Environmental Public Opinion in U.S. States, 1973-2012*

Supporting Information

Environmental Politics

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A1 Data Description

- Table A1 presents the number of observations for each selected variable included in the analysis by year. The observations are nationally representative but not at the state-level. We thus utilized the MRP techniques to estimate state-level opinion for each selected questionnaire from the GSS data.
- Figure A1 presents the mean estimated value for state-level pro-environmental opinion and 95% confidence interval for selected years (1976, 1986, 1996, and 2006). The estimates are from 1,250 number of simulations for each year. We take the mean value from the simulations.

Table A1: Number of Observations for the Selected Variables by Year

Year	Environment	Aid	Blacks	Defense	Education	Health	Welfare
1973	1,413	1,421	1,402	1,407	1,434	1,445	1,432
1974	1,378	1,422	1,379	1,380	1,418	1,426	1,422
1975	1,398	1,416	1,372	1,387	1,420	1,425	1,405
1976	1,425	1,438	1,392	1,395	1,449	1,441	1,429
1977	1,414	1,421	1,402	1,404	1,469	1,454	1,449
1978	1,448	1,444	1,417	1,413	1,472	1,471	1,473
1980	1,382	1,389	1,347	1,370	1,404	1,407	1,401
1982	1,732	1,757	1,722	1,738	1,792	1,761	1,766
1983	1,494	1,509	1,447	1,506	1,544	1,531	1,530
1984	466	462	455	469	475	465	471
1985	717	718	699	722	724	727	719
1986	682	698	666	691	705	702	700
1987	569	573	556	570	585	589	568
1988	685	679	655	672	688	692	685
1989	731	715	686	721	741	738	720
1990	634	640	618	634	654	653	635
1991	728	717	685	733	727	729	707
1993	758	759	720	765	774	768	756
1994	1,455	1,444	1,372	1,442	1,476	1,440	1,448
1996	1,379	1,353	1,292	1,353	1,402	1,394	1,394
1998	1,318	1,297	1,249	1,299	1,355	1,345	1,317
2000	1,355	1,311	1,236	1,307	1,381	1,379	1,331
2002	1,322	1,313	1,259	1,324	1,343	1,336	1,314
2004	1,362	1,348	1,276	1,367	1,383	1,382	1,360
2006	1,446	1,425	1,348	1,442	1,462	1,451	1,434
2008	976	934	881	965	993	973	955
2010	976	973	899	986	1,000	988	980
2012	971	930	877	965	985	969	957

