#### Resumé

## **BART ALAN BRASHERS**

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Atmospheric Modeling Division
US Environmental Protection Agency
US EPA Mail Drop 80
Research Triangle Park NC 27711

## **OBJECTIVE:**

An opportunity to continue working within Air Quality modeling, turbulence, dispersion and dry deposition.

#### **EDUCATION:**

**Ph.D.** Atmospheric Science, University of Washington, June 1998

Advisor: Professor Robert A. Brown. Thesis title: Oceanic Latent Heat Flux from Satellite Data Specialties: Planetary Boundary Layers, Dry Deposition, Turbulence, Surface Fluxes, Remote Sensing.

B.S. Engineering Physics, University of California at Berkeley, June 1987

## **QUALIFICATIONS:**

Expert on atmospheric fluxes: pollution (dry deposition), water vapor, carbon dioxide, heat, etc.

**Experienced** in both Unix and MS Windows environments.

**Excellent** computer skills, with multi-platform experience in scientific programming.

**Experienced** with massive data sets, statistical and analytical techniques.

Fluent is several programming and scripting languages.

Excellent verbal and written communication skills.

Fluent in Swedish, native speaker of English.

#### **PROFESSIONAL EXPERIENCE:**

• Atmospheric Sciences Modeling Division, ARL, NOAA, Research Triangle Park, NC (Joint with Atmospheric Modeling Division, National Exposure Research Laboratory, US EPA)

Post-Doctoral Research Associate, 1998 – Present

- Co-developed a new Multi-Layer Bio-Chemical (MLBC) model for gaseous Dry Deposition of pollutants.
- Validated the MLBC model against direct flux measurements taken over a variety of crops and forests.
- The MLBC model is suitable for traditional MET data and regional Air Quality models.
- Improved the existing NOAA Multi-Layer Model (MLM) for Dry Deposition
- Funded by the National Research Council competitive grants.

### University of Washington, Department of Atmospheric Sciences; Seattle, WA Research Assistant, 1991 – 1998

- Developed a new method for estimating latent heat flux over the world's oceans using satellite data.
   Development and validation relied on a large collection of atmospheric soundings and ship data (MET and turbulence).
- Developed and maintained code for R.A. Brown's PBL model.
- Gave numerous in-house seminars.
- Teaching Assistant, Winter 1993
  - Co-T.A. for *Weather*, an introductory courses for non-science majors. Delivered daily weather briefings and occasional lectures, wrote and graded all homework and tests, and led 3 weekly quiz sections.

# • Tracer Technologies; San Marcos, CA

**Manager of Computer Services**, 1989 – 1991

- Responsible for data from several automated ambient monitoring stations (permitting support).
- Designed and installed automated feedback system from monitoring station downwind of refineries.
- Designed and implemented hand-held data collection systems for leak detection in refineries.

References available upon request.