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Current position(s)

Research Physical Scientist, NASA Goddard Institute for Space Studies, New York
Adjunct Research Scientist, Lamont-Doherty Earth Observatory, Palisades

Areas of specialization

Interactions and feedbacks between the land surface, terrestrial ecosystems, and the climate system.

Appointments held

2009-pres Research Physical Scientist (GS-13), NASA-GISS, New York
2009-pres Adjunct Research Scientist, LDEO, New York
2009 Scientific Programmer/Analyst, NASA-GISS/Sigma Space Partners
2007-2009 NOAA Global Change Postdoctoral Fellow, NASA-GISS/LDEO

Education

2007 PhD in Environmental Science, University of Virginia
2004 MSc in Environmental Science, University of Virginia
2001 BS in Environmental and Forest Biology, SUNY College of Environmental Science and Forestry

Awards & Fellowships

2010 2009 Editors' Citation for Excellence in Refereeing, AGU
2007 NOAA Climate and Global Change Postdoctoral Fellowship, NOAA
2007 Maury Environmental Sciences Prize, University of Virginia

Publications

- in review McCabe GJ, Ault TR, **Cook BI**, Betancourt JL, Schwartz MD, “Influences of ENSO and PDO on the Timing of North American Spring”, *submitted to International Journal of Climatology*
- in press Tierney JE, Lewis SC, **Cook BI**, LeGrande AN, Schmidt GA, “Model, proxy and isotopic perspectives on the East African Humid Period”, *Earth and Planetary Science Letters*
- Cook BI**, Seager R, Miller RL, “The impact of devegetated dune fields on North American climate during the late Medieval Climate Anomaly”, *Geophysical Research Letters*
- Bell AR, **Cook BI**, Anchukaitis KJ, Buckley BM, Cook ER, “Repurposing climate reconstructions for drought prediction in Southeast Asia”, *Climatic Change* [pdf](#)
- Cook BI**, Seager R, Miller RL, “On the causes and dynamics of the early twentieth century North American pluvial”, *Journal of Climate*
- Cook BI**, Puma MJ, Krakauer NY, “Irrigation induced surface cooling in the context of modern and increased greenhouse gas forcing”, *Climate Dynamics* [pdf](#)
- Cook BI**, Cook ER, Anchukaitis KJ, Seager R, Miller RL, “Forced and unforced variability of twentieth century North American droughts and pluvials”, *Climate Dynamics*, doi:10.1007/s00382-010-0897-9 [pdf](#)
- Cook BI**, Seager R, Miller RL, “Atmospheric circulation anomalies during two persistent North American droughts: 1932-1939 and 1948-1957”, *Climate Dynamics*, doi:10.1007/s00382-010-0807-1 [pdf](#)
- 2010 **Cook BI**, Terando A, Steiner A (2010), “Ecological forecasting and climate data uncertainties: a phenology modeling case study”, *Environmental Research Letters*, 5(4), doi: 10.1088/1748-9326/5/4/044014 [pdf](#)
- Anchukaitis KJ, Buckley BM, Cook ER, **Cook BI**, D’Arrigo RD, Ammann CM (2010), “The influence of volcanic eruptions on the climate of the Asian monsoon region”, *Geophysical Research Letters*, doi:10.1029/2010GL044843 [pdf](#)
- Puma MJ, **Cook BI** (2010), “Effects of irrigation on global climate during the twentieth century”, *Journal of Geophysical Research-Atmospheres*, 115(D16), doi:10.1029/2010JD014122 [pdf](#)
- Krakauer NY, **Cook BI**, Puma MJ (2010), “Contribution of soil moisture feedback to global climate variability”, *Hydrology and Earth System Sciences*, 14, 505-520 [pdf](#)

