

APPENDIX G

List of Acronyms

Acronyms in CIOSS Five-Year Plan

| | |
|------------|--|
| AGU | American Geophysical Union |
| ASLO | American Society of Limnology and Oceanography |
| CCS | California Current System |
| CI | Cooperative Institute |
| CIMSS | Cooperative Institute for Meteorological Satellite Studies |
| CIOSS | Cooperative Institute for Oceanographic Satellite Studies |
| COAS | College of Oceanic and Atmospheric Sciences |
| COAST | Coastal Ocean Applications and Science Team |
| CoOP | Coastal Ocean Processes |
| CoOP COAST | Coastal Ocean Processes – Coastal Ocean Advances in Shelf Transport (Oregon) |
| CoOP WEST | Coastal Ocean Processes – Wind Events In Shelf Transport (N. California) |
| CWI | Coastal Waters Imager |
| DoD | Department of Defense |
| ECO HAB | Ecology and Oceanography of Harmful Algal Blooms |
| FRN | Federal Register Notice |
| GEOSS | Global Earth Observing System of Systems |
| GIS | Geographic Information Systems |
| GLOBEC | Global Ocean Ecosystems Dynamics program |
| GODAE | Global Ocean Data Assimilation Experiment |
| GOES | Geostationary Operational Environmental Satellites |
| GOES-R | Geostationary Operational Environmental Satellites – next generation of GOES (~2012) |
| GOES-R3 | GOES-R Risk Reduction |
| HES | Hyperspectral Environmental Suite |
| HES-CW | Hyperspectral Environmental Suite – Coastal Waters Imager |
| HMSC | Hatfield Marine Science Center |
| IOM | Inverse Ocean Modeling |
| IOOS | Integrated Ocean Observing System |
| IR | Infrared |
| ITR | Information Technology Research |
| JPO | Journal of Physical Oceanography |
| MOA | Memorandum of Agreement |
| MODIS | MODerate resolution Imaging Spectroradiometer |
| MTDC | Modified Total Direct Cost |
| NASA | National Aeronautics and Space Administration |
| NCDC | National Climatic Data Center |

| | |
|----------|---|
| NCEP | National Centers for Environmental Prediction |
| NESDIS | National Environmental Satellite, Data and Information Service |
| NGDC | National Geophysical Data Center |
| NMFS | National Marine Fisheries Service |
| NOAA | National Oceanographic and Atmospheric Administration |
| NODC | National Oceanographic Data Center |
| NOPP | National Ocean Partnership Program |
| NOS | National Ocean Service |
| NPOESS | National Polar-orbiting Operational Environmental Satellite Systems |
| NRL | Naval Research Laboratory |
| NSF | National Science Foundation |
| NWFSC | Northwest Fisheries Science Center |
| NWS | National Weather Service |
| OAR | Office of Oceanic and Atmospheric Research |
| OCMP | Oregon Coastal Management Program |
| OCS | Ocean Climate Service |
| OGP | Office of Global Programs |
| OHH | Oceans and Human Health |
| OMSI | Oregon Museum of Science and Industry |
| ONR | Office of Naval Research |
| OPPI | Office of Program Planning and Integration |
| ORA | Office of Research and Applications |
| ORAD | Oceanographic Research Applications Division |
| ORION | Ocean Research Interactive Observatory Networks |
| OSU | Oregon State University |
| PAR | Photosynthetically Active Radiation |
| PFEL | Pacific Fisheries Environmental Laboratory |
| PMEL | Pacific Marine Environmental Laboratory |
| QuikSCAT | SeaWinds Scatterometer on the QuikSCAT platform |
| SAR | Synthetic Aperture Radar |
| SeaWiFS | Sea-viewing Wide Field-of-view Sensor – Color Sensor |
| SF424 | Standard Form 424 |
| SMILE | Science and Math Investigative Learning Experience |
| SSH | Sea Surface Height |
| SST | Sea Surface Temperature |
| STAR | Center for Satellite Applications & Research |
| SWFSC | Southwest Fisheries Science Center |
| TOA | Top Of the Atmosphere |
| TOS | The Oceanography Society |
| UCLA | University of California Los Angeles |

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HIGHER EDUCATION

11. Institutional:
North Carolina State University, B.S. (Physics), 1966
University of Miami, M.S. (Physics), 1968
University of Miami Ph.D. (Physics), 1973

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EXPERIENCE

14. Academic:
University of Miami, Dean, RSMAS 3/95
Interim Dean, RSMAS 1/95
Associate Dean for Research, RSMAS 8/11/89
Professor 6/1/87
Chairman, MPO 6/1/85-12/31/89
Acting Chairman, MPO 6/1/84-5/31/85
Associate Professor 1983
Research Associate Professor 1980
Research Assistant Professor 9/73
Research Associate 1972
Research Assistant 1970

15. Non-academic

| | | |
|----------------------|---------------------|------|
| Technical Associates | Systems Analyst | 1972 |
| NOAA/ EML, Miami, | Computer Specialist | 1972 |
| Lockheed Elect. Co | Consultant | 1968 |

16. Military: None

PUBLICATIONS

17. Books & monographs published:

1993

Njoku, E. G. and O. B. Brown. Sea surface Temperature. In: *Atlas of Satellite Observations Related to Global Change*, Eds. R.J. Gurney, J. L. Foster and C.L. Parkinson, Cambridge University Press, 1993, pp: 237-249.

18. Juried or refereed journal articles & exhibitions:

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1980

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1981

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1982

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1996

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Goni, G., S. Garzoli, A. Roubicek, D. Olson and O. Brown. Agulhas Ring Dynamics from TOPEX/POSEIDON Satellite Altimeter Data. *Journal of Marine Research*, 55, 1997, 861-883.

1998

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2000

Kearns, E.J., J.A. Hanafin, R.H. Evans, P.J. Minnett, and O.B. Brown. An independent assessment of Pathfinder AVHRR sea-surface temperature accuracy using the Marine Atmosphere Emitted Radiance Interferometer (M-AERI). *Bull. Am. Met. Soc.* **81**, 1525-1536.

2001

Minnett, P. J., R. O. Knuteson, F.A. Best, B.J. Osborne, J. A. Hanafin and O. B. Brown, 2001. The Marine-Atmosphere Emitted Radiance Interferometer (M-AERI), a high-accuracy, sea-going infrared spectroradiometer. *Journal of Atmospheric and Oceanic Technology*, 18, 994-1013.

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2002

Esaias, W., M. Abbott, K. Carder, J. Campbell, D. Clark, R. Evans, H. Gordon, O. Brown, P. Minnett, E. Kearns, K. Kilpatrick, G. Mitchell, K. Turpie, R. Woodward, R. Vogel, D. Thomas. Ocean primary production estimates from Terra MODIS and their dependency on satellite chlorophyll *a* algorithms. *Remote Sensing of the Environment*.

19. Other works, publications and abstracts:

1971

Brown, O.B. and H.R. Gordon. Theoretical models of light scattering by hydrosols. *Eos Transactions* **52**(4), 1971: 25 (Abstract).

Brown, O.B. Measurement of the classical scattering matrix. Univ. of Miami Physics Dept. publication. MIAPH-OP-71.6, 1971.

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1972

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Brown, O.B. A study of light scattering by ocean borne particulates. University of Miami Ph.D. Thesis, 1972.

1973

Brown, O.B. and H.R. Gordon. Irradiance reflectivity in and above a homogeneous ocean. *Eos Transactions* **54**(4), 1973: 317 (Abstract).

Brown, O.B. and H.R. Gordon. Light scattering in the Florida Straits. *Eos Transactions* **54**(4), 1973: 311 (Abstract).

1974

Brown, O.B. and K. Voight. Meander motions in the Equatorial Atlantic. Preliminary report, first results from the Equatorial PCM Experiment during GATE, phase II, UM/RSMAS Scientific Report, 1974.

Brown, O.B. and H.R. Gordon. Comparison between the diffuse reflectance of homogeneous and two-layer oceans. *Eos Transactions* **55**, 1974: 287 (Abstract).

Brown, O.B., H.R. Gordon and M.M. Jacobs. Semi-empirical relations between the inherent and apparent optical properties of the ocean. *Eos Transactions* **55**, 1974: 289 (Abstract).

Brown, O.B. GARP/GATE Report No. 14, Preliminary scientific results (Vol. 1) of the GARP Atlantic Tropical Experiment, 1974. 33-337.

1975

Brown, O.B., R.H. Evans, and J.C. Van Leer. Computers at sea: is satellite communication a viable alternative? Presentation at the Working Conference on Oceanographic Data Systems. WHOI, Woods Hole, MA. Proceedings, UNOLS, 1975: 81.

1976

Brown, O.B., W. Duing and R. Evans. A current profiling survey in the Straits of Sicily. Technical Report (nInterim Confidential Report), 1976: 105 pp.

1977

Brown, O.B., W. Duing and R. Evans. A current profiling survey in the Straits of Sicily. Technical Report 75-TMPC-04. Final Report. Vol. I and Vol. II (Confidential), 1977: 710 pp.

Brown, O.B. Large-scale equatorial surface thermal anomalies as observed by the GOES satellite. The GARP Atlantic Tropical Experiment (GATE). Report of the International Workshop on the GATE Equatorial Experiment (Miami, FL, February-March 1977). International Council of Science Unions. World Meteorological Organization, Geneva, Switzerland, 1977: 1.2-1.11 (Abstract).

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1978

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1979

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1982

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1983

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Emmerson, S.R., J.W. Brown, O.B. Brown and R.H. Evans. Warm Core Rings Experiment Cruise 3, NOAA AVHRR Imagery Digest, 16 May 82 - 8 July 82. Technical Report UM RSMAS No. 83011, 1983.

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1984

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- 1985**
- Brown, O.B., R.H. Evans, D.B. Olson and G. Podestá. A Satellite Infrared Survey of the Brazil/Falklands Confluence. *Eos Transactions* **66**(18), 1985: 291 (Abstract).
- Brown, O.B. Indo-U.S. Field Working Group (U.S.) Planning Meeting Report from meeting at U. Miami RSMAS, 10/14/85 (O. Brown - convenor), 1985: 35 pp.
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- 1986**
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- Brown, O.B. Study of Seasonal to Interannual Sea Surface Temperature Variation in the Arabian Sea (1982-1985). Proceedings of AIBS International Conference on Marine Science of the Arabian Sea, Karachi, Pakistan, 1986.
- Brown, O.B. Regional Estimates of Surface Chlorophyll Variability Using NIMBUS-7 CZCS Color Imagery. *Eos Transactions* **66**(51), 1986: 1275 (Invited Abstract).
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Olson, D.B., S. Emmerson, M. Carle, O.B. Brown, R. Evans. Large-scale Surface Circulation in the South Atlantic from Satellite IR and Drifter Data. *Eos Transactions* **66**(51), 1986: 1300 (Abstract).

