South Wales, Iain Suthers, Laura Richardson, Mark Baird, Sagulenko Evgeny, 2015-2018, Partner Institution(s): ARC Discovery Project, Funding: University of New South Wales, ARC Discovery Project

Australian marine microbial biodiversity initiative, Lev Bodrossy, Mark Brown, Tim Moltmann, 2015-2017, Funding: Integrated Marine Observing System (IMOS), Bioplatforms Australia (BPA)

Ichthyoplankton long-term monitoring at National Reference Stations, University of Tasmania, Iain Suthers, Ana Lara-Lopez, Anthony Richardson, Kerrie Swadling, Tim Ward, 2015-2016, Funding: AFMA - Australian Fisheries Management Authority

Understanding the physical oceanographic drivers of a mass coral bleaching event AIMS research project, Australian Institute of Marine Science, Craig Steinberg, 2016-2017

NESP project 2.3.1 - benthic light as ecologically-validated GBR-wide indicator for water quality: drivers, thresholds and cumulative risks, Australian Institute of Marine Science, University of Queensland, James Cook University, Katrina Fabricius, 2016-2018, Partner Institution(s): National Environmental Science Programme (NESP)

Satellite detection of marine pollution in the Great Barrier Reef, Commonwealth Scientific Industrial Research Organisation, David Blondeau-Patissier, 2016-2019, Funding: Advance Queensland Fellowship

Great Barrier Reef resilience mapping, Commonwealth Scientific Industrial Research Organisation, Mark Baird, Scott Condie, 2017-2018, Partner Institution(s): AIMS, UQ, Funding: Great Barrier Reef Foundation

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NESP Tropical Water Quality Hub Project 3.2.1 – Deriving ecologically relevant load targets to meet desired ecosystem condition for the Great Barrier Reef: a case study for seagrass meadows in the Burdekin region, James Cook University, M Collier, Mark Baird, 2017-2019, Partner Institution(s): UQ, JCU, AIMS, Funding: National Environmental Science Program (NESP)

Scoping study to address poor water quality in the Whitsunday Region, Commonwealth Scientific Industrial Research Organisation, Mark Baird, Britta Schaffelke, 2017-2019, Partner Institution(s): AIMS, Funding: Department of Energy and Environment

NESP Tropical Water Quality Hub, Project 3.2.5 – Testing and implementation of the water quality metric for the 2017 and 2018 reef report cards, Great Barrier Reef Marine Park Authority, Britta Schaffelke, Mark Baird, 2017-2017, Funding: Department of Energy and Environment, National Environmental Science Program (NESP), CSIRO, Australian Institute of Marine Science, Queensland Government - Office of the Great Barrier Reef

Integrating biogeochemical modelling and ocean colour observations to quantify human impacts on water quality in the coastal ocean. CSIRO OCE postdoctoral fellowship, Commonwealth Scientific Industrial Research Organisation, Mark Baird, Emlyn Jones, Richard Matear, Thomas Schroeder, Funding: CSIRO

AIMS Bleaching response 201, Australian Institute of Marine Science, Line Bay, Neal Cantin, Katrina Fabricius, Craig Steinberg, 2017-2018

Assessment of any impacts of scuba divers on critically endangered Grey Nurse sharks, Queensland Parks and Wildlife Service, Great Barrier Reef and Marine PArks, Carley Bansemer, 2017-2018, Partner Institution(s): QLD Government, UQ, CSIRO, Funding: Burnett Mary Regional Group from Landcare Australia, Sea Life Trust, The Edge Pledge

Reef 2050 Integrated monitoring and reporting program strategy - Data Management and Systems Actions 3 and 5: Principles, protocols and characteristics for data management, University of Tasmania, Roger Proctor, 2017-2017, Partner Institution(s): UTAS, AIMS, CSIRO, JCU

NESP TWQ - Project 3.3.3 - Defining the values of the ecological systems that influence the GBR and lie outside the marine park and world heritage area boundaries, James Cook University, Johanna Johnson, Funding: James Cook University, University of Queensland, Australian Institute of Marine Science, National Environmental Science Program (NESP)

Trichodesmium on the Great Barrier Reef: A comparison of information observations, satellite and modelling, Australian Institute of Marine Science, Commonwealth Scientific Industrial Research Organisation, Barbara Robson, Jenny Skerratt, David Blondeau-Patissier, Edward King, Claire Davies, Ruth Eriksen, Anthony Richardson, 2018-2018, Funding: Australian Institute of Marine Science, CSIRO

Develop/enhance the Marine Virtual Laboratory (MARVL) to provide the information infrastructure in support of the national ocean modelling system, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): BOM (Oceans), BOM (water), NCI, SARDI, TPAC, UWA, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Building services for Australian marine data discovery, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): AAD, AIMS, CSIRO (O&A linkage + OBIS), CSIRO (ALA linkage + OBIS), Geoscience Australia, GreyBits Engineering, SIMS, TERN, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

NESP Tropical Water Quality Hub Project 4.2 - Oceanographic drivers of bleaching in the GBR: from observations to prediction, Marine and Tropical Sciences Research Facility, Craig Steinberg, 2018-2020

Oceanographic drivers of bleaching in the GBR: from observations to prediction (Project 4.2), Australian Institute of Marine Science, Craig Steinberg, 2018-2021, Funding: National Environmental Science Program (NESP), Australian Institute of Marine Science, CSIRO

**Project Count**

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Estimating and maximising the survival of key species released by recreational fishers in NSW, Industry and Investment New South Wales, Matt Broadhurst, 2003-2012

"Fishtrack": effects of flows and barriers on the distribution, abundance, movements and migration of freshwater fishes in the Clarence River System, Industry and Investment New South Wales, Stuart Rowland, Gavin Butler, 2006-2011

Great white shark tagging project, Industry and Investment New South Wales, Nick Otway, 2006-2007

Grey nurse shark South-East Australian Coastal Acoustic Monitoring System (SEACAMS), Industry and Investment New South Wales, Nick Otway, 2006-2008

Movements and biology of coastal sharks in NSW, Industry and Investment New South Wales, Amy Smoothey, Vic Peddemors, 2007-2012

Quantifying the role of salps in marine food webs and organic carbon export, University of New South Wales, Iain Suthers, Funding: ARC Discovery Project

Autonomous exploration and characterization of benthic habitats linked to oceanographic processes, University of Sydney, Stefan Williams, 2008-2010, Funding: ARC Discovery Project

Movements and ecological interactions of key fish species in estuaries and coastal waters of NSW, Industry and Investment New South Wales, Charles Gray, 2008-2013

Offshore artificial reefs research program, Industry and Investment New South Wales, Micheal Lowry, 2009-2013

Assessment of barotrauma and its mitigation measures on the behaviour and survival of offshore species in NSW, Industry and Investment New South Wales, John Stewart, 2009-2012, Partner Institution(s): University of Western Sydney

Coastal cold core eddies of the East Australian Current and their fisheries potential, University of New South Wales, Iain Suthers, Funding: ARC Discovery Project

Assessing the adequacy and effectiveness of eastern blue groper protection within Bronte-Coogee Aquatic Reserve utilising habitat mapping and acoustic monitoring techniques, Department of Environment, Climate Change and Water, Macquarie University, T MacDonald, Charlie Huvneers, Rob Harcourt, 2009-2011, Partner Institution(s): Sydney Institute for Marine Science, Macquarie University, SARDI, Flinders University, Randwick Council, Waverly Council, Funding: Caring for Coasts

Machine assisted, multi-scale spatial and temporal observation and modelling of marine benthic habitats, University of Sydney, Stefan Williams, Maria Bryne, Will Figueria, Neville Barrett, 2010-2013, Partner Institution(s): University of Tasmania, Funding: ARC Super Science Fellowship

Autonomous repeatable surveys for long term monitoring of marine habitats, University of Sydney, Stefan Williams, Oscar Pizarro, Michael Jakuba, Mitchell Bryson, 2010-2013, Partner Institution(s): Thales Australia Pty. Ltd., Funding: ARC Linkage Project

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

Cross shelf processes and nutrient enrichment in the East Australian Current regime, University of New South Wales, Amandine Schaeffer, Moninya Roughan, 2010-2015

Feeding and breeding: the role of hydrology in habitat use, fidelity and connectivity of iconic temperate fishes, University of New South Wales, Matt Taylor, Iain Suthers, 2010-2013, Partner Institution(s): NSW I&I, UTS, Invasive Animals CRC, Funding: ARC Linkage Project

Profiling the biology and fishery of rock blackfish (*Girella elevata*) in the Sydney region, Department of Primary Industries, NSW, Charles Gray, Matt Taylor, 2010-2013, Partner Institution(s): UNSW

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Movements and habitat use of luderick within Jervis Bay Marine Park, New South Wales Marine Parks Authority, Nathan Knott, Matt Taylor, 2010-2011, Partner Institution(s): UNSW, UWA, NSW DPI, Funding: New South Wales Marine Parks Authority

Near-shore habitat use by juvenile white sharks in coastal waters off Port Stephens, Commonwealth Scientific Industrial Research Organisation, Bary Bruce, Russell Bradford, 2010-2011, Partner Institution(s): Hunter-Central rivers CMA, Port Stephens Great Lakes Marine Park, Funding: Tag for life

