

Weather Ready Research Data Publication

Xilei Zhao, University of Florida

Wednesday, July 16 at 8:30am



Our Weather Ready Research Award

Call 2: Weather Ready Research Instrument and Data Publication

This second call for Weather Ready Research supported the publication of social science and multidisciplinary data, data collection instruments, and research protocols for natural hazards and disaster research.

A Highway Vehicle Routing Dataset During the 2019 Kincade Fire Evacuation

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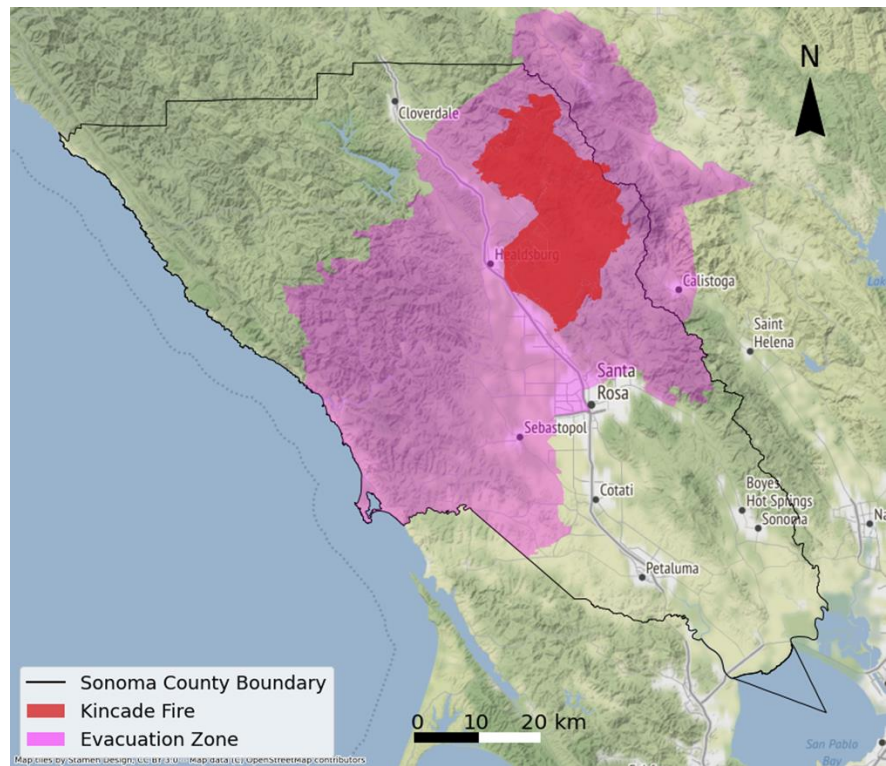
Ruggiero Lovreglio, Massey University

Erica Kuligowski, RMIT University

Daniel Nilsson, University of Canterbury

Date Awarded: May 21, 2021

Overview of the Dataset



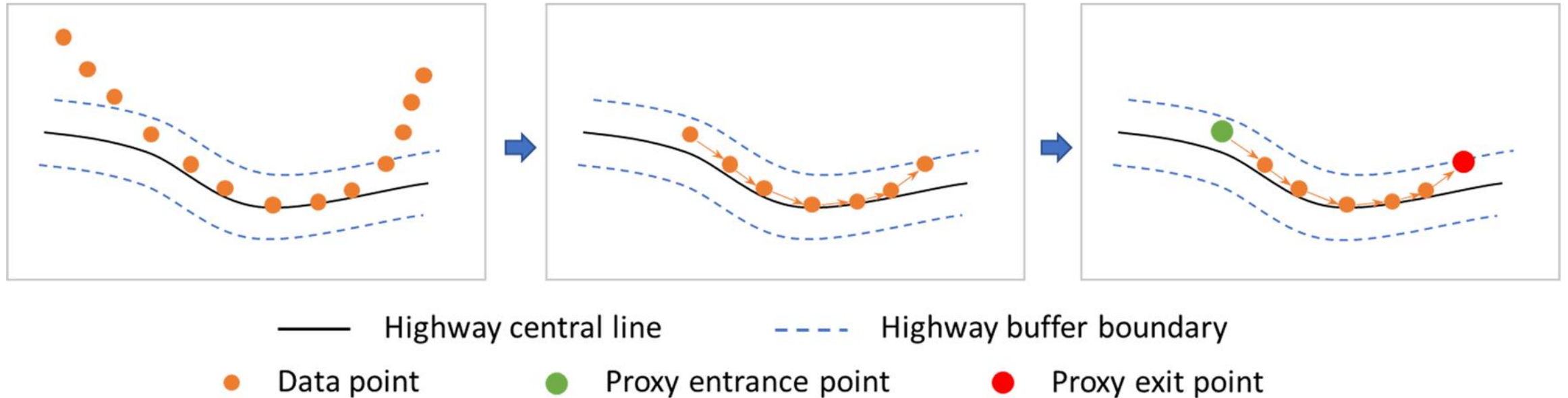
Sonoma County and the Kincadee Fire Perimeter

ID	LATITUDE	LONGITUDE	GEOHASH9	TIMESTAMP_EPOCH	TIMEZONE	FLAG
00001	y_1	x_1	9qbd*****	15715*****	TZ1	0
00002	y_2	x_2	9qbc*****	15715*****	TZ1	0
00003	y_3	x_3	9qbs*****	15712*****	TZ1	0
00003	y_4	x_4	9qbe*****	15726*****	TZ1	0
00004	y_5	x_5	9qbd*****	15713*****	TZ1	0
00004	y_6	x_6	9qbd*****	15714*****	TZ1	0