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1987

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1988

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1990

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1991

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1992

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Podestá, G.P., G.J. Goñi, and O.B Brown. A comparison of AVHRR and GEOSAT Derived Locations of the Brazil Current Surface Front. *Eos Transactions* **73**(43) Supplement, 1992: 128 (Abstract).

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1994

NRC Panel (O.Brown-member) Ocean-Atmosphere Observations Supporting Short-Term Climate Predictions. Report of Ocean-Atmosphere Observations Supporting Short-Term Climate Predictions. Report: National Academy Press 1994: 51 pp.

Abbott, Mark R., Otis B. Brown, Robert H. Evans, Howard R. Gordon, Kendall L. Carder, Frank E. Muller-Karger, and Wayne E. Esaias, 1994. Ocean Color in the 21st Century: A Strategy for a 20-Year Time Series. SeaWiFS Technical Report Series, S. B. Hooker and E. R. Firestone, Eds., NASA Technical Memorandum 104566, Vol. 17, 20 pp.

Halpern, D., W. Knauss, O. Brown, M. Freilich and F. Wentz, An Atlas of Monthly Mean Distributions of SSMI Surface Wind Speed, ARGOS Buoy Drift, AVHRR/2 Sea Surface Temperature, AMI Surface Wind Components, and ECMWF Surface Wind Components During 1992, JPL Publication 94-4, 1994, 143 pp.

1995

Halpern, D., L. Fu, W. Knauss, G. Pihos, O. Brown, M. Freilich and F. Wentz, An Atlas of Monthly Mean Distributions of SSMI Surface Wind Speed, AVHRR/2 Sea Surface Temperature, AMI Surface Wind Velocity, TOPEX/POSEIDON Sea Surface Height, and ECMWF Surface Wind Velocity During 1993, JPL Publication 95-3, 1995, 88 pp.

1996

Smith, W.L., W. Feltz, H.B. Howell, R.O. Knuteson, W.P. Menzel, N.Nalli, H.E. Revercombe, O. Brown, J. Brown, P.J. Minnett and W. McKeown, 1996. Observations of the infrared radiative properties of the ocean - implications for the measurement of sea-surface temperature via satellite remote sensing. Proceedings of the Eighth Conference on Satellite Meteorology and Oceanography. Jan 28 - Feb 2, 1996. Atlanta, Georgia. *American Meteorological Soc.* Boston, MA. USA. pp 531-535.

1997

Halpern, D., V. Zlotnicki, O. Brown, M. Freilich and F. Wentz, An Atlas of Monthly Mean Distributions of SSMI Surface Wind Speed, AVHRR/2 Sea Surface Temperature, AMI Surface Wind Velocity, TOPEX/POSEIDON Sea Surface Height During 1994, JPL Publication 97-1, 1997, 71 pp.

1998

Halpern, D., V. Zlotnicki, P. Woiceshyn, O. Brown, M. Freilich and F. Wentz, An Atlas of Monthly Mean Distributions of SSMI Surface Wind Speed, AVHRR Sea Surface Temperature, AMI Surface Wind Velocity, and TOPEX/POSEIDON Sea Surface Height During 1995, JPL Publication 98-5, 1998, 73 pp.

Halpern, D., V. Zlotnicki, P. Woiceshyn, O. Brown, M. Freilich and F. Wentz. An Atlas of Monthly Mean Distributions of SSMI Surface Wind Speed, AVHRR Sea Surface Temperature, AMI Surface Wind Velocity, and TOPEX/POSEIDON Sea Surface Height during 1996, JPL Publication 98-11, 1998, 73 pp.

1999

Brown, O.B. and P.J. Minnett. 1999. The MODIS infrared sea-surface temperature algorithm. Algorithm Technical Basis Document. NASA Goddard Space Flight Center, Greenbelt, MD. http://modis.gsfc.nasa.gov/MODIS/ATBD/atbd_mod25.pdf

Framinan M.B. , A.Munchow, A. Valle-Levinson, F. Vetere and O. B. Brown, 1999 "Observational Study in the Rio de la Plata Estuary and Adjacent Shelf, South America - Winter 1999", (abstract), Proceedings LOICZ 4th Open Science Meeting - Regimes of Coastal Change, pp. 69.

Mariano, A.J., T.M. Chin, E.H. Ryan, R.Kovach, and O.B. Brown, 1999. "On Gulf Stream Path Variability", *Journal of Geophysical Research*.

2000

Halpern, D., V. Zlotnicki, P. Woiceshyn, O. Brown, G.C. Feldman, M. Freilich and F. Wentz. An Atlas of Monthly Mean Distributions of SSMI Surface Wind Speed, AVHRR Sea Surface Temperature, TMI Surface Wind Velocity, SeaWiFS Chlorophyll-a, and

TOPEX/POSEIDON Sea Surface Topography during 1998, JPL Publication 00-08, 2000, 101 pp.

Kearns, E.J., J.A. Hanafin, R.H. Evans, P.J. Minnett and O.B. Brown, 2000. . An independent assessment of Pathfinder AVHRR sea surface temperature accuracy using the Marine-Atmosphere Emitted Radiance Interferometer (M-AERI). *Bull. Am. Met. Soc.* Vol. **81**, No. 7 1525-1536.

Evans, R.H., P.J. Minnett, O.B. Brown, K. Kilpatrick, E.J. Kearns, H. Gordon, K. Voss and M. Abbott. Early Results from NASA's Moderate Resolution Imaging Spectroradiometer (MODIS): Global and Arabian Sea Regional Ocean Color and Thermal Observations. Proceedings of the 5th Pacific Ocean Remote Sensing Conference (PORSEC2000), 5-8 December 2000 Panaji, Goa, India. Vol. 1, p5.

2001

Minnett, P. J., R. O. Knuteson, B.J. Osborne, J. A. Hanafin and O. B. Brown, 2001. The Marine-Atmosphere Emitted Radiance Interferometer (M-AERI), a high-accuracy, sea-going infrared spectroradiometer. *J. Atmos. Oceanic Tech.*, Vol. **18**, 944-1013.

2002

Minnett, P. J., R.H. Evans, E.J. Kearns and O.B. Brown, 2002. Sea-surface temperature measured by the Moderate Resolution Imaging Spectroradiometer (MODIS). Proceeding of the *IEEE International Geosciences and Remote Sensing Symposium*. Toronto, Canada June 24-28, 2002.

20. Other works accepted for publication:

PROFESSIONAL

21. Funded Research Performed last five years (as P.I. or Co-P.I.)

Raytheon

- GOES 3/LES-9 Ground Stations for the U.S. Anarctic Program, 6/1/04-9/30/06, \$1,841,217

NASA

- Sea Surface Temperature from MODIS (Co-PI), 4/26/04-5/31/07, \$855,000

ONR

- Administrative, 1/1/03-9/30/06, \$1,067,687
- Microphysics of Air-Sea Exchanges, 1/20/03-6/30/06, \$333,547

22. Editorial responsibilities:

Associate Editor, *Journal of Atmospheric and Oceanic Technology*, August 1983 - February 1984

23. Professional & Honorary Organizations:

The Oceanography Society
American Geophysical Union
American Meteorological Society
Association for Computing Machinery
IEEE
Optical Society of America, Florida Section, Scholarship Honorary
Research Society, Physics Honorary
American Institute of Physics
American Association for the Advancement of Science

24. Honors and Awards

1985 - Recipient of NASA's Public Service Group Achievement Award
1990 - AGU Editors' Citation for Excellence in Refereeing, Journal of Geophysical Research - Oceans
1995 - Fellow of American Association for the Advancement of Science
1999 - Fellow of the American Meteorological Society
2001 - Recipient of NASA'S Satellite Ocean Atlas Team, Group Achievement Award
2003 - Recipient of NASA GSFC's EOS Aqua Mission Team, Group Achievement Award
2006 - Recipient of the American Meteorological Society's Charles Franklin Brooks Award for Outstanding Service to the Society

25. Post-Doctoral Fellowships:

Dr. Faiza Al-Yamani
Dr. Guillermo Podestá
Dr. Arthur Mariano

26. Other Professional Activities

1972

Brown, O.B., and H.R. Gordon, A study of the immersion corrections in Eppley underwater pyranometers. Conference on Atmospheric Radiation of the American Meteorology Society.

1973

Brown, O.B., and H.R. Gordon, An examination of factors influencing ocean color using radiative transfer theory. Contributed

1976

Satellite sea surface temperatures (SST) in equatorial Atlantic. Abstract of Progress Report - Workshop on the Currents and Water Masses of the Western Equatorial Atlantic. Instituto de Geofisica UNAM. Mexico City, 7-10 June.

1977

Brown, O.B., and R. Evans, Image processing applications in physical oceanography. Invited presentation at Interactive Video Displays for Atmospheric Studies Workshop at University of Wisconsin, 14-16 June.

Brown, O.B., and R. Evans, Satellite observed processes in the Atlantic equatorial current system. Presentation at the GATE Workshop. National Center for Atmospheric Research. Boulder, Co., July.

1978

Evans, R.H. and O.B. Brown. Quantitative satellite observation of processes by high resolution infrared radiometry. Invited presentation at Workshop on Remote Sensing in Oceanography. Voss, Norway, February 28 - March 2, 1978.

Brown, O.B. Long period waves in the equatorial Atlantic. Presentation at the GATE Symposium in Kiel, FRG., May 1978.

Brown, O.B., and R. Evans. Evidence for zonally trapped propagating waves in the eastern Atlantic from satellite sea surface temperature observations. Presentation at the IUCRM meeting in Victoria, B.C., June, 1978.

Evans, R.H. and O.B. Brown. Approach toward quantitative satellite Oceanography and Satellites, AMS, June 14-15, 1978.

1979

Satellite observations of the Summer monsoon 1979. Invited talk at NORDA Workshop on Satellite Oceanography, Bay St. Louis, MS, Oct. 9-11.

1980

Effects of the Summer monsoon in the western Indian Ocean. Invited presentation at UNESCO Conference on Red Sea and Western Indian Ocean Oceanography, Khartoum, Sudan, January 8-15

Brown, O.B. and R. Evans. Sea surface temperature (SST) variability Oceanography from Space Meeting, Venice, Italy, May 26,

Brown, O.B. and R.H. Evans. Propagating Eddies in the Somali Current. Paper presented at SCOR WG 47 Indian Ocean Panel Meeting. Wormley, England, June 24-25.

Satellite data streams, preliminary processing. Invited talk presented at Image Processing and Satellite Data Handling Workshop. University of Rhode Island, Narragansett Bay Campus, August 5-7.

INDEX observations of oceanic response to the Summer monsoon. Invited presentation at EPOCS NORPAX Workshop. La Jolla, CA, August 11-15.

