

News and information on integrated activities at Southampton taking place through the partnership between NOC and the University of Southampton can be viewed at <http://noc.ac.uk>.


National Oceanography Centre, Southampton
UNIVERSITY OF SOUTHAMPTON AND NATURAL ENVIRONMENT RESEARCH COUNCIL

discovering the unknown

[Contact us](#) | [Find us](#) | [For media](#) | [NOCSnet](#) | [Webmail](#) | [Disclaimer](#)

People | Search: Go

<ul style="list-style-type: none"> NOCS home About us Support us Recent News & archive Research Education Schools & public National Marine Facilities Commercial Data Library & Information Policy & coordination Project offices Job vacancies 	<h2 style="margin: 0;">Ocean Modelling and Forecasting</h2> <h3 style="margin: 10px 0 0 0;">Publications in 2010</h3> <p>Results from University of Southampton e-prints archive</p> <hr/> <p>Year: 2006 2007 2008 2009 2010</p> <hr/> <p>Aksenov, Yevgeny, Bacon, Sheldon, Coward, Andrew C. and Nurser, A.J. George (2010) The North Atlantic inflow to the Arctic Ocean: high-resolution model study. <i>Journal of Marine Systems</i>, 79, (1-2), 1-22. (doi:10.1016/j.jmarsys.2009.05.003)</p> <p>Aksenov, Yevgeny, Bacon, Sheldon, Coward, Andrew C. and Holliday, N. Penny (2010) Polar outflow from the Arctic Ocean: A high resolution model study. <i>Journal of Marine Systems</i>, 83, (1-2), 14-37. (doi:10.1016/j.jmarsys.2010.06.007)</p> <p>Allen, J. Icarus, Aiken, James, Anderson, Thomas R., Buitenhuis, Erik, Cornell, Sarah, Geider, Richard J., Haines, Keith, Hirata, Takafumi, Holt, Jason, Le Quéré, Corinne, Hardman-Mountford, Nicholas, Ross, Oliver N., Sinha, Bablu and While, James (2010) Marine ecosystem models for earth systems applications: The MarQUEST experience. <i>Journal of Marine Systems</i>, 81, (1-2), 19-33. (doi:10.1016/j.jmarsys.2009.12.017)</p> <p>Anderson, Thomas R. and Mitra, Aditee (2010) Dysfunctionality in ecosystem models: an underrated pitfall? <i>Progress in Oceanography</i>, 84, (1-2), 66-68. (doi:10.1016/j.poccean.2009.09.007)</p> <p>Anderson, Thomas R. (2010) Progress in marine ecosystem modelling and the "unreasonable effectiveness of mathematics". <i>Journal of Marine Systems</i>, 81, (1-2), 4-11. (doi:10.1016/j.jmarsys.2009.12.015)</p> <p>Anderson, Thomas R. and Tang, Kam W. (2010) Carbon cycling and POC turnover in the mesopelagic zone of the ocean: Insights from a simple model. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i>, 57, (16), 1581-1592. (doi:10.1016/j.dsr2.2010.02.024)</p> <p>Anderson, Tom (2010) The beauty of science. <i>Ocean Challenge</i>, 17, (1), 8-9.</p> <p>Blackford, J.C., Allen, J.I., Anderson, T.R. and Rose, K.A. (eds.) (2010) Contributions from Advances in Marine Ecosystem Modelling Research II, 23-26 June 2008, Plymouth, UK (Special Issue). <i>Journal of Marine Systems</i>, 81, (1-2), 1-206.</p> <p>Blackford, Jerry, Allen, J. Icarus, Anderson, Thomas R. and Rose, Kenneth A. (2010) Challenges for a new generation of marine ecosystem models: Overview of the Advances in Marine Ecosystem Modelling Research (AMEMR) Symposium, 23-26 June 2008, Plymouth UK. <i>Journal of Marine Systems</i>, 81, (1-2), 1-3. (doi:10.1016/j.jmarsys.2009.12.018)</p> <p>Burd, Adrian B., Hansell, Dennis A., Steinberg, Deborah K., Anderson, Thomas R., Aristegui, Javier, Baltar, Federico, Beuprè, Steven R., Buesseler, Ken O., DeHairs, Frank, Jackson, George A., Kadko, David C., Koppelman, Rolf, Lampitt, Richard S., Nagata, Toshi, Reinthaler, Thomas, Robinson, Carol, Robison, Bruce H., Tamburini, Christian and Tanaka, Tsuneo (2010) Assessing the apparent imbalance between geochemical and biochemical indicators of meso- and bathypelagic biological activity: What the @S#! is wrong with present calculations of carbon budgets? <i>Deep Sea Research Part II: Topical Studies in Oceanography</i>, 57, (16), 1557-1571. (doi:10.1016/j.dsr2.2010.02.022)</p> <p> de Boer, A.M., Watson, A.J., Edwards, N.R. and Oliver, Kevin I.C. (2010) A comprehensive, multi-process box-model approach to glacial-interglacial carbon cycling. <i>Climate of the Past Discussions</i>, 6, 867-903. (doi:10.5194/cpd-6-867-2010)</p> <p>Ferrari, Raffaele, Griffies, Stephen M., Nurser, A. J. G. and Vallis, Geoffrey K. (2010) A boundary-value problem for the parameterized mesoscale eddy transport. <i>Ocean Modelling</i>, 32, (3-4), 143-156. (doi:10.1016/j.ocemod.2010.01.004)</p>	<p>Ocean Modelling and Forecasting pages</p> <ul style="list-style-type: none"> OMF home People Research Publications Facilities PhD. Programme <p>Other NOCS research groups</p> <p>Select group... <input style="width: 50px;" type="text"/></p>
---	---	--

