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Professional Preparation

- Postdoctoral research Atmospheric Sciences and Institute of Geophysics and Planetary Physics, University of California, Los Angeles, 1995-1996
- Ph. D. Atmospheric Sciences, University of Arizona, January 1995
- M. S. Astrophysics, University of Arizona, May 1991
- B. S. Physics, University of Science and Technology of China, July 1987

Appointments

- Full/Associate/Assistant Professor, University of Maryland, College Park. 2001-present
- Alexander Von Humboldt fellow, Max-Planck Institute for Meteorology, Germany. 2000
- Scientist (IPA), NASA Goddard Space Flight Center. 1999
- Assistant Research Scientist, University of California, Los Angeles. 1997-2000
- Visiting postdoctoral scientist, Massachusetts Institute of Technology. 1995

Selected Publications

1. **Zeng, N.**, F. Zhao, G. J. Collatz, E. Kalnay, R. J. Salawitch, and T. West, L. Guanter, 2014: The agricultural Green Revolution as a driver of the increasing atmospheric CO₂ seasonal amplitude. *Nature*, doi:10.1038/nature13893.
2. Ruth, M., E. Kalnay, N. Zeng, R. S. Franklin, J. Rivas, F. Miralles-Wilhelm, 2011: Sustainable prosperity and societal transitions: Long-term modeling for anticipatory management. *Environmental Innovation and Societal Transitions*, 1 (2011), 160-165, doi:10.1016/j.eist.2011.03.004.
3. **Zeng, N.**, J. Yoon, A. Venzileos, G. J. Collatz, E. Kalnay, A. Mariotti, A. Kumar, A. Busalacchi, S. Lord, 2008: Dynamical Prediction of Terrestrial Ecosystems and the Global Carbon Cycle: a 25-year Hindcast Experiment. *Global Biogeochem. Cycles*, 22, GB4015, doi:10.1029/2008GB003183.
4. Zeng, N., Y. Ding, J. Pan, H. Wang, J. Gregg, 2008: Climate change: the Chinese challenge. *Science*, 319, 730-731.
5. Chen, Z. H., Zhu, J., and **Zeng, N.**: Improved simulation of regional CO₂ surface concentrations using GEOS-Chem and fluxes from VEGAS, *Atmos. Chem. Phys.*, 13, 7607-7618, doi:10.5194/acp-13-7607-2013, 2013.
6. Le Quéré, C., R. J. Andres, T. Boden, T. Conway, R. A. Houghton, J. I. House, G. Marland, G. P. Peters, G. R. van der Werf, A. Ahlström, R. M. Andrew, L. Bopp, J. G. Canadell, P. Ciais, S. C. Doney, C. Enright, P. Friedlingstein, C. Huntingford, A. K. Jain, C. Jourdain, E. Kato, R. F. Keeling, K. Klein Goldewijk, S. Levis, P. Levy, M. Lomas, B. Poulter, M. R. Raupach, J. Schwinger, S. Sitch, B. D. Stocker, N. Viovy, S. Zaehle, and **N. Zeng**, 2013: The global carbon budget 1959–2011. *Earth Syst. Sci. Data*, 5, 165-185, 2013
7. **Zeng, N.**, H. Qian, E. Munoz, and R. Iacono, 2004: How strong is carbon-climate feedback under global warming?. *Geophys. Res. Lett.*, L20203. 10-1029/2004GL020904.
8. Huntzinger, D.N., W.M. Post, Y. Wei, A.M. Michalak, T.O. West, A.R. Jacobson, I.T. Baker, J.M. Chen, K.J. Davis, D.J. Hayes, F.M. Hoffman, A.K. Jain, S. Liu, A.D. McGuire, R.P. Neilson, Chris Potter, B. Poulter, David Price, B.M. Raczka, H.Q. Tian, P. Thornton, E. Tomelleri, N. Viovy, J. Xiao, W. Yuan, **N. Zeng**, M. Zhao, R. Cook, 2012: North American Carbon Program (NACP) regional interim synthesis: Terrestrial biospheric model intercomparison. *Ecological Modeling*, 232, 144-157.
9. Friedlingstein, P., Cox, P., Betts, R., Bopp, L., von Bloh, W., Brovkin, V., Cadule, P., Doney, S., Eby,

- M., Fung, I., Bala, G., John, J., Jones, C., Joos, F., Kato, T., Kawamiya, M., Knorr, W., Lindsay, K., Matthews, H. D., Raddatz, T., Rayner, P., Reick, C., Roeckner, E., Schnitzler, K.-G., Schnur, R., Strassmann, K., Weaver, A. J., Yoshikawa, C., **Zeng, N.**, 2006: Climate-carbon cycle feedback analysis: results from the C4MIP model intercomparison, *J. Climate*, 19, 3337-3353.
10. **Zeng, N.**, Y. Ding, J. Pan, H. Wang, J. Gregg, 2008: Climate change: the Chinese challenge. *Science*, 319, 730-731.
 11. **Zeng, N.**, 2008: Carbon sequestration via wood burial. *Carbon Balance and Management*, 3:1; doi:10.1186/1750-0680-3-1.
 12. **Zeng, N.**, 2003: Glacial-Interglacial Atmospheric CO₂ Change--The Glacial Burial Hypothesis. *Adv. Atmos. Sci.*, 20, 677-693.
 13. **Zeng, N.**, J. D. Neelin, W. K.-M. Lau, and C. J. Tucker, 1999: Enhancement of interdecadal climate variability in the Sahel by vegetation interaction. *Science*, 286, 1537-1540.

Synergistic Activities

- Conference Chair, The 9th International Carbon Dioxide Conference (ICDC9), June 2013
- Co-chief editor 'Earth System Dynamics' of EGU
- Lead or co-Convener for AGU Meetings 2000, 2002, 2008, 2010 and WPGM meeting 2006, EGU 2008, 2009, 2012; Contributing author for IPCC reports 2001, 2013.
- Member, US-CLIVAR Panel on Predictability, Prediction and Application Interface (PPAI).
- Member, USGCRP Carbon Cycle Science Working Group (CCS WG).

List of collaborators within last 48 months

E. Kalnay, R. Salawitch, R. Dickerson (U Maryland)
 G. J. Collatz (NASA/Goddard Space Flight Center)
 T. O. West (JGCRI/PNNL)
 A. Alessandri (ENEA/Italy)
 F. Kucharski (ICTP)
 L. Guanter (Free University of Berlin)
 A. Kumar (National Centers for Environmental Prediction, NOAA)
 Z. Chen, J. Wang, B. Jia, Z. Xie (Chinese Academy of Sciences)

Collaboration in a broad sense with the North American Carbon Program MstMIP model intercomparison participants (Huntzinger et al., 2013), the international TRENDY model intercomparison participants (Sitch et al., 2013), the US CLIVAR drought group (Schubert et al., 2009), and the EMICAR5 project (Zickfeld et al., 2013).

Ph.D. thesis advisor: R. E. Dickinson (currently at U Texas)

Postdoctoral advisor: J. D. Neelin (UCLA)

Graduate students advised: H. Qian, E. Munoz, A. Alessandri, S. Liu, B. Wauer, B. Cook, J. Gregg, J.-S. Kang, R. Chen, B. Johnston, F. Zhao, Y. Pan, J. Wang, R. Esmaili, C. Martin

Postdoctoral scientists advised: J. Yoon, R. Joseph, M. Su, B. Jia, Z. Chen