Inter-annual variability in the Gulf Stream. Presented at the BLM South Atlantic OCS Environmental Studies Program. Charleston, S.C.,

Brown, O.B., and R.H. Evans. The RSMAS satellite data processing Wisconsin, October 14-15.

Evans, R.H., and O.B. Brown. Propagation of thermal fronts in the Satellite Data to the Oceanographic Sciences Conference. Madison, Wisconsin, October 14-15.

Brown, O.B., and R.H. Evans. Interannual variability in the Arabian Sea SST. Invited paper presented at Application of Satellite Data.

Brown, O.B., and F. Schott. MONEX oceanographic observations along the east African coast. Invited paper presented at the MONEX Workshop. Tallahassee, Florida, January 15.

Evans, R.H. and O.B. Brown. Gulf Stream frontal variability. Presented at the BLM South Atlantic Bight physical Oceanography Study Conference. Raleigh, N.C., March 3-5.

Brown, O.B. and R.H. Evans. Gulf Stream frontal variability in the South Atlantic Bight as derived from the NAVOCEANO weekly frontal analysis. Presented at BLM South Atlantic Bight Physical Oceanography Study Conference. Beaufort, N.C., September 21-24.

Brown, O.B. and R.H. Evans. Evolution of sea surface temperature patterns in the Somali basin during the Summer monsoon. Poster presented at Applications of Aerospace Remote Sensing in Marine Research. 1981 ICES Statutory Meeting. Woods Hole, MA., October 6-10,

Use of remote sensing (satellite infrared and ocean color) to study temporal changes in the surface structure of Gulf Stream rings. Presented at US-Aust-NZ Workshop on Warm-Core Rings, Wellington, New Zealand, January 18-22.

Warm Core Rings. Presented at Oceans and Ice Branch Seminar, NASA, Goddard Space Flight Center, Lab. for Atmospheric Sciences, Greenbelt, Maryland, July 16.

Kinematics of Warm Core Rings. Presented at University of North Carolina, Marine Science Center Seminar, Chapel Hill, North Carolina, October 21.

Warm Core Rings Experiment: An Application of Satellite Oceanography. Invited talk presented at NSF, Washington, April 26.

Frequency Allocations for University National Ocean Laboratories System (UNOLS). Talk presented at the Meeting of the Committee on Radio Frequencies, May 16-17.

Brown, O.B. and R. Evans. Thermal time series of Warm Core Ring 82-B. Paper presented at the JPL satellite Derived Workshop II (SST) in Pasadena, CA, June 22-24.

1983

Brown, O.B. and R. Evans. Satellite Observations of Warm Core Rings. Invited talk. Warm Core Ring Summer Workshop. URI-Alton-Jones Campus, RI, July 18.

Kinematics of Warm Core Rings determined by satellite observations. Invited lecture, GFD Summer Program, Woods Hole Oceanographic Inst., MS, July 21.

1984

Interannual SST Variability in the Arabian Sea, Presentation at INDO-U.S. Bilateral Workshop in Bangalore, India, March.

Seminar, "Introduction to Satellite Oceanography", Instituto Tecnológico de Buenos Aires (ITBA), Argentina, June.

A Spring Bloom Episode off U.S. East Coast, presented at Joint U.S.-French OCI Working Group Meeting, Paris, France, July 8-14.

Blooming off the U.S. East Coast: A Satellite Description. Invited presentation at Global Ocean Flux Workshop, National Academy of Sciences, Woods Hole Study Center, Woods Hole, MA, 10-14.

Color and Thermal Remote Sensing in Oceanography, Invited seminar at University of Washington, Seattle, WA, November 6-9.

1985

Participant in program coordination and scientific planning meeting for observational oceanographic activities within the U.S./India Bilateral, Boulder, CO., March 14-15

Presentation at CCCO Atlantic Panel Meeting, "Global Mapping of SST Using Satellite Infrared Observations", Rio de Janeiro, Brazil, September.

Seminar at Instituto Tecnológico de Buenos Aires, Argentina, "Satellite Study of the Brazil/Malvinas Confluence", September.

Seminar at Instituto Argentino de Oceanografía, Bahía Blanca, Argentina, "Satellite Study of the Brazil/Malvinas Confluence", September.

Convenor of Indo-U.S. Field Working Group (U.S.) Planning Meeting at U. of Miami, October.

Seminar at Duke University, Department of Geology, Durham, NC, "Remote Sensing Studies of Transient Ocean Variability", November 21.

Seminar at Duke University Marine Laboratory, Beaufort, NC, "Remote Sensing Studies of Transient Ocean Variability", November 22.

1986

Attended workshop on Upper Ocean Processes (GOFS), Horne Point, MD. Presentation - "Use of Satellite Ocean Color Observations.", March 17-21.

Attended joint U.S.-Pakistan symposium titled "International Conference on Marine Science of the Arabian Sea", in Karachi, Pakistan, March 27 - April 3.

Attended Ocean Prediction Workshop 1986 (OPW'86) at Harvard University, Cambridge, MA, and presented "Eddy Resolving in Situ and Satellite Remote Sensing", April 14-19.

USAID Workshop on US-SPAIN Bilateral, Santiago de Campostella, Spain. Presented "Use of Satellite Infrared and Color Observations", June 6-14 .

Chaired NODS/SODSSWG meeting in Los Angeles CA, August 24-26.

Lecture titled "Satellite Infrared Remote Sensing of the World's Oceans" at Scripps Institution of Oceanography for their lecture series on "Present and Future Opportunities in Satellite Oceanography", October 16.

Seminar in Undergraduate Marine Science Program, U. Miami, "Satellite Oceanography", November 13.

1987

Chairman Advisory Committee for Institute for Naval Oceanography at NSTL, MS, February 6-7.

Chaired Science Working Group, EOSAT C-WIFS Meeting, Lanham, MD, February 11-12,.

Invited Seminar - Harvard University Dept. of Earth and Planetary Sciences Physical Oceanography Seminar Series, "Use of Satellite Visible and Infrared Data to Study Ocean Variability", April 20,

Chairman Advisory Committee for Institute of Naval Oceanography at NSTL, MS, February 6-7.

Chaired Science Working Group, EOSAT C-WIFS Meeting, Lanham, MD, February 11-12.

Invited Seminar - Harvard University Dept. of Earth and Planetary Sciences Physical Oceanography Seminar Series, "Use of Satellite Visible and Infrared Data to Study Ocean Variability", April 20.

1988

The Joint Global Ocean Flux Study. Invited presentation at Australian Academy of Science Elizabeth and Frederick White Conference on Global Change, Canberra, Australia, Feb. 22-28.

Brown, O.B., D. Olson and R. Evans. Height and thermal field mesoscale variability in the South Atlantic. Invited presentation at ONR South Atlantic Accelerated Research Initiative (SAARI) Meeting, Lamont-Doherty Geological Observatory, May 24-26.

Olson, D., G. Podestá, O. B. Brown and R. Evans. Temporal variations in the separation of Brazil and Malvinas Currents. Invited presentation at ONR South Atlantic Accelerated Research Initiative (SAARI) Meeting, Lamont-Doherty Geological Observatory, May 24-26.

1989

Oceanography by Satellite. Invited seminar at Nova University, December 5.

1990

Role of Satellite Observations in Global Change. Presented at Venice Oceans From Space meeting, Scuola Grande San Giovanni Evangelista, Venice, Italy, May 22-26.

Invited to visit China for four weeks (June 19 - July 20) as a project Specialist in the World Bank supported Chinese University Development Project. Host University was Ocean University of Qingdao, Peoples Republic of China, where a series of lectures was given on satellite ocean remote sensing and related topics. Also gave invited lectures at Academica Sinica Institute of Oceanology, and State Oceanic Administration First Institute of Oceanography, Qingdao, titled "Satellite Observations and Global Programs".

Ocean Research and Space Systems - Satellite Oceanography: New Challenges. Invited presentation at Marine Technical Society meeting, September 26-28 1990.

Satellite-Derived Global Sea Surface Temperature Fields: 1982-1989. Invited presentation at OPSAT '90 (Operational Satellites: Sentinels for the Monitoring of Climate and Global Change) Conference, Washington DC, October 16-19, 1990.

1991

"Infrared Remote Sensing and AVHRR IR Calibration", Invited seminar at NASA/GISS

"The Role of Satellite Systems", NAS TOGA Panel, Georgetown

"Satellites for Ocean and Wind Field", Session Discussion Leader, JGOFS CCCO CO₂ Panel Meeting, Paris

1992

"Goals of Cono Sur Initiative", Buenos Aires, Argentina, and Montevideo, Uruguay

Invited Chair for Global Regional Dynamic Processes session at Autonomous Bio-Optical Ocean Observing Systems Scientific Symposium (ABOOS), Monterey, CA

1993

"Remote Sensing Program", Invited presentation, JGOFS Arabian Sea Studies meeting, Alexandria, VA

"GOALS & the U.S. Global Change Research Program", Invited presentation, GOALS conference in Hawaii

“JGOFS and the IAI”, Invited presentation, Inter-American Workshop in Montevideo, Uruguay

“Satellite Observations and Joint Global Ocean Flux Studies, Invited presentation, Japan/U.S. workshop (NASDA), Tokyo.

1994

Presentation at JGOFS Arabian Sea meeting in Atlanta GA, April 1994

Presentation at MODIS meeting at Goddard Space Flight Center May 1994

Presentation at ATBD meeting in Landover MD May 1994

1995

”Scientific Utility of Naval Environmental Data”, MEDEA, May 1995, MITRE.

1996

“GOOS–Role of *In-Situ* Observations” presentation at Global Climate Observing System meeting in Geneva, Switzerland, September 9, 1996

Presentation at MITRE meeting on Ocean Studies in McLean, VA, September 1996.

“Observations of the infrared radiative properties of the ocean - implications for the measurement of sea-surface temperature via satellite remote sensing”. Eighth Conference on Satellite Meteorology and Oceanography. Jan 28 - Feb 2, 1996. Atlanta, Georgia. With W.L. Smith, W. Feltz, H.B. Howell, R.O. Knuteson, W.P. Menzel, N.Nalli, H.E. Revercombe, P.J. Minnett, J. Brown, and W. McKeown.

1997

“Oceans and Security” presentation at ACOPS 1997 Global Conference in Washington, DC, May 19, 1997

“MODIS scan mirror issues and SST. EOS PM-1” Spacecraft maneuver meeting. NASA Goddard Space Flight Center, Greenbelt MD, May 1997. With P.J. Minnett.

”Ocean Dumping of Chemical Munitions: Environmental Effects in Arctic Seas”, MEDEA, May 1997, MITRE.

“Measurements of near-surface vertical temperature gradients in the Tropical Pacific Ocean”, Fall Meeting of the American Geophysical Union, San Francisco, USA, 1997. With R.O. Knuteson and P.J. Minnett.