-  Gómez-Enri, Jesus, Vignudelli, Stefano, Quartly, Graham D., Gommenginger, Christine P., Cipollini, Paolo, Challenor, Peter G. and Benveniste, Jérôme (2010) [Modeling Envisat RA-2 waveforms in the coastal zone: case-study of calm water contamination](#). *IEEE Geoscience and Remote Sensing Letters*, 7, (3), 474-478. (doi:10.1109/LGRS.2009.2039193)
- Grignon, L., Smeed, D.A., Bryden, H.L. and Schroeder, K. (2010) [Importance of the Variability of Hydrographic Preconditioning for Deep Convection in the Gulf of Lion, NW Mediterranean](#). *Ocean Science*, 6, (2), 573-586. (doi:10.5194/os-6-573-2010)
- Grist, Jeremy P., Josey, Simon A., Marsh, Robert, Good, Simon A., Coward, Andrew C., deCuevas, Beverly A., Alderson, Steven G., New, Adrian L. and Madec, Gurvan (2010) [The roles of surface heat flux and ocean heat transport convergence in determining Atlantic Ocean temperature variability](#). *Ocean Dynamics*, 60, (4), 771-790. (doi:10.1007/s10236-010-0292-4)
- Haigh, Ivan, Nicholls, Robert and Wells, Neil (2010) [Assessing changes in extreme sea levels: Application to the English Channel, 1900-2006](#). *Continental Shelf Research*, 30, (9), 1042-1055. (doi:10.1016/j.csr.2010.02.002)
- Haigh, Ivan D., Nicholls, Robert and Wells, Neil (2010) [A comparison of the main methods for estimating probabilities of extreme still water levels](#). *Coastal Engineering*, 57, (9), 838-849. (doi:10.1016/j.coastaleng.2010.04.002)
- Hopkins, J., Shaw, A.G.P. and Challenor, P. (2010) [The Southland Front, New Zealand: Variability and ENSO correlations](#). *Continental Shelf Research*, 30, (14), 1535-1548. (doi:10.1016/j.csr.2010.05.016)
- Hopkins, Jo, Challenor, Peter and Shaw, Andrew G.P. (2010) [A New Statistical Modelling Approach to Ocean Front Detection from SST Satellite Images](#). *Journal of Atmospheric and Oceanic Technology*, 27, (1), 173-191. (doi: 10.1175/2009JTECHO684.1)
- Hutchinson, David K., Hogg, Andrew McC. and Blundell, Jeffrey R. (2010) [Southern Ocean response to relative velocity wind stress forcing](#). *Journal of Physical Oceanography*, 40, (2), 326-339. (doi:10.1175/2009JPO4240.1)
- Ivchenko, V.O., Wells, N.C., Aleynik, D.L. and Shaw, A.G.P. (2010) [Variability of heat and salinity content in the North Atlantic in the last decade](#). *Ocean Science*, 6, (3), 719-735. (doi:10.5194/os-6-719-2010)