Cost-effective autonomous systems for large scale monitoring of marine protected areas, University of Sydney, Oscar Pizarro, Stefan Williams, Michael Jakuba, Ryan Eustice, Louis Whitcomb, 2010-2014, Partner Institution(s): University of Michigan, Johns Hopkins University, Funding: ARC Discovery Project, QEII Fellowship

Stress, virulence and bacterial disease in temperate seaweeds: the rise of the microbes, University of New South Wales, Peter Steinberg, S Kjelleberg, T Thomas, S Egan, Melinda Coleman, 2010-2013, Funding: ARC Linkage Project

Virulence and bacterial disease in temperate seaweeds. The rise of the microbes, University of New South Wales, Ezequiel Marzinelli, Funding: NSW State Government, ARC Future Fellowship

Multi-scale recognition: generating meaning from multi-resolution data, University of Sydney, Bertrand Douillard, Funding: ARC APD Fellow

Demography and interannual variability of salp swarms, University of New South Wales, Natasha Henschke, Jason Everett, M Doblin, Kylie Pitt, Anthony Richardson, Iain Suthers, 2011-2014, Funding: Commonwealth Government

A Laser Optical Plankton Counter (L-OPC) for laboratory or in situ size distributions of zooplankton: ecological dynamics of a changing East Australian Current, University of New South Wales, Iain Suthers, Anthony Richardson, M Doblin, Funding: ARC LIEF

Image-based automated macrobenthic species identification, counting and sizing, University of Sydney, Commonwealth Scientific Industrial Research Organisation, University of Tasmania, Stefan Williams, Oscar Pizarro, Russ Babcock, Matthew Dunbabin, Neville Barrett, 2011-2014, Funding: SIEF Fellowship

White shark population and abundance trends, Bary Bruce, 2011-2015, Funding: National Environmental Research Program (NERP)

Eddies and upwelling: using satellite datasets to examine patterns in chlorophyll a adjacent to the East Australian Current, University of Technology Sydney, Jason Everett

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

Effects of climate change on temperate benthic assemblages on the continental shelf in eastern Australia, University of Tasmania, Craig Johnson, Neil Holbrook, Neville Barrett, Peter Steinberg, 2011-2014, Partner Institution(s): University of New South Wales, Funding: ARC Super Science Fellowship

Ocean carbon and acidification, Bronte Tilbrook, Andrew Lenton, Partner Institution(s): AIMS, UQ, USyd, UNSW, UWA, NOAA(USA) NIES(Japan), IPSL(France), Funding: Australian Climate Change Science Program (ACCSP), CSIRO

Assessing the efficacy of small marine protected areas for the conservation of eastern blue groper and wobbegong sharks, Macquarie University, Rob Harcourt, 2011-2012, Partner Institution(s): DECCW, I & I, Funding: Seaworld Research and Rescue Foundation

Model benthic habitat and assemblage distribution using data derived from AUV, BUV and swath acoustic mapping in and around NSW marine parks, University of Sydney, Renata Ferrari, Partner Institution(s): NSW DPI, Funding: NSW State Government

Zooplankton atlas of Australia, University of Tasmania, Kerrie Swadling, 2012-2012, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

Phytoplankton atlas of Australia, University of Tasmania, Gustaaf Hallegraeff, 2012-2015, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

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Do coastal currents feed the harvest from purpose-built, offshore artificial reefs?, University of New South Wales, Sydney Institute for Marine Science, Iain Suthers, Micheal Lowry, Matt Taylor, Moninya Roughan, Emma Johnston, Charles Gray, 2012-2015, Funding: ARC Linkage Project, Department of Primary Industries, NSW

The krill pump: transferring carbon across a layered ocean in a changing, University of New South Wales, Iain Suthers, Funding: ARC Discovery Project

NERP Solitary Island survey, Department of Primary Industries, NSW, Alan Jordan, Partner Institution(s): USyd, UTAS

Marine video, University of Sydney, Stefan Williams, Partner Institution(s): UWA, UTAS, UNSW, CSIRO, AIMS, Funding: Australian National Data Service (ANDS)

Movement of Port Jackson Sharks, Macquarie University, Christopher Brown, Nathan Knott, 2012-2020, Partner Institution(s): Taronga Conservancy Society, Fisheries NSW, Funding: ARC Linkage Project, Taronga Zoo, Seaworld Research and Rescue Foundation, Woolworths

Australian marine microbial biodiversity initiative, Commonwealth Scientific Industrial Research Organisation, Lev Bodrossy, Partner Institution(s): CSIRO, UNSW, UTS, AIMS, SIMS

Deep water kelp forests; benthic biodiversity in marine parks in NSW, Sydney Institute for Marine Science, University of New South Wales, Ezequiel Marzinelli

Coastal carbon collaboration cluster, Commonwealth Scientific Industrial Research Organisation, Andy Steven, 2012-2015, Partner Institution(s): CSIRO, UTS, UWA, SCU, JCU, UNSW

Delivering information suitable for studying spatial and temporal variability in benthic habitats using autonomous underwater vehicles, University of Sydney, Stefan Williams, Funding: ARC Future Fellowship

Long-term changes in Vibrio bacteria, Luigi Vezzulli, 2012-2013, Funding: CSIRO

The IMOS plankton ecosystem assessment report, Commonwealth Scientific Industrial Research Organisation, Anthony Richardson, 2012-2013, Funding: CSIRO

Offshore artificial reefs, Industry and Investment New South Wales, Iain Suthers, Matt Taylor, 2013-2016, Funding: ARC Linkage Project

Autonomous benthic observing system, University of Western Australia, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Australian Institute of Marine Science, Department of Primary Industries, NSW, Stefan Williams, Oscar Pizarro, Gary Kendrick, Neville Barrett, Russ Babcock, Andrew Heyward, Alan Jordan, Partner Institution(s): University of Sydney, Funding: ARC LIEF

A transportable containerised laboratory for rapid cell sorting and high-resolution bioimaging of living aquatic microbes in field locations, University of New South Wales, Macquarie University, University of Western Australia, University of Tasmania, M Doblin, Justin Seymour, Peter Ralph, Saravanamuthu Vigneswaran, Cynthia Whitchurch, Partner Institution(s): University of Technology, Sydney, Funding: ARC LIEF

Topological, statistical and signal-theoretic methods for identifying Lagrangian coherent structures in the East Australian Current, University of New South Wales, Shane Keating, 2013-2013, Partner Institution(s): SIMS, Funding: University of New South Wales

Incorporating new knowledge of phytoplankton diversity and nutrient utilisation into an ocean-climate model to improve forecasts of ocean function, M Doblin, Shauna Murray, Richard Matear, B Hutchins, 2014-2016, Funding: ARC

Finding the shadows using the eyes of gliders, Robin Robertson, Funding: ADFA

Drivers of primary production in eastern Australia, University of Technology Sydney, M Doblin, 2014-2015, Partner Institution(s): CSIRO, Funding: CSIRO Marine and Coastal Carbon Biogeochemistry

A high resolution re-analysis for the East Australian Current, University of New South Wales, University of Hawaii, Colette Kerry, Moninya Roughan, Brain Powell, 2014-2015, Funding: US-NRL

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Social interactions and migration patterns of Port Jackson sharks, Macquarie University, Culum Brown, Tristan Guttridge, Joanna Wiszniewski, Marlin Gregor, Nathan Knott, 2014-2017, Funding: ARC Linkage Project

Advancing dynamical understanding in the East Australian Current: optimising the ocean observation and prediction effort, Sydney Institute for Marine Science, Moninya Roughan, 2014-2016, Funding: ARC

Productivity in the East Australian Current, University of New South Wales, Moninya Roughan, Amandine Schaeffer

Social networking in a changing ocean: microbial-scale ecological interactions control ocean-scale chemistry, DP140101045, Justin Seymour, et al., 2014-2016

Australian national shelf reanalysis, Emlyn Jones, Moninya Roughan, Tim Moltmann, Andreas Schiller, Peter May, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

NRS regional WQM fluorescence characterisation, Commonwealth Scientific Industrial Research Organisation, L Clementson, Tim Lynch, 2014-2016, Funding: CSIRO

Time series of primary productivity at the Port Hacking National Reference station, University of Technology Sydney, M Doblin, Virginie van Dongen-Vogels, 2014-2016, Partner Institution(s): OEH, Funding: CSIRO, Marine and coastal carbon biogeochemistry cluster

A uniquely Integrated approach to predicting Fisheries Recruitment, University of New South Wales, Moninya Roughan, 2015-2018, Funding: ARC Linkage Project

Coastal radar observations of frontal eddies in the Tasman Sea, University of New South Wales, Moninya Roughan, Shane Keating, Iain Suthers, Matt Archer, 2015-2017, Funding: NSW Research Attraction and Acceleration Program

Shark movements linked to oceanography, Rob Harcourt, Vic Peddemors, Moninya Roughan, Kate Lee, 2015-2017, Funding: NSW Research Attraction and Acceleration Program

Reflections on sonar, University of New South Wales, Robin Robertson, Funding: ADFA

