

**Patrice Clare (Kucera) Sutter**  
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**EMPLOYMENT EXPERIENCE:**

METEOROLOGICAL CONSULTANT, JRS CONSULTANTS, INC., Colorado Springs, Colorado – 2004 to Present

**Northwest / Colorado Research Associates, Boulder, Colorado – 2011 to present**

- Analyze and identify deep convective plumes from global satellite imagery used to model gravity waves in the mesosphere and thermosphere.
- Format and generate input files for reverse ray tracing numerical models.
- Compile weather summaries for case studies.

**Applied Weather Associates, Inc., Monument, Colorado – 2008 to present**

- Perform various tasks required for Probable Maximum Precipitation (PMP) studies, including data mining and analysis, storm identification and classification, maximization, transpositioning, storm analysis and history compilation.
- Conduct data collection and ground surveys for PMP studies.
- Provide support and analysis for forensic meteorology cases.
- Provide weather forecasts and ground observations for real-time field projects.

**Kleinfelder and Associates, Colorado Springs, Colorado – 2/2004 to 11/2004**

- Initialized and generated air quality and toxic assessments for commercial clients using Environmental Protection Agency's (EPA) Industrial Source Complex (ISC3) and AERMOD dispersion models.
- Formatted and quality-controlled surface and upper air meteorological data used as input for air dispersion models.
- Conducted Phase I Site Assessments to identify recognized environmental conditions, such as a release of hazardous waste, which may impact continued use or planned development of a site.

OWNER, ENTREPRENEUR

**Colorado Custom Crafts, Colorado Springs, Colorado – 5/2005 to Present**

- Design and create custom sewn and embroidered crafts.
- Operate home business including marketing and sales, client relations, financial records, product research.

METEOROLOGIST, TECHNICAL WRITER, TECHNICAL TRAINER, HUMAN FACTORS EVALUATION, QUALITY ASSURANCE, GUI DESIGNER, SOFTWARE REQUIREMENTS

**National Oceanic and Atmospheric Administration (NOAA) Forecast Systems Laboratory (FSL) Boulder, Colorado -- 11/1992 to 2/2004**

- Meteorologist on the FSL Evaluation Team, which conducts risk reduction, human factors, and usability evaluation activities for the NWS. Prepared online surveys and collected and analyzed user feedback data using statistical software packages. Designed usage-logging techniques that were embedded within software to obtain objective user feedback. Conducted real-time usability studies and exercises to test new software and gather user information.
- Compiled technical content and formatting of the National Weather Service's (NWS) workstation Online Users Manuals for numerous AWIPS software builds for national distribution. Also wrote user documentation for several other NWS software packages.

- Lead of the FSL User Interface Working Group that designs and develops graphical user interfaces for forecaster and emergency manager software applications. Close interaction with software engineers and meteorologists and scientists to coordinate the compatibility of end-user requirements with existing system architecture.
- Participated in nearly every aspect of a multi-year, multi-million dollar project in which FSL developed the core components of the for Advanced Weather Interactive Processing System (AWIPS) display workstation. System is now installed and in use in all 125 National Weather Service offices and National Centers in the US. Also been involved with US Air Force, NASA and Lockheed-Martin in incorporating the AWIPS software into launch operations at Vandenberg Air Force Base and Kennedy and Johnson Space Centers in 2002-2003. Other countries (Taiwan, Korea, Hong Kong, and Thailand) are using or negotiating to use AWIPS to support weather forecasting and research.
- Lead Trainer for the AWIPS workstation to NOAA and NASA forecasters, and foreign users requiring extended visits to Taiwan and Korea. Training involved not just "knobology," but having a solid understanding of the system architecture. Prepared all course outlines and practice modules used by software contractors. Also lead trainer for other National Weather Service World Wide Web Dissemination software packages for Emergency Managers and Forecasters.

#### STAFF METEOROLOGIST / TALK SHOW PRODUCER

##### **Business Radio Network, Colorado Springs, CO -- 11/1991 to 8/1992**

- Prepared national weather forecasts for business travelers.
- Anchored twice-hourly national weather forecasts that were carried on over 100 radio affiliates in the United States and Canada.
- Arranged guests for and assisted with talk show broadcasts.