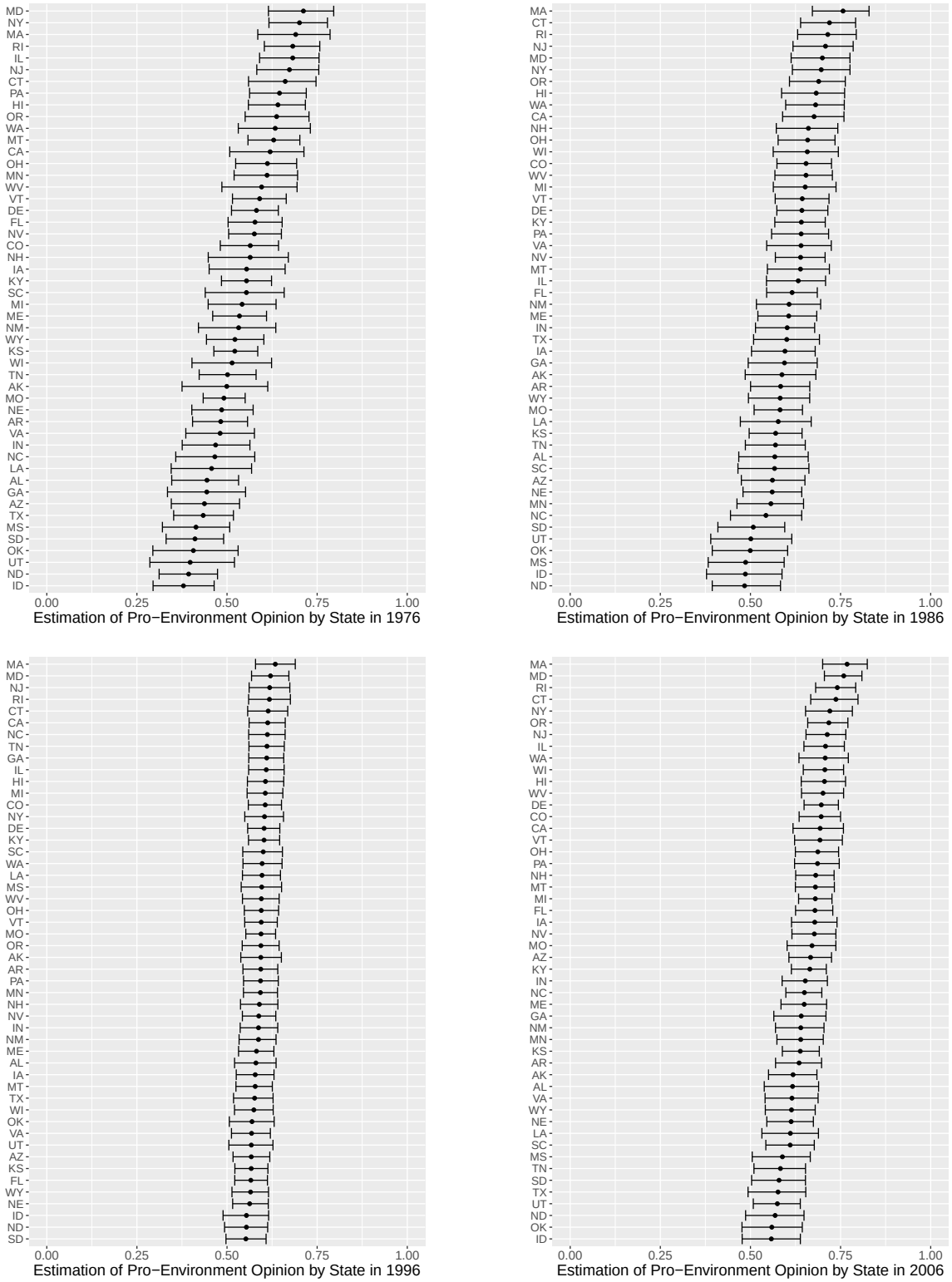

Figure A1: Estimated state-level pro-environmental opinion and 95% confidence interval for selected years. The estimates are from 1,250 simulations. We take the mean value from the simulations throughout the paper but present the confidence interval for the selected years here.

A2 Changes by State

- Figure A2 shows changes in environmental public opinion over time in U.S. states.
- Figure A3 shows changes in pro-environmental public opinion over time in U.S. states by partisanship.
- Figure A4 shows changes in anti-environmental public opinion over time in U.S. states by partisanship.