Ocean Mixing Matters, University of New South Wales, Robin Robertson, Partner Institution(s): Defence Related Research Project

Ichthyoplankton long-term monitoring at National Reference Stations, University of Tasmania, Iain Suthers, Ana Lara-Lopez, Anthony Richardson, Kerrie Swadling, Tim Ward, 2015-2016, Funding: AFMA - Australian Fisheries Management Authority

Australian marine microbial biodiversity initiative, Lev Bodrossy, Mark Brown, Tim Moltmann, 2015-2017, Funding: Integrated Marine Observing System (IMOS), Bioplatforms Australia (BPA)

Linking phytoplankton to fisheries using zooplankton size spectra, University of New South Wales, Iain Suthers, Laura Richardson, Mark Baird, Sagulenko Evgeny, 2015-2018, Partner Institution(s): ARC Discovery Project, Funding: University of New South Wales, ARC Discovery Project

A unique integrated approach to predicting fisheries recruitment, LP150100064, Moninya Roughan, Andrew Jeffs, G Liggins, Melinda Coleman, 2016-2018

Ocean Weather Forecasting, University of New South Wales, Moninya Roughan, Colette Kerry, Shane Keating, Brain Powell, William Johns, 2017-2020, Partner Institution(s): OCEANOGRAPHIC FIELD SERVICES PTY LTD; MetOcean Solutions Ltd; University of Hawaii at Manoa, USA, Funding: ARC Linkage Project

Key-stone microbes and planktonic guilds in the Australian ocean, University of Technology Sydney, Mark Brown, Justin Seymour, Martin Ostrowski, J Fuhrman, Murray Levine, R Edwards, Lev Bodrossy, Partner Institution(s): DP170101925, Funding: ARC Discovery Project

Identifying Galapagos shark movement patterns, interactions with fishing vessels and residency in Lord Howe Island Marine Park, University of Western Australia, Jonathan Mitchell, Vic Peddemors, S Gudge, Timothy Langlois, D McLean, 2017-2020, Partner Institution(s): NSW DPI, UWA, IMOS ATF, NSW Marine Parks, Funding: NSW Recreational Fisheries Trust



Increasing participation in ocean science through data visualization, University of Sydney, M Doblin, K Sweetapple, J Lorber-Kasunic, Funding: Department of Industry, Innovation, Science, Research and Tertiary Education

Develop/enhance the Marine Virtual Laboratory (MARVL) to provide the information infrastructure in support of the national ocean modelling system, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): BOM (Oceans), BOM (water), NCI, SARDI, TPAC, UWA, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Building services for Australian marine data discovery, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): AAD, AIMS, CSIRO (O&A linkage + OBIS), CSIRO (ALA linkage + OBIS), Geoscience Australia, GreyBits Engineering, SIMS, TERN, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Teasing apart phytoplankton-bacteria relationships, University of Technology Sydney, Justin Seymour, Jean-Baptiste Raina, Penny Ajani, Roman Stocker, 2018-2021, Partner Institution(s): Swiss Federal Institute of Technology, Zurich; New York University, Funding: ARC Discovery Project

**Project Count**

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## Southern Australian Integrated Marine Observing System

Prawn and crab harvest optimisation: a bio-physical management tool, South Australian Research and Development Institute, Lachlan McLeay, 2008-2015, Partner Institution(s): SA Government, Funding: Fisheries Research and Development Corporation, South Australian Research and Development Institute

A hydrodynamic/biogeochemical modelling facility for S.A., South Australian Research and Development Institute, John Middleton, 2008-2014, Partner Institution(s): Marine Innovation S.A., Flinders University, Funding: Marine Innovation S.A.

What size do marine protected area sanctuary zones need to be in order to protect the near-threatened Western Blue Groper and Harlequin Fish? , Department of Environment and Natural Resources, Simon Bryars, Paul Rogers, Charlie Huveneers, 2009-2010, Partner Institution(s): Flinders University, Funding: Department of Environment and Natural Resources, SA, South Australian Research and Development Institute

Carrying capacity for Spencer Gulf, South Australian Research and Development Institute, John Middleton, 2009-2013, Partner Institution(s): Fisheries research and Development Corporation, Flinders University, Funding: South Australian Research and Development Institute

The aggregative behaviour of snapper (*Chrysophrys auratus*) and their interactions with white sharks (*Carcharodon carcharias*), South Australian Research and Development Institute, Anthony Fowler, Charlie Huveneers, Mike Steer, 2009-2010

The effects of berley on the distribution and behaviour of white sharks at the Neptune Islands, SA, Commonwealth Scientific Industrial Research Organisation, Bary Bruce, Russell Bradford, 2009-2011, Funding: Department of Environment and Natural Resources, SA, Calypso Star Charters

Understanding the residence time and movement patterns of whaler sharks (*Carcharhinus* spp.) along the Adelaide metropolitan beaches, South Australian Research and Development Institute, Flinders University, Charlie Huveneers, Paul Rogers, Simon Goldsworthy, 2010-2014, Partner Institution(s): DEWNR, Adelaide and Mt Lofty Range NRM Board

Acoustic telemetry in Northern Spencer Gulf, South Australia: understanding the spawning aggregative behaviour of snapper (*Chrysophrys auratus*) and their interactions with white sharks (*Carcharodon carcharias*), South Australian Research and Development Institute, Flinders University, Charlie Huveneers, 2010-2011

Movement and home ranges of the Harlequin Fish, Department of Environment and Natural Resources, Simon Bryars, 2010-2011, Partner Institution(s): SARDI, Flinders University, University of Adelaide

Acoustic telemetry in Northern Gulf St. Vincent, South Australia: contributions to understanding the movement behaviour of snapper (*Chrysophrys auratus*) and whaler and white sharks (*Carcharhinus* sp. and *Carcharodon carcharias*), South

Australian Research and Development Institute, Anthony Fowler, Charlie Huveneers, 2011-2012, Partner Institution(s): Flinders University, Funding: South Australian Research and Development Institute

Spencer Gulf Research Initiative: Development of an Ecosystem Model for Fisheries and Aquaculture, University of Adelaide, South Australian Research and Development Institute, Bronwyn Gillanders, Simon Goldsworthy, John Middleton, Mark Doubell, 2011-2014, Partner Institution(s): FRDC Proj. No. 2011/205, UOA, SARDI, Funding: Fisheries Research and Development Corporation

Monitoring Threatened, Endangered and Protected shark species and species of conservation concern within the Adelaide metropolitan region, South Australian Research and Development Institute, Flinders University, Charlie Huveneers, 2011-2014, Funding: Neiser Foundation, Adelaide and Mt Lofty Ranges NRM Board

Ocean carbon and acidification, Bronte Tilbrook, Andrew Lenton, Partner Institution(s): AIMS, UQ, USyd, UNSW, UWA, NOAA(USA) NIES(Japan), IPSL(France), Funding: Australian Climate Change Science Program (ACCSP), CSIRO

Southern Australian Integrated Marine Observing System (SAIMOS) - biological survey and data QA/QC, Flinders University, Royal Netherlands Institute, National Oceanography Centre, Station Biologique, Sophie Leterme, Corina Brussaard, Mike Zubkov, Nathalie Simon

New pathways of exchange at the mouth of Spencer Gulf: double diffusion., South Australian Research and Development Institute, Griffith University, Mark Doubell, John Middleton, Charles Lemkert

The IMOS plankton ecosystem assessment report, Commonwealth Scientific Industrial Research Organisation, Anthony Richardson, 2012-2013, Funding: CSIRO

Long-term changes in Vibrio bacteria, Luigi Vezzulli, 2012-2013, Funding: CSIRO

Phytoplankton atlas of Australia, University of Tasmania, Gustaaf Hallegraeff, 2012-2015, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

Zooplankton atlas of Australia, University of Tasmania, Kerrie Swadling, 2012-2012, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

The influence of fish movement on regional fishery production and stock structure for snapper (*Pagrus auratus*) in south eastern Australia, South Australian Research and Development Institute, Anthony Fowler, Charlie Huveneers, Mike Steer, 2012-2014, Funding: Fisheries Research and Development Corporation

South Australian gulfs data scoping and collation, University of Adelaide, Bronwyn Gillanders, 2012-2013, Partner Institution(s): MISA, Funding: Integrated Marine Observing System (IMOS)

Autonomous benthic observing system, University of Western Australia, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Australian Institute of Marine Science, Department of Primary Industries, NSW, Stefan Williams, Oscar Pizarro, Gary Kendrick, Neville Barrett, Russ Babcock, Andrew Heyward, Alan Jordan, Partner Institution(s): University of Sydney, Funding: ARC LIEF

A transportable containerised laboratory for rapid cell sorting and high-resolution bioimaging of living aquatic microbes in field locations, University of New South Wales, Macquarie University, University of Western Australia, University of Tasmania, M Doblin, Justin Seymour, Peter Ralph, Saravanamuthu Vigneswaran, Cynthia Whitchurch, Partner Institution(s): University of Technology, Sydney, Funding: ARC LIEF

