

Supporting information for:

Title: Recent cover crop adoption is associated with small maize and soybean yield losses in the United States

Running title: Yield impacts of cover crops in the Corn Belt

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Table S1: Candidate variables and data sources. The full set of environmental covariables sampled at each point location.

Variable	Time Aggregation	Source
April mean temperature	Static	PRISM 1981-2010 Normals
April precipitation	Static	PRISM 1981-2010 Normals
May mean temperature	Static	PRISM 1981-2010 Normals
May precipitation	Static	PRISM 1981-2010 Normals
June mean temperature	Static	PRISM 1981-2010 Normals
June precipitation	Static	PRISM 1981-2010 Normals
June vapor pressure deficit	Static	PRISM 1981-2010 Normals
July mean temperature	Static	PRISM 1981-2010 Normals
July precipitation	Static	PRISM 1981-2010 Normals
July vapor pressure deficit	Static	PRISM 1981-2010 Normals
August mean temperature	Static	PRISM 1981-2010 Normals
Slope	Static	USGS NED
Soil root zone available water content	Static	SSURGO
Soil productiivty index, corn	Static	SSURGO
Soil productivity Index, soy	Static	SSURGO
Soil drainage class	Static	SSURGO
Aridity	Annual; June - August	GRIDMET - derived
Early season precipitation	Annual; January - April	GRIDMET
Growing season precipitation	Annual; June - August	GRIDMET
Growing Degree Days (corn calculation)	Annual; January - August	GRIDMET - derived
Growing season mean temperature	Annual; June - August	GRIDMET
Solar radiation	Annual; June - August	GRIDMET
April precipitation	Annual	GRIDMET
April mean minimum temperature	Annual	GRIDMET
April mean maximum temperature	Annual	GRIDMET
April mean temperature	Annual	GRIDMET
April mean climate water deficit	Annual	TerraClimate
April mean soil moisture	Annual	TerraClimate
May precipitation	Annual	GRIDMET
May mean minimum temperature	Annual	GRIDMET

May mean maximum temperature	Annual	GRIDMET
May mean temperature	Annual	GRIDMET
May mean climate water deficit	Annual	TerraClimate
May mean soil moisture	Annual	TerraClimate
June precipitation	Annual	GRIDMET
June mean minimum temperature	Annual	GRIDMET
June mean maximum temperature	Annual	GRIDMET
June mean vapor pressure deficit	Annual	GRIDMET
June mean climate water deficit	Annual	TerraClimate
June mean soil moisture	Annual	TerraClimate
July precipitation	Annual	GRIDMET
July mean minimum temperature	Annual	GRIDMET
July mean maximum temperature	Annual	GRIDMET
July mean vapor pressure deficit	Annual	GRIDMET
July mean climate water deficit	Annual	TerraClimate
July mean soil moisture	Annual	TerraClimate
August mean minimum temperature	Annual	GRIDMET
August mean maximum temperature	Annual	GRIDMET
August mean vapor pressure deficit	Annual	GRIDMET
August mean soil moisture	Annual	TerraClimate
Latitude	Static	
Longitude	Static	
Year	Annual	
