

# Online Appendix for “Defining Racial and Ethnic Context with Geolocation Data”\*

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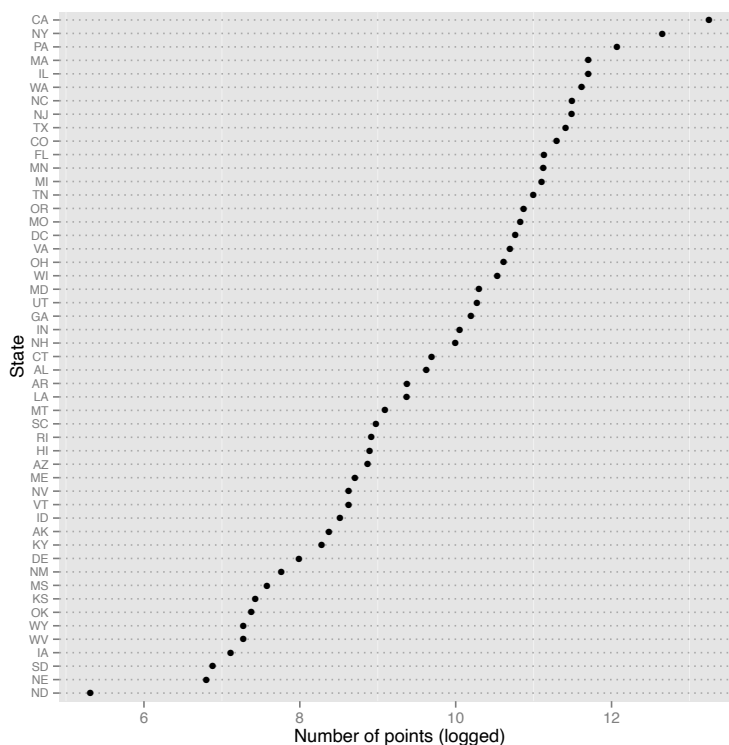


Figure 1: OpenPaths Observations by State. Each point presents the logged number of observed geolocations for all respondents for each state.

\* All data and information necessary to replicate the results in the article [Moore and Reeves \(2020a\)](#) are available in the Harvard Dataverse at [Moore and Reeves \(2020b\)](#) at <https://doi.org/10.7910/DVN/G3YJXY>.

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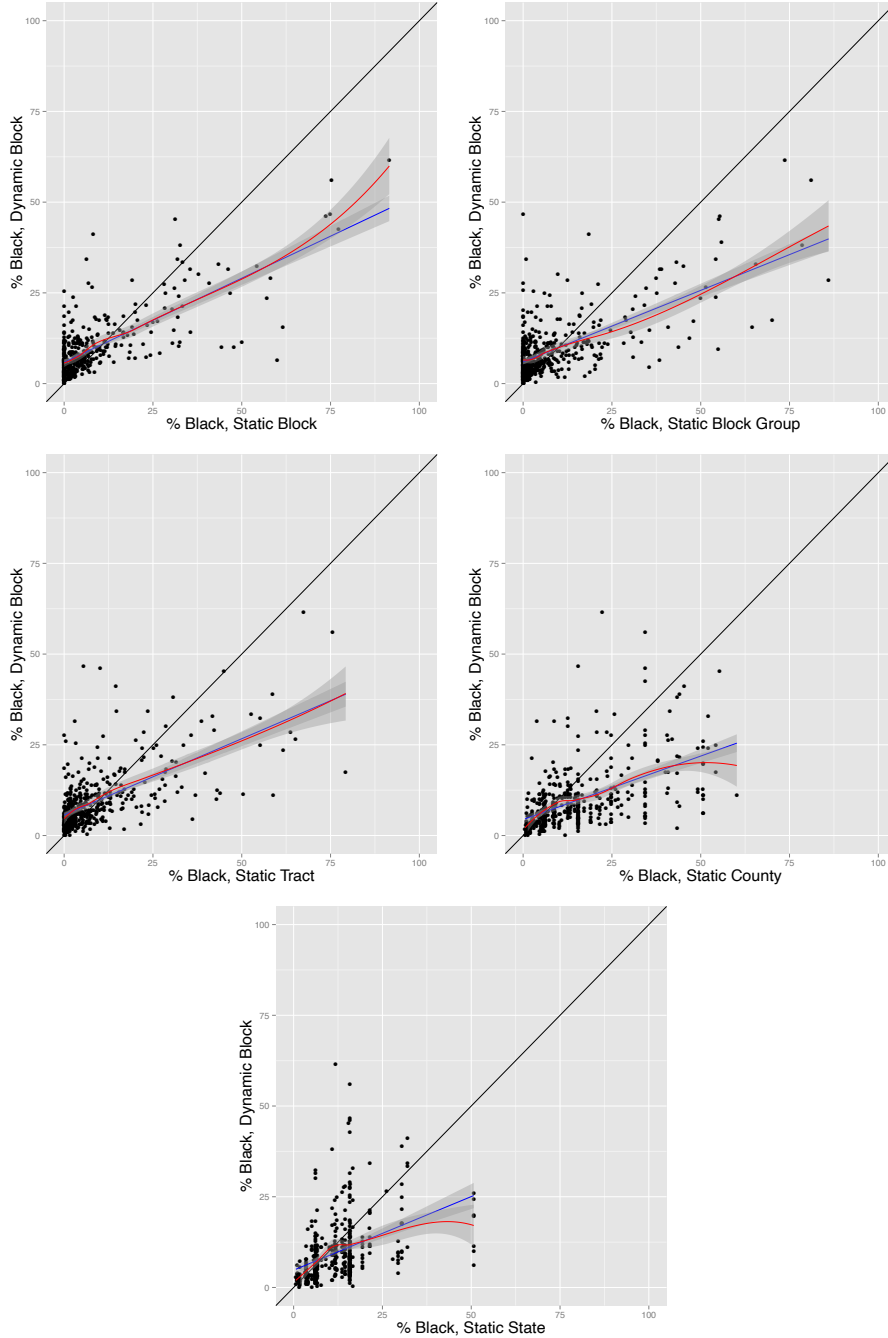


