

Harvard Physical/Interdisciplinary Ocean Science Group Bibliography

In Preparation

- [285] 2006 – Simulating a Highly Variable Open Ocean Front.
Liang, X. San and A.R. Robinson
- [284] 2005 – An Overview of Real-Time Dynamical Interdisciplinary Ocean Forecasting with the Harvard Ocean Prediction System.
Robinson, A.R
- [283] 2005 – End-to-End Systems for Environmental-Acoustical-Sonar Predictions under Uncertainties: Concepts and Methods.
Lermusiaux, P.F.J., C.-S. Chiu, A.R. Robinson and P. Abbot
- [282] 2005 – Coupled acoustical-physical uncertainty predictions, data assimilation and adaptive sampling for MREA.
Lermusiaux, P.F.J., A.R. Robinson, P.J. Haley, Jr., W.G. Leslie, C.-S. Chiu, C. Evangelinos, P. Abbot, H. Schmidt, O.G. Logutov, P.A. Moreno, G. Cossarini, X.S. Liang and S. Majumdar
- [281] 2005 – Real-Time Forecasting and Re-Analysis Fields.
Robinson, A.R, *et al.*
- [280] 2005 – Real-Time Error Prediction and Data Assimilation with ESSE.
Lermusiaux, P.F.J., *et al.*
- [279] 2005 – Model Comparisons and Multi-Model Estimates.
Robinson, A.R., Y. Chao, I. Schulman, *et al.*
- [278] 2005 – Fast Data Assimilation Via Toeplitz-Block-Toeplitz Error Covariance Approximation.
Logutov, O.G., *et al.*
- [277] 2005 – Comparison of fronts in the Middle Atlantic Bight and the South China Sea.
Robinson, A.R., P.J. Haley, Jr., P.F.J. Lermusiaux, W.G. Leslie, *et al.*
- [276] 2005 – A generalized biological model and application in Monterey Bay, California.
Tian, R.C., P.F.J. Lermusiaux, J.J. McCarthy and A.R. Robinson
- [275] 2005 – Mass.Bay/ASCOT-01 Modeling and Dynamics: Part II.
Moreno, P.A., J.J. McCarthy and A.R. Robinson
- [274] 2005 – Mass.Bay/ASCOT-01 Modeling and Dynamics: Part I.

Moreno, P.A., J.J. McCarthy and A.R. Robinson

- [273] 2004 – A Generalized Biological Model for the Oceans.
Tian, R.C.
- [272] 2003 – The Harvard Generalized Biological model: Structure, Parameterization and Adaptive Modeling.
Tian, R.C.

Submitted

- [271] 2006 – Adaptive Sampling, Data Assimilation and Adaptive Modeling. Invited manuscript for a special issue of the Journal of Inverse Problems on Mathematical Issues and Challenges in Data Assimilation for Geophysical Systems: Interdisciplinary Perspectives. Jones, Christopher K.R.T. and Kayo Ide (Editors)
Lermusiaux P.F.J.
- [270] 2005 – Mesoscale and Submesoscale Processes and Dynamics for the Monterey Bay Region Circulation. *Deep-Sea Research*.
Liang, X.S. and A.R. Robinson
- [269] 2005 – Multi-Scale Dynamical Processes, Mesoscale and Sub-mesoscale Dynamics. *Deep Sea Research*.
Liang, X.S., A.R. Robinson, P.J. Haley, Jr., W.G. Leslie, P.F.J. Lermusiaux and R. Tian
- [268] 2005 – Verification and Training of Real-Time Forecasting of Multi-Scale Ocean Dynamics for MREA. *Journal of Marine Sciences*.
Leslie, W.G., A.R. Robinson, P.J. Haley, Jr., O. Logutov, P. Moreno, P.F.J. Lermusiaux and E. Coelho
- [267] 2004 – Towards a Dynamic Data-Driven System for Rapid Adaptive Interdisciplinary Ocean Forecasting. In *Dynamic Data-Driven Application Systems*. F. Darema (Ed.) Kluwer Academic Publishers.
Patrikalakis, N.M., J.J. McCarthy, A.R. Robinson, H. Schmidt, W. Cho, C. Evangelinos, P.J. Haley, Jr., S. Lasis, P.F.J. Lermusiaux and R. Tian
- [266] 2003 – An Operational Circulation Modeling System for the Gulf of Maine/Georges Bank Region, Part I: Basis Elements. *Journal of Marine Systems*
Brown, W.S., A. Gangopadhyay, F.L. Bub, Z. Yu, G. Strout, A.R. Robinson, B.J. Rothschild and M.A. Sundermeyer
- [265] 2003 – Localized Multiscale Energy and Vorticity Analysis. II. Instability theory and validation. *Dynamics of Atmospheres and Oceans*.
Liang, X.S. and A.R. Robinson
- [264] 2003 – Real-Time Forecasting of Synoptic Transients in the Eastern Ligurian Sea. *Journal of Marine Systems*.

Robinson, A.R., J. Sellschopp, W.G. Leslie, A. Alvarez, G. Baldasserini, P.J. Haley, Jr., P.F.J. Lermusiaux, C. Lozano, E. Nacini, R. Onken, R. Stoner and P. Zanasca

- [263] 2002 – Progress in Coastal Ocean Science and Related Applications.
Robinson, A.R.

In Press

- [262] 2006 – Assessment of environmental correlates with the distribution of fish stocks using a spatially explicit model, *Ecological Modelling*.
Sundermyer, M.A., B.J. Rothschild and A.R. Robinson
- [261] 2006 – Multi-Model Fusion and Error Parameter Estimation. *WMO DA Symposium Special Issue. Q. J. R. Meteorol. Society*.
Logutov, O.G. and A.R. Robinson
- [260] 2006 – Uncertainty Estimation and Prediction for the Interdisciplinary Ocean. Invited paper for a special issue of the *Journal of Computational Physics* on “Uncertainty Quantification.”
Glimm, James and George Karniadakis, (Editors).
Lermusiaux, P.F.J.
- [259] 2005 – Web-Enabled Configuration and Control of Legacy Codes: An Application to Ocean Modeling. *Ocean Modeling*.
Evangelinos, C., R.C. Chang, P.F.J. Lermusiaux and N.M. Patrikalakis
- [258] 2005 – *THE SEA: The Global Coastal Ocean, Volume 14B: Interdisciplinary Regional Studies and Syntheses*. Harvard University Press, Cambridge, MA
Robinson, A.R. and K.H. Brink, (Editors)
- [257] 2005 – *THE SEA: The Global Coastal Ocean, Volume 14A: Interdisciplinary Regional Studies and Syntheses*. Harvard University Press, Cambridge, MA
Robinson, A.R. and K.H. Brink, (Editors)

Publications

- [256] 2006 – Progress and Prospects of U.S. Data Assimilation in Ocean Research, *Oceanography*, 19(1) 172-183.
Lermusiaux, P. F.J., P. Malanotte-Rizzoli, D. Stammer, J. Carton, J. Cummings and A.M. Moore.
- [255] 2006 – Towards Standard Parameterization in Marine Biological Modeling. *Ecological Modeling*, **193**(3-4), 363-386.
Tian, R.C.
- [254] 2006 – Quantifying Uncertainties in Ocean Predictions. Invited manuscript for a special issue of *Oceanography* on Advances in Computational Oceanography, **19**(1), 92-105,
Paluszkiwicz, Terri and Scott Harper (Office of Naval Research) (Editors)

- Lermusiaux, P.F.J., C-S. Chiu, G.G. Gawarkiewicz, P. Abbot, A.R. Robinson, R. N. Miller, P. J. Haley, W.G. Leslie, S.J. Majumdar, A.Pang and F. Lekien
- [253] 2005 – *The SEA: The Global Coastal Ocean, Volume 13: Multiscale Interdisciplinary Processes*. Harvard University Press, Cambridge, MA
Robinson, A.R. and K.H. Brink, (Editors)
- [252] 2005 – Interdisciplinary Multiscale Coastal, Dynamical, Processes and Interactions. *THE SEA: Volume 13: Multiscale Interdisciplinary Processes*. Robinson, A.R. and K.H. Brink, (Editors), Harvard University Press, Cambridge, MA, 3-35.
Robinson, A.R., K.H. Brink, H.W. Ducklow, R.A. Jahnke and B.J. Rothschild
- [251] 2005 – Localized Multiscale Energy and Vorticity Analysis. I. Fundamentals. *Dynamics of Atmospheres and Oceans*, **38**(3-4), 195-230.
Liang, X.S. and A.R. Robinson
- [250] 2005 – A rapid response nowcast/forecast system using multiply nested ocean models and distributed data systems. *Journal of Marine Systems*, **56**, 45-66.
Onken, R., A.R. Robinson, Lakshmi Kantha, Carlos J. Lozano, Patrick J. Haley, Jr. and Sandro Carniel
- [249] 2005 – Using Commercial Landings Data to Identify Environmental Correlates with Distributions of Fish Stocks. *Fisheries Oceanography*, **14**(1), 47-63.
Sundermeyer, M.A., B.J. Rothschild and A.R. Robinson
- [248] 2005 – Wilkinson Basin area water masses: a revisit with EOFs. *Continental Shelf Research*, **25**(2), 277-296.
Warn-Varnas, Alex, Avijit Gangopadhyay, J.A. Hawkins and A.R. Robinson
- [247] 2004 – Prediction Systems with Data Assimilation for Coupled Ocean Science and Ocean Acoustics. *Theoretical and Computational Acoustics 2003*. A. Tolstoy, Y.-C. Teng, E.C. Shang (Editors), World Scientific Publishing, 325-342.
Robinson, A.R. and P.F.J. Lermusiaux
- [246] 2004 – A study of the Iceland-Faeroe Frontal Variability Using the Multiscale Energy and Vorticity Analysis. *Journal of Physical Oceanography*, **34**, 2571-2591.
Liang, X.S. and A.R. Robinson
- [245] 2004 – Adaptive Coupled Physical and Biogeochemical Ocean Predictions: A Conceptual Basis. Invited paper *in Computational Science – ICCS*, F. Darema (ed.), Lecture Notes in Computer Science, **3038**, 685-692.
Lermusiaux, P.F.J., C. Evangelinos, R.Tian, P.J.Haley, Jr., J.J. McCarthy, N.M. Patrikalakis, A.R. Robinson and H. Schmidt
- [244] 2004 – Biogenic Carbon and Nitrogen Export in a Deep-convection Region: Simulations in the Labrador Sea. *Deep-Sea Research I*, **51**, 413-437.
Tian, R.C., D. Deibel, R.B. Rivkin and A. Vezina