- Cook BI**, Cook ER, Anchukaitis KJ, Huth PC, Thompson JE, Smiley SF (2010), “A homogeneous record (1896-2006) of daily weather and climate at Mohonk Lake, New York”, *Journal of Applied Meteorology and Climatology*, 49, 544-555 [pdf](#)
- 2009 **Cook BI**, Buckley BM (2009), “Objective determination of monsoon season onset, withdrawal, and length”, *Journal of Geophysical Research-Atmospheres*, doi:10.1029/2009JD012795 [pdf](#)
- Cook BI**, Miller RL, Seager R (2009), “Amplification of the ‘Dust Bowl’ drought through human induced land degradation”, *Proceedings of the National Academy of Sciences*, doi:10.1073/pnas.0810200106 [pdf](#)
- Sacks W, **Cook BI**, Buening N, Levis S, Helkowski JH (2009), “Effects of global irrigation on near-surface climate”, *Climate Dynamics*, doi:10.1007/s00382-008-0445-z [pdf](#)
- 2008 Hui WCJ, **Cook BI**, D’Odorico P, Ravi S, Fuentes J (2008), “Dust-rainfall feedbacks in the West African Sahel”, *Water Resources Research*, doi:10.1029/2008WR006885 [pdf](#)
- Cook BI**, Miller RL, Seager R (2008), “Dust and sea surface temperature forcing of the 1930s ‘Dust Bowl’ drought”, *Geophysical Research Letters*, doi:10.1029/2007GL032509 [pdf](#)
- Cook BI**, Bonan GB, Levis S, Epstein HE (2008), “The thermoinsulation effect of snow cover within a climate model”, *Climate Dynamics*, doi:10.1007/s00382-007-0341-y [pdf](#)
- Cook BI**, Bonan GB, Levis S, Epstein HE (2008), “Rapid vegetation responses and feedbacks amplify climate model response to snow cover changes”, *Climate Dynamics*, doi:10.1007/s00382-007-0296-z [pdf](#)
- Sacks W, **Cook BI**, Cook ER, Huth P, Thompson JE, Forster A, Smiley D (2008), “A cross-taxa phenological dataset from Mohonk Lake, NY and its relationship to climate”, *International Journal of Climatology*, doi:10.1002/joc.1629 [pdf](#)
- 2006 **Cook BI**, Bonan GB, Levis S (2006), “Soil moisture feedbacks to precipitation in southern Africa”, *Journal of climate*, 19, 4198-4206 [pdf](#)
- 2005 Buckley BM, **Cook BI**, Bhattacharyya A, Dukpa D, Chaudhary V (2005), “Global surface temperature signals in pine ring-width chronologies from southern monsoon Asia”, *Geophysical Research Letters*, doi:10.1029/2005GL023475 [pdf](#)
- Cook BI**, Smith TM, Mann ME (2005), “The North Atlantic Oscillation and regional phenology prediction over Europe”, *Global Change Biology*, doi:10.1111/j.1365-2486.2005.00960.x [pdf](#)

- 2004 LHeureux ML, Mann ME, **Cook BI**, Gleason BE, Vose RS (2004), “Atmospheric circulation influences on seasonal precipitation patterns in Alaska during the latter twentieth century”, *Journal of Geophysical Research-Atmospheres*, doi:10.1029/2003JD003845 [pdf](#)
- Cook BI**, Mann ME, D’Odorico P, Smith TM (2004), “Statistical simulation of the NAO on European winter surface temperatures: applications to phenological modeling”, *Journal of Geophysical Research-Atmospheres*, doi:10.1029/2003JD004305 [pdf](#)
- 2003 Cook ER, Palmer JG, **Cook BI**, Hogg A, D’Arrigo RD (2003), “A multi-millennial palaeoclimate resource from *Lagorostrobos colensoi* tree-rings at Oroko Swamp, New Zealand”, *Global and Planetary Change*, 33, 209-220 [pdf](#)

Funded Proposal & Grants

“Forecasting phenology: Integrating ecology, climatology, and phylogeny to understand plant responses to climate change.” Working Group Proposal, National Center for Ecological Analysis and Synthesis. **Cook BI** and Wolkovich E

“Paleoclimate Shocks: Environmental Variability, Human Vulnerability, and Societal Adaptation During the Last Millenium in the Greater Mekong Basin.” NSF Award GEO-0908971, CO-PI

“North American Megadrought: Atmosphere-Ocean Forcing and Landscape Response from the Medieval Period to the Near-Term Greenhouse Future.” NSF Award ATM-0902716, CO-PI

Professional Activities

- Reviewer for peer reviewed journals, including *Nature Geoscience*, *Geophysical Research Letters*, and *Water Resources Research*
- Lead organizer for oral and poster session at AGU 2010, “A03: Understanding Drought Variability, Forcing, and Feedbacks”
- Advised research intern and post doc as part of NSF Award GEO-0908971