**Table A4.** Model selection for the determinants of NDVI in Inner Mongolia

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Var | SAR | SEM | SAC | SDM | SAR | SEM | SAC | SDM |
|  | Coefficient | | | | Marginal effect | | | |
| Temperature | 0.00390\*\* | 0.00976 | 0.00790 | -0.00062 | 0.01620\*\* | 0.00976 | 0.00654 | 0.01305\* |
|  | (0.00172) | (0.00604) | (0.00640) | (0.00878) | (0.00713) | (0.00604) | (0.00528) | (0.00687) |
| Precipitation | 0.01219\*\*\* | 0.03612\*\*\* | 0.03673\*\*\* | 0.03023\*\*\* | 0.05065\*\*\* | 0.03612\*\*\* | 0.03040\*\*\* | 0.04514\*\*\* |
|  | (0.00180) | (0.00456) | (0.00493) | (0.00545) | (0.00664) | (0.00456) | (0.00529) | (0.00674) |
| Radiation | 0.00009 | -0.00790 | -0.01060 | -0.01870 | 0.00037 | -0.00790 | -0.00877 | 0.00416 |
|  | (0.00155) | (0.00662) | (0.00834) | (0.01388) | (0.00643) | (0.00662) | (0.00683) | (0.00744) |
| Ln Animal density | 0.00278 | -0.00061 | -0.00061 | 0.00002 | 0.01154 | -0.00061 | -0.00051 | 0.03583\*\* |
|  | (0.00307) | (0.00293) | (0.00273) | (0.00303) | (0.01279) | (0.00293) | (0.00227) | (0.01747) |
| Spatial |  |  |  |  |  |  |  |  |
| rho | 0.75941\*\*\* |  | -0.20834\* | 0.76282\*\*\* |  |  |  |  |
|  | (0.02334) |  | (0.11700) | (0.02244) |  |  |  |  |
| lambda |  | 0.77255\*\*\* | 0.83821\*\*\* |  |  |  |  |  |
|  |  | (0.02176) | (0.02976) |  |  |  |  |  |
| Variance |  |  |  |  |  |  |  |  |
| sigma2\_e | 0.00112\*\*\* | 0.00110\*\*\* | 0.00103\*\*\* | 0.00109\*\*\* |  |  |  |  |
|  | (0.00010) | (0.00010) | (0.00009) | (0.00010) |  |  |  |  |
| Wx |  |  |  |  |  |  |  |  |
| Temperature |  |  |  | 0.00371 |  |  |  |  |
|  |  |  |  | (0.00873) |  |  |  |  |
| Precipitation |  |  |  | -0.01953\*\*\* |  |  |  |  |
|  |  |  |  | (0.00539) |  |  |  |  |
| Radiation |  |  |  | 0.01969 |  |  |  |  |
|  |  |  |  | (0.01465) |  |  |  |  |
| Ln Animal density |  |  |  | 0.00848\*\* |  |  |  |  |
|  |  |  |  | (0.00355) |  |  |  |  |
| N | 2516 | 2516 | 2516 | 2516 | 2516 | 2516 | 2516 | 2516 |
| AIC | -9373.308 | -9387.375 | -9405.825 | -9406.895 |  |  |  |  |
| BIC | -9338.325 | -9352.393 | -9365.012 | -9348.591 |  |  |  |  |
| R2 | 0.424 | 0.408 | 0.316 | 0.101 |  |  |  |  |

\* *p* < 0.1, \*\* *p* < 0.05, \*\*\* *p* < 0.01, Standard errors in parentheses.

Source: Authors' own estimation.

Notes: Since Durbin-Wu-Hausman test suggests fixed effects model are preferred for our spatial panel estimation, we only report the results from fixed effects estimation for SAR, SDM, and SAC.