- [243] 2003 – Sub-mesoscale Operational Modeling: the mini-HOPS concept, NATO Undersea Research Centre memorandum, NURC M-144.
Coelho, E.F. and A.R. Robinson
- [242] 2003 – NATO Tactical Ocean Modeling: the mini-HOPS strategy in the Maritime Rapid Environmental Assessment 2003 Sea Trial, in MREP03 Conference Vila Marigola-LaSpezia, Italy, NATA Undersea Research Centre conference proceedings series, NURC CP-47/CD-70.
Coelho, E.R. and A.R. Robinson
- [241] 2003 – Advanced Systems for Operational Ocean Forecasting of Interdisciplinary Fields and Uncertainties, in MREP03 Conference Vila Marigola-LaSpezia, Italy, NATO Undersea Research Centre conference proceedings series, NURC CP-47/CD-70.
Robinson, A.R. and W.G. Leslie
- [240] 2003 – Modeling of Climate Forcing on a Cold-ocean Ecosystem, Conception Bay, Newfoundland. *Marine Ecology Progress Series*, **262**, 1-17.
Tian, R.C., D. Deibel, R. J. Thompson and R.B. Rivkin
- [239] 2003 – Sensitivity of Biogenic Carbon Export to Ocean Climate in the Labrador Sea, a Deep-water Formation Region. *Global Biogeochemical Cycles*, **17**(4), 1090, 1-11.
Tian, R.C., A. Vezina, D. Deibel and R.B. Rivkin
- [238] 2003 – A Study of Environmental Indicators and the Predictability of Commercial Fish Stocks. *ICES Marine Science Symposia - Hydrobiological Variability in the ICES Area, 1990-1999*, **290**, 396-399, 2003.
Sundermeyer, M.A., B.J. Rothschild, and A.R. Robinson
- [237] 2003 – The Use of Data Assimilation in Coupled Hydrodynamic Ecological and Biogeochemical Models of the Ocean. Preface – 33rd International Liege Colloquium on Ocean Dynamics – Liege, Belgium, May 7 – 11, 2001. *Journal of Marine Systems*, **40**, 1-3.
Gregoire, M., P. Brasseur and P.F.J. Lermusiaux
- [236] 2003 – Forecasting of Synoptic Transients in the Eastern Ligurian Sea. *In Autonomous underwater vehicle and ocean modeling networks: GOATS 2000*. Proceedings of a conference held in La Spezia, Italy, Bovio, E., R. Tyce and H. Schmidt (Editors) NATO SACLANT Undersea Research Centre, *SACLANTCEN Conference Proceedings Series CP-46*.
Robinson, A.R., J. Sellschopp, W.G. Leslie, R. Onken, A. Alvarez, G. Baldasserini, P.J. Haley, Jr., P.F.J. Lermusiaux, C. Lozano, E. Nacini, R. Stoner and P. Zanasca
- [235] 2003 – Rapid Real-Time Interdisciplinary Ocean Forecasting Using Adaptive Sampling and Adaptive Modeling and Legacy Codes: Component Encapsulation Using XML. *Proceedings of Computational Science - ICCS 2003*, International Conference on Computational Science 2003, Saint Petersburg, Russian Federation, and Melbourne, Australia, June 2003, P.M.A. Sloot, D. Abramson, A. Bogdanov, J.J. Dongarra, A. Zomaya and Y. Gorbachev (Editors). Lecture Notes in Computer Science, Springer, **2660**, 375-384.
Evangelinos, C., R. Chang, P.F.J. Lermusiaux and N.M. Patrikalakis

- [234] 2003 – Feature Oriented Regional Modeling and Simulations in the Gulf of Maine and Georges Bank. *Continental Shelf Research*, **23**(3-4), 317-353.
Gangopadhyay, A., A.R. Robinson, P.J. Haley, Jr., W.G. Leslie, C.J. Lozano, J.J. Bisagni and Z. Yu
- [233] 2003 – The use of data assimilation in coupled hydrodynamic, ecological and bio-geo-chemical models of the ocean. Special Issue, 33rd International Liege colloquium, May 2001. *Journal of Marine Systems*, **40**.
Gregoire, M., P. Brasseur and P.F.J. Lermusiaux (Guest Editors)
- [232] 2003 – Coupled physical and biological data driven simulations of Massachusetts Bay in late summer: Real-time and post-cruise data assimilation. Special Issue on “The use of data assimilation in coupled hydrodynamic, ecological and bio-geo-chemical models of the oceans,” Gregoire M., P. Brasseur and P.F.J. Lermusiaux (Editors), *Journal of Marine Systems*, **40**, 171-212.
Besiktepe, S.T., P.F.J. Lermusiaux and A.R. Robinson
- [231] 2003 – Data-driven Simulations of Synoptic Circulation and Transports in the Tunisian-Sardinia-Sicily Region. *Journal of Geophysical Research*, **108**(C9), 8123-8136.
Onken, R., A.R. Robinson, P.F.J. Lermusiaux, P.J. Haley, Jr., and L.A. Anderson
- [230] 2002 – Predictive Skill, Predictive Capability and Predictability in Ocean Forecasting. *Proceedings of Oceans 2002 IEEE/MITS Conference*, 787-794.
Robinson, A.R., P.F.J. Lermusiaux, P.J. Haley, Jr. and W.G. Leslie
- [229] 2002 – Advanced Interdisciplinary Data Assimilation: Filtering and Smoothing via Error Subspace Statistical Estimation. *Proceedings of Oceans 2002 IEEE/MITS Conference*, 795-802.
Lermusiaux, P.F.J., A.R. Robinson, P.J. Haley, Jr. and W.G. Leslie
- [228] 2002 – Wavelet-Based Multiscale Window Transform and Energy and Vorticity Analysis. PhD Thesis, Harvard University, Cambridge, MA.
Liang, X. S.
- [227] 2002 – Coupled 3D Physical and Biological Modelling of the Mesoscale Variability Observed in North-East Atlantic in Spring 1997: Biological Processes. *Deep-Sea Research Part I: Oceanographic Research*, **49**(10), 1741-1768.
Popova, E.E., C.J. Lozano, M.A. Srokosz, M.J.R. Fasham, P.J. Haley, Jr. and A.R. Robinson
- [226] 2002 – Transfer of uncertainties through physical-acoustical-sonar end-to-end systems: A conceptual basis. *Acoustic Variability 2002*. N.G. Pace and F.B. Jensen (Editors), Saclantcen. Kluwer Academic Press, 603-610.
Robinson, A.R., P. Abbot, P.F.J. Lermusiaux and L. Dillman
- [225] 2002 – Four-dimensional data assimilation for coupled physical-acoustical fields. *Acoustic Variability, 2002*. N.G. Pace and F.B. Jensen (Editors), Saclantcen. Kluwer Academic Press, 417-424.