Figure 2: **Dynamic vs. Static Measures of Percent Black.** Panels show block, block group, tract, county, and state contexts. Modal location for a geography on  $x$ -axis; mean of dynamic contexts on  $y$ -axis. Linear regression (blue) and loess smooths (red) displayed.

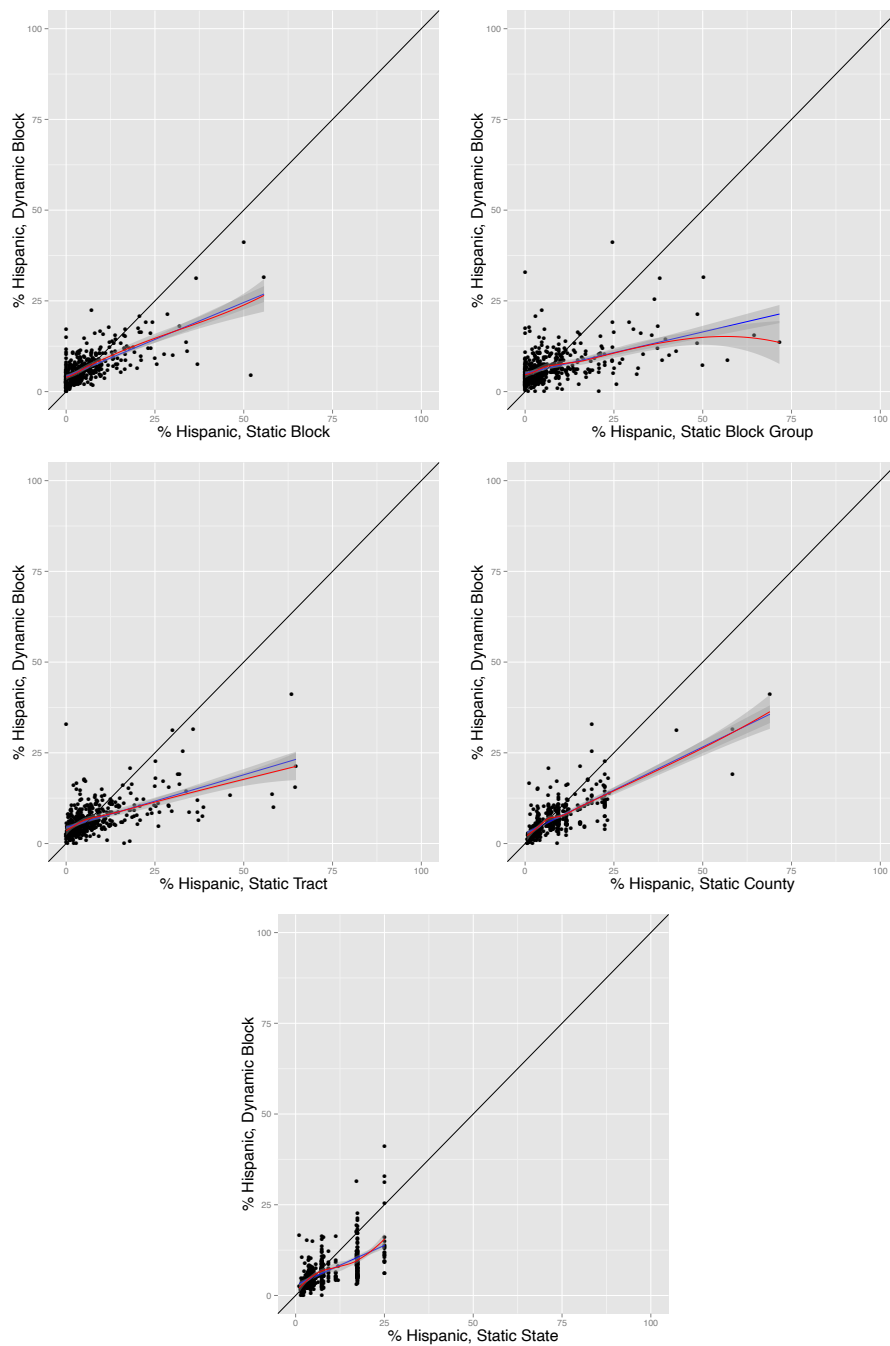


Figure 3: **Dynamic vs. Static Measures of Percent Hispanic.** Panels show block, block group, tract, county, and state contexts. Modal location for a geography on  $x$ -axis; mean of dynamic contexts on  $y$ -axis. Linear regression (blue) and loess smooths (red) displayed.

