

# Wolfgang Langhans, Ph.D.

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## SUMMARY

PostDoc in atmospheric physics with 10+ years of experience in research, numerical modeling of weather and climate, analysis and management of large data, code development, and analytic problem solving.

- Scientific analysis of large data to test predictive theories for atmospheric dynamics and cloud physics
- Code development in large interdisciplinary teams for government-funded projects
- Critical research mindset toward new challenges with drive for personal growth

## SELECTED SKILLS AND ACCOMPLISHMENTS

- Developed broad technical skills based on Linux (10 yr), Latex (10 yr), MPI Fortran codes (9 yr), Bash scripts (9 yr), NCAR graphics (9 yr), Matlab (5 yr), Python (1 yr), Git (4 yr), JIRA & Confluence (1 yr), MS Office (15 yr).
- Accomplished a strong publication record with an h-index of 8 and 10 papers.
- Earned and delivered 10 invited seminars at renowned institutions, e.g., Jet Propulsion Lab, Lawrence Livermore National Lab, Max-Planck Institute Hamburg, Nanjing University, ETH Zurich, UC Berkeley.

## PROFESSIONAL EXPERIENCE

### **Lawrence Berkeley National Laboratory, Berkeley** - *Postdoctoral Researcher*, 2013 - PRESENT

- Conduct innovative research, publish scientific papers, and present at conferences.
- Lead team efforts to develop code of shallow-cloud parameterizations to improve representation of clouds in two global climate models.
- Advise interdisciplinary team of 10 on physical aspects of climate models.

### **ETH Zurich, Switzerland** - *Graduate and Postdoctoral Researcher*, 2009- 2012

- Successfully analyzed large data from cloud- and turbulence-resolving models to test theories.
- Wrote parallel Fortran code for a community model for weather and climate forecasts.
- Counseled numerical-modeling division at MeteoSwiss to pioneer operational forecasts on 1-km grid.

### **University of Innsbruck, Austria** - *M.S. Student Researcher*, 2007- 2008

- Developed Fortran and Matlab code and managed jobs on multi-processor machines.
- Validated mesoscale simulations of a precipitation event to detect the optimal setup with minimal error.
- Acquired scientific skills including data processing, illustration, writing, and publishing.

## EDUCATION

- **ETH Zurich, Switzerland** - *Ph.D. in Atmospheric Sciences*, 2009 - 2012
- **University of Innsbruck, Austria** - *B.S. & M.S. in Meteorology & Geophysics*, 2003 - 2008