- Lampitt, R.S., Achterberg, E.P., Anderson, T.R., Hughes, J.A., Iglesias-Rodriguez, M.D., Kelly-Gerreyn, B.A., Lucas, M., Popova, E.E., Sanders, R., Shepherd, J.G., Smythe-Wright, D. and Yool, A. (2010) [Ocean fertilisation: a potential means of geo-engineering?](#) In, Thompson, J. Michael T. and Launder, Brian (eds.) *Geo-Engineering Climate Change: Environmental Necessity or Pandora's Box?* Cambridge, University of Cambridge, 149-180.
- Lampitt, R.S., Salter, I., de Cuevas, B.A., Hartman, S., Larkin, K.E. and Pebody, C.A. (2010) [Long-term variability of downward particle flux in the deep northeast Atlantic: Causes and trends](#). [in special issue: Water Column and Seabed Studies at the PAP Sustained Observatory in the Northeast Atlantic] *Deep Sea Research Part II: Topical Studies in Oceanography*, 57, (15), 1346-1361. (doi:10.1016/j.dsr2.2010.01.011)
- Lévy, M., Klein, P., Tréguier, A.-M., Iovino, D., Madec, G., Masson, S. and Takahashi, K. (2010) [Modifications of gyre circulation by sub-mesoscale physics](#). *Ocean Modelling*, 34, (1-2), 1-15. (doi:10.1016/j.ocemod.2010.04.001)
- Mackay, Edward B.L., Challenor, Peter G. and Bahaj, AbuBakr S. (2010) [On the use of discrete seasonal and directional models for the estimation of extreme wave conditions](#). *Ocean Engineering*, 37, (5-6), 425-442. (doi:10.1016/j.oceaneng.2010.01.017)
- Mackay, Edward B.L., Bahaj, Abubakr S. and Challenor, Peter G. (2010) [Uncertainty in wave energy resource assessment part 1: historic data](#). *Renewable Energy*, 35, (8), 1792-1808. (doi:10.1016/j.renene.2009.10.026)
- Mackay, Edward B.L., Bahaj, AbuBakr S. and Challenor, Peter G. (2010) [Uncertainty in wave energy resource assessment part 2: variability and predictability](#). *Renewable Energy*, 35, (8), 1809-1819. (doi:10.1016/j.renene.2009.10.027)
- Martin, Adrian, Lampitt, Richard, Billett, David, Talbot, Pam and Anderson, Thomas R. (2010) [Dedication to Dr. Martin Angel and Prof. Mike Fasham FRS](#). [in special issue: Water Column and Seabed Studies at the PAP Sustained Observatory in the Northeast Atlantic] *Deep Sea Research Part II: Topical Studies in Oceanography*, 57, (15), 1272-1280. (doi:10.1016/j.dsr2.2010.01.004)
- Merckelbach, Lucas, Smeed, David and Griffiths, Gwyn (2010) [Vertical water velocities from underwater gliders](#). *Journal of Atmospheric and Oceanic Technology*, 27, (3), 547-563. (doi: 10.1175/2009JTECHO710.1)
- Oschlies, A., Pahlow, M., Yool, A. and Matear, R.J. (2010) [Climate engineering by artificial ocean upwelling: channelling the sorcerer's apprentice](#). *Geophysical Research Letters*, 37, L04701. (doi:10.1029/2009GL041961)