Lermusiaux, P.F.J. and C.-S. Chiu

- [224] 2002 – Feature-Oriented Regional Modeling of Oceanic Fronts. *Dynamics of Atmospheres and Oceans*, **36**, 201-232.
Gangopadhyay, A. and A.R. Robinson
- [223] 2002 – On the Mapping of Multivariate Geophysical Fields: Sensitivities to Size, Scales and Dynamics. *Journal of Atmospheric and Oceanic Technology*, **19**, 1602-1637.
Lermusiaux, P.F.J.
- [222] 2002 – Modeling Uncertainties in the Prediction of the Acoustic Wavefield in a Shelfbreak Environment. *Theoretical and Computational Acoustics, 2001*. Shang, E.-C., Q. Li and T.F. Gao, *World Scientific Publishing Co.*, 191-200.
Lermusiaux, P.F.J., C.-S. Chiu and A.R. Robinson
- [221] 2002 – Visualizing scalar volumetric data with uncertainty. *Computers and Graphics-UK*, **26**(2), 239-248.
Djurcilov, S., K. Kim, P.F.J. Lermusiaux and A. Pang.
- [220] 2002 – Rapid Assessment of the Coastal Ocean Environment. *Ocean Forecasting: Conceptual Basis and Applications*. N. Pinardi & J.D. Woods, Springer, 203-232.
Robinson, A.R and J. Sellschopp
- [219] 2002 – Introduction - Biological-Physical Interactions in the Sea: Emergent Findings and New Directions. *THE SEA: Volume 12: Biological-Physical Interactions in the Sea*. Robinson, A.R., J.J. McCarthy, and B.J. Rothschild (Editors), John Wiley and Sons, NY, 1-17.
McCarthy, J.J., A.R. Robinson and B.J. Rothschild
- [218] 2002 – *THE SEA: Volume 12: Biological-Physical Interactions in the Sea*. John Wiley and Sons, NY
Robinson, A.R., J.J. McCarthy and B.J. Rothschild (Editors)
- [217] 2002 – Data Assimilation for Modeling and Predicting Coupled Physical-Biological Interactions in the Sea. *THE SEA: Volume 12: Biological-Physical Interactions in the Sea*. Robinson, A.R., J.J. McCarthy and B.J. Rothschild (Editors), John Wiley and Sons, NY, 475-536.
Robinson, A.R. and P.F.J. Lermusiaux
- [216] 2001 – Assimilating near-real-time fisheries and environmental data into an advanced fisheries management information system (abstract), 2001 ICES AC Handbook, Annual Science Conference, International Council for the Exploration of the Sea, Oslo, 26-29 September.
Brown, W.S., F.L. Bub, B. Rothschild, M. Sundermeyer, A. Gangopadhyay, R. Lane, A. R. Robinson and P.J. Haley, Jr.

- [215] 2001 – Data Assimilation in Models. *Encyclopedia of Ocean Sciences*. Academic Press Ltd., London, 623-634.
Robinson, A.R. and P.F.J. Lermusiaux
- [214] 2001 – Mediterranean Sea Circulation. *Encyclopedia of Ocean Sciences*. Academic Press Ltd., London, 1689-1706.
Robinson, A.R., A. Theocharis, A. Lascaratos and W.G. Leslie
- [213] 2001 – On the Summer Mesoscale Variability of the Black Sea. *Journal of Marine Research*, **59**, 475-515.
Besiktepe, S., C.J. Lozano and A.R. Robinson
- [212] 2001 – Features of Dominant Mesoscale Variability, Circulation Patterns and Dynamics in the Strait of Sicily. *Deep-Sea Research I*, **48**, 1953-1997.
Lermusiaux, P.F.J. and A.R. Robinson
- [211] 2001 – Volume Rendering Data with Uncertainty Information. *In “Joint Eurographics – IEEE TVG Symposium on Visualization,”* Springer-Verlag, 234-252 & 355-356.
Djurcilov, S., K. Kwansik, P.F.J. Lermusiaux and A. Pang
- [210] 2001 – Evolving the Subspace of the Three-Dimensional Multiscale Ocean Variability: Massachusetts Bay. *Journal of Marine Systems*, **29**, 385-422.
Lermusiaux, P.F.J.
- [209] 2001 – The Development and Demonstration of an Advanced Fisheries Management Information System. Seventeenth International Conference on Interactive Information and Processing Systems (IIIPS), 15-17 January, 2001, Albuquerque, New Mexico, *American Meteorological Society*, Boston, MA, Sect. **4**:23, 186-190.
Robinson, A. R., B.J. Rothschild, W.G. Leslie, J.J. Bisagni, M.F. Borges, W.S. Brown, D. Cai, P. Fortier, A. Gangopadhyay, P.J. Haley, Jr., H.S. Kim, L. Lanerolle, P.F.J. Lermusiaux, Lozano, C.J., M.G. Miller, G. Strout and M.A. Sundermeyer.
- [208] 2001 – Physical and Biological Modeling in the Gulf Stream Region, II: Physical and Biological Processes. *Deep-Sea Research I*, **48**, 1139-1168.
Anderson, L.A. and A.R. Robinson
- [207] 2000 – The Digital Ocean. Proceedings of Computer Graphics International, GCI 2000, Geneva, Switzerland, June 2000. IEEE Computer Society Press, Los Alamitos, CA, 45-53.
Patrikalakis, N.M., S.L. Abrams, J.G. Bellingham, W. Cho, K.P. Mihanetzi, A.R. Robinson, H. Schmidt and P.C.H. Wariyapola
- [206] 2000 – Physical and Biological Modeling in the Gulf Stream Region:I. Data Assimilation Methodology. *Deep-Sea Research I*, **47**, 1787-1827.
Anderson, L.A., A.R. Robinson and C.J. Lozano
- [205] 2000 – On the Mapping of Multivariate Geophysical Fields:Error and Variability Subspace Estimates. *Q.J.R. Meteorol. Soc.*, April **B**, 1387-1430.

Lermusiaux, P.F.J., D.G. Anderson and C.J. Lozano

- [204] 1999 – Ontology and Metadata Creation for the Poseidon Distributed Coastal Zone Management System. Proceedings of IEEE Forum on Research and Technology Advances in Digital Libraries, IEEE ADL'99, 180-189.
Wariyapola, P.C.H., N.M. Partikalakis, S.L. Abrams, P. Elisseeff, A.R. Robinson, H. Schmidt and K. Streitlien
- [203] 1999 – Interdisciplinary Ocean Science is Evolving and a Systems Approach is Essential. *Journal of Marine Systems*, **22**, 231-239.
Robinson, A.R., J.J. McCarthy and B.J. Rothschild
- [202] 1999 – Adaptive Sampling for Ocean Forecasting. *Naval Research Reviews*, **51**(2), 28-38.
Robinson, A.R. and S.M. Glenn
- [201] 1999 – Realtime Forecasting of the Multidisciplinary Coastal Ocean with the Littoral Ocean Observing and Predicting System (LOOPS). *Third Conference on Coastal Atmospheric and Oceanic Prediction and Processes*, (3-5 Nov. 1999), New Orleans, LA. *American Meteorological Society*, 130-135.
Robinson, A.R. and the LOOPS Group
- [200] 1999 – Strait of Sicily Water Masses. *Dynamics of Atmospheres and Oceans, Special Issue in honor of Prof. A.R. Robinson*, **29**, 437-469.
Warn-Varnas, A., J. Sellschopp, P.J. Haley, Jr., W.G. Leslie and C.J. Lozano
- [199] 1999 – Estimation and Study of Mesoscale Variability in the Strait of Sicily. *Dynamics of Atmospheres and Oceans, Special Issue in honor of Prof. A.R. Robinson*, **29**, 255-303.
Lermusiaux, P.F.J.
- [198] 1999 – Distributed Information and Computation in Scientific and Engineering Environments. *D-Lib Magazine, The Magazine of Digital Library Research*, (www.dlib.org), **5**(4), April.
Patrikalakis, N.M., P.J. Fortier, Y. Ioannidis, C.N. Nikolaou, A.R. Robinson, J.R. Rossignac, A. Vinacua, and S.L. Abrams
- [197] 1999 – Influence of Physical Forcing on Microclouds of Dissolved Organic Matter and Nutrients in the Ocean. *Journal of Plankton Research*, **21**(7), 1217-1230.
Rothschild, B.J., P.J. Haley, Jr. and D. Cai
- [196] 1999 – Chaotic Streamlines in a Steady Bounded Three-Dimensional Stokes Flows. *Physica D*, **130**, 105-132.
Kroujiline, D. and H.A. Stone
- [195] 1999 – Progress in Ocean Science and Ocean Acoustics, Keynote Address, Theoretical and Computational Acoustics '97 (Yu-Chiung Teng *et al*), 1–25 *World Scientific Publishing Co.*, Singapore.
Robinson, A.R. and C.J. Lozano

- [194] 1999 – The Atlantic Ionian Stream, — Special Issue — in Memory of Dr. Antonio Michelato. *Journal of Marine Systems*, **20**, 129-156.
Robinson, A.R., J. Sellschopp, A. Warn-Varnas, W.G. Leslie, C.J. Lozano, P.J. Haley, Jr., Anderson, L.A. and P.F.J. Lermusiaux
- [193] 1999 – On the Theory of Advective Effects on Biological Dynamics in the Sea II: Localization, Light Limitation, and Nutrient Saturation. *Proceedings of the Royal Society, A*, **455**, 1813-1828.
Robinson, A.R.
- [192] 1999 – Data Assimilation via Error Subspace Statistical Estimation, Part II: Mid-Atlantic Bight Shelfbreak Front Simulations, and ESSE Validation. *Monthly Weather Review*, **127**(8), 1408-1432.
Lermusiaux, P.F.J.
- [191] 1999 – Data Assimilation via Error Subspace Statistical Estimation, Part I: Theory and Schemes. *Monthly Weather Review*, **127**(7), 1385-1407.
Lermusiaux, P.F.J. and A.R. Robinson
- [190] 1999 – Forecasting and Simulating Coastal Ocean Processes and Variabilities with the Harvard Ocean Prediction System, *In Coastal Ocean Prediction*, (C.N.K. Mooers, Editors), AGU Coastal and Estuarine Studies Series, 77-100, American Geophysical Union.
Also appeared in:
1997 – *Rapid Environmental Assessment, SACLANTCEN Conference Proceedings Series* CP-44, 187-198.
Robinson, A.R.
- [189] 1999 – The “Mad Sea” Phenomenon in the Strait of Sicily. *Journal of Physical Oceanography*, **29**, 2210-2231.
Candela, J., S. Mazzola, C. Sammari, R. Limeburner, C.J. Lozano, B. Patti and A. Bonnano
- [188] 1998 – Influence of Mesoscale Eddies on New Production in the Sargasso Sea. *Nature*, **394**, 263-265.
McGillicuddy, Jr., D.J., A.R. Robinson, D.A. Siegel, H.W. Jannasch, R. Johnson, T.D. Dickey, J. McNeil, A.F. Michaels, and A.H. Knap
- [187] 1998 – *THE SEA: The Global Coastal Ocean*, Volume **11**: Regional Studies and Syntheses. John Wiley and Sons, NY.
Robinson, A.R. and K.H. Brink
- [186] 1998 – *THE SEA: The Global Coastal Ocean*, Volume **10**: Processes and Methods. John Wiley and Sons, NY.
Brink, K.H. and A.R. Robinson
- [185] 1998 – Data Assimilation. *In THE SEA: The Global Coastal Ocean*, Volume **10**: Processes and Methods (K.H. Brink and A.R. Robinson, Editors), John Wiley and Sons, NY, 541-594.

