

**Karen Elaine Fisher Favret**  
**Spatial Temporal Earth, LLC**  
**571-241-5231**  
**kefavret@gmail.com**  
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***Education***

Cornell University, Ithaca NY	Ph.D. Aug, 2002
Ecology and Evolutionary Biology-- Biological Oceanography	
Dalhousie University, Halifax NS	M.Sc. Apr, 1996
Biological Oceanography	
University of California, Berkeley CA	A.B. Dec, 1991
Earth Science and Economics	

***Employment***

Spatial Temporal Earth, LLC, Sole Proprietor	2010-present
<i>Event-based analysis of ocean color imagery/IC Consultant</i>	
Los Alamos National Laboratory, Technical Staff Member	2005-2009
<i>Office of the Chief Scientist IPA to Intelligence Community 2007-2009</i>	
Los Alamos National Laboratory, Postdoctoral Research Associate	2003-2005
<i>Physics-based analysis of dynamic experimentation and simulation</i>	
San Francisco State University, Lecturer-Romberg Tiburon Center	2002-2003
<i>(Postdoc) Historical analysis of plankton distributions in San Francisco Bay</i>	

***Research/Fellowships/Internships***

Woods Hole Oceanographic Inst. Visiting Scientist	2002-present
NASA Earth System Science Fellowship	1998-2001
Volumetric Assessment of Factors Governing Seasonal and Interannual Fluxes of Phytoplankton on Georges Bank 1994 to 1999 and Application to SeaWiFS Data for New Production Calculations	
Cornell Biogeochemistry Research Training Grant	1997, 2000, 2001
Stable Isotope Ratios determined by Mass Spec. used in relating trophic interactions to spatial/temporal variation in plankton composition	
Woods Hole Oceanographic Inst. Visiting Student Advisor Peter Wiebe	1996, 1999-2002
Sigma Xi Travel Grant for presentation of MSc. Research	1997 (Feb)
U.S. Antarctic Program/ U.C. Santa Barbara Intern	1996 (Jan-Mar)
Long Term Ecological Research Program: Palmer Station & R/V Polar Duke	
Bioacoustical Oceanography Workshop UCSC	1995, 1996
Applying basic principles of active & passive acoustics	
NASA/University of Maryland Summer Fellowship	1992 (Jun-Aug)
Program in Remote Sensing of the Oceans, Advisor Chuck McClain	
Cal on Campus Internship, U.C. Berkeley Office of the President	1990

***Community Service***

MetroDogs Community Canine SAR Team coordinator	2007-present
Reading to Dogs & Therapy dog handler	2004-present

Mountain Canine Corps SAR dog handler  
Pajarito Mountain Ski Patrol and K9 SAR

2003-2007  
2003-2009

### ***Research Societies***

American Geophysical Union (AGU), American Society of Limnology and Oceanography (ASLO), Sigma Xi, The Oceanography Society (TOS), Acoustical Society of America (ASA)

### ***Publications***

Fisher, K.E., J.R. Kamm, A. Davis, 2005, "Towards Validation Metrics in Fluid Dynamical Simulations Based on Wavelet Transforms and Multifractal Analyses", in Proceedings from Fractals in Engineering 2005 (CDROM).

Fisher, K.E., P.H. Wiebe, B.D. Malamud, 2004, "Fractal Characterization of Local Hydrographic and Biological Scales of Patchiness on Georges Bank", in Handbook of Scaling Methods in Aquatic Ecology: Measurement, Analysis, Simulation, L. Seuront and P.G. Strutton eds., CRC Press, Boca Raton, pp. 297-320. LA-UR-03-5013

Fisher, K. and Kimmerer, W., 2004, "Fractal distributions of temperature, salinity and fluorescence in Spring 2001-2002 in South San Francisco Bay", in Thinking in Patterns: Fractals and Related Phenomena in Nature, M.M. Novak, ed. World Scientific, New Jersey, pp. 199-211. LA-UR-03-7509

Fisher, K.E, 2002, Intermittency in Spatial and Temporal Plankton Patterns, PhD dissertation, Cornell University. (also poster: AGU fall meeting 2002)

Fisher, K.E., 1995, A Global New Production Estimate Based on Nitrate Entrained by Seasonal Fluctuations in Mixed Layer Depth, M.Sc. Thesis, Dalhousie University.

### ***Research Cruises*** (duration and destination)

**Research vessels:** R/V Albatross, R/V Oceanus, R/V Endeavor, R/V Revelle, R/V Edwin Link, R/V Polaris, R/V Questuary, R/V David Johnston, Fishing vessel: F/V Isabel S; Research Ice Breaker: RVIB Nathaniel B Palmer

**2004** EN331- test cruise for high frequency acoustic backscatter detection of microstructure

**2003/2** USGS San Francisco Bay monitoring; RTC South San Francisco Bay monitoring

**2001** NBP0103, NBP0104 (45 days, Western Antarctic Peninsula) GLOBEC Survey cruises

**1999** AL9901, EN320, AL9906 (10-14 days, Georges Bank) GLOBEC Broadscale cruises

EL9904, EL9905 (8 & 20 days, Southern flank Georges Bank) GLOBEC Process cruises

EN330, EN331 (10 days, Gulf of Maine) GLOBEC Process cruises

NAGL98-01B (8 days, Stellwagen Bank) National Undersea Research Center

**1998** AL9801, OC319, AL9808 (10-14 days, Georges Bank) GLOBEC Broadscale cruises

OC332, OC334, (10 days, Gulf of Maine) GLOBEC Process cruises

**1997** Kiwi-01 (7 days, Monterey Bay) Bioacoustical Oceanography Workshop; EN307 (10 days Gulf of Maine)