Understanding the decline of the little penguins in South Australia, Flinders University, Diane Colombelli-Negrel, Partner Institution(s): NRM Boards (Adelaide and Mt Lofty Ranges Board and Kangaroo Island Board), Funding: Adelaide and Mt Lofty Ranges NRM Board, Department of Environment and Natural Resources, SA, Nature Foundation of South Australia, Lirabenda Endowment Research Fund, Birds SA, The Nature Conservation

Adelaide coastal waters modelling, SA water capital project C0738, South Australia Water, DAMCO Consulting and Deltares, Milena Fernandes, Rob Daly, Paul Erftemeijer, Jos van Gils, 2013-2016, Funding: South Australia Water Asset Management Program

Biological nitrogen fixation in the Australian marine environment: the Southern Australian region, University of Technology Sydney, South Australian Research and Development Institute, Lauren Messer, Justin Seymour, Mark Doubell, Partner

Institution(s): UTS, SARDI, Funding: ARC

Global climate influence on local oceanography and southern bluefin tuna fishing patterns in the Great Australian Bight, Southern Bluefin Tuna Industry Association, Kirstin Rough, Page Eveson, Alastair Hobday, Jessica Farley, Mark Doubell, Partner Institution(s): CSIRO, SARDI, Funding: CSIRO, South Australian Research and Development Institute

Great Australian Bight collaborative science program, South Australian Research and Development Institute, Tim Ward, 2013-2016, Partner Institution(s): Marine Innovation South Australia (MISA), CSIRO, British Petroleum, SARDI

Physical oceanography in GAB: the science that underpins, Department of Primary Industries SA, South Australian Research and Development Institute, John Luick, J Luetchrford, 2013-2017, Partner Institution(s): CSIRO, Funding: BP

Monitoring the effects of the South Australian white shark cage-diving industry, South Australian Research and Development Institute, Flinders University, Woods Hole Oceanographic Institute, Charlie Huveneers, Paul Rogers, Simon Goldsworthy, 2013-2016, Funding: Department of Environment and Natural Resources, SA

The Great Australian Bight research program: project 4.1. Status, distribution and abundance of iconic species and apex predators in the Great Australian Bight, South Australian Research and Development Institute, Flinders University, Simon Goldsworthy, Alice Mackay, Luciana Moller, Guido Para, Paul Rogers, 2014-2017, Funding: BP, South Australian Research and Development Institute, Flinders University

The Great Australian Bight research program, project 1.2, waves, South Australian Research and Development Institute, Commonwealth Scientific Industrial Research Organisation, David Griffin, John Middleton, 2014-2017, Funding: BP, CSIRO, South Australian Research and Development Institute

Operational oceanography for oil and gas exploration in the Great Australian Bight: British Petroleum, Oliver Jones, 2014-2017, Partner Institution(s): BP, Funding: BP

NRS regional WQM fluorescence characterisation, Commonwealth Scientific Industrial Research Organisation, L Clementson, Tim Lynch, 2014-2016, Funding: CSIRO

The Great Australian Bight Research Program, Project 2.2 Characterise variation in offshore/slope microbial, plankton and micronekton communities in the Great Australian Bight, South Australian Research and Development Institute, Commonwealth Scientific Industrial Research Organisation, Rudy Kloster, Paul van Ruth, Mark Doubell, Anthony Richardson, 2014-2017, Partner Institution(s): CSIRO, SARDI, Funding: BP, CSIRO, South Australian Research and Development Institute

The Great Australian Bight research program: project 2.1. Spatial and temporal variation in shelf microbial and plankton communities in the Great Australian Bight, South Australian Research and Development Institute, Commonwealth Scientific Industrial Research Organisation, Paul van Ruth, R McGarvey, Tim Ward, Anthony Richardson, 2014-2017, Funding: BP, CSIRO, South Australian Research and Development Institute

The Great Australian Bight research program, project 1.1, oceanography: the science that underpins, South Australian Research and Development Institute, Commonwealth Scientific Industrial Research Organisation, John Middleton, David Griffin, 2014-2017, Funding: BP, CSIRO, South Australian Research and Development Institute

The Great Australian Bight research program: project 4.2. Identifying areas of ecological significance for iconic species and apex predators in the great Australian Bight, South Australian Research and Development Institute, Commonwealth Scientific Industrial Research Organisation, Simon Goldsworthy, Fred Bailleul, Toby Patterson, 2014-2017, Funding: BP, South Australian Research and Development Institute, Flinders University

The Great Australian Bight research program: project 7.1. Knowledge integration of socio-ecological systems of the Great Australian Bight, South Australian Research and Development Institute, Commonwealth Scientific Industrial Research Organisation, Tim Ward, Cathy Bulman, Elizabeth Fulton, Simon Goldsworthy, 2014-2017, Funding: BP, CSIRO

Optimising the size and quality of sardines through real-time harvest monitoring, South Australian Research and Development Institute, South Australian Sardine Industry Association, Mark Doubell, John Middleton, Tim Ward, Graham Watson, 2014-2015, Partner Institution(s): SARDI, SASIA, Funding: Australian Seafood Cooperative Research Centre

The Great Australian Bight research project, South Australian Research and Development Institute, Commonwealth Scientific Industrial Research Organisation, John Middleton, David Griffin, 2014-2017, Partner Institution(s): CSIRO, SARDI,

Funding: BP, CSIRO, South Australian Research and Development Institute, Flinders University, University of Adelaide

Australian national shelf reanalysis, Emlyn Jones, Moninya Roughan, Tim Moltmann, Andreas Schiller, Peter May, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

Tuna and finfish aquaculture environmental program 2015/16 to 2018/19, South Australian Research and Development Institute, Maylene Loo, Mark Doubell, 2015-2019, Funding: PIRSA Fisheries and Aquaculture

Optimising the size and quality of sardines through real-time harvest monitoring: CRC Project No. 2013/746, South Australian Research and Development Institute, Mark Doubell, Tim Ward, Paul Watson, Charles James, Jonathan Carrol, Ana Redondo-Rodriguez, Funding: CRC Seafood

Modelling of oceanographic variables for the development of additional finfish aquaculture in Spencer gulf, South Australian Research and Development Institute, Mark Doubell, Charles James, John Middleton, Funding: Clean Seas Tuna

Australian marine microbial biodiversity initiative, Lev Bodrossy, Mark Brown, Tim Moltmann, 2015-2017, Funding: Integrated Marine Observing System (IMOS), Bioplatforms Australia (BPA)

Environmental monitoring to improve understanding of oyster performance, Paul van Ruth, 2015-2017, Funding: Eyre Peninsula NRM Board, South Australian Oyster Growers Association, South Australian Oyster Research Council

Linking phytoplankton to fisheries using zooplankton size spectra, University of New South Wales, Iain Suthers, Laura Richardson, Mark Baird, Sagulenko Evgeny, 2015-2018, Partner Institution(s): ARC Discovery Project, Funding: University of New South Wales, ARC Discovery Project

Applications of tracking technologies to understand patterns of movement, residency and habitat use of pelagic sharks in Spencer Gulf: resolving overlaps with community activities and marine industries, South Australian Research and Development Institute, Paul Rogers, 2015-2017, Funding: Fisheries Research and Development Corporation

Monitoring the effects of the South Australian white shark cage-diving industry, South Australian Research and Development Institute, Charlie Huveneers, 2016-2019, Funding: Department of Environment and Natural Resources, SA

eSA-Marine: Phase I: the first step towards an operational now-cast/forecast model ocean prediction system for Southern Australia (FRDC 2016/005), John Middleton, et al., 2016-2017, Funding: Fisheries Research and Development Corporation

Acoustic monitoring of large predators in South Australian Marine Parks, Flinders University, Charlie Huveneers, 2017-2019, Funding: Department of Environment and Natural Resources, SA, Victor Harbor Council, Oceanic Victor

Develop/enhance the Marine Virtual Laboratory (MARVL) to provide the information infrastructure in support of the national ocean modelling system, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): BOM (Oceans), BOM (water), NCI, SARDI, TPAC, UWA, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Building services for Australian marine data discovery, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): AAD, AIMS, CSIRO (O&A linkage + OBIS), CSIRO (ALA linkage + OBIS), Geoscience Australia, GreyBits Engineering, SIMS, TERN, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

**Project Count**

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## Western Australian Integrated Marine Observing System

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

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

Habitat use and migration patterns of silvertip and grey reef sharks at the Rowley Shoals, Western Australia, Macquarie University, University of Adelaide, Iain Field, Mark Meekan, Corey Bradshaw, 2007-2009

WAMSI Node 3 Ningaloo research program: diversity, abundance and habitat utilisation of sharks and rays., John Stevens, Peter Last, W White, Rob McCauley, Mark Meekan

WAMSI node 3 Ningaloo research program: adequacy of zoning in the Ningaloo marine park, R Pillans, Russ Babcock, James Patterson, Jason How, G Hyndes

Deployment of ocean gliders as part of WAIMOS, University of Western Australia, Charitha Pattiaratchi, 2008-2011, Partner Institution(s): WAMSI, Funding: Western Australian Marine Science Institution

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

Animations of raw temperature and anomalies for all Commonwealth Marine Reserves to inform the review and revision, in particular, of management plans for the following Reserves: Ashmore, Cartier, Ningaloo, and Mermaid, University of Melbourne, Jeffrey Maynard

