**Table A1.** Definition and mean values of the county-level variables used in the regression analysis with standard deviations in parentheses.

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Definition and unit | Inner Mongolia | Mongolia |
| NDVI | Average normalized difference vegetation index (NDVI) during the growing season | 0.3(0.1) | 0.3(0.1) |
| Temperature | Average temperature during the growing season (°C) | 15.0(2.0) | 10.5(2.8) |
| Precipitation | Total precipitation during the growing season (100 mm) | 2.8(1.0) | 2.1(0.9) |
| Radiation | Average solar radiation during the growing season (MJ/m2) | 21.3(2.2) | 20.8(3.5) |
| Animal density | Grazing livestock converted into animal units per km2 grassland (million units/km2) | 45.8(86.9) | 17.8(35.7) |