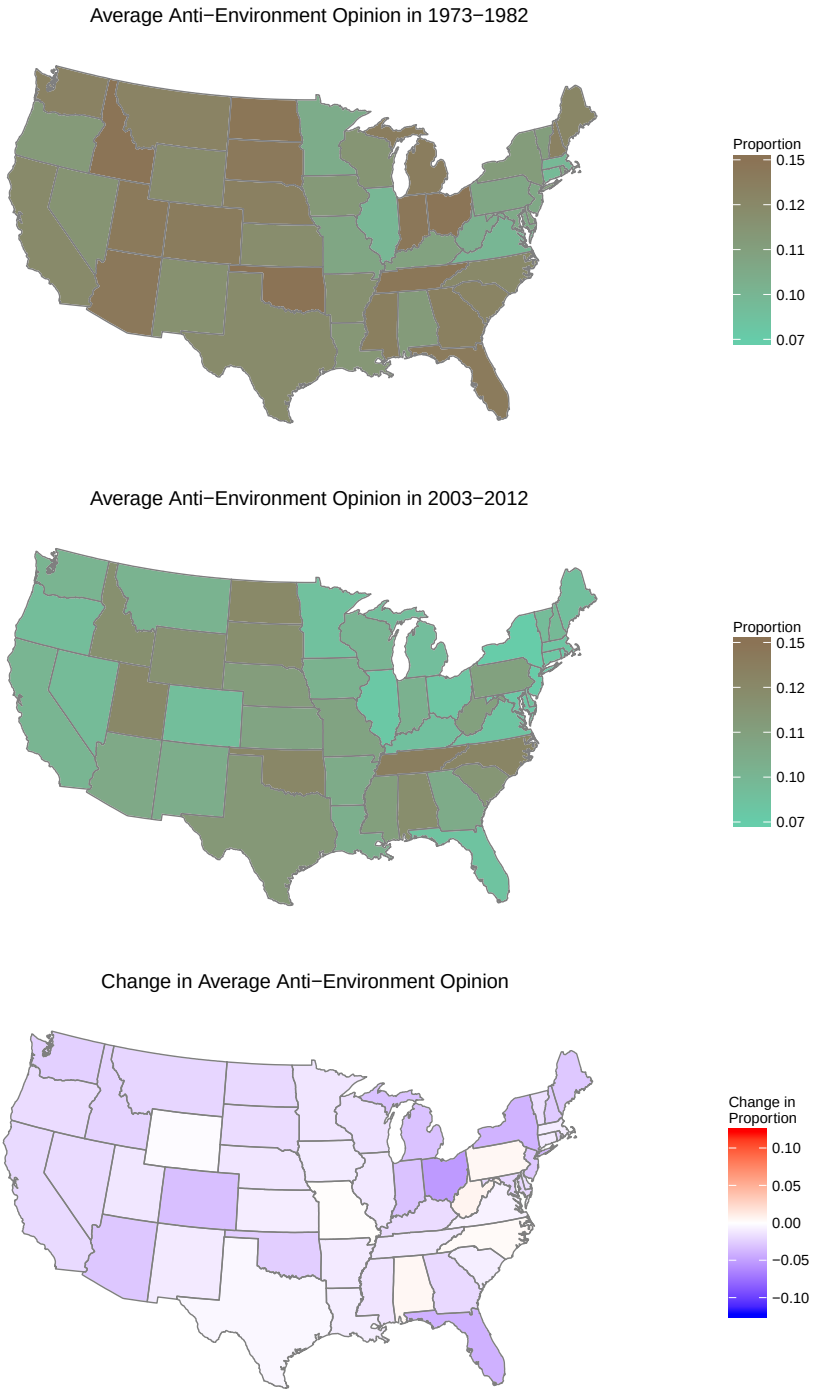

Figure A2: Average pro-environmental public opinion in 1973-82 and 2003-12. The two upper figures display average value of pro-environmental opinion in each state in 1973-77 and 2008-12. We use quantiles-cut point in the color-legend in order to fully represent the variation across the states. The minimum value for the calculated average pro-environment opinion in the two periods is 0.45, the 25%, the 50%, the 75% cut-points are 0.54, 0.58, 0.61, and the maximum value is 0.67. The figure presented at the bottom describes the change in pro-environment opinion between the two periods. The blue (red) colored-states are the ones that moved toward pro (anti) environment direction.A-6

Figure A3: Average environmental opinion by partisanship, 1973-82 and 2003-12. The first two maps present the average share of Democrats pro-environment attitudes for 1973-82 and 2003-12. The middle two maps illustrate the same for Republicans. The bottom two maps illustrate the same for Independents.

Figure A4: Average anti-environment opinion by partisanship, 1973-82 and 2003-12. The first two maps present the average share of Democrats with anti-environment attitudes for 1973-82 and 2003-12. The middle two maps illustrate the same for Republicans. The bottom two maps illustrate the same for Independents.

A3 Changes in Polarization Over Time

- Figure A5 shows changes in partisan polarization over time.

