



Dr. James J. Bisagni

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Research Interests

Remote sensing of sea surface temperature and ocean pigments; remote sensing of dynamic ocean topography and surface waves; biological oceanographic applications of remotely-sensed data; dynamics/kinematics of coastal fronts; air-sea interaction; atmospheric propagation and attenuation of electromagnetic radiation; image and signal processing; computer/video data visualization; distributed data systems.

Current Research

- 2002-2006, GLOBEC-01: Patterns of Energy Flow and Utilization on Georges Bank (Co-Investigator; D.J. Gifford, Principal Investigator), NSF/NOAA, \$1,175,262.
- 2002-2006, GLOBEC-01: The Physics of Georges Bank and its Impact on Biology (Co-investigator; R. Beardsley, Principal Investigator), NOAA/NSF, \$2,001,912.
- 2004-2007, Climate-Related Interannual Variability of Potential New Production Over the Western North Atlantic Ocean (Principal Investigator; A. Gangopadhyay & J. Goes, Co-Investigators), NASA, \$662,000.

Recent Publications

- Bisagni, J.J., H.-S. Kim, and K.F. Drinkwater, 2006. Observations and modeling of shelf-slope front seasonal variability between 75° and 50° W. *Deep-Sea Res. II*, 53(23-24):2477-2500.
- Bisagni, J. J., 2003. The seasonal cycles of nitrate supply and potential new production in the Gulf of Maine and Georges Bank regions. *J. Geophys. Res.*, 108(C11), 8015, doi:10.1029/2001JC001136.
- Gangopadhyay, A., A. R. Robinson, P. J. Haley, W. J. Leslie, C. J. Lozano, J. J. Bisagni and Z. Yu, 2003. Feature-oriented regional modeling and simulations (FORMS) in the Gulf of Maine and Georges Bank. *Cont. Shelf Res.*, 23:317-353.
- Wishner, K. F., D. J. Gifford, B. K. Sullivan, J. J. Bisagni, D. M. Outram and D. D. Van Keuren, 2003. The biological signature of Scotian Shelf Water crossovers on Georges Bank during spring 1997. *J. Geophys. Res.*, 108(C11), 8014, doi:10.1029/2001JC001266.
- Bisagni, J. J., K. W. Seemann and T. P. Mavor, 2001. High-resolution satellite-derived sea surface temperature variability over the Gulf of Maine and Georges Bank region, 1993-1996. *Deep-Sea Research II*, 48:71-94.
- Mavor, T. P. and J. J. Bisagni, 2001. Seasonal variability of sea surface temperature fronts on Georges Bank. *Deep-Sea Res. II*, 48:215-244.
- Bisagni, J. J., 2000. Estimates of vertical heat flux and stratification from southern Georges Bank, interannual variability, 1985-1995. *Continental Shelf Research*, 20:211-231.