DUO CHAN https://duochanatharvard.github.io

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EDUCATION

09/2015-present Earth and Planetary Sciences, Harvard University, **Ph.D. 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 AND SELECTED MEDIA COVERAGE

01/2020 Harvard Horizons Fellow
12/2019 Harvard GSAS professional development award
08/19/2019 **NPR news:** How much hotter are the oceans? (link)
01/07/2016 **Yale Climate Connections:** 2015's key climate science research advances (link)
2015-2016 William Benjamin and Jill Kowal Graduate Aid Fund in Environmental Studies

TEACHING EXPERIENCE

01/2020 **TA:** Weather, Water, and Climate - Perry School (7th grade, public school outreach)
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

- **Chan D.,** Dai X., Wu Q., Huang J., & Zhang Y. On the dynamics of the interannual variability of East Asian jet core. *Climate Dynamics*. 1-17.
- **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.
- 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.
- **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.

Papers Submitted and in Preperation

- **Chan D.,** & Huybers P. Systematic differences in bucket sea surface temperatures caused by misclassification of engine room intake measurements. *Under revision in Journal of Climate*.
- Dai, C., **Chan, D*.**, Huybers, P., & Pillai, N. Late 19th-century navigational uncertainties and their influence on sea surface temperature estimates. *Under revision in Annals of Applied Statistics.*
- **Chan D.,** Vecchi G., Yang W. & Huybers P. Corrected sea surface temperatures improves prediction of Atlantic Hurricane activity. *In prep.*

* co-first author

Conferences and Presentations

- 2019, AGU Fall Meeting, San Francisco: "Improved sea surface temperatures better predict multi-decadal variability of Atlantic TC count"(**Poster**)
- 2019, International meeting on statistical climatology, Toulouse: "More homogeneous early 20th-century sea surface warming after correcting for historical artifacts" (**Talk**)
- 2019, Fudan University, Shanghai: "Correcting datasets leads to more homogeneous early-twentieth-century sea surface warming" (**Invited Talk**)
- 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, Randane: "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, Honolulu: "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, Nanjing: "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 SCHOOLS

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