#### METEOROLOGIST / FORECASTER / OBSERVER

##### **National Weather Service, Colorado Springs, Colorado -- 8/1989 to 3/1990**

- Certified to take and record Surface Weather Observations.
- Operated and maintained weather instrumentation and computers (VAX and PCs).
- Prepared and wrote forecasts, special weather statements, warnings, and climate summaries.
- Broadcasted hourly weather conditions, statements, warnings, and forecasts on NOAA Weather Radio.

#### ASSOCIATE SCIENTIST II - Atmospheric Technology Division

##### **National Center for Atmospheric Research, Boulder, Colorado -- 4/1986 to 7/1989**

- Participated in the implementation of Terminal Doppler Weather Radar (TDWR) at Stapleton Airport, Denver.
- Supervised and operated Mobile Sounding equipment and a Rawinsonde launch station in several field experiments.
- Field-tested wind shear and microburst detection algorithms.
- Performed data processing and analysis of weather events.
- Processed single and dual-Doppler radar data.
- Nowcasted and verified microburst and wind shear events over Stapleton Airport during several field demonstrations for the Federal Aviation Administration.

#### **EDUCATION:**

##### **Metropolitan State College, Denver, Colorado**

- B.S. Meteorology with Mathematics Minor. Graduated May 1988.
- Course work included dynamic and theoretical meteorology, synoptic and mesoscale analysis and forecasting, urban and industrial meteorology, meteorological instrumentation.
- Teaching assistant for undergraduate meteorology courses.

##### **University of Colorado, Colorado Springs, Colorado**

- General Undergraduate studies

#### **COMPUTER SKILLS:**

- Operating Systems: **DOS, UNIX, Linux, Windows 98/2000/XP**
- Languages: Some familiarity with **FORTRAN, C, C++, Perl, HTML**, some **JavaScript** and **Python**

- Software Packages: Microsoft **Power Point**, Adobe **Photoshop** and Adobe **Acrobat**, Microsoft **Word**, Microsoft **Excel**, **FrameMaker**, Corel **WordPerfect** and **Quattro Pro**, DeLorme Topographic Tools.

#### ADDITIONAL TRAINING:

- **Fundamentals of Air Dispersion Modeling:** EPA Dispersion Modeling Course. Houston, Texas, February, 2004
- **Achieving your Highest Priorities:** Franklin Covey Seminar. Denver, Colorado, January 2004.
- **PowerPoint 2000.** New Horizons Computer Learning Center. Boulder, Colorado, July 2002.
- **Client-Side JavaScript.** In-House Training, NOAA/FSL, Boulder, Colorado, June 2002.
- **Essentials of Credibility, Composure, and Confidence.** SkillPath Seminars, Boulder, Colorado, May 2002.
- **Conflict Management Skills for Women.** SkillPath Seminars. Denver, Colorado, March 2000.
- **Object-Oriented Analysis and Design Course.** In-House Training. NOAA/FSL, Boulder, Colorado, February 2000.
- **Hands-on C++ Programming Course.** University of Colorado Continuing Education. Boulder, Colorado, October 1999.
- **Introductory C++ Programming Course.** University of Colorado Continuing Education. Boulder, Colorado, October 1998
- **HTML Basics.** In-House Training. NOAA/FSL, Boulder, Colorado, March 1996.
- **UNIX Fundamentals.** Canary Software, Inc. Boulder, Colorado, June 1993.
- **Technical and Scientific Writing Course.** RDD Consultants, Inc. Boulder, Colorado, February 1993.

#### AWARDS, HONORS, AND RECOGNITION:

- **NWS Norman Risk Reduction Project** - June 1994; FSL Evaluation Team recognized for "technical and scientific leadership"
- **NWS Modernization Award** - 1997; WFO-Advanced Team recognized for "exceptional skill and dedication."
- **CIRES/NOAA Award** – November 1997; "In recognition for outstanding service in the CIRES and the NOAA Forecast Systems Laboratory."
- **AWIPS Build 3 Veteran Award** – December 1997; "In recognition for effort in AWIPS Build 3 Development."
- **NWS "Gold Disk" Award** - July 1999; "In recognition for outstanding work designing and preparing the AWIPS User's Manual."
- **NOAA Recognition Award** - June 2000; "For exceptional performance leading the training and preparing user documentation and training materials of a complex web dissemination application."
- **U.S. Dept. of Commerce/NOAA/NWS Special Citation** – November 2002; "In recognition for exemplary and sustained Build 5 Support from 1999-2002."
- **NOAA FSL Web Award** – December 2003; "For Best Internal Use for the FSL Evaluation Team Web Site."