“OrbView-2/SeaWiFS” NASA/GSFC press conference, Washington, DC, September 23, 1997.

1998

Minnett, P.J., O.B. Brown, R.J. Sikorski, A. Kumar, K. Kilpatrick and A.M. Zavody. MODIS SST retrievals – algorithm derivation error budget and plans for validation. *MODIS Science Team Meeting*, College Park, MD. December 15.

2000

Yang, Q., B. Parvin, A.J. Mariano, E. Ryan, R.H. Evans, and O.B. Brown, 2000. Seasonal and Interannual Studies of Vortices in SST Data, Oceans from Space, Venice.

Minnett, P.J., E. J. Kearns, J. A. Hanafin, R. H. Evans and O.B. Brown Improved determination of the accuracy of satellite-derived SST fields. Tenth ARM Science Team Meeting, San Antonio, TX, 13-17 March.

Esaias, W., M. Abbott, J. Campbell, K. Carder, O. Brown, D. Clark R. Evans, F. Hoge, H. Gordon, P. Minnett. Early MODIS Ocean Data Results. *Spring Meeting of the American Geophysical Union*. Washington, DC. May 30 – June 3.

E. J. Kearns, R. H. Evans, P. J. Minnett, O. B. Brown, K. Kilpatrick, S. Walsh, W. Baringer, J. Brown, and R. Sikorski. New SST and Ocean Color Data from MODIS/Terra: Caveat Emptor? NOAA Atlantic Oceanographic and Meteorological Laboratory, Miami, FL, June 2.

Brown, O.B., P.J. Minnett, R.H. Evans, E.J. Kearns, and R. J. Sikorski. MODIS Sea-surface temperature. *MODIS Science Team Meeting*, College Park, MD. June 7-8, 2000.

2001

Symposium on Climate Variability, the Oceans, and Societal Impacts” conference session at the American Meteorological Society “AMS 81st” Annual Meeting held in Albuquerque, New Mexico, January 14-18, 2001.

Minnett, P.J., R. H. Evans and O.B. Brown. Prospects for Improved Sea-surface temperatures from MODIS – Superior Accuracy and Refined Applications. *MODIS Science Team Meeting*. Columbia MD, January 24-26, 2001

Evans, R. H., P. J. Minnett, O.B. Brown, H.R. Gordon, K. Kilpatrick and E. Kearns. Results from NASA’s Moderate Resolution Imaging Spectroradiometer (MODIS): Global and Arabian Sea Regional Ocean Color and Thermal Observations. *MODIS Science Team Meeting*. Columbia MD, January 24-26, 2001

Minnett, P.J., O.B. Brown, B. Albrecht, K. Maillet, R. Kovach, P. Kollias, R.M. Reynolds and S. Cummings. The use of the cruise ship Explorer of the Seas as an instrumented platform for climate-related measurements over the oceans. Part 1. Atmospheric Instruments. Eleventh ARM Science Team Meeting, Atlanta, GA, 19-23 March 2001.

Albrecht, B., P.J. Minnett, O.B. Brown, P. Kollias, K. Maillet, R. Kovach, J. Tenerelli and A. Li. The use of the cruise ship Explorer of the Seas as an instrumented platform for climate-

related measurements over the oceans. Part 2. Atmospheric Data. Eleventh ARM Science Team Meeting, Atlanta, GA, 19-23 March 2001.

Brown, O.B., P. J. Minnett, R.H. Evans and E. J. Kearns. Satellite Earth Remote Sensing: The Earth Observing System and the Next Decade. *Oceanology International Americas* 2001, Miami, FL, April 3-5 2001

Esaias, W., R.H. Evans, H. R. Gordon, P.J. Minnett, M. Abbott, O.B. Brown, K. Carder, D. Clark, J. Campbell, K. Voss, W. Balch,, K. Kilpatrick, R. Letelier, R. Chen, F. Hoge, E. J. Kearns, R.J. Sikorski, R. Vogel, K. Turpie, K. S. Walsh and J. Brown. MODIS Ocean Product Quality Improvement over the First 16 Months. IEEE International Geosciences and Remote Sensing Symposium. Sydney, Australia. July 9-13, 2001.

Evans R.H., P.J. Minnett, O.B. Brown, I.L. Barton, E.J. Kearns, K. Kilpatrick, R.J. Sikorski, A. Kumar and A.M. Zavody. Measurements of the Ocean Surface Temperature from the Moderate Resolution Imaging Spectroradiometer (MODIS). IEEE International Geosciences and Remote Sensing Symposium. Sydney, Australia. July 9-13, 2001.

Brown O. B., P. J. Minnett, R. H. Evans and E. J. Kearns. Sea Surface Temperature. *MODIS Ocean Team Meeting*. Baltimore, 17 December, 2001

Brown, O.B., P.J. Minnett, R.H. Evans, E.J. Kearns, V. Banzon, W. Baringer, J. Brown, J. Hanafin, E. Key, Kilpatrick, A. Kumar, K. Maillet, M. Szczodrak and S. Walsh. Sea Surface Temperature – MOD 28 Status. MODIS Science Team Meeting, Baltimore, MD, 18 December 2001.

2002

Minnett, P.J., R.H. Evans, E.J. Kearns and O.B. Brown. Sea-surface temperature measured by the Moderate Resolution Imaging Spectroradiometer (MODIS). *IEEE International Geosciences and Remote Sensing Symposium*. Toronto, Canada. June 24-28, 2002.

Evans, R. H., E. J. Kearns, P. J. Minnett, O. B. Brown, W. Baringer, J. Brown, K. Kilpatrick and S. Walsh. Sea surface temperature measured by the MODerate resolution Imaging Spectroradiometer (MODIS). MODIS Science Team Meeting, Greenbelt MD, July 22-24, 2002.

Evans, R. H. , E. J. Kearns, P. J. Minnett, O. B. Brown, W. Baringer, J. Brown, K. Kilpatrick and S. Walsh. Sea surface temperature measured by the MODerate resolution Imaging Spectroradiometer (MODIS). “*Remote Sensing of the Earth's Environment from Terra,*” a Workshop at the International Summer School on Atmospheric and Oceanic Science, L'Aquila, Italy, August 25-30, 2002.

Brown, O. B., R. H. Evans, P. J. Minnett, E. J. Kearns and K. Kilpatrick. Sea surface temperature measured by the MODerate resolution Imaging Spectroradiometer (MODIS). NASA Earth Observing System Investigator Working Group Meeting, Ellicott City, MD. November 18, 2002.

Evans, R.H., O.B. Brown, P.J. Minnett and E.J. Kearns. A comparison of MODIS AQUA and TERRA SST using MAERI and buoy observations. Third Workshop of the Global Ocean Data Assimilation Experiment High Resolution Sea Surface Temperature Pilot Project. Frascati, Italy, December 4. 2002.

2003

Minnett, P.J., R. H. Evans, E. J. Kearns, K. Kilpatrick, A. Kumar, W. Baringer, O. B. Brown and W. Esaias. AQUA MODIS Sea Surface Temperatures. Aqua Science Working Group Meeting, NASA Goddard Space Flight Center, Greenbelt, MD, May 28, 2003.

Minnett, P.J., R.H. Evans, E.J. Kearns, K. Kilpatrick, K.A. Maillet, A. Kumar, W. Baringer, S. Walsh, E.L. Key, M. Szczodrak and O. B. Brown. Sea surface temperature measurements from the MODerate-resolution Imaging Spectroradiometer (MODIS) on AQUA. AGU Fall Meeting, San Francisco, CA. December 9, 2003.

TEACHING

27. Teaching Awards Received: None

28. Teaching Specialization (courses taught)
Satellite Oceanography

29. Thesis and Dissertation Advising/Post doctoral student supervision:

Committee Chairman

Steven R. Emmerson, M.S., 1977 An inter-comparison between objectively analyzed low cloud-level winds and observed-surface winds for the GATE area

Maria Cristina Forbes, Ph.D., 1993 Altimeter Observations in the South Atlantic

John Hargrove, Ph.D., 1998 Zonal Variability of Mesoscale Oceanography from TOPEX/POSEIDON Altimetry in the North Pacific

Mariana Framiñan, Ph.D., 2005 On the Physics, Circulation and Exchange Processes of the Rio de la Plata Estuary and the Adjacent Shelf.

Committee Member

Michael M. Jacobs, M.S., 1975 A study of the influence of the ocean on atmospheric radiative heating

Valery Lee, M.S., 1980 The GATE experiment atlas

Chris Johnson, M.S., 1987, Neotectonics in Central Mexico from Landsat V Thematic Mapper Imagery; Ph.D., 1990, Stratigraphy and Structure of the San Lucas Area, Michoacan and Guerrero States, Southwest Mexico

Sonia Bauer, M.S., 1990 Effects of Large Scale Forcing on Arabian Sea Mixed Layer

Aline Rodriguez, M.S., 1990 The Importance of Photo Inhibition in Obtaining Analytical Satellite Estimates of Integral Primary Productivity

Watson W. Gregg, Ph.D., 1991, University of South Florida Stimulation of the 1979 Spring Bloom in the Mid-Atlantic Bight: A coupled Physical/Biological/Optical Model Designed for CZCS Data

Jerry Miller, Ph.D. 1992 Gulf Stream Frontal Meanders in the South Atlantic Bight

Osvaldo Ulloa, 1993, Ph.D., Dalhousie University (External Member) Influence of Heterotrophic Bacteria and other Sub-Micrometer Particles on Light Scattering in the Ocean

Deanna Wilson-Diaz, 2002, Ph.D., On the Heat Budget of the Arabian Sea.

