

**Robert D. Bornstein**  
**Senior Associate, EnviroComp Consulting, Inc.**

Department of Meteorology  
 San Jose State University, San Jose, CA 95192 USA  
 Mobile Phone: 415-308-1587; e-mail: PBLMODEL@HOTMAIL.COM

**EDUCATIONAL BACKGROUND**

City College of New York:	B.S. Meteorology (1964)
New York University:	M.S. Meteorology (1968)
(School of Engineering)	Ph.D. Meteorology (1972)

**PROFESSORSHIPS/RESEARCH POSITIONS**

San Jose State University (1969-present): Department of Meteorology, Tenured Full Professor  
 Consiglio Nazionale Recerce and IBM, Venice, Italy (1977): Visiting Scientist  
 Stanford University (1981 -92): Civil Engineering Department, Consulting Research Prof.  
 University of Vienna, Austria (1985): Department of Meteorology, Visiting Professor  
 Univ. of Sao Paulo, Brazil (Fall Semester 1992): Dept. of Atmospheric Sci., Visiting Professor  
 EU/Joint Research Center, Ispra, Italy (1993-7): Environ. Institute, Visiting Scientist/Consultant  
 Hebrew University of Jerusalem, Israel (Spring Semester 2000): Visiting Professor  
 Ben Gurion University, Israel (Spring Semester 2005): Visiting Scientist  
 Cambridge University, UK (Spring Semester 2005): Senior Academic Visitor  
 National Autonomous University (UNAM), Mexico City: Visiting Lecturer (Spring 2007)

**PROFESSIONAL EXPERIENCE**

*Researcher* (1964-1969): with Dr. Ben Davidson on U.S. EPA project on urban air pollution  
*Sponsored Researcher* (1969-): EPA, NSF, NASA, CARB, IBM, NATO, AeroVironment, ARL, Battelle, ABAG, CCWD, NRL, LMMS, LLNL, EPRI, COMET, USAID, BAAQMD, DHS projects on observation, analysis, and simulation of polluted coastal/urban PBLs

**JOURNAL EDITORSHIPS**

*Atmospheric Environment* (1987-present): Executive Editor or Editor Emeritus  
*Environmental Software* (1986-1993): Associate Editor  
*Journal of Applied Meteorology* (1989-1996): Associate Editor

**AWARDS/HONORS**

*Fulbright Fellowships*: National Research Council, Venice, Italy: 1977  
 University of Vienna, Austria (travel only): 1985; University of Sao Paulo, Brazil: 1992  
*SJSU Outstanding Professor*, 1988: one award per year  
*Phi Kappa Phi*, SJSU Chapter, Distinguished Academic Achievement Award: 1989  
*Rieger Environmental Fellow*, U.S. lecturer in Israel: 2000 (one per year)  
*SJSU Science/Engineering, Wang Family Award*: 2001 (one per CSU Campus per year)  
*Fellow*, American Meteorological Society, 2004  
*Helmuth Landsberg Urban-Climate Award*, American Meteorological Society, 2008  
*Luke Howard Urban-Climate Award*, International Association for Urban Climate, 2008

## Current and Recent Positions

*Bay Area Air Quality Management District*: Tech. Advisory Committee (2003-); Chair (2006)  
*American Metr. Society*: Urban Board (2003-6), Weather Modification Committee (2003-6)  
*World Meteorological Organization*: US Rep., Commission for Urban Climatology (2004-9)  
*International Association for Urban Climate*: Elected member, Board of Directors (2003-6)  
*Liberty Science Center*, Skyscraper Project advisor (2004-6)

## P. I. on Recent Research Grants

\$140K from NASA to simulate Atlanta environmental impacts (1996-2001)  
\$70K from LLNL for support of student researchers in environmental sciences (1996-2001)  
\$240K from LMMS to incorporate satellite cloud info into LAPS and MM5 (1995-2001)  
\$300K from California Air Resources Board for MM5 simulation of LA air quality (1998-02)  
\$67K from TECQ for MM5 simulations of Houston sea breeze fronts (2003-2004)  
\$1.5M from USAID to simulate environmental impacts from Tel Aviv and Gaza (1999-2006)  
\$250K from NSF for 106 CPU cluster for atmospheric modeling (3003-5)  
\$75K from DHS for MM5 simulations of NYC for ER warning system (2004-6)  
\$180K from NSF to simulate Portland and Houston sea breeze flows (2006-9)  
\$37K from USAID for pollutant transport patterns in Israel, Jordan, Lebanon (2007-11)

## Selected Recent Papers

Schayes, G, P. Thunis, and R. Bornstein, 1996: Development of the Topographic Vorticity-mode Mesoscale (TVM) Model: Part I--Formulation. *J. Appl. Meteor.*, **35**, 1815-1823.  
Bornstein, R. et al., 1996: Development of the Topographic Vorticity-mode Mesoscale (TVM) Model: Part II--Evaluation. *J. Appl. Meteor.*, **35**, 1824-1834.  
Thunis, P., and R. Bornstein, 1996: Hierarchy of mesoscale flow assumptions and equations. *J. of Atmos. Sci.*, **53**, 380-397.  
Sistla, G., S. T. Rao, R. Bornstein, et al. 1996: Effects of uncertainties in meteorological inputs on UAM predictions and ozone control strategies. *Atmos. Environ.*, **30**, 2011-2025.  
Chen, J., L. Linsey, and R. Bornstein, 1999: Transport of the Navajo Power Plant plume to Grand Canyon National Park. *J. Appl. Meteor.*, **38**, 1049-1068.  
Lin, Q., and R. Bornstein, 2000: Urban heat islands and summertime convective thunderstorms in Atlanta. *Atmos. Environ.*, **34**, 507-516.  
Dabberdt, W., R. Bornstein, et al., 2000: Forecast issues in the urban zone. *Bull. Amer. Meteor. Soc.*, **81**, 2047-2064.  
Oliveira, A., R. Bornstein, and M. Molero, 2003: Annual and diurnal wind patterns in the city of Sao Paulo. *Water, Air, and Soil Pollution: Focus*, **3**, 3-16.  
Boucouvala, D., R. Bornstein, J. Wilkinson, and D. Miller, 2003: MM5 simulations a 1997 Southern California Ozone Study (SCOS97) episode. *Atmos. Environ.*, **37(S2)**, 95-118.  
Boucouvala, D., and R. Bornstein, 2003: Meteorological analysis of observations from a 1997 Southern California Ozone Study (SCOS97) episode. *Atmos. Environ.*, **37(S2)**, 73-94.  
Pullen, J., T. Holt, A. Blumberg, and R. Bornstein, 2007: Atmospheric response to local upwelling in vicinity of NY/NJ Harbor. *J. Appl. Meteor. & Climatology.*, **46**, 1031-1052.  
Weinroth, E., R. Bornstein, et al., 2008: Simulations of Mideast transboundary ozone transport: A source apportionment case study. *Atmos. Environ.*, **42**, 3700-3716.  
Lebassi, B., R. Bornstein, et al., 2009 A global-warming reverse-reaction coastal summer daytime cooling in California. *J. Climate*, **22**, 3558-73.  
Bornstein, R., and A. Melford, 2009: UHI and human heat-stress values during the July 2006 Portland, OR heat wave. Conf. Vol., 2nd Inter. Conf. on UHIs, 21-23 Sept, LBNL, CA.