**Table A5.** Model selection for the determinants of NDVI in Mongolia

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Var | SAR | SEM | SAC | SDM | SAR | SEM | SAC | SDM |
|  | Coefficient | | | | Marginal effect | | | | |
| Temperature | -0.00113 | -0.00153 | 0.00130 | 0.00699 | -0.00837 | -0.00153 | 0.00102 | -0.01205\* |
|  | (0.00087) | (0.00481) | (0.00575) | (0.00698) | (0.00633) | (0.00481) | (0.00449) | (0.00615) |
| Precipitation | 0.00766\*\*\* | 0.02279\*\*\* | 0.01504\*\* | -0.00419 | 0.05670\*\*\* | 0.02279\*\*\* | 0.01175\*\* | 0.05994\*\*\* |
|  | (0.00122) | (0.00612) | (0.00747) | (0.00869) | (0.00951) | (0.00612) | (0.00596) | (0.00960) |
| Radiation | -0.00056 | -0.00394 | -0.00383 | -0.00098 | -0.00412 | -0.00394 | -0.00299 | -0.00257 |
|  | (0.00123) | (0.00805) | (0.01005) | (0.01389) | (0.00906) | (0.00805) | (0.00786) | (0.00978) |
| Ln Animal density | 0.00564\* | -0.00062 | -0.00124 | -0.00018 | 0.04173\* | -0.00062 | -0.00097 | 0.08970\*\*\* |
|  | (0.00301) | (0.00407) | (0.00391) | (0.00397) | (0.02215) | (0.00407) | (0.00306) | (0.02365) |
| Spatial |  |  |  |  |  |  |  |  |
| rho | 0.86485\*\*\* |  | -0.27988\*\*\* | 0.86189\*\*\* |  |  |  |  |
|  | (0.00999) |  | (0.03904) | (0.01018) |  |  |  |  |
| lambda |  | 0.87138\*\*\* | 0.92353\*\*\* |  |  |  |  |  |
|  |  | (0.01005) | (0.00803) |  |  |  |  |  |
| Variance |  |  |  |  |  |  |  |  |
| sigma2\_e | 0.00147\*\*\* | 0.00147\*\*\* | 0.00138\*\*\* | 0.00147\*\*\* |  |  |  |  |
|  | (0.00012) | (0.00012) | (0.00010) | (0.00012) |  |  |  |  |
| Wx |  |  |  |  |  |  |  |  |
| Temperature |  |  |  | -0.00865 |  |  |  |  |
|  |  |  |  | (0.00714) |  |  |  |  |
| Precipitation |  |  |  | 0.01246 |  |  |  |  |
|  |  |  |  | (0.00903) |  |  |  |  |
| Radiation |  |  |  | 0.00063 |  |  |  |  |
|  |  |  |  | (0.01441) |  |  |  |  |
| Ln Animal density |  |  |  | 0.01257\*\*\* |  |  |  |  |
|  |  |  |  | (0.00451) |  |  |  |  |
| N | 8942 | 8942 | 8942 | 8942 | 8942 | 8942 | 8942 | 8942 |
| AIC | -30671.271 | -30602.431 | -30725.208 | -30693.478 |  |  |  |  |
| BIC | -30628.680 | -30559.840 | -30675.519 | -30622.493 |  |  |  |  |
| R2 | 0.146 | 0.084 | 0.040 | 0.077 |  |  |  |  |

\* *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, thus we only report the results from fixed effects estimation for SAR, SDM, and SAC.