

The figure is a scatter plot with four overlapping ellipses, each representing a different group of US states. The ellipses are labeled 1, 2, 3, and 4. Ellipse 1 is yellow and contains states like Mississippi, Louisiana, Georgia, and Alabama. Ellipse 2 is green and contains states like Georgia, Utah, Delaware, and Virginia. Ellipse 3 is purple and contains states like Maryland, New Jersey, Connecticut, and Massachusetts. Ellipse 4 is blue and contains states like New York, Texas, and California. States are labeled with their names and marked with symbols: circles for the yellow ellipse, triangles for the green ellipse, crosses for the purple ellipse, and pluses for the blue ellipse. The x-axis ranges from -2 to 3, and the y-axis ranges from -2 to 2.

State	Symbol	Ellipse Group
Mississippi	Circle	1
Louisiana	Circle	1
Georgia	Triangle	2
Utah	Triangle	2
Delaware	Cross	3
Virginia	Cross	3
Connecticut	Cross	3
Massachusetts	Cross	3
New York	Plus	4
Texas	Plus	4
California	Plus	4
Florida	Plus	4
Montana	Triangle	2
Idaho	Triangle	2
Wyoming	Triangle	2
South Dakota	Triangle	2
North Dakota	Triangle	2
Nebraska	Triangle	2
Kansas	Triangle	2
Illinois	Cross	3
Indiana	Triangle	2
Ohio	Triangle	2
Michigan	Triangle	2
Wisconsin	Triangle	2
Minnesota	Triangle	2
North Carolina	Triangle	2
Tennessee	Triangle	2
Alabama	Triangle	2
South Carolina	Triangle	2
Arkansas	Triangle	2
Kentucky	Triangle	2
West Virginia	Triangle	2
New Mexico	Triangle	2
Oklahoma	Triangle	2
Arizona	Triangle	2
Colorado	Triangle	2
Utah	Triangle	2
Idaho	Triangle	2
Wyoming	Triangle	2
South Dakota	Triangle	2
North Dakota	Triangle	2
Nebraska	Triangle	2
Kansas	Triangle	2
Illinois	Cross	3
Indiana	Triangle	2
Ohio	Triangle	2
Michigan	Triangle	2
Wisconsin	Triangle	2
Minnesota	Triangle	2
North Carolina	Triangle	2
Tennessee	Triangle	2
Alabama	Triangle	2
South Carolina	Triangle	2
Arkansas	Triangle	2
Kentucky	Triangle	2
West Virginia	Triangle	2
New Mexico	Triangle	2
Oklahoma	Triangle	2
Arizona	Triangle	2
Colorado	Triangle	2
Utah	Triangle	2
Idaho	Triangle	2
Wyoming	Triangle	2
South Dakota	Triangle	2
North Dakota	Triangle	2
Nebraska	Triangle	2
Kansas	Triangle	2
Illinois	Cross	3
Indiana	Triangle	2
Ohio	Triangle	2
Michigan	Triangle	2
Wisconsin	Triangle	2
Minnesota	Triangle	2
North Carolina	Triangle	2
Tennessee	Triangle	2
Alabama	Triangle	2
South Carolina	Triangle	2
Arkansas	Triangle	2
Kentucky	Triangle	2
West Virginia	Triangle	2
New Mexico	Triangle	2
Oklahoma	Triangle	2
Arizona	Triangle	2
Colorado	Triangle	2
Utah	Triangle	2
Idaho	Triangle	2
Wyoming	Triangle	2
South Dakota	Triangle	2
North Dakota	Triangle	2
Nebraska	Triangle	2
Kansas	Triangle	2
Illinois	Cross	3
Indiana	Triangle	2
Ohio	Triangle	2
Michigan	Triangle	2
Wisconsin	Triangle	2
Minnesota	Triangle	2
North Carolina	Triangle	2
Tennessee	Triangle	2
Alabama	Triangle	2
South Carolina	Triangle	2
Arkansas	Triangle	2
Kentucky	Triangle	2
West Virginia	Triangle	2
New Mexico	Triangle	2
Oklahoma	Triangle	2
Arizona	Triangle	2
Colorado	Triangle	2
Utah	Triangle	2
Idaho	Triangle	2
Wyoming	Triangle	2
South Dakota	Triangle	2
North Dakota	Triangle	2
Nebraska	Triangle	2
Kansas	Triangle	2
Illinois	Cross	3
Indiana	Triangle	2
Ohio	Triangle	2
Michigan	Triangle	2
Wisconsin	Triangle	2
Minnesota	Triangle	2
North Carolina	Triangle	2
Tennessee	Triangle	2
Alabama	Triangle	2
South Carolina	Triangle	2
Arkansas	Triangle	2
Kentucky	Triangle	2
West Virginia	Triangle	2
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Oklahoma	Triangle	2
Arizona	Triangle	2
Colorado	Triangle	2
Utah	Triangle	2
Idaho	Triangle	2
Wyoming	Triangle	2
South Dakota	Triangle	2
North Dakota	Triangle	2
Nebraska	Triangle	2
Kansas	Triangle	2
Illinois	Cross	3
Indiana	Triangle	2
Ohio	Triangle	2
Michigan	Triangle	2
Wisconsin	Triangle	2
Minnesota	Triangle	2
North Carolina	Triangle	2
Tennessee	Triangle	2
Alabama	Triangle	2
South Carolina	Triangle	2
Arkansas	Triangle	2
Kentucky	Triangle	2
West Virginia	Triangle	2
New Mexico	Triangle	2
Oklahoma	Triangle	2
Arizona	Triangle	2
Colorado	Triangle	2
Utah	Triangle	2
Idaho	Triangle	2
Wyoming	Triangle	2
South Dakota</		

These two components explain 40 % of the point variability.