SERVICE

30. University Committee and Administrative Responsibilities

Present:

Named Dean of RSMAS, January 1995

Chairman, UM Information Technology Advisory Committee

Chairman, RSMAS Business and Finance Roundtable

Former:

Member, Dean of the College of Arts and Sciences Search Committee 2004

Named Associate Dean for Research, RSMAS, Fall 1989

RSMAS Facilities Committee

RSMAS Computer and Communications Committee

Member, vice-Provost for Research Search Committee

RSMAS South Florida Environmental Research Committee

Oil Pollution Research Committee

Chairman, MPO, 1985 through 1989

Acting Chairman, MPO, 1984 to 1985

UM Self-Study Committee on Computing, Dec. 1985 to June 1986

RSMAS Faculty Representative to U. M. Adv. Committee for the FL Demonstration Proj., appointed Jan. 1986

Chairman, Ocean Technology Committee, 1983-1984

Ocean Technology Committee, 1978

31. Professional Activities

Present:

Member of the EPA Science Advisory Board Hypoxia Advisory Panel, 2006

Chair of the SURA Board of Trustees, 2006

Member of NRC Space Studies Board Earth Sciences Decadal Study Committee, 2005

Member of CORE-JOI Integration Working Group, 2005

Councilor-Planning Commission, AMS, 2001 - 2006

Member of Joint Oceanographic Institutions (JOI) Board of Governors, 1995

Member of Consortium for Ocean Research and Education (CORE) Board of Governors, 1995

Member of the Shake-A-Leg Miami Board of Trustees, 2003

Member of the SURA Board of Trustees, 2000

Former:

Member of the JHU APL Science and Technology Advisory Panel 2001-2006
 Member of the JHU APL Space Department Advisory Board 1998-2001
 Chairman of NOAA Science Advisory Board Climate and Global Change Working Group, 2002-2006
 Member of NOAA Science Advisory Board, 1998-2006
 Member of the NRC Committee on Radio Frequencies, 2004 – 2006
 Chairman, BOT, UCAR (University Corporation for Atmospheric Research), 2000-2002
 Trustee, UCAR, Oct. 1996-2002
 Member of Stiltsville Committee of the National Park System Advisory Board, 2000
 Member of Ocean Observatories Steering Committee, 2000-2002
 Member of the Air Force Technical Applications Center (AFTAC) Satellite Review Panel, 1999-2003
 Chairman of CORE Public Policy Committee, 1998
 Chairman, J-GOOS Committee (Oct. 1991–Oct. 1995)
 Chairman, AAAS Section Nominating Committee, 1997
 Chairman, U.S. JGOFS Steering Committee, (1991 – 1995)
 Chairman, Unidata Policy Committee, 1995
 Councilor, AMS, 1998-2001
 Member of Biscayne Bay Partnership Initiative Policy Committee, 1999-2001
 Member of Ocean Research Advisory Panel (ORAP) Ocean Observations Working Group, 1998
 Member of the EOS Post-2000 Study Committee, 1999
 Member, AAAS Section Nominating Committee, 1999
 Member of the Ocean Studies Board, 1998
 Member of SeaWIFS Science Team (NASA)
 Member of TOS Steering Committee, 1997
 Member of the Space Studies Board's Committee on Earth Studies (CES) (1997–1999)
 Member of SAC (Science Advisory Committee) of the IAI (Inter-American Institute for Global Change Research, 1995-2001
 Member of UCAR University Relations Committee
 Member of UCAR NOAA Data Management Advisory Panel
 Member of JOI SeaNet Committee
 Member of SCOR IOC CO₂ Panel
 Member of Environmental Task Force
 Member of Earth Science & Applications Advisory Committee (NASA)
 Member of NRC Panel on Near-Term Development of Operational Ocean Observations, 1993
 Co-Chairman, Hydrospheric Processes Laboratory Visiting Committee (NASA), 1993
 Member Ocean Color Science Working Group Member (NASA)
 Member of NOAA JOI Ocean Observations Science Panel
 Member, UCAR Unidata Policy Committee and Implementation Working Group
 Member Subcommittee on International Council of Scientific Unions (NSF)
 Member of NRC Ocean Studies Board NOAA Panel
 Member of MEDEA, 1992-2002
 Member of Eos/MODIS Instrument Team, 1991-2003
 Chairman of NOAA Climate and Global Change Panel, 1991-2002
 Member of UCAR Strategic Plan Blue Ribbon Panel, 1991
 Named President of Cono Sur Initiative, Inc., 1990

Member of Joint SCOR IOC Committee on Climatic Changes and the Ocean (CCCO)

Member of Advisory Panel for Tropical Ocean/Global Atmosphere (TOGA) Program, September 1985 to 6/30/91 (National Research Council)

Chairman UCAR Advisory Committee for the Institute for Naval Oceanography (INOAC) January 1987. Reappointed to Committee in 1990.

Member of NSF Advisory Committee for Ocean Sciences - 1987 for 3 years

Member of Earth Science and Applications Data Systems (ESADS) Committee, February 1987 (NASA)

Member of International Committee on Joint Ocean Global Flux Studies for 3 years, January 1988, (member of Executive Committee)

Member of U.S. JGOFS Executive Committee, September 1989

Member of Sea-WIFS Prelaunch Science Working Team (SPSWT), August 1988

Member of Advisory Board of Ocean-Air Interactions, March 1988

Member of Editorial Board for Journal of Ocean Air Interactions: Techniques, Observations and Analyses, February 1988

Member Global Ocean Flux Studies (GOFS) Executive Committee, July 1987; Steering Committee, 1984-1987

Associate Editor, Journal of Geophysical Research, 1986-1990.

COCOS Lecturer, Duke University Marine Laboratory, Beaufort, NC, summer of 1986

Member of ONR Physical Oceanography Advisory Committee, January 1986-1988.

Member of Committee on Geophysical Data (CGD), October 1985 to 6/30/88. (National Research Council)

Member Satellite Ocean Data System Science Working Group (NASA), 1985

Chairman, NODS Oversight Committee, 1986.

Member WOCE Indian Ocean Sector panel member, 1985.

Member Naval Studies Board Remote Sensing Task Group, 1983. (National Research Council)

Member Indo-U.S. Bilateral Science Working Group, 1983, Chairman Field Program Planning Group

Member Warm Core Rings Executive Committee, 1983-1986

Member WSCORE Steering Group, 1985-1986.

Member CCCO Indian Ocean Panel 1983-1986.

Member Joint French-U.S. Ocean Color Science Working Group, 1983.

Member Pilot Ocean Data System (PODS) Scientific Steering Group (NASA), 1982-1985.

U.S. Delegation Representative to CINCWIO Program Group Meeting, Nairobi, Kenya, 1-10 October, 1982.

Member Sea Surface Stress Working Group (NASA) 1981-1984.

Member SCOR Working Group 56, "Equatorial Upwelling," 1978-1986.

Member NAS-Committee on Radio Frequencies (CORF), 1978-1984.

Co-chairman of the Oceanographic Data System Conference, Woods Hole Oceanographic Institution, 1978.

Coordinator, ATS "Memorandum of Understanding" for UNOLS operators for utilization of ATS satellite communications.

March 2006

CURRICULUM VITAE

NAME: JEFFREY J. POLOVINA

ORGANIZATION: National Oceanic & Atmospheric Administration National Marine
Fisheries Service
Pacific Island Fisheries Science Center
Ecosystem & Oceanography Division
2570 Dole Street
Honolulu, Hawaii 96822-2396
(808) 983-5390
E-mail: jeffrey.polovina@noaa.gov

PRESENT POSITION: Chief, Ecosystem & Oceanography Division
Pacific Islands Fisheries Science Center
NOAA Fisheries
Honolulu, HI

EDUCATION:

B.S., Mathematics, Carnegie-Mellon University, 1970
Ph.D., Statistics, University of California, Berkeley, 1974

EXPERIENCE:

2004-Present Chief, Ecosystem & Oceanography Division
Pacific Islands Fisheries Science Center
NOAA Fisheries
Honolulu, HI

2003-2004 Acting Science Center Director
Pacific Islands Fisheries Science Center
NOAA Fisheries
Honolulu, HI

1994-2003 Chief, Ecosystem & Environment Investigations
National Marine Fisheries Service
Honolulu Laboratory
Honolulu, Hawaii

1988-1994 Chief, Insular Research Investigations

National Marine Fisheries Service
Honolulu Laboratory
Honolulu, Hawaii

1985-1988 Leader, Fishery Enhancement and Dynamics
Program
National Marine Fisheries Service
Honolulu Laboratory
Honolulu, Hawaii

1981-1985 Leader, Resource Assessment Investigation
National Marine Fisheries Service
Honolulu Laboratory
Honolulu, Hawaii

1979-1981 Statistician
National Marine Fisheries Service
Honolulu, Hawaii

1975-1979 Assistant Researcher/Sea Grant P.I.
Department of Genetics
University of Hawaii
Honolulu, Hawaii

1974-1975 Lecturer
Department of Mathematics
University of California at San Diego
La Jolla, California

RESEARCH INTERESTS:

Climate and marine ecosystems
Ecosystem modeling
Satellite remote sensing of the ocean
Artificial reefs and enhancement
Fisheries oceanography

HONORS AND AWARDS:

Fulbright Research Scholar Fellowship to Galapagos, 1998
Department of Commerce Silver Medal, 1997
Fulbright Research Scholar Fellowship to Kenya, 1992
Department of Commerce Group Bronze Medal, 1990
Honorable Mention Recognition, NMFS Publications Advisory
Committee for best paper in:
 1992-*Fishery Bulletin*
 1986-*Fishery Bulletin*
 1985-*Fisheries Review*
 1984-*Fishery Bulletin*
Fellow, American Institute of Fishery Research Biologists,
1987-Present
Duke University Marine Lab Super Speaker, September 2004
Hatfield Marine Science Center (Oregon State University) Distinguish Lecturer,
December 2005

SERVICE ON SCIENTIFIC COMMITTEES:

Tagging of Pacific Pelagics (TOPP) Steering Committee 2004- present
US GLOBEC SSC 2005 - present
Affiliate Graduate Faculty, Department of Oceanography, University of Hawaii, 1991-
Present
Senior Fellow, Joint Institute for Marine and Atmospheric Research (JIMAR), University
of Hawaii, 1990-Present
JIMAR Council Member, 1996-Present
Adjunct faculty, Centro de Investigaciones Biologicas del
 Noroeste, La Paz, B.C.S., Mexico, 1995-Present
Member, Editorial Board, *Fisheries Oceanography*, 1999-2002
 Member, Editorial Board, *Coral Reefs*, 1994-97
Associate Editor, *North American Journal of Fishery Management*, 1990-91
 NOAA representative to Pacific Regional Marine Research
Board, 1992-96
 Chairman, Crustacean Fishery Monitoring Team, Western
 Pacific Regional Fishery Management Council (NOAA),

1977-Present

STUDENT THESIS (COMPLETED):

Michael Seki, M.S., 2001, Distribution patterns of pelagic cephalopods through the subarctic and subtropical frontal zones in the central North Pacific, Department of Oceanography, University of Hawaii

Michael Seki, Ph.D. 2003, Physical characterization and biological responses at large and meso-scale oceanographic phenomena in the Subtropical North Pacific, Graduate School of Fisheries and Faculty of Fisheries, Hokkaido University.

Matthew Perry, Ph.D. Trophic ecology of two oceanic squids in the North Pacific subtropical gyre. Department of Oceanography, University of Hawaii

Kevin Wang, M.S., Department of Oceanography, University of Hawaii. 1998. Population dynamics of akule in Hawaiian waters.

Robert Humphreys, Jr., M.S., Department of Fisheries, University of Washington, 1995.
Recruitment variation in a seamount population of armorhead: an analysis of biological characters derived primarily from otolith analysis.

