

---

---

**Essential Data for the article "Sea Spray and Its Feedback Effects: Assessing Bulk Algorithms of Air-Sea Heat Fluxes via Direct Numerical Simulations"**

**David Richter, Tianze Peng**

**Publication Date**

15-12-2023

**License**

This work is made available under a CC BY-ND 3.0 license and should only be used in accordance with that license.

**Citation for this work (American Psychological Association 7th edition)**

Richter, D., & Peng, T. (2019). *Essential Data for the article "Sea Spray and Its Feedback Effects: Assessing Bulk Algorithms of Air-Sea Heat Fluxes via Direct Numerical Simulations"* (Version 1). University of Notre Dame. <https://doi.org/10.7274/r0-f1pa-8037>

This work was downloaded from CurateND, the University of Notre Dame's institutional repository.

For more information about this work, to report or an issue, or to preserve and share your original work, please contact the CurateND team for assistance at [curate@nd.edu](mailto:curate@nd.edu).

Supplementary material: 2D-PDFs generated by a case with bottom RH at 98% for droplets with radius at 25-microns

Update: 11/2/2019

Attached are two 2D-PDFs showing the relationships between the residence time and droplets' temperature and radius change. The simulation was run at the benchmark boundary conditions "M1" except the reduced bottom RH from 100% to 98%. The mass loading of droplets is 5%. These two plots could be used as a comparison between the original cases (RH=100% at bottom, c.f. Fig. 7). Density legends are plotted in logarithm scale.

Due to the reduced bottom relative humidity, the high density area for short-lifetime droplets are shifted near the zero, which is as expected as the conclusion drawn in the original discussion (c.f. Sect. 3.b.2 and 3.b.3, and Eq. (21)).