Transient coastal upwelling along ningaloo reef project , University of Western Australia, Gregory Ivey, Ryan Lowe, Charitha Pattiaratchi, 2009-2011, Funding: ARC

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

New insights from ocean gliders - comparing oceanographic forcing of phytoplankton dynamics in two very different Eastern Boundary Current regions, University of Western Australia, University of Washington, Christine Hanson, Peter Rhines, Funding: University of Western Australia

AUV Data Analysis for Predictability in Time-Evolving Regimes (ADAPTER), Naval Resesarch Lab, Jeff Book, 2010-2012, Partner Institution(s): UWA, AIMS, Funding: US-NRL

Establishment of a cost-effective monitoring program to detect changes in the structure of benthic invertebrate and macroalgae assemblages in the west coast Bioregion, University of Western Australia, University of Sydney, Dan Smale, Gary Kendrick, Euan Harvey, 2010-2013, Funding: Western Australian Marine Science Institution

Management implications of climate change on fisheries in WA, Fisheries Research & Development Corporation, Nick Caputi, Ming Feng, 2010-2013, Partner Institution(s): Dep of Fisheries WA, CSIRO

Environmental factors affecting the low puerulus settlements, Fisheries Research & Development Corporation, Nick Caputi, Ming Feng, 2010-2013, Partner Institution(s): Dep of Fisheries, CSIRO

Scientific support for managing Australia's marine biodiversity - a national marine biodiversity hub, University of Tasmania, Nicholas Bax, Chris Austin, Russ Babcock, Neville Barrett, Mark Bravington, Brendan Brooke, Julian Michael Caley, Piers Dunstan, Karen Edyvane, Peter Harris, Sarah Jennings, Gary Kendrick, Tim O'Hara, Sean Pascoe, Bob Pressey, Wendy Proctor, Tony Smith, Chris Wilcox, 2011-2015, Partner Institution(s): AIMS, CDU, CSIRO, GA, Museum Victoria, JCU, UTas, UWA, Funding: National Environmental Research Program (NERP)

Sediment dynamics in muddy estuaries, Australian Defence Force Academy, Australian Institute of Marine Science, International Petroleum Exploration Corporation, David Williams, Xiao Hua Wang, 2011-2014, Funding: ADFA, Australian Institute of Marine Science, Oceanology Institute China, INPEX

Importance of internal waves in the stimulation of primary productivity at Ningaloo Reef, University of Western Australia, Australian Institute of Marine Science, Ryan Lowe, Nicole Jones, Richard Brinkman, Peter Strutton, Jim Falter, Gregory Ivey, 2011-2012, Partner Institution(s): UWA, AIMS, UTas, Funding: ANNIMS

Acoustic tracking of top-order predators on offshore coral atolls of the NW Shelf, Australian Institute of Marine Science, Macquarie University, University of Western Australia, Mark Meekan, Rob Harcourt, 2011-2016

Understanding climate drivers and predicting the future for coastal Australian ecosystems, University of Tasmania, Peter Strutton, Jayson Semmens, Caleb Gardner, Gary Griffith, 2011-2013, Partner Institution(s): UWA, JCU, Funding: ANNIMS

Project 2: analysis of approaches for monitoring biodiversity in Commonwealth waters, Commonwealth Scientific Industrial Research Organisation, University of Tasmania, Keith Hayes, Jeffrey Dambacher, Emma Lawrence, Russ Babcock, Rhys Leeming, Alan Williams, Neville Barrett, Nicole Hill, Vanessa Lucieer, Gary Kendrick, Euan Harvey, Scott Nichol, 2011-2014, Partner Institution(s): AIMS, CSIRO, GA, UTAS, UWA, Funding: National Environmental Research Program (NERP)

WAMSI node 2: Ningaloo, Australian Institute of Marine Science, University of Western Australia, Richard Brinkman, Partner Institution(s): AIMS, Funding: Australian Institute of Marine Science, Western Australian Marine Science Institution

Analysis of approaches for monitoring biodiversity in the Commonwealth marine area: Houtman Abrolhos Islands, Keith Hayes, 2011-2015, Funding: National Environmental Research Program (NERP)

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

Leeuwin current and capes current dynamics, Commonwealth Scientific Industrial Research Organisation, Liejun Zhong, Ming Feng, 2011-2012, Funding: CSIRO

Ocean carbon and acidification, Bronte Tilbrook, Andrew Lenton, Partner Institution(s): AIMS, UQ, USyd, UNSW, UWA, NOAA(USA) NIES(Japan), IPSL(France), Funding: Australian Climate Change Science Program (ACCSP), CSIRO

Sea breeze forcing of near-inertial wave near the critical latitude for resonance, University of Western Australia, Florence Kaempf, Charitha Pattiaratchi, 2011-2012, Partner Institution(s): Bangor University, UK (John Simpson) and Hydrographic Institute of the Republic of Croatia, Split, Croatia (Hrvoje Mihanovic), Funding: Group of Eight European Fellowship

Tidal variability and mixing on the Australian North West shelf, University of Western Australia, Samuel Kelly, Nicole Jones, Gregory Ivey, Ryan Lowe, 2011-2012, Funding: University of Western Australia, Australian Institute of Marine Science, CSIRO

Net conservation benefit, connectivity codelling, Commonwealth Scientific Industrial Research Organisation, Ming Feng, 2012-2015, Partner Institution(s): UWA

Phytoplankton atlas of Australia, University of Tasmania, Gustaaf Hallegraeff, 2012-2015, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

The connectivity of the Australian North West Shelf with the Leeuwin Current, University of Western Australia, Australian Institute of Marine Science, Naval Resesarch Lab, Gregory Ivey, Ryan Lowe, Peter Strutton, Nicole Jones, Miles Furnas, Richard Brinkman, 2012-2013, Partner Institution(s): UWA, AIMS, US-NRL, UTAS, Funding: NICOP

Assessing threats to marine biodiversity of the Ningaloo world heritage area, Mathew Vanderklift, Russ Babcock, 2012-2013, Funding: Caring For Our Country

Coupled physical and biogeochemical dynamics on the Australian North West Shelf, Gregory Ivey, Ryan Lowe, Peter Strutton, Nicole Jones, Miles Furnas, Gary Brinkman, 2012-2014, Funding: ARC Discovery Project

Ocean-shelf exchange with an emphasis on the roles of waves, tides, eddies and cross-shelf flows on carbon exchange, University of Tasmania, University of Western Australia, James Cook University, Roger Proctor, Charitha Pattiaratchi, Peter Ridd, 2012-2014, Funding: ANNIMS

Coastal carbon collaboration cluster, Commonwealth Scientific Industrial Research Organisation, Andy Steven, 2012-2015, Partner Institution(s): CSIRO, UTS, UWA, SCU, JCU, UNSW

The IMOS plankton ecosystem assessment report, Commonwealth Scientific Industrial Research Organisation, Anthony Richardson, 2012-2013, Funding: CSIRO

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Long-term changes in Vibrio bacteria, Luigi Vezzulli, 2012-2013, Funding: CSIRO

Zooplankton atlas of Australia, University of Tasmania, Kerrie Swadling, 2012-2012, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

A transportable containerised laboratory for rapid cell sorting and high-resolution bioimaging of living aquatic microbes in field locations, University of New South Wales, Macquarie University, University of Western Australia, University of Tasmania, M Doblin, Justin Seymour, Peter Ralph, Saravanamuthu Vigneswaran, Cynthia Whitchurch, Partner Institution(s): University of Technology, Sydney, Funding: ARC LIEF

WAMSI Kimberley climate change project, Commonwealth Scientific Industrial Research Organisation, Ming Feng, Partner Institution(s): <http://www.wamsi.org.au/content/partners>, Funding: Western Australian Marine Science Institution

Physical oceanographic dynamics in the Kimberley, University of Western Australia, Gregory Ivey, Richard Brinkman, Ryan Lowe, 2013-2015, Partner Institution(s): AIMS, Funding: Western Australian Marine Science Institution

Climate-scale forcing of phytoplankton community structure in the south Indian Ocean, Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, Richard Matear, Anthony Richardson, Ming Feng, 2013-2016, Partner Institution(s): CSIRO, Funding: CSIRO OCE Postdoctoral Fellowship

The dynamics and variability of the Ningaloo Nino, Commonwealth Scientific Industrial Research Organisation, Ming Feng, 2013-2014, Partner Institution(s): BOM

Observations of remarkable eastward flows in the South Indian Ocean, University of Tasmania, Nathan Bindoff, Julian McCreary, Ryo Furue, Ming Feng, Jessica Benthuisen, Catia Domingues, 2013-2016, Partner Institution(s): CSIRO, University of Hawaii, Funding: ARC Discovery Project

Autonomous benthic observing system, University of Western Australia, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Australian Institute of Marine Science, Department of Primary Industries, NSW, Stefan Williams, Oscar Pizarro, Gary Kendrick, Neville Barrett, Russ Babcock, Andrew Heyward, Alan Jordan, Partner Institution(s): University of Sydney, Funding: ARC LIEF

