**Guide to State-by-State Analyses**

This section explains the terminology and structure of the analysis for the 2022 congressional maps for each state in the sample.

**Terminology**

I use these two abbreviations.

|  |  |
| --- | --- |
| **Abbreviation** | **Metric** |
| Vf | Statewide two-party Democratic vote share |
| Sf | Estimated two-party Democratic seat share (fractional seats) |

I also refer to the main partisan analytics that DRA computes for an election with these.[[1]](#footnote-1)

|  |  |
| --- | --- |
| **Abbreviation** | **Metric** |
| EG | Efficiency gap () |
| PROP | Proportionality () |
| BS\_50 | Seat bias () |
| BV\_50 | Vote bias () |
| BS\_V | Geometric seat bias () |
| GS | Global symmetry () |
| DECL | Declination () |
| MM | Mean–median () |
| LO | Lopsided outcomes () |
| R | Winner’s bonus () |
| r | Responsiveness () |

**Analyses**

For each state’s new congressional map, there’s a short summary along with detailed analysis in three sections.

The first section, “Election Input,” compares the election inputs to method:

* The statewide vote share – The table shows the value for the composite, the values for each election in the composite, and the mean of those values, the standard error of the mean (SEM), the difference between the composite value and the mean, and that difference normalized by the SEM.
* The district-by-district vote shares – A rank-votes graph shows the district-by-district composite vote shares (white squares with black borders), the means (crosses), and error bars (+/– two SEM).

The second section, “Intermediate Results,” compares the results of intermediate processing:

* The estimated corresponding seat share – A table analogous to the previous one for vote share shows the corresponding values for cumulative fractional seat share.
* The inferred seats–votes curve – A seats–votes curve shows estimated seat shares (line) for the local region of the inferred seats–votes curves, where “local” means +/– 5% from the statewide vote share, again along with the means (crosses) and error bars (+/– two SEM). The point (Vf, Sf) noted is noted with a star.

The third section, “Metrics Outputs,” compares the resulting measurements:

* Measures of bias with fractional (percentage) units – A plot shows the composite values (x’s), the means (vertical bars), and error bars (+/– two SEM) for each measure.
* Declination – Since declination is measured in degrees, the values are compared in a separate table.
* Responsiveness measures – Similarly, since the winner’s bonus (big ‘R’) and responsiveness (little ‘r’) are slopes and not percentages, values are compared in a separate table. Values for these typically range in the low single digits.

[end]

1. Notably, Jon Eguia’s partisan advantage with a jurisdictional baseline is not included. It requires county-level information which is available in DRA proper. This analysis used the standalone analytics functionality (dra2020/dra-analytics) which does not have that information. [↑](#footnote-ref-1)