Carol Reeb, Ph.D., Department of Genetics, University of Hawaii, 1994. Molecular insights into the evolution of a circumtropical fish, *Coryphaena hippurus*, and an Indo-Pacific group of mollusks, *Cellana*.

Theresa Martinelli, M.S., Department of Zoology, University of Hawaii, 1993. Nutritional indices for the Hawaiian spiny lobster, *Panulirus marginatus*.

Wayne Haight, M.S., Department of Zoology, University of Hawaii, 1989. Trophic relationships, density, and habitat associations of deepwater snappers (Lutjanidae) from Penguin Bank, Hawaii.

REFEREED PUBLICATIONS:

Polovina, J. J., I. Uchida, G. Balazs, E. Howell, D. Parker, P. Dutton. 2006.
The Kuroshio Extension Current Bifurcation Region: A pelagic hotspot for juvenile loggerhead sea turtles. *Deepsea Res. II* (53):326-339.

Wilson, S.G., J. J. Polovina, B. S. Stewart, M. G. Meekan. 2006. Movements of whale sharks (*Rhincodon typus*) tagged at Ningaloo Reef, Western Australia. *Marine Biology*.148:1157-1166.

Polovina, J. J., and E. A. Howell. 2005. Ecosystem indicators derived from satellite-remotely sensed oceanographic data for the North Pacific. *ICES Journal of Marine Science*.62:319-327.

Polovina, J. J. 2005. Climate variation, regime shifts, and implications for sustainable fisheries. *Bull. Mar. Sci.*76(2):233-244.

- Kerstetter, D.W., J.J. Polovina, and J. E. Graves. 2004. Evidence of shark predation and scavenging of fishes equipped with pop-up satellite archival tags. *Fish. Bull.*102(4):750-756.
- Bograd, S.J.,D.G. Foley, F.B. Schwing, C. Wilson, R. M. Laurs, J. J. Polovina, E. A, Howell, R. E. Brainard. 2004. On the seasonal and interannual migration of the Transition Zone Chlorophyll Front. *Geophysical Research Letters* 31:L17204.
- Polovina, J. J., G. H. Balazs, E. A Howell, D. M. Parker, M. P. Seki, and P. H. Dutton. 2004. Forage and migration habitat of loggerhead (*Caretta caretta*) and olive ridley (*Lepidochelys olivacea*) sea turtles in the central North Pacific Ocean. *Fish. Oceanogr.*
- Polovina, J. J., G. H. Balazs, E. A Howell, D. M. Parker, and M.P. Seki. 2003. Dive-depth distribution of loggerhead (*Carretta carretta*) and olive ridley (*Lepidochelys olivacea*) sea turtles in the central North Pacific Ocean: Might deep longline sets catch fewer turtles? *Fish. Bull.*101(1):189-193.
- Watters, G. M., R. J. Olson, R. C. Francis, P. C. Fiedler, J. J. Polovina, S. B. Reilly, K. Y. Aydin, C. H. Boggs, T. E. Essington, C. J. Walters, and J. F. Kitchell. 2003. Physical forcing and the dynamics of the pelagic ecosystem in the eastern tropical Pacific: simulations with ENSO-scale and global-warming climate drivers.*Can. J. Fish. Aquat. Sci.*:60:1161-1175.
- Antonelis, G. A., J. D. Baker, J. J. Polovina. 2003. Improved body condition of weaned Hawaiian monk seal pups associated with El Nino events: potential benefits to an endangered species. *Marine Mammal Science* 19(3):590-598.
- Seki, M.P., J. J. Polovina, D. R. Kobayashi, R. R. Bidigare, and G. T. Mitchum. 2002. An oceanographic characterization of swordfish longline fishing grounds in the Subtropical North Pacific. *Fish. Oceanogr.*11:5,251-266.
- Polovina, J.J., E. Howell, D.R.Kobayashi, and M.P.Seki. 2001. The Transition Zone chlorophyll front, a dynamic global feature defining migration and forage habitat for marine resources. *Progress in Oceanography*(49)1-4:469-483.
- Seki, M. P., and J. J. Polovina 2001. Ocean gyre ecosystems. Volume 4 p:1959-1964. In: *The Encyclopedia of Ocean Sciences* Steele, J. H. et. al (eds.) Academic Press. San Diego, Ca.3399p.
- Seki, M. P., J. J. Polovina, R. E Brainard, R. R. Bidigare, C. L. Leonard, and D. G. Foley. 2001. Biological enhancement at cyclonic eddies tracked with GOES thermal imagery in Hawaiian waters. *GRL*:28(8):1583-1586.
- Polovina, J.J., E. Howell, and M. P. Seki. 2000. Satellite ocean color sensors detect biological change in mid-latitude North Pacific, 1997-2000.*EOS AGU.* 81(44)p.519.
- Laurs, R. M., and J. J. Polovina. 2000. Satellite remote sensing: An important tool in

- fisheries oceanography.p:146-157 *In: Fisheries oceanography: An integrative approach to fisheries ecology and management*, P. J. Harrison and T. R. Parsons (eds.), Blackwell Science Ltd., Oxford, UK.347pp.
- Polovina, J. J.
2000. The lobster fishery in the Northwestern Hawaiian Islands.p:98-104 *In: Spiny lobsters: Fisheries and culture 2nd edition*, B. F. Phillips and J. Kittaka (eds.), Blackwell Science Ltd., Oxford, UK.679pp
- Bustamante, R. H., G. K. Reck, B. I. Ruttenberg, and J. J. Polovina.
2000. The Galapagos spiny lobster fishery.p:210-220. *In: Spiny lobsters: Fisheries and culture 2nd edition*, B. F. Phillips and J. Kittaka (eds.), Blackwell Science Ltd., Oxford, UK.679pp.
- Polovina, J. J., D. R. Kobayashi, D. M. Ellis, M. P. Seki, and G. H. Balazs.
2000. Turtles on the edge: movement of loggerhead turtles (*Caretta caretta*) along oceanic fronts in the central North Pacific, 1997-1998. *Fish. Oceanogr* (9):71-82.
- Polovina, J. J., and W. R. Haight.
1999. Climate variation, ecosystem dynamics, and fisheries management in the Northwestern Hawaiian Islands. *In: Ecosystem approaches for fisheries management*, Alaska Sea Grant College Program, AK-SG-99-01, p. 23-32.
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PUBLICATIONS :

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- 1999 Woody, Catherine, Eddie Shih, Jerry Miller, Thomas Royer, Larry Atkinson and Richard Moody. Salinity measurements in the coastal ocean. Workshop Review. Sept.1998. CCPO Technical Report 99-01.

PROPOSAL REVIEW PANELS, ADVISORY COMMITTEES, EDITORIAL BOARDS, ETC.

- Member, EASTWARD Scheduling Committee, University National Oceanographic Laboratory System. 1976 to 1979.
- Proposal Review Panel. National Science Foundation "Biological Effects of Coastal Upwelling." Annapolis, Md. 13 to 14 September 1979.
- Program Review. U.S. Environmental Protection Agency "The Chesapeake Bay Program." Hampton, VA 26 - 30 November 1979.

Shoreline Assistance Committee, Department of Natural Resources, State of Georgia. Meets monthly to rule on shoreline construction permits, 1982 to 1986.

NASA OSTA1 Ocean Color Experiment in situ Experiment Team Member, 1983 to 1986.

Editorial Board, Springer-Verlag Lecture Note Series in Coastal and Estuarine Studies, 1983-1985.

Committee on effectiveness of oil spill dispersants in the ocean. National Academy of Sciences, National Research Council, Marine Board, 1985 to 1988.

Proposal Review Panel, National Science Foundation, Physical Oceanography, 1986.

Advisor to MMS Scientific Advisory Panel (NAS), 1988.

University National Oceanography Laboratory Ship Advisory Committee, 1988 to 1992.

Vice Chairperson to the Scientific Committee (SC) of the Outer Continental Shelf Advisory Board, Minerals Management Service, 1990 to 1992.

Coastal Ocean Prediction Systems Interim Scientific Planning Committee, 1989 to 1990.

U.S. WOCE Hydrographic Program Implementation Panel, 1989 to 1992.

University National Oceanographic Laboratory Ships Council, 1989 to 1991.

Chairperson of the Scientific Committee of the Outer Continental Shelf Advisory Board, Minerals Management Service, 1992 to 1994.

Member, Scientific Committee of the Outer Continental Shelf Advisory Board, Minerals Management Service, 1994 to 1995.

Chesapeake Research Consortium. Member of Board, 1993 to present.

Coastal Ocean Program. National Science Foundation, Member Steering Committee, 1994 - 1996.

Middle Atlantic Regional Research Program. Trustee, 1993 to 1995.

Fleet Improvement Committee, University National Laboratory Oceanographic System, Member, 1995 - 1997.

Subcommittee on Environmental Information for Select Outer Continental Shelf Areas under Moratoria. Department of Interior, Minerals Management Service, Co- Chair. 1996 - 1998.

Chair, Board of Trustees, Chesapeake Research Consortium. Member of Board, 1996 - 2001.

Fleet Improvement Committee, University National Laboratory Oceanographic System, Chair, 1997 - 2003.

National Research Council, Marine Board. 1998-2000.

National Association of State Universities and Land-Grant Colleges. Board of Oceans and Atmospheres. Member. 1998 to present.

University representative to the University Corporation for Atmospheric Research. 1999 - present.

Land-Ocean Interactions in the Coastal Zone (LOICZ) Continental Margin Task Team (CMTT) member. 1998 - present.

Minerals Management Service Workshop on the Physical oceanography of the slope and rise of the Gulf of Mexico. Workshop Chair. New Orleans. September 2000.

ICES Study Group on Management of Integrated Data. 2003 - Present

GOES-R HES Coastal Water imager Science Team. 2004 - present.

Mid-Atlantic Coastal Ocean Observing Regional Association, interim steering committee. 2004 - 2005.

Mid-Atlantic Coastal Ocean Observing Regional Association, Board of Directors, 2005 - 2008.

Chesapeake Bay Observing System, interim steering committee, 2004 - present.

Canadian Foundation for Innovation Assessment Committee. 2004-2005.

WORKSHOPS, MEETINGS, AND SYMPOSIA:

Controlled Ecosystem Pollution Experiment, December, Miami, Florida, 1972.

Sources and Sinks of Carbon Monoxide and Methane Symposium, August 15-17, 1972, St. Petersburg, Florida.

Application of Mass Spectrometry to Environmental Problems, November 5-7, 1972, Athens, Georgia.

Global Atmospheric Transport Experiment, Miami, Florida, May, 1973.

Controlled Ecosystem Pollution Experiment, February 10-13, La Jolla, California, 1974.

"An oceanographic research program for the continental shelf off the S.E. United States." U.S. Energy Research and Development Administration, October 8-9, Augusta, Georgia 1974.