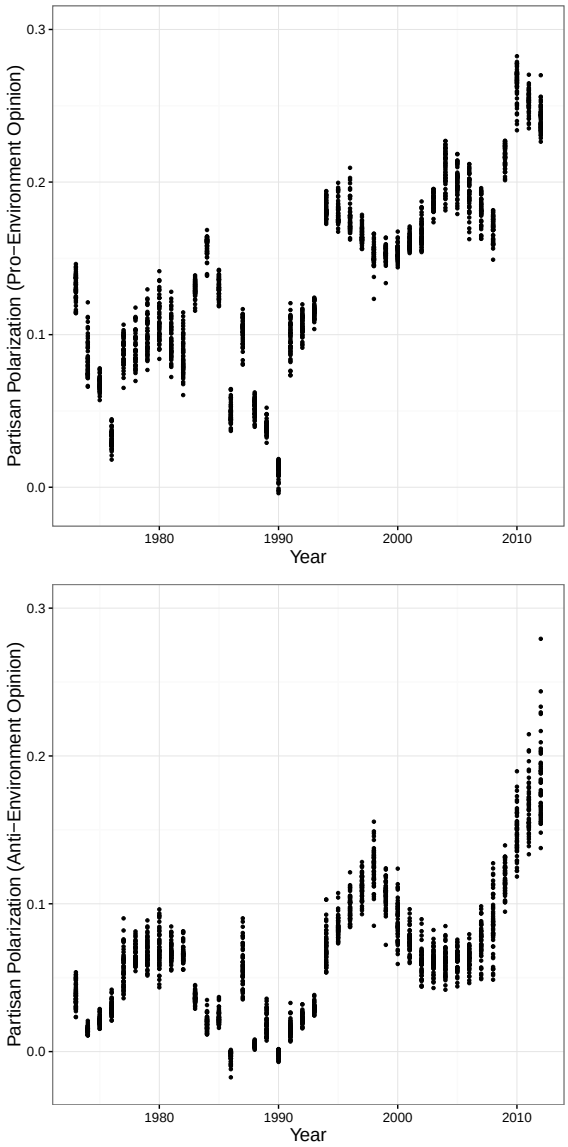

Figure A5: Party polarization in environmental opinion, 1973-2012. We measure the state-level partisan polarization of environmental public opinion for each year by calculating the estimated share of Democrats that favor more spending in the environment subtracted by the same measure for Republicans (upper); and the estimated share of Republicans that oppose spending in the environment subtracted by the same measure for democrats (lower). For both measures, party polarization in environmental public opinion have dramatically increased from the 2000s.

A4 Partisan Sorting and Anti-Environmental Opinion

- Figure A6 shows the state-level correlations between partisan sorting and anti-environmental opinion by partisan identification.