Robinson, A.R., P.F.J. Lermusiaux and N.Q. Sloan

- [184] 1998 – An Airborne Expendable Bathythermograph Survey of the South China Sea, May 1995. *Journal of Geophysical Research*, **103**, 21,637-21,652.
Chu, P.C., C. Fan, C.J. Lozano and J.L. Kerling
- [183] 1997 – On the Theory of Advective Effects on Biological Dynamics in the Sea. *Proceedings of the Royal Society*, **A**, 453, 2295-2324.
Robinson, A.R.
- [182] 1997 – Eddy-Induced Nutrient Supply and New Production in the Sargasso Sea. *Deep-Sea Research*, **44**(8), 1427-1450.
McGillicuddy, D.J. and A.R. Robinson
- [181] 1997 – Interaction Between the Oceanic Mesoscale and the Surface Mixed Layer. *Dynamics of Atmospheres and Oceans*, **27**, 549-574 — Special Issue — Prof. Richard Pfeffer.
McGillicuddy, D.J. and A.R. Robinson
- [180] 1997 – Circulation and Dynamics of the Western North Atlantic, I: Multi-Scale Feature Models. *Journal of Atmospheric and Oceanic Technology*, **14**, 1314-1332.
Gangopadhyay, A., A.R. Robinson, and H.G. Arango
- [179] 1997 – Circulation and Dynamics of the Western North Atlantic, II: Dynamics of Meanders and Rings. *Journal of Atmospheric and Oceanic Technology*, **14**, 1333-1351.
Robinson, A.R. and A. Gangopadhyay
- [178] 1997 – Circulation and Dynamics of the Western North Atlantic, III: Forecasting the Meanders and Rings. *Journal of Atmospheric and Oceanic Technology*, **14**, 1352-1365.
Gangopadhyay, A. and A.R. Robinson
- [177] 1997 – Error Subspace Data Assimilation Methods for Ocean Field Estimation: Theory, Validation and Applications. PhD Thesis, Harvard University, Cambridge, MA.
Lermusiaux, P.F.J.
- [176] 1996 – A Topographic-Rossby Mode Resonance over the Iceland-Faeroe Ridge. *Journal of Physical Oceanography*, **26**(12), 2735-2747.
Miller, A.J., P.F.J. Lermusiaux and P.-M. Poulain
- [175] 1996 – Experiment in Eastern Mediterranean Probes Origin of Deep Water Masses. *EOS*, **77** (32), 305-311.
Malanotte-Rizzoli, P., A.R. Robinson, W. Roether, B. Manca, A. Bergamasco, S. Brenner, G. Civitarese, D. Georgopoulos, P.J. Haley, Jr., S. Kioroglou, H. Kontoyannis, N. Kress, M.A. Latif, W.G. Leslie, E. M. Ribera d'Alcala, I. Salihoglu, E. Sansone and A. Theocharis
- [174] 1996 – *Dynamics of a Shelf-Slope Front: Process Studies and Data-Driven Simulations in the Middle Atlantic Bight*. Ph.D. Thesis, Harvard University, Cambridge, MA.
Sloan, N.Q.

- [173] 1996 – Real-Time Regional Forecasting. *Modern Approaches to Data Assimilation in Ocean Modelling* (P. Malanotte-Rizzoli, Editors), Elsevier Oceanography Series, Elsevier Science, The Netherlands. 377-412.
Robinson, A.R., H.G. Arango, A. Warn-Varnas, W.G. Leslie, A.J. Miller, P.J. Haley, Jr. and C.J. Lozano
- [172] 1996 – Real-Time Operational Forecasting on Shipboard of the Iceland-Faeroe Frontal Variability. *Bulletin of the American Meteorological Society*, **77**(2), 243-259.
Robinson, A.R., H.G. Arango, A.J. Miller, A. Warn-Varnas, P.-M. Poulain and W.G. Leslie
- [171] 1996 – Physical Processes, Field Estimation and Interdisciplinary Ocean Modeling. *Earth-Science Reviews*, **40**, 3-54.
Robinson, A.R.
- [170] 1996 – An Interdisciplinary Ocean Prediction System: Assimilation Strategies and Structured Data Models. *Modern Approaches to Data Assimilation in Ocean Modelling* (P. Malanotte-Rizzoli, Editors), Elsevier Oceanography Series, Elsevier Science, The Netherlands. 413-452.
Lozano, C.J., A.R. Robinson, H.G. Arango, A. Gangopadhyay, N.Q. Sloan, P.J. Haley, Jr. and W.G. Leslie
- [169] 1996 – Dynamical Adjustment of Quasi-Synoptic Data Sets in the Eastern Mediterranean: Testing a Full Basin Coastal Methodology. *Journal of Marine Systems*, **7**, 9-42.
Golnaraghi, M., C.J. Lozano and A.R. Robinson
- [168] 1995 – Global ocean phosphate and oxygen simulations. *Global Biogeochemical Cycles*, **9**(4), 621-636.
Anderson, L.A. and J. L. Sarmiento
- [167] 1995 – Quantitative Skill of Quasigeostrophic Forecasts of a Baroclinically Unstable Iceland-Faeroe Front. *Journal of Geophysical Research*, **100**(C6), 10833-10849.
Miller, A.J., P.-M. Poulain, A.R. Robinson, H.G. Arango, W.G. Leslie and A. Warn-Varnas
- [166] 1995 – Quasigeostrophic Forecasting and Physical Processes of Iceland-Faeroes Frontal Variability. *Journal of Physical Oceanography*, **25**, 1273-1295.
Miller, A.J., H.G. Arango, A.R. Robinson, W.G. Leslie, P.-M. Poulain and A. Warn-Varnas
- [165] 1995 – One Dimensional Numerical Simulation of New Primary Production: Lagrangian and Eulerian Formulations. *Journal of Plankton Research*, **17**(2), 405-412.
McGillicuddy, Jr., D.J.
- [164] 1995 – Coupled Physical and Biological Modeling of the Spring Bloom in the North Atlantic, II: Three-Dimensional Bloom and Post-Bloom Effects. *Deep-Sea Research I*, **42**(8), 1359-1398.
McGillicuddy, Jr., D.J., A.R. Robinson and J.J. McCarthy

- [163] 1995 – Coupled Physical and Biological Modeling of the Spring Bloom in the North Atlantic, I: Model Formulation and One-Dimensional Bloom Processes. *Deep-Sea Research I*, **42**(8), 1313-1357.
McGillicuddy, Jr., D.J., J.J. McCarthy and A.R. Robinson
- [162] 1995 – Verification of an Operational Gulf Stream Forecasting Model. *In Quantitative Skill Assessment for Coastal Ocean Models, Coastal and Estuarial Studies*. American Geophysical Union, **47**, 469-499.
Glenn, S.M. and A. R. Robinson
- [161] 1995 – The M_2 Tide in the Mediterranean Sea: Dynamical Analysis and Data Assimilation. *Oceanologica Acta*, **18**, 419-441.
Lozano, C. J. and J. Candela
- [160] 1994 – Barotropic response of the Western Mediterranean to observed atmospheric pressure forcing. *In The Seasonal and Interannual Variability of the Western Mediterranean Sea* P.E. LaViolette (Editor), 325-360.
Candela, J. and C. J. Lozano
- [159] 1994 – Experiment Evaluates Ocean Models and Data Assimilation in the Gulf Stream (DAMEE). *EOS*, **75**(34), 385,391,394.
Willems, R.C., S.M. Glenn, M.F. Crowley, P. Malanotte-Rizzoli, R.E. Young, T. Ezer, G.L. Mellor, H.G. Arango, A.R. Robinson and C.-C. A. Lai
- [158] 1994 – Sensitivity Issues for Interfacing Mesoscale Ocean Prediction and Parabolic Acoustic Propagation Models. *Oceanography and Acoustics: Prediction and Propagation Models* (A.R. Robinson and D. Lee, Editors), American Inst. of Physics, New York, 133–160.
Siegmann, W.L., D. Lee, G. Botseas and A.R. Robinson
- [157] 1994 – Ocean Variability, Acoustic Propagation and Coupled Models. *Oceanography and Acoustics: Prediction and Propagation Models* (A.R. Robinson and D. Lee, Editors), American Inst. of Physics, New York, 1-6.
Robinson, A.R. and D. Lee
- [156] 1994 – *Oceanography and Acoustics: Prediction and Propagation Models*. Edited and with an introduction by A.R. Robinson and D. Lee, 257 pp. American Inst. of Physics, New York.
Robinson, A.R. and D. Lee
- [155] 1994 – The Physical and Dynamical Oceanography of the Mediterranean Sea. *Ocean Processes in Climate Dynamics: Global and Mediterranean Examples* (P. Malanotte-Rizzoli and A.R. Robinson, Editors), Proceedings of NATO-ASI, Kluwer Academic Publishers, Dordrecht, The Netherlands, 255-306.
Robinson, A.R. and M. Golnaraghi
- [154] 1994 – A Dynamical System for Acoustic Applications. *Oceanography and Acoustics: Prediction and Propagation Models* (A.R. Robinson and D. Lee, Editors), American Inst. of Physics, New York, 80-117.