Australian national shelf reanalysis, Emlyn Jones, Moninya Roughan, Tim Moltmann, Andreas Schiller, Peter May, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

Ocean circulation and mesoscale eddies in the southeast Indian Ocean, Commonwealth Scientific Industrial Research Organisation, Ming Feng, 2014-2016, Partner Institution(s): Chinese Academy of Sciences, Funding: CSIRO, Chinese Academy of Sciences

Alkalinity of Australian waters, Nick Hardman-Mountford, Jim Greenwood, 2014-2015, Funding: CSIRO

Application of NERP biodiversity hub survey methodology to Geographe Bay Commonwealth marine reserve, University of Tasmania, Emma Lawrence, Stefan Williams, Gary Kendrick, Euan Harvey, 2014-2015, Partner Institution(s): CSIRO, UTAS, UWA, USyd, Funding: National Environmental Research Program (NERP)

International phytoplankton functional type intercomparison working group, Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, 2014-2015, Partner Institution(s): NASA, ESA, NOAA, EUMETSAT, JAXA, KIOST, AWI, CNRS/LOV, CSIR, PML, U. Maine, U. Hokkaido, U. Lisboa, U. Sao Paulo, IRD, U. Richmond, Pixalytics, Michigan Tech., WHOI, Funding: IOCCG

The role of internal wave-driven near-bed turbulent dynamics in coastal ocean sediment mobilisation, University of Western Australia, Gregory Ivey, Nicole Jones, Jonathan Nash, Samuel Kelly, 2014-2016, Funding: ARC Discovery Project

NRS regional WQM fluorescence characterisation, Commonwealth Scientific Industrial Research Organisation, L Clementson, Tim Lynch, 2014-2016, Funding: CSIRO

Biogeochemical processes supporting productivity of Kimberley coastal waters, WAMSI Project 2.2.2, Western Australian Marine Science Institution, Anya Waite, 2014-2015, Funding: Western Australian Marine Science Institution, University of Western Australia, CSIRO

Phytoplankton variability in the Indian Ocean, Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, 2014-2015, Funding: CSIRO

Instabilities of the Leeuwin Current and eddy energetics, Commonwealth Scientific Industrial Research Organisation, Ming Feng, Qinyan Liu, 2014-2015, Funding: China Scholarship Council

Operational and scientific monitoring program & applied research program, Australian Institute of Marine Science, D Souter, 2014-2015, Partner Institution(s): AIMS, Shell Development (Australia) Pty Ltd, Funding: INPEX, Shell Development (Australia) Pty Ltd

Linking phytoplankton to fisheries using zooplankton size spectra, University of New South Wales, Iain Suthers, Laura Richardson, Mark Baird, Sagulenko Evgeny, 2015-2018, Partner Institution(s): ARC Discovery Project, Funding: University of New South Wales, ARC Discovery Project

Sediment re-suspension processes under internal waves in the north-west shelf of Australia, University of Western Australia, Charitha Pattiaratchi, Gustavo Lauton de Oliveira, 2015-2016, Funding: University of Western Australia

Remote sensing in support of environmental monitoring - part 2, David Antoine, 2015-2017, Funding: Western Australian Marine Science Institution, CSIRO, CUT

Offshore southern right whale calling, Curtin University, Rob McCauley, Alexander Gavrilo

Predicting circulation patterns along the south-west Australian continental shelf, University of Western Australia, Ivica Janekovic, Charitha Pattiaratchi, Sarath Wijeratne, Yasha Hetzel, Simone Cosoli, 2015-2016, Partner Institution(s): IMOS, Funding: University of Western Australia

Feasibility of SeaSonde radar calibration via autonomous drones, University of Western Australia, Simone Cosoli, Jim Pettigrew

Blue whale calling trends Australia wide, Curtin University, Rob McCauley, Alexander Gavrilo

Carbonate system of Australian coastal waters from IMOS NRS and VOS measurements, Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, Jim Greenwood, 2015-2016, Partner Institution(s): CSIRO, Funding: CSIRO

Australian marine microbial biodiversity initiative, Lev Bodrossy, Mark Brown, Tim Moltmann, 2015-2017, Funding: Integrated Marine Observing System (IMOS), Bioplatforms Australia (BPA)

Benthic habitat survey of outer Darwin Harbour and Bynoe Harbour, Australian Institute of Marine Science, David Williams, Partner Institution(s): AIMS, NT Government Department of Land Resource Management, Geoscience Australia, Funding: Australian Institute of Marine Science, NT Government Department of Land Resource Management and Geoscience Australia

Fish chorusing and acoustics, Curtin University, Rob McCauley

OCE postdoctoral fellowship in recovery and resilience of coral reefs, Commonwealth Scientific Industrial Research Organisation, Christopher Doropoulos, Russ Babcock, 2015-2018, Funding: CSIRO, Gorgon Barrow Island Net Conservation Benefits Fund

Accuracy of wind data from WERA radars, University of Western Australia, Charitha Pattiaratchi, Simone Cosoli

Understanding the physical oceanographic drivers of a mass coral bleaching event AIMS research project, Australian Institute of Marine Science, Craig Steinberg, 2016-2017

Computer modelling tools for predicting acoustic detection performance of a sea glider, Curtin University, Alexander Gavrilo, 2016-2016, Funding: Defence Science and Technology Group

Feasibility of extraction of meteotsunami signals from HF Radar, University of Western Australia, Simone Cosoli, Charitha Pattiaratchi

Eastern Indian Ocean upwelling research initiative, Commonwealth Scientific Industrial Research Organisation, Yukio Masumoto, Weidong Yu, Raleigh Hood, Ming Feng, 2016-2020, Partner Institution(s): CSIRO, JAMSTEC, State oceanographic



Administration of China, University of Maryland

Protected and iconic species movement, distribution and threats, Australian Institute of Marine Science, Michelle Thums, 2017-2019, Funding: Quadrant Energy

Understanding the isolated coral reef atolls of the north west shelf , Australian Institute of Marine Science, James Gilmour, 2017-2020, Funding: Quadrant Energy

Coupled dynamics of the Indo-Pacific warm pool, Commonwealth Scientific Industrial Research Organisation, Ming Feng, Susan Wijffels, 2017-2022, Funding: The Centre for Southern Hemisphere Oceans Research (CSHOR)

Metocean hazards from solitons (Project 1), Nicole Jones, Gregory Ivey, M Rayson, Funding: Industrial Transformation Research Hub for Offshore Floating Facilities (OFFshore ITRH)

Develop/enhance the Marine Virtual Laboratory (MARVL) to provide the information infrastructure in support of the national ocean modelling system, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): BOM (Oceans), BOM (water), NCI, SARDI, TPAC, UWA, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Develop a strong current warning system and inform knowledge of the nearshore current regime influencing the Western Rock Lobster fishery, University of Western Australia, Charitha Pattiaratchi, Timothy Langlois, Simone Cosoli, Simon de Lestang, 2018-2021, Funding: Fisheries Research and Development Corporation

Building services for Australian marine data discovery, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): AAD, AIMS, CSIRO (O&A linkage + OBIS), CSIRO (ALA linkage + OBIS), Geoscience Australia, GreyBits Engineering, SIMS, TERN, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

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## South East Australia Integrated Marine Observing System

Spatial management of reef fisheries and ecosystems: understanding the importance of movement, University of Tasmania, Colin Buxton, 2004-2010, Partner Institution(s): DPIPWE, NT Fisheries

Rebuilding ecosystem resilience: Assessment of management options to minimise formation of 'Barrens' habitat by the long-spined sea urchin (*Centrostephanus rodgersii*) in Tasmania, University of Tasmania, Craig Johnson, 2007-2010, Partner Institution(s): DPIPWE

Towards integrated multi-species management of Australia's SE reef fisheries: a Tasmanian example, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Stewart Frusher, 2007-2010, Partner Institution(s): DPIPWE

Understanding movement patterns in key recreational species, University of Tasmania, Jeremy Lyle, 2008-2010, Partner Institution(s): Inland Fisheries Service

Understanding the vulnerability of key inshore and estuarine fish species: new opportunities with accelerometer telemetry, University of Tasmania, Jayson Semmens, 2008-2010, Partner Institution(s): Vemco

Assessing the effectiveness of shark nursery area closures for the protection and conservation of soastal shark species, University of Tasmania, Jayson Semmens, Stewart Frusher, Adam Barnett, 2010-2014, Funding: Winifred Violet Scott Charitable Trust

The impact of Fish Aggregating Devices (FADs) on the movement and behaviour of tropical tuna (*Thunnus obesus*, *Katsuwonus pelamis* and *Thunnus albacares*), University of Tasmania, Jayson Semmens, Stewart Frusher, Kilian Stehfest, 2010-2013, Funding: Holsworth Wildlife Research Endowment

Ocean carbon and acidification, Bronte Tilbrook, Andrew Lenton, Partner Institution(s): AIMS, UQ, USyd, UNSW, UWA, NOAA(USA) NIES(Japan), IPSL(France), Funding: Australian Climate Change Science Program (ACCSP), CSIRO

Using animal-borne cameras to quantify prey field, habitat characteristics and foraging success in a marine top predator, Deakin University, John Arnould, Mark Hindell, Jayson Semmens, 2011-2013, Partner Institution(s): University of Tasmania, Funding: ARC