American Geophysical Union, April 16-20, 1973, Washington, D.C.

IDOE Symposium on Shelf Dynamics "Chemical and Physical Oceanography of the Georgia Shelf," April 3-6, 1974, Annapolis, Maryland.

Gordon Conference on Chemical Oceanography January 14-18, 1974, Santa Barbara, California.

American Society of Limnology Oceanography, June 1975, Halifax, Nova Scotia. Paper: "The volume, frequency and effect of Gulf Stream intrusions on the South Atlantic Bight."

American Meteorological Society, Symposium on the Marine Boundary Layer, Seattle, Washington, 29 March - 2 April, 1976.

American Institute of Biological Sciences, Symposium on the Ecology and Management of the Continental Shelf, New Orleans, Louisiana, 30 May - 3 June, 1976. Paper: "Physics

Chemical Processes in Continental Shelf Waters."

American Society of Limnology and Oceanography, Symposium of the South Atlantic Bight, Savannah, Georgia 21-24 June, 1976. Paper: "Hydrographic Observations in Onslow Bay."

American Meteorological Society, Symposium on the Marine Boundary Layer, Seattle, Washington, 29 March - 2 April, 1976.

American Institute of Biological Sciences, Symposium on the Ecology and Management of the Continental Shelf, New Orleans, Louisiana, 30 May - 3 June, 1976. Paper: "Physics Chemical Processes in Continental Shelf Waters."

"Conference on Environmental Studies Program on the South Atlantic Continental Shelf Area." Bureau of Land Management, October 1976, Atlanta, Georgia.

Workshop on Anoxia in the Mid-Atlantic Bight, Washington, D.C. October 15-16, 1976. National Science Foundation.

Southeastern Estuarine Research Society, "Nearshore Transfer Processes." Brunswick, Georgia, November 15, 1976.

Gordon Research Conference on Chemical Oceanography, "Chemical Transfer Processes in the South Atlantic Bight." Santa Barbara, California, January 24-27, 1977.

First Conference on the Continental shelf, "Intrusions and Flushing." Raleigh, North Carolina, March 30 April 1, 1977.

Estuarine Research Society, "Chemical and physical transfer processes in the coastal zone off Georgia." Mt. Pocono, PA, 3-5 October, 1977.

Nearshore Ecosystems, Duke University Marine Laboratory, Beaufort, North Carolina, 2-3 December 1977.

Gordon Research Conference on Chemical Oceanography, "Chemical Transfer Processes in the South Atlantic Bight." Santa Barbara, California, January 24-27, 1977.

First Conference on the Continental Shelf, "Intrusions and Flushing." Raleigh, North Carolina, March 30 - April 1, 1977.

Estuarine Research Society, "Chemical and physical transfer processes in the coastal zone off Georgia." Mt. Pocono, PA, 3-5 October, 1977.

Conference on Nearshore Ecosystem, "Chemical and physical processes in coastal waters." Florida State University, Tallahassee, 13-15 April, 1978.

American Society of Limnology and Oceanography Annual Meeting, "The volume and effect of Gulf Stream intrusions in Onslow Bay and a predictive model,"

Space and Time Symposium. Victoria, B.C., 19-22 June, 1978.

Southeastern Estuarine Research Federation, Hilton Head, SC, 26-28 October, 1978.

American Chemical Society, Savannah, GA, 6-10 November 1978. Talk: "Tracers of river water in the coastal zone."

Grundy CTD Conference, San Diego, CA, 12-15 March, 1979. Talk: "9825 based CTD data acquisition system."

American Geophysical Union, Washington, 17-21 June, 1979. Talk: "Topographical influences on the Gulf Stream." (with J. O. Blanton).

Bureau of Land Management. "Environmental Effects of Oil Exploration on the Outer Continental Shelf." Atlanta, Georgia 8-9 November 1979.

International Symposium on Coastal Upwelling. Three co-authored papers were presented: "Upwelling along the Gulf stream front of the southeastern coast of the United States;" "Upwelling processes in the South Atlantic Bight;" "Upwelling off the southeastern coast of the United States an overview." University of Southern California, Los Angeles, CA. 4-8 February, 1980.

U.S. Department of Energy. "Environmental Consequences of Offshore Thermal Energy Conversion." Brookhaven National Laboratory, Upton, New York, 22 - 24 January, 1980.

American Geophysical Union, San Francisco, CA. December 1980. Talk: "Oceanographic climatology of the southeastern U.S. continental shelf waters."

American Society for Limnology and Oceanography, Seattle, WA. December 1980. Talk: "Nutrient sources to the southeastern U.S. shelf waters: rivers, recycling, and the Gulf Stream."

American Geophysical Union, San Francisco, CA. December 1981. Talk.

American Geophysical Union ASLO Joint Meeting, San Antonio, TX. February 1982. Talk.

Workshop on Gulf Stream Structure and Variability. Raleigh, North Carolina April, 1982.

American Society for Limnology Oceanography Raleigh, NC, June 1982. "Hydrography and nutrients in the SAB."

American Geophysical Union San Francisco, CA, December 1982. Talks.

NORDA. "Chemical Variability in Frontal Regions." Bay St. Louis, Mississippi, September, 1983.

American Society for Limnology Oceanography/American Geophysical Union New Orleans, January 1984. "Overview of OPUS."

ONR workshop on Coastal Transition Zone. Monterey, CA 8-10 May 1984, invited panel leader.

University of Delaware, Invitational Seminar Series, Oct. 1985, "Physical hydrography of upwelling near Pt. Conception, California."

University of Maryland, Invitational Seminar Series, Oct. 1985, "Physical hydrography of upwelling near Pt. Conception, California."

NSF Workshop of Global Ocean Ecology. Wintergreen, VA, 10-13 May 1988.

Duke University Marine Laboratory, June 1988, "What we have learned about shelf dynamics in the last 20 years." 50th Anniversary Celebration invited speaker.

American Geophysical Union Baltimore, MD, June 1988. Talk: "Hydrographic Variability During Gale."

University of North Carolina, Marine Sciences Seminar, April 5, 1989. Talk: "Nitrate and Buoyancy Fluxes on the Southeastern U.S. Continental Shelf: Results from GALE."

ODU Alumni Associate/Academic Affairs Committee, Norfolk, Virginia, January 24, 1990. Talk: "Review of CCPO."

ODU Alumni Association/Young Alumni Council, Norfolk, Virginia, May 2, 1990, "Oceanography at ODU."

Duke Marine Laboratory and National Marine Fisheries Laboratory, Beaufort, North Carolina, April 1991, "Nutrient Flux to the Shelf During Winter Conditions."

Horn Point Environmental Laboratory, Cambridge, Maryland, October 9, 1991. Talk: "Comments on Nutrient Supply to Shelves."

American Geophysical Union, Ocean Sciences Meeting, New Orleans, Louisiana, January 1992. Paper presented: "Gulf Stream Frontal Eddy Influence on Productivity of the Southeast U.S. Continental Shelf."

The Oceanography Society. February 1993. "Hydrography of the Old Bahama Channel." Seattle, WA.

IAI Workshop on Comparative Studies of Oceanic, Coastal, and Estuarine Processes. "Eastern United States coastal processes and global change." (invited). August 1993. Montevideo, Uruguay.

American Geophysical Union, Ocean Sciences Meeting, San Diego, California. February 1994. "Low salinity water into the North Atlantic Ocean".

Northeastern Gulf of Mexico Physical Oceanography Workshop. Minerals Management Service. Invited Convener. April 5 - 7, 1994. Tallahassee, Florida

Nitrogen Dynamics in the North Atlantic. UNESCO/SCOR. Block Island. May 8-14. 1994. Invited participant.

American Geophysical Union, Spring Meeting, Baltimore. June 1995. "Critical aspects of the shelf break in cross-shelf transfer." Invited.

Workshop on Global Change Research in the Americas, August 28-30, 1995, Belém, Brazil

LOICZ Open Science Meeting, Noordwijkerhout, The Netherlands, November 1997, "Role of shelf-ocean exchange on material flux". Invited.

LOICZ Continental Margin Task Team, Texel, The Netherlands, November 1997. "Processes that exchange material across the continental margin". Invited.

American Society of Naval Engineers, Tidewater Section, Virginia Beach, November 1997, Environmental Symposium, 97. Invited Moderator.

Minerals Management Service, Department of the Interior, New Orleans, Dec 1997. Information Transfer Meeting. "Physical Setting/Description of the Manteo Area". Invited Presentation. Tom Curtin and Lorraine Heilman co-authors.

American Geophysical Union, Ocean Sciences Meeting, San Diego, Feb. 1998. Co-Author on 4 papers and posters.

Hydrographic Surveying for Nautical Charting. Course offered in Seattle, Washington. April 1998. Coordinator in cooperation with College of Sciences, Continuing Education and NOAA Office of Charting.

Great Australian Bight Workshop. Invited Paper. September 1998. Port Lincoln, South Australia, Australia.

1999 Atkinson, L. P., Lorraine Heilman and Tom Curtin. Bathymetric and physical oceanographic description of the Manteo Lease Area. p. 497-508. U. S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, La. OCS Study MMS 99-0042. 710 pp. Invited Presentation.

1999. Charleston Bump Colloquium. Charleston, South Carolina. Oct. 1999. "Gulf Stream and shelf physical oceanography at the Charleston Bump: Deflection, bimodality, meanders and upwelling. Bane, Atkinson, and Brooks. Presented by Bane.

2000. Continental runoff and ocean margin fluxes. Atkinson, Royer, Grosch, Sugimoto and Curtin. Invited Presentation. AGU/ASLO Ocean Sciences, January 2000.

2000. Carbon fluxes at continental margins: a strategy for global synthesis. Liu, Hall, Talaue-McManus and Atkinson. Invited Poster. AGU/ASLO Ocean Sciences, January 2000. Presented by Liu.

2000. Transverse variability of the flow in an energetic tidal channel. Caceres, Valle-Levinson and Atkinson. AGU/ASLO Ocean Sciences, January 2000. Presented by Caceres.

2000. Near-shore and shelf dynamics. AGU/ASLO Ocean Sciences, January 2000. Invited Presider.

2000. Continental margin biogeochemical fluxes I: Regional Studies. AGU/ASLO Ocean Sciences, January 2000. Invited Presider.

2000 Observations along the Chilean coastline and comments on the ocean margins. University of Concepcion. December 2000. Invited presentation.

2001 Ocean margins and the global carbon assessment: status and continental task team activities. IGBP Open Science Meeting. Amsterdam. Invited Presentation.

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2005 The Second Annual IOOS Implementation Conference, "Setting National Priorities for the Integrated Ocean Observing System: The U.S. Ocean and Coasts Contribution to the U.S. IEOS. May 3-5, 2005, Arlington, VA.