Synthetic GPS Data Samples

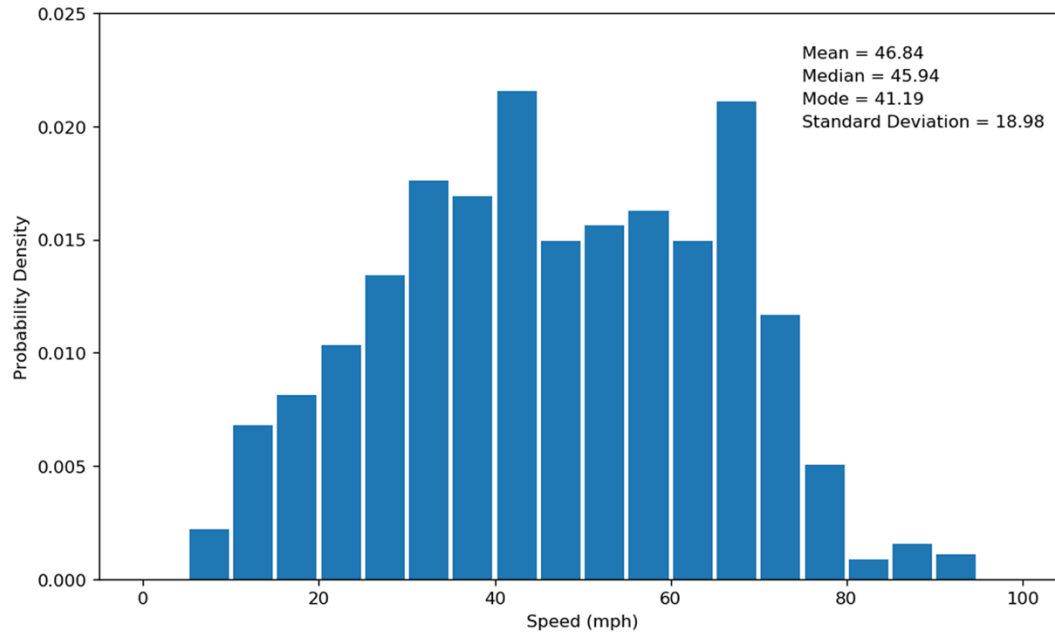
Xu, Y., Zhao, X., Lovreglio, R. *et al.* A highway vehicle routing dataset during the 2019 Kincadee Fire evacuation. *Sci Data* **9**, 608 (2022).
<https://doi.org/10.1038/s41597-022-01731-6>

Data Processing

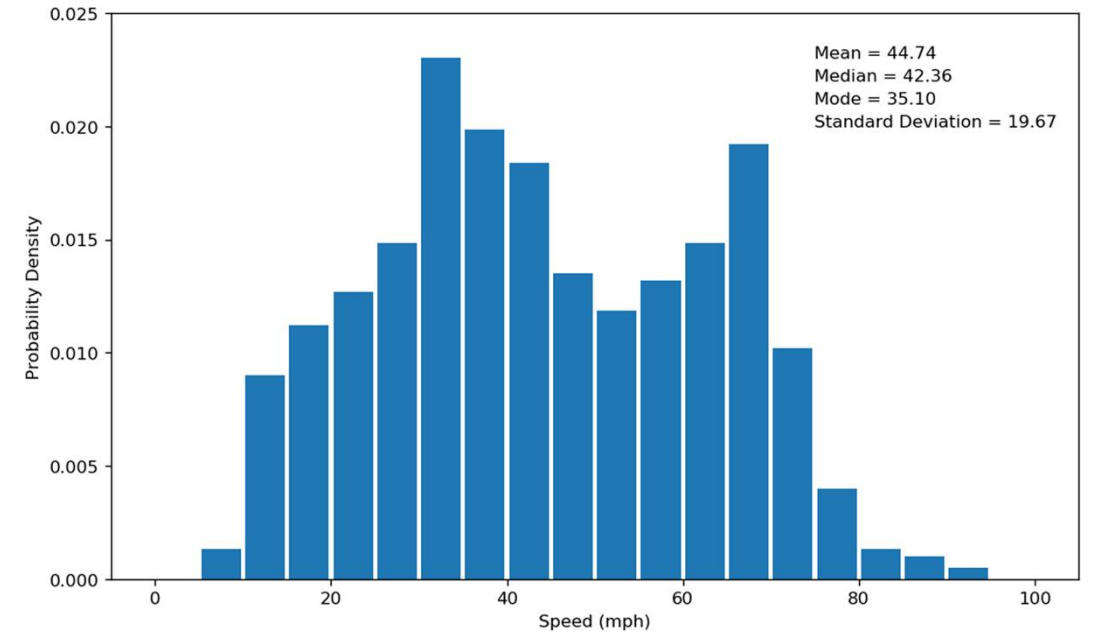


An example of data processing

Data Validation



Travel speed distribution (before the fire started)



Travel speed distribution (during the fire)

Published Dataset

PRJ-3226 | A Highway Vehicle Routing Dataset During the 2019 Kincade Fire Evacuation

[Download Dataset](#)

PI	Zhao, Xilei
Co-PIs	Kuligowski, Erica ; Xu, Yiming ; Nilsson, Daniel ; Lovreglio, Ruggiero
Project Type	Field research Social Sciences Longitudinal Study Engineering Interdisciplinary
Natural Hazard Type(s)	Wildfire
Event(s)	Kincade Fire Sonoma County, California, United States 2019-10-23 — 2019-11-06 Lat 38.792458 long -122.780053
Awards	NIST 60NANB20D182 Natural Hazards Center Weather Ready Research Award Program No Number
Keywords	Highway vehicle routing, GPS data, Wildfire evacuation, Kincade Fire, California

Cite This Data:

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Acknowledgements

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