Issues in marine science: developing sustainable strategies for rang-shifting species, University of Tasmania, Stewart Frusher, Funding: ANNIMS Springboard

Southern rock lobster thrive in Tasman Fracture CMR, University of Tasmania, Neville Barrett, 2011-2015, Funding: National Environmental Research Program (NERP)

Effects of climate change on temperate benthic assemblages on the continental shelf in eastern Australia, University of Tasmania, Craig Johnson, Neil Holbrook, Neville Barrett, Peter Steinberg, 2011-2014, Partner Institution(s): University of New South Wales, Funding: ARC Super Science Fellowship

Continued monitoring of chondrichthyan species in coastal areas of SE Australia: assessing the effectiveness of shark nursery area closures for the protection and conservation of coastal shark species, University of Tasmania, Jayson Semmens, Jeremy Lyle, Adam Barnett, Colin Buxton, Stewart Frusher, 2011-2013, Funding: Save Our Seas Foundation

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

Sand and granite reef communities revealed at Freycinet CMR, University of Tasmania, Neville Barrett, 2011-2015, Funding: National Environmental Research Program (NERP)

Snapper migratory dynamics and habitat use, Fisheries Victoria, Paul Hamer, 2011-2014, Funding: Victorian Recreational Fishing Licence Trust

Understanding climate drivers and predicting the future for coastal Australian ecosystems, University of Tasmania, Peter Strutton, Jayson Semmens, Caleb Gardner, Gary Griffith, 2011-2013, Partner Institution(s): UWA, JCU, Funding: ANNIMS

Image-based automated macrobenthic species identification, counting and sizing, University of Sydney, Commonwealth Scientific Industrial Research Organisation, University of Tasmania, Stefan Williams, Oscar Pizarro, Russ Babcock, Matthew Dunbabin, Neville Barrett, 2011-2014, Funding: SIEF Fellowship

Scientific support for managing Australia's marine biodiversity - a national marine biodiversity hub, University of Tasmania, Nicholas Bax, Chris Austin, Russ Babcock, Neville Barrett, Mark Bravington, Brendan Brooke, Julian Michael Caley, Piers Dunstan, Karen Edyvane, Peter Harris, Sarah Jennings, Gary Kendrick, Tim O'Hara, Sean Pascoe, Bob Pressey, Wendy Proctor, Tony Smith, Chris Wilcox, 2011-2015, Partner Institution(s): AIMS, CDU, CSIRO, GA, Museum Victoria, JCU, UTas, UWA, Funding: National Environmental Research Program (NERP)

White shark population and abundance trends, Bary Bruce, 2011-2015, Funding: National Environmental Research Program (NERP)

NERP Flinders Island and CMR survey, University of Tasmania, Neville Barrett, Partner Institution(s): USyd

The IMOS plankton ecosystem assessment report, Commonwealth Scientific Industrial Research Organisation, Anthony Richardson, 2012-2013, Funding: CSIRO

Australian marine microbial biodiversity initiative, Commonwealth Scientific Industrial Research Organisation, Lev Bodrossy, Partner Institution(s): CSIRO, UNSW, UTS, AIMS, SIMS

Ocean-shelf exchange with an emphasis on the roles of waves, tides, eddies and cross-shelf flows on carbon exchange, University of Tasmania, University of Western Australia, James Cook University, Roger Proctor, Charitha Pattiaratchi, Peter Ridd, 2012-2014, Funding: ANNIMS

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NERP Solitary Island survey, Department of Primary Industries, NSW, Alan Jordan, Partner Institution(s): USyd, UTAS

Phytoplankton atlas of Australia, University of Tasmania, Gustaaf Hallegraeff, 2012-2015, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

Zooplankton atlas of Australia, University of Tasmania, Kerrie Swadling, 2012-2012, Funding: University of Tasmania, Integrated Marine Observing System (IMOS), CSIRO

Long-term changes in Vibrio bacteria, Luigi Vezzulli, 2012-2013, Funding: CSIRO

Jigging for Science - Defining the spawning needs of calamari, Fisheries Victoria, Corey Green, 2012-2015, Funding: Victorian Recreational Fishing Licence Trust

Autonomous benthic observing system, University of Western Australia, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Australian Institute of Marine Science, Department of Primary Industries, NSW, Stefan Williams, Oscar Pizarro, Gary Kendrick, Neville Barrett, Russ Babcock, Andrew Heyward, Alan Jordan, Partner Institution(s): University of Sydney, Funding: ARC LIEF

Near real-time modelling of Bass Strait for EPA Victoria, John Andrewartha, 2013-2014

A transportable containerised laboratory for rapid cell sorting and high-resolution bioimaging of living aquatic microbes in field locations, University of New South Wales, Macquarie University, University of Western Australia, University of Tasmania, M Doblin, Justin Seymour, Peter Ralph, Saravanamuthu Vigneswaran, Cynthia Whitchurch, Partner Institution(s): University of Technology, Sydney, Funding: ARC LIEF

Australian national shelf reanalysis, Emlyn Jones, Moninya Roughan, Tim Moltmann, Andreas Schiller, Peter May, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

NRS regional WQM fluorescence characterisation, Commonwealth Scientific Industrial Research Organisation, L Clementson, Tim Lynch, 2014-2016, Funding: CSIRO

International phytoplankton functional type intercomparison working group, Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, 2014-2015, Partner Institution(s): NASA, ESA, NOAA, EUMETSAT, JAXA, KIOST, AWI, CNRS/LOV, CSIR, PML, U. Maine, U. Hokkaido, U. Lisboa, U. Sao Paulo, IRD, U. Richmond, Pixalytics, Michigan Tech., WHOI, Funding: IOCCG

Improved understanding of Tasmanian harmful algal blooms and biotoxin events to support seafood risk management, University of Tasmania, Gustaaf Hallegraeff, 2014-2017, Funding: Fisheries Research and Development Corporation

Predicting marine currents, nutrients and plankton in the coastal waters of South Eastern Tasmania in response to changing weather patterns, Christine Crawford, Stewart Frusher, Kerrie Swadling, 2014-2017, Funding: Fisheries Research and Development Corporation

Sensing Macquarie Harbour, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Jayson Semmens, Adam Main, John McCulloch, 2015-2016, Partner Institution(s): Tasmanian Salmonid Growers Association, Funding: Sense-T Stage 2

Patterns of interaction between habitat and oceanographic variables affecting the connectivity and productivity of invertebrate fisheries, Deakin University, University of Melbourne, Latrobe University, Fisheries Victoria, Daniel Ierodiaconou, Eric Trembl, Steve Swearer, Nick Murphy, Mary Young, Adam Miller, Jan Strugnell, Harry Gorfine, Craig Sherman, Bridget Green, 2015-2017, Funding: Fisheries Research and Development Corporation

Southern ocean carbon cycle postdoctoral fellow, University of Tasmania, Paula Conde-Pardo, 2015-2018, Funding: ACECRC

Australian marine microbial biodiversity initiative, Lev Bodrossy, Mark Brown, Tim Moltmann, 2015-2017, Funding: Integrated Marine Observing System (IMOS), Bioplatforms Australia (BPA)

Linking phytoplankton to fisheries using zooplankton size spectra, University of New South Wales, Iain Suthers, Laura Richardson, Mark Baird, Sagulenko Evgeny, 2015-2018, Partner Institution(s): ARC Discovery Project, Funding: University of New South Wales, ARC Discovery Project

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Project D3: evaluating and monitoring the status of marine biodiversity assets on the continental shelf, University of Tasmania, Neville Barrett, Vanessa Lucieer, 2015-2021, Funding: National Environmental Science Program (NESP)

Project D2: analysis methods and software to support standard operating procedures for survey design, condition assessment and trend detection, University of Tasmania, Scott Foster, Neville Barrett, 2015-2021, Funding: National Environmental Science Program (NESP)

Managing ecosystem interactions across differing environments: building flexibility and risk assurance into environmental management strategies, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, C MacLeod, Neville Barrett, Karen Wild-Allen, 2015-2018, Funding: Fisheries Research and Development Corporation

Ichthyoplankton long-term monitoring at National Reference Stations, University of Tasmania, Iain Suthers, Ana Lara-Lopez, Anthony Richardson, Kerrie Swadling, Tim Ward, 2015-2016, Funding: AFMA - Australian Fisheries Management Authority

AUV-based monitoring of benthic habitats in the SE CMR Network, University of Tasmania, Neville Barrett, Jacquomo Monk, 2016-2016, Funding: Department of the Environment

AUV surveys of Beagle and Flinders AMP, University of Tasmania, Institute of Marine and Antarctic Studies, Neville Barrett, Jacquomo Monk, 2017-2017, Funding: Parks Australia

Building services for Australian marine data discovery, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): AAD, AIMS, CSIRO (O&A linkage + OBIS), CSIRO (ALA linkage + OBIS), Geoscience Australia, GreyBits Engineering, SIMS, TERN, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