2005 The International Council for the Study of the Sea Study Group on Management of Integrated Data (SGMID)* (Co-chairs: Peter Wiebe, USA, and Christopher Zimmermann, Germany), at IPIMAR,* Lisbon, Portugal from 11-13 April 2005

2005 The Oceanography Society June 6-10, 2005 at UNESCO Headquarters, Paris, France. DEVELOPMENT OF A SURFACE CURRENT MAPPING SYSTEM USING HIGH FREQUENCY RADAR FOR U.S. COASTAL WATERS Larry P. Atkinson, Jack Harlan (NOAA).

2006 US/EU-Baltic International Symposium. May 23-25, 2006. Klaipeda, Lithuania. "Establishing a National HF Radar Network for the U.S. IOOS". Larry Atkinson and Jack Harlan.

Presentations related to Ocean.US activities:

2002 Feb. Hawaii NOPP town hall with Yoder

2002 July 9. Va Tech

2002 September 12. Scripps Faculty meeting

2002 September 12. Scripps Observing System conference with politicians

2002 September 25. UNOLS Meetings in DC

2002 October 7. CCPO ODU

2002 October 9. Ann Arbor USGOOSSC

2002 October 22. NRC Committee on Implementation of Seafloor Observatories.

2002 October 24. Mid-Atlantic Bight Meteorology and Oceanography Meeting at CCPO

2003 31 March and 1 April. Regional Summit in DC.

2003 7-11 April. EGU-AGU Poster Presentation. Nice, France.

2003 29 April. SURA Committee on SCOOP. DC.

2003 5-8 May. JGOFS Final Open Science Meeting. Invited Presentation.

2003 20 May. "Internet-scale Sensing Infrastructure for Oceanography". Sponsored by Intel, OSU and NSF. Skamania, WA

2003 21-23 May. "Information technology (IT) needs to support ocean research in the coming decade". Skamania, WA

2003 4-6 June TOS/OI. Poster Presentation. New Orleans.

2003 17 June. Poster Exhibit. Council for National Science Funding. Washington DC.

2003 23-24 June. CSC Regional RFP panel review. Charleston, SC

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CONSULTING:

USDI, Bureau of Land Management

Texas Instruments,

Exxon

Science Applications International Corporation (SAIC)

JAYCOR, Inc.

ARCO

Dynalysis of Princeton

Falcon Drilling

Hunton and Williams

OTHER:

Local Chairman, American Society of Limnology and Oceanography, Annual Meeting 1976. Savannah, GA.

Coordinator for the Department of Energy Workshop on the Ocean Margins, Virginia Beach, Virginia, June 1990.

External Reviewer, Department of Applied Ocean Physics, Rosensteil School of Marine and Atmospheric Sciences. University of Miami, March 1994.

Quality Review Board, MMS and Scripps Institution of Oceanography, "Santa Barbara Channel Study" 1995 to Present.

Quality Review Board, MMS and Science Applications International Inc., "Desoto Canyon Study". 1997 to Present.

COURSES TAUGHT:

Ocean 605 Introductory Physical Oceanography, 1986-1990

Ocean 602 Methods in Physical Oceanography, 1986-1992

Ocean 710/810 Descriptive Regional Oceanography, 1991-1994, 2002

Ocean 405/505 - Physical Oceanography. 1996.

Ocean 306 – Survey of Oceanography. Fall 1998, Spring 1999, Fall 1999, Spring 2000.

Ocean 691 - Seminar. F1997, S1998.

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Ocean 711/811 - Regional Oceanography - Fall 2005

Ocean 895 - Seminar in ocean observing - Fall 2005

Capstone Course - Assisted - Fall 2005

Ocean 895 - Matlab for Oceanographers - Spring 2005

UNIVERSITY SERVICE:

1987 - 1988 Committee on the University's Mission and Objectives

1988 - 1990 Committee for Academic Affairs Strategic Planning

1992 - 1997 Chair, Department of Oceanography
1991 - 2004. Director, Center for Coastal Physical Oceanography
1998 - 2000 Faculty Senate
1998 - 2004. Executive Director. Cooperative Institute of Coastal Physical Oceanography.
1999 - 2000 Chair, Promotion and Tenure Committee. Faculty Senate.
2002 - Present. University Eminent Scholars Committee
2004 - Present Coordinating Maritime Initiative at ODU
2005 - Present. Undergraduate Committee.

STUDENTS GRADUATED or Current Students:

Lovingwood, Rebecca L., August 1987. Thesis, "Processes Which Create and Destroy Stratification in the South Atlantic Bight During GABEX II." L. P. Atkinson, Chmn., L. Y.

Maher, Patmarie S., December 1988. Nonthesis Master's Degree.

Kim, Cheolsoo, December 1990, Ph.D. Thesis, "Freshwater Transport on the Continental Shelf of the Southeastern United States ." L. P. Atkinson, Chmn., G. T. Csanady, J. Klinck, J. O. Blanton.

Becker, Peter, August 1995, Ph.D. Thesis, "The Effect of Arctic River Hydrological Cycles on Arctic Ocean Circulation". L. P. Atkinson, Chmn, J. Klinck, A. D. Kirwan, S. Levitus.

David Ruble, December 1996. Non-thesis Master's Degree.

Moody, Richard. 1999. Non-Thesis Master's Degree

Chris Katzenmiller. 2005. MS.

Jose Blanco. 2004. PhD

Eggelston, Jana. 2005 MS.

Eggelston, Robert. 2005 MS

Lane, Ruth MS. current

Riveron-Enzastiga, Mayra, MS, current

Salas, David, PhD, current

Cousins, Jasmine, PhD, Current

Trudell, Amber, MS, current

Pinones, Andrea, MS, current

Narvaez, Diego, MS, current

STUDENT COMMITTEES at Old Dominion University

Moses, Joy. 1986. MSc. "Storm surge predictions at Sewell's Point with local wind, pressure, and previous surge as surge predictors in Chesapeake Bay"

Pelegri, Jose Lius. 1992. PhD. "Diapycnal mixing and mass transfer in western boundary currents"

Hommel, Dorlisa L. 1992. MSc. "Plankton transport patterns and residence times around a tall seamount: simulation results"

Moisan, John. 1993. PhD. "Modeling nutrient and plankton processes in the California coastal transition zone"

Mullen, Caitlin P. 1994. PhD. "Flow kinematics and dynamics of the Gulf Stream from composite imagery"

Deksheniaks, M. M. 1996. PhD. "The effects of environmental variability on the population structure of the eastern shore oyster (*Crassostrea virginica*): a modeling study"

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Kumar, Ajoy. 1996. PhD. "Observation of shelfwater overturning the southern slope sea"

Reiss, Chris. 1997. PhD. "Influence of physics on the distribution of ichthyoplankton across the Chesapeake Bay plume"

Smith, David 1999. PhD.

Fillopino, Katherine, PhD, current

STUDENTS ADVISED or Graduated at other Universities (in recent years):

Miller, Jerry. 1992. PhD. University of Miami. "Gulf Stream meanders and frontal eddies in the South Atlantic Bight" (on committee)

Goschen, W. S. 1991. PhD. University of Port Elizabeth, South Africa. "Ocean dynamics associated with prominent capes and bays off the south coast of South Africa" (on committee)

O'Malley, P. G. 1981. MSc. Georgia Institute of Technology. "The effect of summertime shelf break upwelling on nutrient flux in southeastern United States continental shelf waters" (advisor)

FUNDING HISTORY

Prior to 1990 my funding was primarily several large grants from the Department of Energy and the National Science Foundation. Over that period the total amount of funding was approximately \$2.6M.

In recent years my funding involved support for CCPO and personal efforts to develop international collaborative efforts with universities in Chile.

The Center has been supported by a grant from the Commonwealth at levels of ca \$800,000 per year between 1991 and 1995, and at the \$300,000 per year level since then.

Currently I am still supported by an extension of my NSF grant. I am also working on a \$2.5M Coastal Ocean Technology System grant (earmark) initiative for the Virginia Coastal Ocean Observing System. Finally I have \$220,00 from ONR for work with VT and \$169,999 for work with the Wallops group.

Proposals Submitted and Funded:

Started in 1999 to keep track of proposals for the University bookkeeping.

"U.S. - Chile Program: A study of the marine ecosystem of the Chilean Inland Sea" a NSF international programs project. 4/1/96 - 3/31/99. \$57,569.

Continued funding for work in Chile and other parts of the East Pacific will be provided by a grant to SIO and CICESE to form an "Eastern Pacific Consortium". I'm on the steering committee.

"Research opportunities for Program Officers (ROPO) for Dr. Tom Curtin" from the Office of Naval Research. 2/1/95 - present. \$42,000. \$14,000 per year.

"Nutrient fluxes through the Chesapeake Bay mouth". \$77,764. With Arnaldo Valle-Levinson and Lou Codispoti. 2/1/1999 to 1/31/2000. In for renewal.

A collaboration with NOAA/NOS has resulted in a \$50k contract to start an Instrument Field Evaluation Site in the lower Chesapeake Bay. This continues at about \$50k per year.

"Support for the Office of the Fleet Improvement Committee Chair to Develop the Biennial Review". Sub-contract from URI. NSF Funding. 5/1/99 to 4/31/00. \$10,000.

"IPA Funding for Gary Magnuson". NOAA. Annually ending 3/31/00. \$400,000 total.

"Various NOAA task orders". NOAA. About \$50,000 annual.

"Biological responses to topographically induced upwelling of the Gulf Stream". With G. Paffenhoffer and others. NSF. \$1,229,687. Declined. 12/99.

"Development and testing of an antifouling method for the measurement of salinity". Tom Royer PI, Atkinson, Shoenbach. NSF. \$199,000. Funded.

"Development of a stratification parameter as an indicator of Chesapeake Bay Health". EPA. \$23,000. 1999. Declined. Co PI's. Grosch, Klinck, Royer, Valle-Levinson and Locarnini.

"Analysis of long term trends in Chesapeake Bay". EPA. \$23,000. Declined.

"Support for JGOFS/LOICZ workshop of CMTT on eastern and western boundary currents". LOICZ/JGOFS. \$20,000. December 2000. Funded.

"Community Planning for Ocean Observations, Long Term Time Series and Observatory Systems". About \$300,000. NSF. August 2001. Funded through 2005 with no cost extensions.

"Heterogeneous teams of autonomous vehicles: advanced sensing and control". \$220,000. July 2005 to July 2006. Office of Naval Research.

"Coastal Obs II". \$169,000 from NOAA via CIT. One year ending 2006.

Local Service (for the university, started 1/1/00):

January, 2000 Presentation to Crab Creek Dredging Educational Forum. Norfolk. Invited by neighborhood association.

Occasional advisor to Elizabeth River Project

Organizing Virginia Coastal Ocean Observing System with local maritime community.

Organizing a local section of the Marine Technology Society.