Robinson, A.R., J.C. Carman and S.M. Glenn

- [153] 1994 – Vortices and Jets: Dynamics, Interactions and Forecasts. *Modelling of Oceanic Vortices* (G.J.F. van Heijst, Editors), KNAW, North Holland, Elsevier, 1-15.
Robinson, A.R.
- [152] 1994 – Vertical Projection of Sound Speed Profile and Its Effect on Ocean-Acoustic Models. *Theoretical and Computational Acoustics*, Volume 2 (D. Lee and M.H. Schultz, Editors), World Scientific Publishing Co., 933-946.
Pourkaviani, M. and A.R. Robinson
- [151] 1994 – *Ocean Processes in Climate Dynamics: Global and Mediterranean Examples*. Proceedings of NATO-ASI, 437 pp. Kluwer Academic Publishers, Dordrecht, The Netherlands.
Malanotte-Rizzoli, P. and A.R. Robinson
- [150] 1994 – Dynamical Studies of the Eastern Mediterranean Circulation. *Ocean Processes in Climate Dynamics: Global and Mediterranean Examples* (P. Malanotte-Rizzoli and A.R. Robinson, Editors), Proceedings of NATO-ASI, Kluwer Academic Publishers, Dordrecht, The Netherlands, 395-406.
Golnaraghi, M. and A.R. Robinson
- [149] 1994 – Oceanographic/Topographic Interactions on Acoustic Propagation in the Iceland-Faeroe Front Region. *Journal of the Acoustic Society of America*, **95**(4), 1882-1894.
Carman, J.C. and A.R. Robinson
- [148] 1994 – Oceanographic, Topographic and Sediment Interactions in Deep Water Acoustic Propagation: Part II, Gulf Stream Simulations. *Journal of the Acoustic Society of America*, **95**(3), 1363-1377.
Carman, J.C. and A.R. Robinson
- [147] 1994 – Oceanographic, Topographic and Sediment Interactions in Deep Water Acoustic Propagation: Part I, Effect of Sediment Properties on Propagation Patterns within the Water Column. *Journal of the Acoustic Society of America*, **95**(3), 1344-1362.
Carman, J.C.
- [146] 1993 – A Coupled Surface Boundary Layer Quasigeostrophic Ocean Model. *Dynamics of Atmospheres and Oceans*, **18**(3-4), 151-208.
Walstad, L.J. and A.R. Robinson
- [145] 1993 – Mesoscale and Upper Ocean Variabilities during the 1989 JGOFS Bloom Study. *Deep-Sea Research*, **40**(1-2), 9-35.
Robinson, A.R., D.J. McGillicuddy, J. Calman, H.W. Ducklow, M.J.R. Fasham, F.E. Hoge, W.G. Leslie, J.J. McCarthy, S. Podewski, D.L. Porter, G. Sauer and J.A. Yoder
- [144] 1993 – *Physical Oceanography of the Eastern Mediterranean Sea — Special Issue — Deep-Sea Research*, **40**(6), 1332 pp., Pergamon Press, Oxford.

Robinson, A.R. and P. Malanotte-Rizzoli

- [143] 1993 – Circulation and Dynamics of the Eastern Mediterranean Sea; Quasi-Synoptic Data-Driven Simulations. *Deep-Sea Research*, **40**(6), 1207-1246.
Robinson, A.R. and M. Golnaraghi
- [142] 1993 – Mediterranean and Global Ocean and Climate Dynamics. *EOS*, **74**(44), 06-507.
Robinson, A.R., C.J. Garrett, P. Malanotte-Rizzoli, S. Manabe, S.G. Philander, N. Pinardi, W. Roether, F.A. Schott, and J. Shukla
- [141] 1993 – Marine Circulation: Global and Regional Impacts. *Sistema Terra*, **2**(1), 35-36.
Robinson, A.R.
- [140] 1993 – *Mesoscale Ocean Dynamics and Biological Productivity*. PhD Thesis, Harvard University, Cambridge, MA.
McGillicuddy, Jr., D.J.
- [139] 1993 – *Computational Acoustics. Volume 2: Acoustic Propagation*, 457 pp. North-Holland, Amsterdam, The Netherlands.
Lee, D., A.R. Robinson, and R. Vichnevetsky
- [138] 1993 – *Computational Acoustics. Volume 1: Scattering, Supercomputing and Propagation*, 456 pp. North-Holland, Amsterdam, The Netherlands.
Lau, R.L., D. Lee, and A.R. Robinson
- [137] 1993 – Dynamical Studies of the Mersa Matruh Gyre: Intense Meander and Ring Formation Events. *Deep-Sea Research*, **40**(6), 1247-1267.
Golnaraghi, M.
- [136] 1993 – *Circulation and Dynamics of the Eastern Mediterranean Sea*. PhD Thesis, Harvard University, Cambridge, MA.
Golnaraghi, M.
- [135] 1993 – Environmental Input Sensitivities of an Interfaced Ocean-Acoustic System. *Computational Acoustics: Scattering, Supercomputing and Propagation: Volume 1* (R.L. Lau, D. Lee, and A.R. Robinson, Editors), North-Holland, Amsterdam, The Netherlands, 429-450.
Glenn, S.M., W.L. Siegmann, D. Lee, G. Botseas and A.R. Robinson
- [134] 1993 – Surface Duct and Range Dependence Effects on Acoustic Propagation in the North Atlantic Drift Region. *Computational Acoustics: Scattering, Supercomputing and Propagation: Volume 1* (R.L. Lau, D. Lee, and A.R. Robinson, Editors), North-Holland, Amsterdam, The Netherlands, 19-38.
Carman, J.C. and A.R. Robinson
- [133] 1992 – Progress in the Understanding of the Eastern Mediterranean Sea. *Advances in Mediterranean Oceanography — Special Issue 11 — Bulletin of the Institute of Oceanography, Monaco*.

Robinson, A.R. and M. Golnaraghi

- [132] 1992 – General Circulation of the Eastern Mediterranean. *Earth-Science Reviews*, **32**, 285-309.
Robinson, A.R., P. Malanotte-Rizzoli, A. Hecht, A. Michelato, W. Roether, A. Theocharis, U. Unluata, N. Pinardi, and the POEM Group
- [131] 1992 – Shipboard Prediction with a Regional Forecast Model. *The Oceanography Society Magazine*, **5**(1), 42-48.
Robinson, A.R.
- [130] 1992 – Consistent Baroclinic Quasigeostrophic Ocean Model in Multiply Connected Ocean Domains. *Mathematics and Computers in Simulation*, **34**(1), 51-79.
Ozsoy, E., C.J. Lozano, and A.R. Robinson
- [129] 1992 – Structure and Dynamics of the Rhodes Gyre System, and Dynamical Interpolation for Estimates of the Mesoscale Variability. *Journal of Physical Oceanography*, **22**(4), 317–337.
Milliff, R.F. and A.R. Robinson
- [128] 1992 – A Test of the Parsons-Veronis Hypothesis on the Separation of the Gulf Stream. *Journal of Physical Oceanography*, **22**(11), 1286-1301.
Gangopadhyay, A., P. Cornillon, and D.R. Watts
- [127] 1992 – An Adjoint Method for Obtaining the Most Rapidly Growing Perturbation to Oceanic Flows. *Journal of Physical Oceanography*, **22**(4), 338-349.
Farrell, B.F. and A.M. Moore
- [126] 1992 – Radar Altimetry and Global Climatic Change. *Johns Hopkins APL Technical Digest*, **3**, 431-444.
Dobson, E.D., F.M. Monaldo, D.L. Porter, A.R. Robinson, C.C. Kilgus, J. Goldhirsch and S.M. Glenn
- [125] 1991 – The Eastern Mediterranean General Circulation: Features, Structure and Variability. *Dynamics of Atmospheres and Oceans*, **15**(3-5), 215-240.
Robinson, A.R., M. Golnaraghi, W.G. Leslie, A. Artegiani, A. Hecht, E. Lazzoni, A. Michelato, E. Sansone, A. Theocharis, and U. Unluata
- [124] 1991 – Environmental Sensitivity Studies with an Interfaced Ocean-Acoustics System. *Ocean Variability and Acoustic Propagation* (J.R. Potter and A. Warn-Varnas, Editors), Kluwer Academic Publishers, Dordrecht, The Netherlands, 545-560.
Robinson, A.R., S.M. Glenn, W.L. Siegmann, D. Lee, and G. Botseas
- [123] 1991 – GEOSAT: A U.S. Navy Spaceborne Altimeter. *Oceanus*, **33**(4), 50-57.
Porter, D.L., S.M. Glenn, E.B. Dobson, and A.R. Robinson