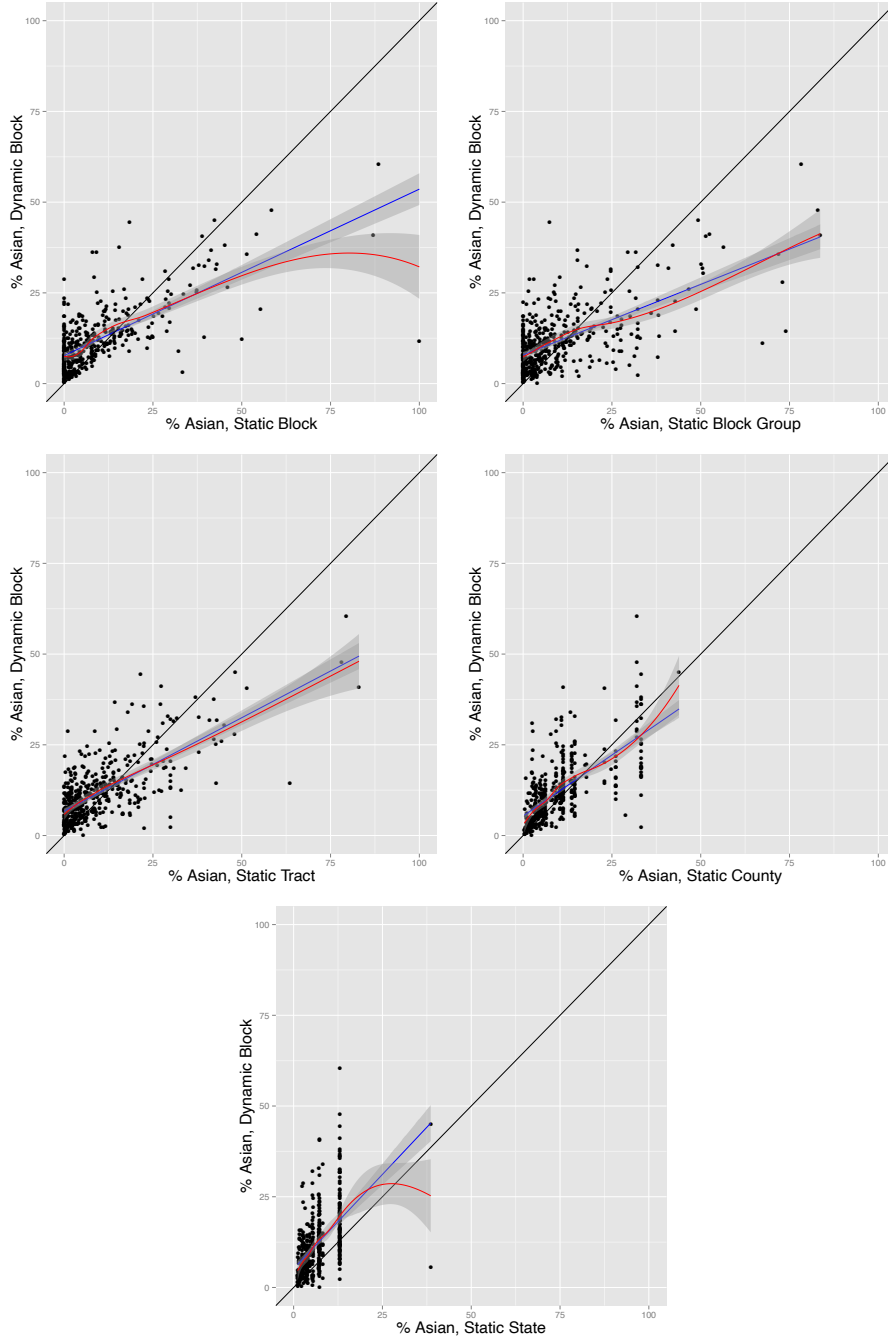


Figure 4: **Dynamic vs. Static Measures of Percent Asian.** Panels show block, block group, tract, county, and state contexts. Modal location for a geography on  $x$ -axis; mean of dynamic contexts on  $y$ -axis. Linear regression (blue) and loess smooths (red) displayed.

Race/Ethnic Group	Geography	Statistic	Value
White	Block	Intercept	34.1
White	Block	Slope	0.4
White	Block	RMSE	10.7
White	Block Group	Intercept	35.6
White	Block Group	Slope	0.4
White	Block Group	RMSE	11.3
White	Tract	Intercept	32.2
White	Tract	Slope	0.5
White	Tract	RMSE	10.9
White	County	Intercept	35.2
White	County	Slope	0.5
White	County	RMSE	12.0
White	State	Intercept	27.3
White	State	Slope	0.6
White	State	RMSE	12.3
Black	Block	Intercept	5.9
Black	Block	Slope	0.5
Black	Block	RMSE	5.8
Black	Block Group	Intercept	6.0
Black	Block Group	Slope	0.4
Black	Block Group	RMSE	6.3
Black	Tract	Intercept	5.7
Black	Tract	Slope	0.4
Black	Tract	RMSE	6.5
Black	County	Intercept	4.4
Black	County	Slope	0.4
Black	County	RMSE	7.2
Black	State	Intercept	4.8
Black	State	Slope	0.4
Black	State	RMSE	7.9
Hispanic	Block	Intercept	4.2
Hispanic	Block	Slope	0.4
Hispanic	Block	RMSE	3.4
Hispanic	Block Group	Intercept	5.0
Hispanic	Block Group	Slope	0.2
Hispanic	Block Group	RMSE	4.2
Hispanic	Tract	Intercept	4.5
Hispanic	Tract	Slope	0.3
Hispanic	Tract	RMSE	3.8
Hispanic	County	Intercept	2.8