Robinson, Carol, Steinberg, Deborah K., Anderson, Thomas R., Aristegui, Javier, Carlson, Craig A., Frost, Jessica R., Ghiglione, Jean-François, Hernández-León, Santiago, Jackson, George A., Koppelman, Rolf, Quéguiner, Bernard, Rassoulzadegan, Fereidoun, Robison, Bruce H., Tamburini, Christian, Tanaka, Tsuneo, Wishner, Karen F. and Zhang, Jing (2010) [Mesopelagic zone ecology and biogeochemistry - a synthesis](#). *Deep Sea Research Part II: Topical Studies in Oceanography*, 57, (16), 1504-1518. (doi:10.1016/j.dsr2.2010.02.018)

Scott, R. B., Holland, Christina L. and Quinn, Terrence M. (2010) [Multidecadal trends in instrumental SST and coral proxy Sr/Ca records](#). *Journal of Climate* 2010, 23, (5), 1017-1033. (doi:10.1175/2009JCLI2386.1)

Scott, Robert B., Arbic, Brian K., Chassignet, Eric P., Coward, Andrew C., Maltrud, Mathew, Merryfield, William J., Srinivasan, Ashwanth and Varghese, Anson (2010) [Total kinetic energy in four global eddy ocean circulation models and over 5000 current meter records](#). *Ocean Modelling*, 32, (3-4), 157-169. (doi:10.1016/j.ocemod.2010.01.005)

Scott, Robert B., Arbic, Brian K., Chassignet, Eric P., Coward, Andrew C., Maltrud, Mathew, Merryfield, William J., Srinivasan, Ashwanth and Varghese, Anson (2010) [Total kinetic energy in four global eddy ocean circulation models and over 5000 current meter records](#). *Ocean Modelling*, 32, (3-4), 157-169. (doi:10.1016/j.ocemod.2010.01.005)

Scott, Robert B., Holland, Christina L. and Quinn, Terrence M. (2010) [Multidecadal Trends in Instrumental SST and Coral Proxy Sr/Ca Records](#). *Journal of Climate*, 23, (5), 1017-1033. (doi:10.1175/2009JCLI2386.1)

Shepherd, John (2010) [Geoengineering the climate: science, governance and uncertainty](#). *Ocean Challenge*, 17, (1), 10-11.

Sinha, Bablu, Buitenhuis, Erik T., Le Quééré, Corinne and Anderson, Thomas R. (2010) [Comparison of the emergent behavior of a complex ecosystem model in two ocean general circulation models](#). *Progress in Oceanography*, 84, (3-4), 204-224. (doi:10.1016/j.pocean.2009.10.003)

Treguier, A.M., Le Sommer, J., Molines, J.M. and de Cuevas, B. (2010) [Response of the Southern Ocean to the Southern Annular Mode: Interannual Variability and Multidecadal Trend](#). *Journal of Physical Oceanography*, 40, (7), 1659-1668. (doi:10.1175/2010JPO4364.1)

Ward, Ben A., Friedrichs, Marjorie A.M., Anderson, Thomas R. and Oschlies, Andreas (2010) [Parameter optimisation techniques and the problem of underdetermination in marine biogeochemical models](#). *Journal of Marine Systems*, 81, (1-2), 34-43. (doi:10.1016/j.jmarsys.2009.12.005)

Yool, A., Oschlies, A., Nurser, A.J.G. and Gruber, N. (2010) [A model-based assessment of the TrOCA approach for estimating anthropogenic carbon in the ocean](#). *Biogeosciences*, 7, (2), 723-751.



National Oceanography Centre, Southampton, University of Southampton Waterfront Campus,
European Way, Southampton SO14 3ZH, Tel: 00 44 23 8059 6666

UNIVERSITY OF
Southampton