Develop/enhance the Marine Virtual Laboratory (MARVL) to provide the information infrastructure in support of the national ocean modelling system, University of Tasmania, Roger Proctor, 2018-2018, Partner Institution(s): BOM (Oceans), BOM (water), NCI, SARDI, TPAC, UWA, Funding: Australian National Data Service (ANDS), National eResearch Collaboration Tools and Resources (NeCTAR), Research Data Cloud (RDS)

**Project Count**                      **50**

## No Associated Node

Habitat use and movement patterns of grey reef sharks in Palau, Australian Institute of Marine Science, Mark Meekan, Partner Institution(s): Micronesian Shark Foundation, Save Our Seas Foundation, University of Western Australia

Movement and migration of carp in the Murray-Darling basin, Fisheries Victoria, Paul Brown, 2008-2011, Partner Institution(s): Invasive Animals CRC, NSW I&I

CREON Thailand mooring, National Electronics and Computer Technology Centre, Scott Bainbridge, Mullica Jaroensutasinee, Piyawut Srichaikul, 2010-2011, Partner Institution(s): Australian Institute of Marine Science, Walailak University, Funding: National Electronics and Computer Technology Centre

Activity patterns of reef sharks assessed from accelerometer telemetry: contributing to understanding the potential impacts of tourist diving on shark, University of Tasmania, Jayson Semmens, 2010-2014, Funding: Winifred Violet Scott Charitable Trust

Marine monitoring blueprint: meeting a monumental challenge, Paul Hedge, 2011-2015, Funding: National Environmental Research Program (NERP)

Collating existing survey data for Commonwealth marine waters, Jeffrey Dambacher, 2011-2015, Funding: National Environmental Research Program (NERP)

Australia/EU marine information infrastructure collaboration, University of Tasmania, Roger Proctor, 2011-2011, Partner Institution(s): AIMS, CSIRO, ICT, UTAS, AAD, Funding: Department of Industry, Innovation, Science, Research and Tertiary Education

MARVL Information System (MARVLIS), University of Tasmania, Roger Proctor, 2012-2013, Funding: Australian National Data Service (ANDS)

Inter-fleet comparisons of FLNTU outputs to reduce uncertainties in bio-optical data streams in a sustained observing system, Commonwealth Scientific Industrial Research Organisation, Tim Lynch, L Clementson, Robert Kay, Moninya Roughan, Vittorio Brando, M Doblin, Karen Evans, 2012-2014, Partner Institution(s): IMOS, Funding: CSIRO

Satellite phytoplankton functional algorithm inter-comparison project, Hokkaido University, Daisuke Hirano, Partner Institution(s): <http://pft.ees.hokudai.ac.jp/satellite/index.shtml>

Sustainable ecological observing, Commonwealth Scientific Industrial Research Organisation, Keith Hayes, D Smith, Peter Thompson, Russ Babcock, Anthony Richardson, W Rochester, 2012-2013, Funding: CSIRO

Marine Virtual Laboratory (MARVL) early activity, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Roger Proctor, Peter Oke, 2012-2013, Funding: National eResearch Collaboration Tools and Resources (NeCTAR)

Australian Coastal and Ocean Modelling Observations (ACOMO) Workshop, Katy Hill, Andreas Schiller, Roger Proctor, Charitha Pattiaratchi, Moninya Roughan, 2012-2012

Remotely operated vehicle, University of Sydney, Stefan Williams, Oscar Pizarro, I Manchester, Jody Webster, Renata Ferrari, Funding: University of Sydney

Quantitative Quality Control (QC) procedures for Australia's National Reference Stations data – comparing semi-autonomous qualitative and quantitative systems to an expert oceanographer, Commonwealth Scientific Industrial Research Organisation, Elisabetta Morello, Guillaume Galibert, D Smith, Ken Ridgway, Ben Howell, Dirk Slawinski, G Timms, Karen Evans, Tim Lynch, 2013-2013, Partner Institution(s): IMOS, Funding: CSIRO

Marine Virtual Laboratory (MARVL) stage 2, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Roger Proctor, Peter Oke, 2013-2014, Partner Institution(s): AIMS, SARDI, UWA, UNSW, BOM, UTAS, CSIRO, Funding: National eResearch Collaboration Tools and Resources (NeCTAR)

High quality benthic and demersal surveys from small form factor underwater robots, University of Sydney, Oscar Pizarro, Stefan Williams, Mathew Edmunds, 2013-2016, Partner Institution(s): Australian Marine Ecology Pty Ltd, Funding: ARC Linkage Project

Australian-waters EO phytoplankton-type products (AEsOP), Commonwealth Scientific Industrial Research Organisation, Nick Hardman-Mountford, 2013-2013, Funding: CSIRO

Great Australian Bight oceanography project, accuracy of remotely sensed chlorophyll products, South Australian Research and Development Institute, John Middleton

Implications of current spatial management measures on AFMA ERAs for habitats, Roland Pitcher, Funding: Fisheries Research and Development Corporation, CSIRO

IOCCG working group on atmospheric correction over turbid waters, algorithm inter-comparisons, University Littoral-Cote d'Opale, Cedric Jamet, 2014-2016, Partner Institution(s): <http://www.esa-oceancolour-cci.org/?q=project%20team>, Funding: IOCCG

ESA ocean colour climate change initiative: round robin algorithm comparison, Plymouth Marine Laboratories, Shubha Sathyendranath, 2014-2017, Partner Institution(s): <http://www.esa-oceancolour-cci.org/?q=project%20team>, Funding: ESA - European Space Agency

Australian Coastal and Ocean Modelling and Observations workshop, University of Tasmania, Ana Lara-Lopez, Tim Moltmann, Andreas Schiller, Roger Proctor, Charitha Pattiaratchi, Emlyn Jones, Robin Robertson, Richard Brinkman, 2014-2014, Funding: Integrated Marine Observing System (IMOS)

Marine Virtual Laboratory (MARVL) stage 3: improving access to shelf and coastal data and models through MARVL, University of Tasmania, Commonwealth Scientific Industrial Research Organisation, Roger Proctor, Peter Oke, 2014-2015, Partner Institution(s): IMOS, CSIRO, TPAC, Funding: National eResearch Collaboration Tools and Resources (NeCTAR)

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Key ecological features - global SST/SSH/ChlA, Commonwealth Scientific Industrial Research Organisation, Piers Dunstan, Funding: National Environmental Science Program (NESP)

A photometric imaging model for mobile underwater camera design, Sydney Institute for Marine Science, Stefan Williams, Oscar Pizarro, A Lumsdaine, Christopher Roman, Y Schechner, 2015-2017, Funding: ARC Discovery Project

Marine Virtual Laboratory (MARVL) stage 4: engaging more widely, Commonwealth Scientific Industrial Research Organisation, University of Tasmania, Roger Proctor, Peter Oke, 2015-2016, Partner Institution(s): IMOS, CSIRO, TPAC, Funding: National eResearch Collaboration Tools and Resources (NeCTAR)

Forum for Operational Oceanography (FOO), University of Tasmania, Jan Flynn, Tim Moltmann, Emma Sommerville, 2015-2015, Funding: Department of Industry and Science

Supervised autonomy for AUVs using limited bandwidth communication channels, Sydney Institute for Marine Science, Stefan Williams, Oscar Pizarro, 2015-2018, Partner Institution(s): Thales Australia Pty Ltd, Funding: ARC Linkage Project

Autonomous survey technologies for large scale ocean observing , Sydney Institute for Marine Science, Oscar Pizarro, Michael Jakuba, James Kinsey, Christopher Roman, Stefan Williams, Ryan Eustice, Thomas Bridge, Richard Camilli, 2015-2015, Funding: Schmidt Ocean Institute

Diurnal warming in ITF, Commonwealth Scientific Industrial Research Organisation, Susan Wijffels, Funding: CSIRO

Australian Marine and Antarctic DATA Archive (ARMADa), Commonwealth Scientific Industrial Research Organisation, University of Tasmania, Sebastien Mancini, Edward King, Funding: CSIRO, Integrated Marine Observing System (IMOS)

Marine Virtual Laboratory (MARVL) - increasing flexibility and utility, Commonwealth Scientific Industrial Research Organisation, University of Tasmania, Roger Proctor, Peter Oke, 2016-2017, Partner Institution(s): IMOS, CSIRO, TPAC, Funding: National eResearch Collaboration Tools and Resources (NeCTAR), Australian National Data Service (ANDS)

Development of correction algorithms for real time marine PAR/Light data, Australian Institute of Marine Science, University of Tasmania, Craig Steinberg, Manuel Nunez, 2017-2018, Funding: Australian Institute of Marine Science, University of Tasmania

Digital Earth Australia - ACTOR validation and in-water algorithm parameterisation, Commonwealth Scientific Industrial Research Organisation, Alex Held, 2018-2018, Funding: Geoscience Australia

Citizen Science - Eyeon Water Australia, Commonwealth Scientific Industrial Research Organisation, Janet Anstee, 2018-2019, Partner Institution(s): Vrije University Amsterdam, Funding: Department of Industry, Innovation, Science, Research and Tertiary Education

Regional Coastal Ocean model application for POMS outbreaks, Department of Primary Industries SA, Fisheries Research & Development Corporation, Bureau of Meteorology, South Australian Research and Development Institute, Shane Roberts

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