

DUO CHAN

Department of Earth and Planetary Sciences, Harvard University

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RESEARCH INTERESTS

- Sea surface temperature reconstruction
- Land surface processes and temperature variability
- Climate regime in a changing climate
- Atmospheric jet dynamics

EDUCATION

09/2015-present	Earth and Planetary Sciences, Harvard University, PhD. candidate Advisor: Peter Huybers
09/2013-06/2015	School of Atmospheric Sciences, Nanjing University M.S. in Meteorology, 06/2015 Advisors: Qigang Wu, and Yang Zhang
09/2009-06/2013	School of Atmospheric Sciences, Nanjing University B.S. in Applied Meteorology, Minor: Finance, 06/2013

AWARDS

2015-2016	William Benjamin and Jill Kowal Graduate Aid Fund in Environmental Studies
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TEACHING EXPERIENCE

02/2019-05/2019	TA: Climate change debate - undergraduate course
09/2016-12/2016	TA: Paleoclimate as prologue - graduate course
09/2014-01/2015	TA: General Circulation of the Atmosphere - graduate course
07/2014	TA: Scientific English in Atmospheric Sciences - undergraduate summer school

PUBLICATIONS AND SUBMITTED PAPERS

- **Chan D.**, Kent E., Berry D. & Huybers P. (2019). Correcting datasets leads to more homogeneous early 20th century sea surface warming. *Nature*, 571, 393-397.
- **Chan D.** & Huybers P. (2019). Systematic differences in bucket sea surface temperature measurements amongst nations identified using a linear-mixed-effect method. *Journal of Climate*, 32(5), 2569-2589.

- **Chan D.**, Dai X., Wu Q., Huang J., & Zhang Y. On the Dynamics of the Interannual Variability of East Asian Jet Stream. Submitted.
- Hu, C., Wu, Q., Yang, S., Yao, Y., **Chan, D.**, Li, Z., & Deng, K. (2016). A linkage observed between austral autumn Antarctic Oscillation and preceding Southern Ocean SST anomalies. *Journal of Climate*, 29(6), 2109-2122.
- Wu, Q., Cheng, L., **Chan, D.**, Yao, Y., Hu, H., & Yao, Y. (2016). Suppressed mid-latitude summer atmospheric warming by Arctic sea ice loss during 1979–2012. *Geophysical Research Letters*, 43(6), 2792-2800.
- **Chan, D.**, Wu, Q., Jiang, G., & Dai, X. (2016). Projected shifts in Köppen climate zones over China and their temporal evolution in CMIP5 multi-model simulations. *Advances in Atmospheric Sciences*, 3(33), 283-293.
- **Chan, D.**, & Wu, Q. (2015). Significant anthropogenic-induced changes of climate classes since 1950. *Scientific Reports*. 5. 13487. Doi: 10.1038/srep13487.
- **Chan, D.**, & Wu, Q. (2015). Attributing Observed SST Trends and Sub-continental Land Warming to Anthropogenic Forcing during 1979–2005. *Journal of Climate*, 28, 3152–3170.

CONFERENCES AND PRESENTATIONS

- 2019, International meeting on statistical climatology, Toulouse: “More homogeneous early 20th-century sea surface warming after correcting for historical artifacts” (Talk) (Jun. 24-28, 2019)
- 2019, Fudan University, Shanghai: “Correcting datasets leads to more homogeneous early-twentieth-century sea surface warming” (Talk) (Jun. 19, 2019)
- 2019, CLIMAR5, Workshop on Advances in Marine Climatology, Hamburg: “More homogeneous early 20th-century sea surface warming after correcting for historical artifacts” (Talk, presented by a collaborator)
- 2019, ACDC, 10-year reunion: “Remote control of surface soil moisture on projections of summertime mid-latitude land temperature variability” (Talk, presented by a collaborator)
- 2018, AGU Fall Meeting, Washington D.C.: “Homogeneous early 20th-century sea surface warming after correcting for historical artifacts” (Poster)
- 2018, Frontiers in Oceanic, Atmospheric, and Cryospheric Boundary Layers, KITP, Santa Barbara: “Homogeneous early 20th-century sea surface warming after correcting for historical artifacts” (Poster)
- 2018, AOGS 15th Annual Meeting: “On the Dynamics of the Interannual Variability of East Asian Jet Stream” (Talk)
- 2018, EGU General Assembly, Vienna: “Observational constraints reduce the increases of summertime temperature variance in CMIP5 projections” (Talk, presented by a collaborator)
- 2018, Nanjing University: “More uniform early 20th-century sea surface warming after correcting for historical artifacts” (Invited talk)
- 2017, AGU Fall Meeting, New Orleans: “Estimating Uncertainties of Ship Course and Speed in Early

Navigations using ICOADS3.0” (Poster)

- 2016, AGU Fall Meeting, San Francisco: “Is Diurnal Cycle of Sea Surface Temperature Increasing since 1970?” (Poster)
- 2014, AGU Fall Meeting, San Francisco: “Significant anthropogenic-induced changes of climate classes since 1950”. (Poster)
- 2013, AGU Fall Meeting, San Francisco: “Attribution of observed SST trends and sub-continental land warming to anthropogenic forcing during 1979-2005”. (Poster)
- 2013, Interim evaluation of 973-project, Nanjing: “Attribution of observed SST trends and sub-continental land warming to anthropogenic forcing during 1979-2005”. (Talk)
- 2013, EGU General Assembly, Vienna: “Inter-annual variability in the position and strength of the East Asian Jet Stream and its relation to large-scale circulation”. (Poster)

Summer School

- July 2019, Fluid Dynamics of Sustainability and the Environment, Ecole Polytechnique, France.
- Sep. 2017, Advanced Climate Dynamics Courses, University of Bergen, Norway.
- July 2017, "Climate, Weather, Pollution & Health Consequences", A Graduate Summer School partnership between Peking University and Harvard University, Beijing, China.
- July 2016, Rossbypalooza, Chicago University, U.S.