- [122] 1991 – Data Assimilation in a Quasi-Geostrophic Open Ocean Model of the Gulf Stream Using the Adjoint Method. *Journal of Physical Oceanography*, **21(3)**, 398–427.
Moore, A.M.
- [121] 1991 – Azimuthal Variation of Low Frequency Acoustic Propagation through Asymmetric Gulf Stream Eddies. *Journal of the Acoustical Society of America*, **89(5)**, 2157–2167.
Mellberg, L.E., A.R. Robinson, and G. Botseas
- [120] 1991 – *The Mediterranean Sea — Special Issue — Dynamics of Atmospheres and Oceans*, **15(3-5)**. Elsevier Science Publishers, Amsterdam.
Malanotte-Rizzoli, P. and A.R. Robinson
- [119] 1991 – A Synthetic Geoid Validation of Geosat Mesoscale Dynamic Topography in the Gulf Stream Region. *Journal of Geophysical Research-Oceans*, **96(64)**, 7145–7166.
Glenn, S.M., D.L. Porter, and A.R. Robinson
- [118] 1991 – *Oceanographic and Topographic Interactions in Underwater Acoustic Propagation, with Regional Applications*. PhD Thesis, Harvard University, Cambridge, MA.
Carman, J.C.
- [117] 1990 – Hindcasting and Forecasting of the POLYMODE Dataset with the Harvard Open Ocean Model. *Journal of Physical Oceanography*, **20(11)**, 1682-1702.
Walstad, L.J. and A.R. Robinson
- [116] 1990 – Regional Primitive Equation Studies of the Gulf Stream Meander and Ring Formation Region. *Journal of Physical Oceanography*, **20(7)**, 985-1016.
Spall, M.A. and A.R. Robinson
- [115] 1990 – Interfacing Mesoscale Ocean Prediction and Parabolic Acoustic Propagation Models. *Computational Acoustics II* (D. Lee, A. Cakmak, and R. Vichnevetsky, Editors), Elsevier Scientific Publishers, Amsterdam, 155-168.
Siegmann, W.L., M.L. Jacobson, D. Lee, G. Botseas, A.R. Robinson and S.M. Glenn
- [114] 1990 – Gulf Stream Currents from Satellite Altimetry via a Synthetic Geoid Method. *Science and Technology for a New Oceans Decade*, Marine Technology Society, Conference Proceedings, **1**, September 26–28, 233–238.
Robinson, A.R., D.L. Porter and S.M. Glenn
- [113] 1990 – A Modified Capacitance Matrix Method to Implement Coastal Boundaries in the Harvard Open Ocean Model. *Mathematics and Computers in Simulation*, **31(6)**, 541-564.
Milliff, R.F.
- [112] 1990 – Modelled -Time Variability of Acoustic Propagation through a Gulf Stream Meander. *Journal of the Acoustical Society of America*, **87(3)**, 1044-1054.
Mellberg, L.E. , A.R. Robinson, and G. Botseas

- [111] 1990 – Contour Analysis:A New Approach for Melding Geophysical Fields. *Journal of Atmospheric and Oceanic Technology*, **7**(2), 285-295.
Mariano, A.J.
- [110] 1990 – Nowcasting and Forecasting of Ocean Dynamic and Acoustic Fields. *Computational Acoustics II* (D. Lee, A. Cakmak, and R. Vichnevetsky, Editors), Elsevier Science Publishers, Amsterdam, 117-128.
Glenn, S.M. and A.R. Robinson
- [109] 1989 – Point Vortices Embedded in Thin Jet Stream:A Model for Transition and Ring Formation Processes in the Gulf Stream. *Proceedings of the Seventh Symposium on Turbulent Shear Flows*, Stanford University, Stanford, CA.
Suri, A.K. and N. Pinardi
- [108] 1989 – Streamwise Vortices in Shear Flow Transition. Unpublished.
Suri, A.K. and F.H. Abernathy
- [107] 1989 – A New Open Ocean, Hybrid Coordinate Primitive Equation Model. *Mathematics and Computers in Simulation*, **31**, 241-269.
Spall, M.A. and A.R. Robinson
- [106] 1989 – Regional Primitive Equation Modelling and Analysis of the POLYMODE Data Set. *Dynamics of Atmospheres and Oceans*, **14**(1-2), 125-174.
Spall, M.A.
- [105] 1989 – Frontal Signals East of Iceland from the *GEOSAT* Altimeter. *Geophysical Research Letters*, **16**(1), 77-80.
Robinson, A.R., L.J. Walstad, J. Calman, E.B. Dobson, D.W. Denbo, S.M. Glenn, D.L. Porter and J. Goldhirsh
- [104] 1989 – Dynamics of Warm and Cold Ring Formation Processes:Real Data Based Case Studies in the Gulf Stream. Unpublished. (not available)
Robinson, A.R., A.K. Suri and N. Pinardi
- [103] 1989 – Data Assimilation and Dynamical Interpolation in GULFCASTING Experiments. *Dynamics of Atmospheres and Oceans*, **13**(3-4), 301-316.
Robinson, A.R., M.A. Spall, L.J. Walstad and W.G. Leslie
- [102] 1989 – The Synthetic Geoid and the Estimation of Mesoscale Absolute Topography from Altimeter Data. *Johns Hopkins APL Technical Digest*, **10**(4), 369-379.
Porter, D.L., A.R. Robinson, S.M. Glenn and E.B. Dobson
- [101] 1989 – Progress in Geophysical Fluid Dynamics. *Earth-Science Reviews*, **26**, 191-219.
Robinson, A.R.
- [100] 1989 – Forecasting Gulf Stream Meanders and Rings. *EOS, The Oceanography Report*, **70**(45), 1464-1473.

Robinson, A.R., S.M. Glenn, M.A. Spall, L.J. Walstad, G.M. Gardner, and W.G. Leslie

- [99] 1989 – A Note on Consistent Quasigeostrophic Boundary Conditions in Partially Open, Simply and Multiply Connected Domains. *Dynamics of Atmospheres and Oceans*, **14**(1-2), 65–76.
Pinardi, N. and R.F. Milliff
- [98] 1989 – *Quasigeostrophic Ocean Flows in Coastal Domains*. PhD Thesis, Harvard University, Cambridge, MA.
Milliff, R.F.
- [97] 1989 – Lagrangian Potential Vorticity Balance during POLYMODE. *Journal of Physical Oceanography*, **19**(7), 927-939.
Mariano, A.J. and H.T. Rossby
- [96] 1989 – On the Estimation of Mesoscale Vertical Derivatives of Potential Temperature and Density from Hydrographic Data. *Journal of Atmospheric and Oceanic Technology*, **6**(6), 1013-1023.
Mariano, A.J.
- [95] 1989 – Numerical Computations of Acoustic Propagation through Three-Dimensional Ocean Eddies. *Numerical and Applied Mathematics* (W.F. Ames, Editor), J.C. Baltzer Scientific Publishing Co., Basel, 317-321.
Lee, D., G. Botseas, W.L. Siegmann and A.R. Robinson
- [94] 1989 – *Data Assimilation — Special Issue — Dynamics of Atmospheres and Oceans*, **13**(3-4). Elsevier Science Publishers, Amsterdam.
Haidvogel, D.B. and A.R. Robinson
- [93] 1989 – Synoptic Analysis and Dynamical Adjustment of GEOS-3 and Seasat Altimeter Eddy Fields in the Northwest Atlantic. *Journal of Physical Oceanography*, **94**(5), 6221-6230.
DeMey, P. and Y. Menard
- [92] 1988 – *Regional Ocean Modelling: Primitive Equation and Quasigeostrophic Studies*. PhD Thesis, Harvard University, Cambridge, MA.
Spall, M.A.
- [91] 1988 – Gulf Stream Simulations and the Dynamics of Ring and Meander Processes. *Journal of Physical Oceanography*, **18**(12), 1811–1853.
Robinson, A.R., M.A. Spall and N. Pinardi
- [90] 1988 – POEM:Physical Oceanography of the Eastern Mediterranean. *EOS*, **69**(14), 194–203.
Malanotte-Rizzoli, P. and A.R. Robinson