Hispanic	County	Slope	0.5
Hispanic	County	RMSE	3.2
Hispanic	State	Intercept	2.9
Hispanic	State	Slope	0.4
Hispanic	State	RMSE	3.8
Asian	Block	Intercept	7.7
Asian	Block	Slope	0.5
Asian	Block	RMSE	6.4
Asian	Block Group	Intercept	7.9
Asian	Block Group	Slope	0.4
Asian	Block Group	RMSE	6.8
Asian	Tract	Intercept	6.7
Asian	Tract	Slope	0.5
Asian	Tract	RMSE	6.2
Asian	County	Intercept	5.4
Asian	County	Slope	0.7
Asian	County	RMSE	6.5
Asian	State	Intercept	5.2
Asian	State	Slope	1.0
Asian	State	RMSE	7.4

Table 1: Models of dynamic contexts as a function of static contexts. The dependent variables are the white, black, Hispanic, and Asian dynamic contexts. Each is modeled as a function of the static measure at the level of the census block, census block group, census tract, county, and state. For each of the 20 models (4 racial/ethnic groups  $\times$  5 geographic levels), we present the slope and  $y$ -intercept coefficients and root mean squared errors displayed in paper Figure 3 and appendix Figures 2 through 4.

## References

- Moore, Ryan T., and Andrew Reeves. 2020a. “Defining Racial and Ethnic Context with Geolocation Data.” *Political Science Research and Methods* 8(4): 780–794.
- Moore, Ryan T., and Andrew Reeves. 2020b. “Replication Data for: Defining Racial and Ethnic Context with Geolocation Data.” Harvard Dataverse, DOI: 10.7910/DVN/G3YJXY.