

# MICHAEL BRUNKE *atmospheric scientist*

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## EDUCATION

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- 2000      **M.S. in Atmospheric Science**  
The University of Arizona, Tucson, AZ  
Thesis: Uncertainties in sea surface turbulent flux algorithms and datasets
- 1998      **B.S. in Atmospheric, Oceanic, and Space Sciences**  
University of Michigan, Ann Arbor, MI  
Focus on dynamical, synoptic, and mesoscale meteorology.

## APPOINTMENTS

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- 2003-present    **Research Specialist, Senior**
- 2000-2003      **Research Specialist**
- 1999-2000      **Graduate Research Assistant**
- 1998-1999      **Graduate Teaching Assistant**  
Department of Atmospheric Sciences/Institute of Atmospheric Physics, The University of Arizona, Tucson, AZ  
Researcher of the parameterization of marine atmospheric boundary layer and atmosphere-ocean surface processes in global climate and numerical weather prediction models. Evaluated such algorithms using in situ and satellite data.

## PUBLICATIONS

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- Brunke, M. A., X. Zeng, V. Misra, and A. Beljaars, 2008:** Integration of a prognostic sea surface skin temperature scheme into weather and climate models. *J. Geophys. Res.*, in press.
- Brunke, M. A., M. Zhou, X. Zeng, and E. L. Andreas, 2006:** An intercomparison of bulk aerodynamic algorithms used over sea ice with data from the SHEBA experiment. *J. Geophys. Res.*, **111**, C09001, doi:10.1029/2005JC002907.
- Brunke, M. A., C. W. Fairall, X. Zeng, L. Eymard, and J. A. Curry, 2003:** Which bulk aerodynamic algorithms are least problematic in computing ocean surface turbulent fluxes? *J. Climate*, **16**, 619-635.
- Brunke, M. A., X. Zeng, and S. Anderson, 2002:** Uncertainties in sea surface turbulent flux algorithms and datasets. *J. Geophys. Res.*, **107** (C10), 3141, doi: 10.1029/2001JC000992.
- Curry, J. A., A. Bentamy, M. A. Bourassa, D. Bourass, E. F. Bradley, **M. Brunke**, S. Castro, S. H. Chou, C. A. Clayson, W. J. Emery, L. Eymard, C. W. Fairall, M.

- Kubota, B. Lin, W. Perrie, R. A. Reeder, I. A. Renfrew, W. B. Rossow, J. Schulz, S. R. Smith, P. J. Webster, G. A. Wick, and X. Zeng, 2004: SEAFLEX, *Bull. Amer. Meteor. Soc.*, **85**, 409-424.
- Misra, V., L. Marx, **M. Brunke**, and X. Zeng, 2008: The equatorial Pacific cold tongue bias in a coupled climate model. *J. Climate*, **21**, 5852-5869.
- Zeng, X., **M. Brunke**, M. Zhou, C. Fairall, N. A. Bond, and D. H. Lenschow, 2004: Marine atmospheric boundary layer height over the eastern Pacific: data analysis and model evaluation. *J. Climate*, **17**, 4159-4170.
- Zhou, M., X. Zeng, **M. Brunke**, Z. Zhang, and C. Fairall, 2006: An analysis of statistic characteristics of stratus and stratocumulus over eastern Pacific. *Geophys. Res. Lett.*, **33**, L02807, doi: 10.1029/2005GL024796.

## ACTIVITIES

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- ◆ Member, American Meteorological Society and American Geophysical Union
- ◆ Participant in SEAFLEX
- ◆ Session Chair, 12th and 14th AMS Conferences on Interaction of Sea and Atmosphere
- ◆ Member (2005-present) and Chair (2005-06, 2007-present), College of Science Staff Advisory Council
- ◆ Member, three-unit (UA Geosciences, Atmospheric Sciences, and Laboratory of Tree-Ring Research) transformation committee
- ◆ Reviewer, *Journal of Climate*, *Monthly Weather Review*, *Journal of Geophysical Research*, *Meteorology and Atmospheric Physics*, and NSF proposals.