- [89] 1988 – Larval Fishes and Zooplankton in a Cyclonic Eddy in Hawaiian Waters. *Journal of Plankton Research*, **10**(6), 1209-1223.
Lobel, P.S. and A.R. Robinson
- [88] 1988 – Currents, Water Masses, Eddies and Jets in the Mediterranean Levantine Basin. *Journal of Physical Oceanography*, **18**(10), 1320-1353.
Hecht, A., N. Pinardi and A.R. Robinson
- [87] 1987 – *Modelling and Forecasting of Deep Ocean and Near Surface Mesoscale Eddies: Hindcasting and Forecasting with, and Coupling a Surface Boundary Layer Model to, the Harvard Quasigeostrophic Model*. PhD Thesis, Harvard University, Cambridge, MA.
Walstad, L.J.
- [86] 1987 – Altimetric Data Assimilation for Ocean Dynamics and Forecasting. *Johns Hopkins APL Technical Digest*, **8**(2), 267-271.
Robinson, A.R. and L.J. Walstad
- [85] 1987 – The Harvard Open Ocean Model: Calibration and Application to Dynamical Process, Forecasting, and Data Assimilation Studies. *Journal of Applied Numerical Mathematics*, **3**(1-2), 89-131.
Robinson, A.R. and L.J. Walstad
- [84] 1987 – Small Synoptic/Mesoscale Eddies: The Energetic Variability of the Eastern Levantine Basin. *Nature*, **327**(6118), 131-134.
Robinson, A.R., A. Hecht, N. Pinardi, J. Bishop, W.G. Leslie, Y. Rosentraub, A.J. Mariano and S. Brenner
- [83] 1987 – Predicting Open Ocean Currents, Fronts, and Eddies. *Three-Dimensional Ocean Models of Marine and Estuarine Dynamics* (J.C.J. Nihoul and B.M. Jamart, Editors), Elsevier Science Publishers, B.V., Amsterdam, 89-112.
Robinson, A.R.
- [82] 1987 – Dynamical Interpolation and Forecast Experiments of the Evolution of Mesoscale Features off Northern California. *Journal of Physical Oceanography*, **17**(18), 1190-1213.
Rienecker, M.M. , C.N.K. Mooers and A.R. Robinson
- [81] 1987 – Dynamics of Deep Thermocline Jets in the POLYMODE Region. *Journal of Physical Oceanography*, **17**, 1163-1188.
Pinardi, N. and A.R. Robinson
- [80] 1987 – Assimilation of Altimeter Eddy Fields in a Limited Area Quasi-Geostrophic Model. *Journal of Physical Oceanography*, **17**(12), 2280-2293.
DeMey, P. and A.R. Robinson
- [79] 1987 – How Predictable are the Geostrophic Currents in the Recirculation Zone? *Journal of Physical Oceanography*, **17**(6), 751-762.
Carton, J.A.

- [78] 1987 – Analysis Models for the Estimation of Oceanic Fields. *Journal of Atmospheric and Oceanic Technology*, **4**(1), 49-74.
Carter, E.F. and A.R. Robinson
- [77] 1986 – Dynamical Forecasting and Dynamical Interpolation: An Experiment in the California Current. *Journal of Physical Oceanography*, **16**, 1561-1579.
Robinson, A.R., J.A. Carton, N. Pinardi and C.N.K. Mooers
- [76] 1986 – Data Assimilation, Mesoscale Dynamics and Dynamical Forecasting. *Advanced Physical Oceanographic Numerical Modelling*, (J.J. O'Brien, Editors), R. Reidel Publishing Co., Dordrecht, The Netherlands, 465-483.
Robinson, A.R.
- [75] 1986 – Quasigeostrophic Energetics of Open Ocean Regions. *Dynamics of Atmospheres and Oceans*, **10**(3), 185-221.
Pinardi, N. and A.R. Robinson
- [74] 1986 – Transport and Entrapment of Fish Larvae by Ocean Eddies and Currents in Hawaiian Waters. *Deep-Sea Research*, **33**(4), 483-500.
Lobel, P.S. and A.R. Robinson
- [73] 1986 – Modelling the Pole Tide and Its Effect on the Earth's Rotation. *Geophysical Journal of the R.A.S.*, **84**, 121-138.
Carton, J.A. and J.M. Wahr
- [72] 1986 – A Model for the Vertical Flux of Nitrogen in the Upper Ocean: Simulating the Alteration of Isotopic Ratios. *Journal of Marine Research*, **44**, 203-225.
Altabet, M.A., A.R. Robinson and L.J. Walstad
- [71] 1985 – Estimation of Baroclinic Quasi-Geostrophic Model Amplitudes from XBT/CTD Survey Data. *Journal of Atmospheric and Oceanic Technology*, **2**(4), 491-507.
Smith, J.A., C.N.K. Mooers and A.R. Robinson
- [70] 1985 – A Cool Anomaly off Northern California: An Investigation Using IR Imagery and In Situ Data. *Journal of Geophysical Research*, **90**(C3), 4807-4818.
Rienecker, M.M., C.N.K. Mooers, D.E. Hagan and A.R. Robinson
- [69] 1985 – Unity of Geophysics. *Global Change*, T.F. Malone and J.G. Roederer, (Editors). Proceedings of a Symposium sponsored by the International Council of Scientific Unions (ICSU), 20th General Assembly, Ottawa, Canada, Sept. 25, 1984. Cambridge Press, England.
Robinson, A.R.
- [68] 1985 – Estimation and Prediction of Oceanic Fields. *Progress in Oceanography*, **14**, 485-510.
Robinson, A.R. and W.G. Leslie

- [67] 1985 – *Quasigeostrophic Energetics and Oceanic Mesoscale Dynamics*. PhD Thesis, Harvard University, Cambridge, MA.
Pinardi, N.
- [66] 1984 – A Real-Time Dynamical Forecast of Ocean Synoptic/Mesoscale Eddies. *Nature*, **309**(5971), 781-783.
Robinson, A.R., J.A. Carton, C.N.K. Mooers, L.J. Walstad, E.F. Carter, M.M. Rienecker, J.A. Smith, and W.G. Leslie
- [65] 1984 – Turbulent Jets and Eddies in the California Current and Inferred Cross-Shore Transports. *Science*, **223**, 51-53.
Mooers, C.N.K. and A.R. Robinson
- [64] 1984 – Dynamical Forecast Experiments with a Baroclinic Quasigeostrophic Open Ocean Model. *Proceedings of Conference on Predictability of Fluid Motions*, G. Holloway and B. West, (Editors). American Inst. of Physics, AIP Proceedings No. 106. New York.
Miller, R.N. and A.R. Robinson
- [63] 1984 – On the Time-Dependent Meandering of a Thin Jet. *Journal of Physical Oceanography*, **14**(2), 412-423.
Flierl, G. and A.R. Robinson
- [62] 1983 – A Study of the Variability of Ocean Currents in the Northwestern Atlantic Ocean Using Satellite Altimetry. *Journal of Physical Oceanography*, **13**(4), 565-585.
Robinson, A.R., N.E. Huang, C.D. Leita and C.G. Parra
- [61] 1983 – *Eddies in Marine Science* (Edited and with an Introduction by A.R. Robinson), 609 pp., Springer-Verlag, New York/Heidelberg.
Robinson, A.R. (Editor)
- [60] 1983 – A Baroclinic Quasigeostrophic Open Ocean Model. *Journal of Computational Physics*, **50**(1), 38-70.
Miller, R.N., A.R. Robinson and D.B. Haidvogel
- [59] 1983 – Eddy-Induced Dispersion and Mixing. *Eddies in Marine Science* (A.R. Robinson, Editor), Springer-Verlag, New York/Heidelberg, 481-489.
Haidvogel, D.B., A.R. Robinson and C. Root
- [58] 1983 – *The Statistics and Dynamics of Ocean Eddies*. PhD Thesis, Harvard University, Cambridge, MA.
Carter, E.F., Jr.
- [57] 1982 – Dynamics of Ocean Currents and Circulation: Results of POLYMODE and Related Investigations. *Topics in Ocean Physics* (A. Osborne and P. Malanotte-Rizzoli, Editors), Elsevier Science Publishers, New York,. Soc. Italiana di Fisica, Bologna.
Robinson, A.R.

- [56] 1980 – *Response of the Surface Mixed Layer to Quasi-Geostrophic Oceanic Motions*. PhD Thesis, Harvard University, Cambridge, MA.
Stevenson, J.W.
- [55] 1980 – A New Dimension in Physical Oceanography. *Oceanus*, **23(1)**, 40-52.
Robinson, A.R. and W.J. Simmons
- [54] 1980 – Dynamical Forecast Experiments with a Barotropic Open Ocean Model.
Robinson, A.R. and D.B. Haidvogel
- [53] 1980 – The Accuracy, Efficiency, and Stability of Three Numerical Models with Application to Open Ocean Problems. *Journal of Computational Physics*, **34(1)**, 1-53.
Haidvogel, D.B., A.R. Robinson and E.E. Schulman
- [52] 1979 – Mesoscale Eddies and General Ocean Circulation Models. *Dynamics of Atmospheres and Oceans*, **3(2-4)**, 143-180.
Robinson, A.R., D.E. Harrison and D.B. Haidvogel
- [51] 1979 – *Ocean Models and Climate Models*, **3(2-4)**, of *Dynamics of Atmospheres and Oceans*. Elsevier Science Publishers, Amsterdam.
Robinson, A.R. and D.J. Baker
- [50] 1979 – The Mid Ocean Dynamics Experiment. *Deep-Sea Research*, **25**, 859-910.
Robinson, A.R. with the MODE Group
- [49] 1979 – Boundary Forced Planetary Waves:A Simple Model Mid-Ocean Response to Strong Current Variability. *Journal of Physical Oceanography*, **9(5)**, 919-929.
Harrison, E.D. and A.R. Robinson
- [48] 1978 – Energy Analysis of Open Regions of Turbulent Flows:Mean Eddy Energetics of a Numerical Ocean Circulation Experiment. *Dynamics of Atmospheres and Oceans*, **2**, 185-211.
Harrison, D.E. and A.R. Robinson
- [47] 1978 – Boundary Layers in Homogenous-Rotating Fluids. *Boundary Layers in Homogenous and Stratified-Rotating Fluids*, The University Presses of Florida, Gainesville, FL, 1-68.
(Notes on Lectures by A.R. Robinson and V. Barcilon.)
Fein, J.S.
- [46] 1977 – Eddies and the General Circulation of an Idealized Gyre:A Wind and Thermally Driven Primitive Equation Numerical Experiment. *Journal of Physical Oceanography*, **17(2)**, 182-207.
Robinson, A.R., D.E. Harrison, A.J. Semtner and Y. Mintz
- [45] 1977 – XBT Measurements of Thermal Gradients in the MODE Eddy. *Journal of Physical Oceanography*, **7(2)**, 300-302.
Flierl, G. and A.R. Robinson