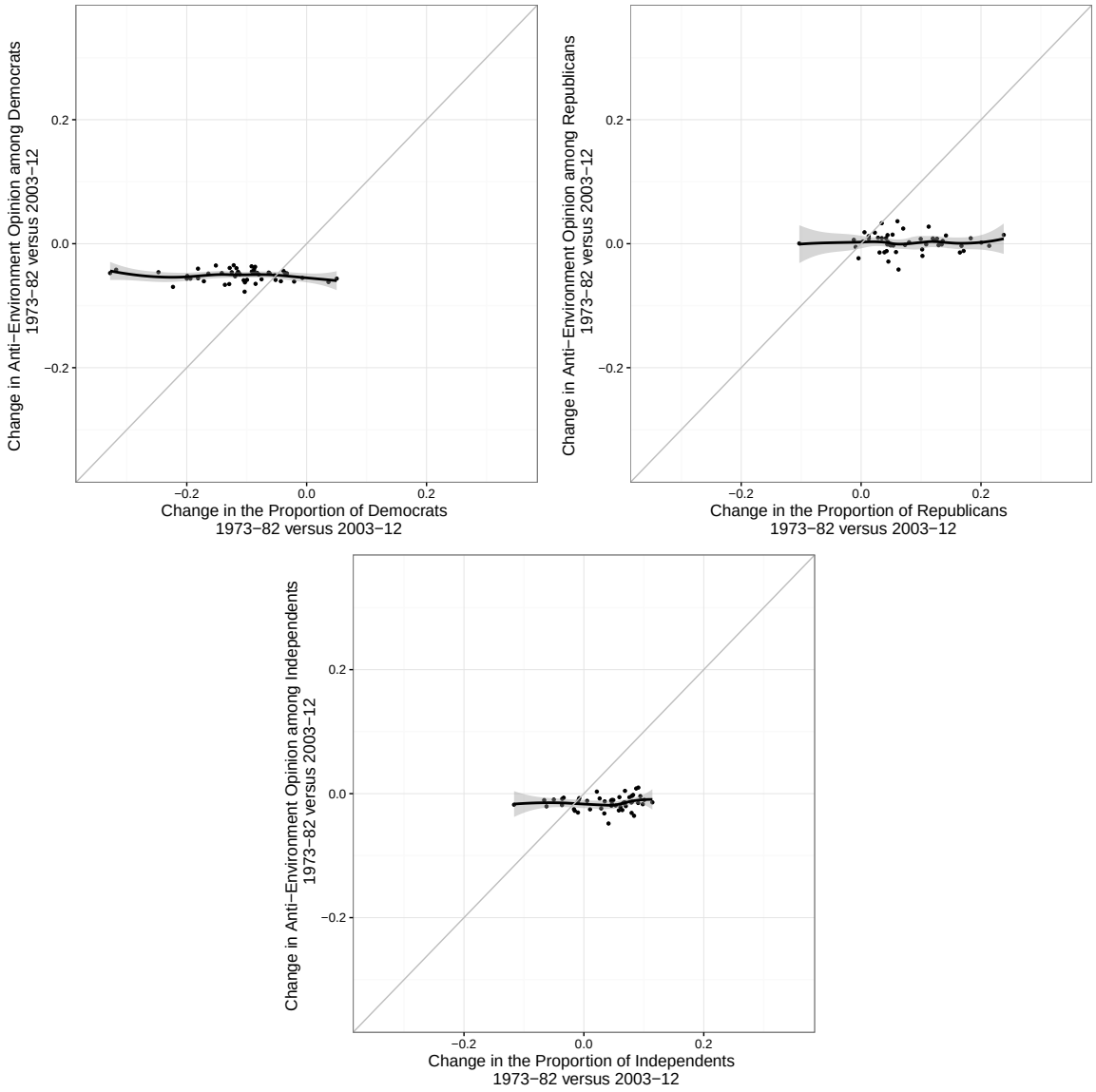

Figure A6: Comparison of state-level change in anti-environmental opinion among Democrats and the change in the share of Democrats between 1973-82 and 2003-12 (top-left). The same figures for Republicans (top-right) and Independents (bottom) are also presented.

A5 Environment Compared to Other Issue Areas

- Figure A7 shows state-level pro-environment public opinion in 1973-82 and 2003-12.

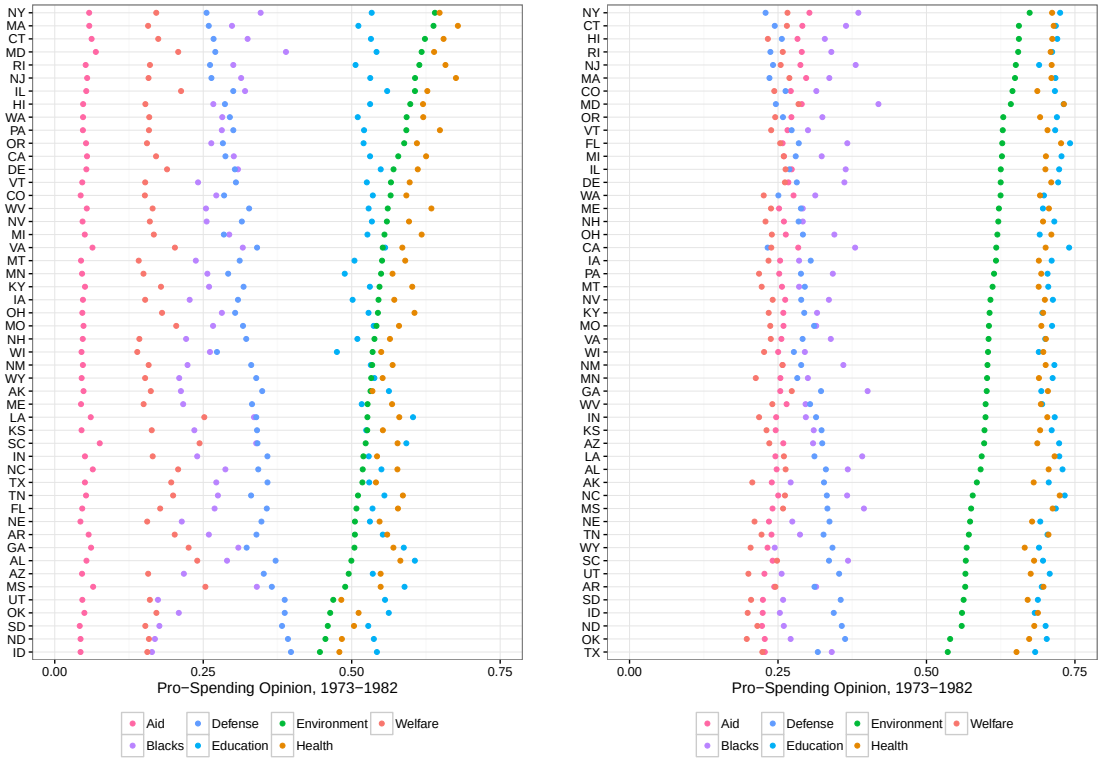

Figure A7: Comparison of state-level pro-environment public opinion, 1973-82 and 2003-12. In both panels, states are arranged by their pro-environment public opinion.