- [44] 1976 – Dynamics of Kuroshio Current. Bruun Memorial Lecture, Intergovernmental Oceanographic Commission (UNESCO), Technical Series.
Robinson, A.R.
- [43] 1976 – Numerical Modelling and Global Forecasting. *Science Technology and the Modern Navy*, Office of Naval Research, 30th Anniversary Volume, 480-496.
Robinson, A.R.
- [42] 1976 – Eddies and Ocean Circulation. *Oceanus*, **19(3)**, 2-25.
Robinson, A.R.
- [41] 1975 – On the Theory of Thin Rotating Jets:A Quasi-Geostrophic Time-Dependent Model. *Geophysical Fluid Dynamics*, **6(3)**, 211-214.
Robinson, A.R., J.R. Luyten and G. Flierl
- [40] 1975 – Variability of Ocean Currents. Technical Report, **13(3)**, AGU. AGU Quadrennial Report, Reviews of Geophysics and Space Physics.
Robinson, A.R.
- [39] 1974 – A Generalized Cyclic Reduction Algorithm. *SIAM Journal on Numerical Analysis*, **11(3)**, 506-520, June.
Sweet, R.
- [38] 1974 – The Baroclinic Instability of the Open Ocean. *Journal of Physical Oceanography*, **4(3)**, 281-294.
Robinson, A.R. and J.C. McWilliams
- [37] 1974 – Transient Gulf Stream Meandering, Part II:Analysis via a Quasi-Geostrophic Time-Dependent Model. *Journal of Physical Oceanography*, **4(2)**, 256-269.
Robinson, A.R., J.R. Luyten and F.C. Fuglister
- [36] 1974 – Transient Gulf Stream Meandering, Part I:An Observational Experiment. *Journal of Physical Oceanography*, **4(2)**, 237-255.
Robinson, A.R., J.R. Luyten and F.C. Fuglister
- [35] 1974 – Conclusions:Where Do We Go from Here. *Numerical Models of Ocean Circulation*. NAS, Washington, DC, Durham Symposium.
Robinson, A.R.
- [34] 1974 – Wave Analysis of the Polygon Array in the Tropical Atlantic. *Deep-Sea Research*, **21(5)**, 359–368.
McWilliams, J.C. and A.R. Robinson
- [33] 1973 – Current Path and Bottom Velocity of the Kuroshio. *Journal of Physical Oceanography*, **3(3)**, 347-350.
Taft, B.A., A.R. Robinson and Jr. W.J. Schmitz

- [32] 1972 – Flooding of Venice. *Quarterly Journal of the Royal Meteorological Society*, **99(422)**, 688-692, (London).
Robinson, A.R., A. Tomasin and A. Artegiani
- [31] 1972 – A Numerical Experiment for the Path of the Kuroshio. *Journal of Marine Research*, **30(1)**, 65-99.
Robinson, A.R. and B.A. Taft
- [30] 1972 – Deadly Surges in the Bay of Bengal Dynamics and Storm-Tide Tables. *Nature*, **239(5369)**, 312-315.
Flierl, G. and A.R. Robinson
- [29] 1971 – East Australian Current. *Journal of Marine Research*, **29(3)**, 256-280.
Godfrey, J.S. and A.R. Robinson
- [28] 1970 – Bottom Velocity Observations Directly under the Gulf Stream. *Science*, **170**, 1192-1194.
Schmitz, W.J., Jr. , A.R. Robinson and F.C. Fuglister
- [27] 1970 – Time-Dependent Topographic Meandering. *Geophysical Fluid Dynamics*, **1(4)**, 412-438.
Robinson, A.R. and S. Gadgil
- [26] 1970 – The Gulf Stream. *Philosophical Transactions of the Royal Society*, (London)
Discussion Meeting on Ocean Currents and Their Dynamics.
Robinson, A.R.
- [25] 1970 – Boundary Layers in Ocean Circulation Models. *Annual Review of Fluid Mechanics*, (Annual Review, Inc., Palo Alto, Calif.).
Robinson, A.R.
- [24] 1969 – A Numerical Method for the Study of the Circulation of the World Ocean. *Journal of Computational Physics*, **4**, 347-376.
Bryan, K.A.
- [23] 1969 – A Laboratory Model for the General Ocean Circulation. *Philosophical Transactions of the Royal Society*, **A(265)**, 533-566, (London).
Baker, D.J. and A.R. Robinson
- [22] 1968 – On the Existence and Structure of Inertial Boundary Currents in a Stratified Ocean. *Journal of Fluid Mechanics*, **32(3)**, 569-607.
Robinson, A.R. and S.L. Spiegel
- [21] 1967 – The Theory of Free Inertial Currents:I. Path and Structure. *Tellus*, **19(2)**, 179-291.
Robinson, A.R. and P.P. Niiler

- [20] 1967 – The Theory of Free Inertial Jets:II. A Numerical Experiment for the Path of the Gulf Stream. *Tellus*, **19(4)**, 601–619.
Niiler, P.P. and A.R. Robinson
- [19] 1966 – An Investigation into the Wind as a Cause of Equatorial Undercurrent. *Journal of Marine Research*, **24**, 179–204.
Robinson, A.R.
- [18] 1966 – Discussion of the Deep Circulation of the Atmosphere of Venus. *Astrophysical Journal*, **146(2)**, 335–339.
Goody, R.M. and A.R. Robinson
- [17] 1965 – A Three-Dimensional Model of Inertial Currents in a Variable-Density Ocean. *Journal of Fluid Mechanics*, **21(2)**, 211–223.
Robinson, A.R.
- [16] 1965 – Oceanography. *Frontiers in Fluid Dynamics*, Chapter 17 (Seeger and Temple, Editors), 540–533.
Robinson, A.R.
- [15] 1965 – On Thermally Maintained Circulation in a Closed Ocean Basin. *Journal of Marine Research*, **23(3)**, 222–230.
Niiler, P.P., A.R. Robinson and S.L. Spiegel
- [14] 1964 – On the Arbitrary Suppression of Vertical Motion in Wind-Driven Oceanic Models. *Journal of Marine Research*, **22(2)**, 168–174.
Robinson, A.R.
- [13] 1964 – Continental Shelf Waves and the Response of Sea Level to Weather Systems. *Journal of Geophysical Research*, **69(2)**, 367–368.
Robinson, A.R.
- [12] 1963 – *Wind-Driven Ocean Circulation*. Blaisdell, New York.
Robinson, A.R. (Editor)
- [11] 1963 – Thermal Circulation on a Rotating Sphere With Application to the Oceanic Thermocline. *Journal of Marine Research*, **21(1)**, 15–38.
Robinson, A.R. and P. Welander
- [10] 1962 – The Instability of a Thermal Ocean Circulation. *Journal of Marine Research*, **20(3)**, 189–200.
Robinson, A.R.
- [9] 1962 – On the Theory of Wind-Driven Ocean Circulation. *Journal of Fluid Mechanics*, **12(1)**, 49–80.
Carrier, G.F. and A.R. Robinson

- [8] 1961 – Heat Flux from the Ocean Bed Produced by Dissipation of the Tides. *Deep-Sea Research*, **8**, 275-278.
Stewart. R.W., G.F. Carrier, A.R. Robinson and H. Stommel
- [7] 1961 – Unsteady Flow in an Inertial Ocean Mode, Proceedings of the Symposium on Mathematics. *Hydrodynamical Methods of Physical Oceanography*, 75–89.
Robinson, A.R.
- [6] 1960 – On Two-Dimensional Inertial Flow in a Rotating Stratified Fluid. *Journal of Fluid Mechanics*, **9(3)**, 321-322.
Robinson, A.R.
- [5] 1960 – The General Thermal Circulation in Equatorial Regions. *Deep-Sea Research*, **6**, 311-317.
Robinson, A.R.
- [4] 1959 – The Oceanic Thermocline. *Tellus*, **3**, 295-308.
Robinson, A.R. and H. Stommel
- [3] 1959 – Amplification of Transient Response of the Ocean to Storms by the Effect of Bottom Topography. *Deep-Sea Research*, **5**, 312-314.
Robinson, A.R. and H. Stommel
- [2] 1959 – The Symmetric State of a Rotating Fluid Differentially Heated in the Horizontal. *Journal of Fluid Mechanics*, **6**, 599-620.
Robinson, A.R.
- [1] 1959 – Original Quantization of Thomson's Atomic Model. *American Journal of Physics*, **27(5)**, 266.
Robinson, A.R.

4-19-06