**Table S2. The relationships of the expansion potential of IPS between RCPs 4.5 and 8.5 scenarios based on logistic values of Maxent.**

|  |  |  |
| --- | --- | --- |
| Terrestrial |  | Freshwater  |
| Code | R2 | *F* value |  | Code | R2 | *F* value |
| BF | 0.9683\*\*\* | 611.7429  |  | LL | 0.9771\*\*\* | 510.9380 |
| DXS | 0.6993\*\*\* | 216.2381  |  | LRD | 0.7509ns | 6.0282 |
| FGS | 0.4107\*\*\* | 16.7237  |  | MF | 0.9102\*\*\* | 415.7224 |
| IW | 0.9987\* | 741.0307  |  | OI | 0.8035\* | 159.4343 |
| MG | 0.4997\*\*\* | 16.9824  |  | PF | 0.9345\*\*\* | 256.7990 |
| MFWS | 0.4734\*\*\* | 33.2616  |  | TCR | 0.8987\*\*\* | 470.2548 |
| MGS | 0.8872\*\*\* | 377.6961  |  | TFRW | 0.6538\*\*\* | 43.4290 |
| RI | 0.9999\*\*\* | 15738.4900  |  | TUR | 0.7287\*\*\* | 51.0249 |
| TBMF | 0.9093\*\*\* | 861.7966  |  | TSCR | 0.4516\*\*\* | 70.0010 |
| TCF | 0.9537\*\*\* | 948.1391  |  | TSFRWC | 0.3245\*\*\* | 22.5797 |
| TGSS | 0.9775\*\*\* | 1648.7290  |  | TSUR | 0.8275\*\*\* | 129.5463 |
| TSCF | 0.7298\*\*\* | 40.5244  |  | XFEB | 0.565\*\*\* | 75.3200 |
| TSDBF | 0.8157\*\*\* | 234.6318  |  | Palm | 0.8897\*\*\* | 3597.8670 |
| TSGSS | 0.7575\*\*\* | 143.6680  |  | Herb | 0.8214\*\*\* | 2051.8880 |
| TSMBF | 0.3734\*\*\* | 135.8462  |  | Tree | 0.7499\*\*\* | 1337.0190 |
| TD | 0.9791\*\*\* | 1308.6810  |  | Shrub | 0.7468\*\*\* | 1315.2940 |
| Palm | 0.8781\*\*\* | 5848.7330  |  | Vine | 0.8278\*\*\* | 2144.0670 |
| Herb | 0.8624\*\*\* | 5089.7170  |  | Aquatic | 0.7636\*\*\* | 1440.3850 |
| Tree | 0.8039\*\*\* | 3329.2420  |  | Fern | 0.7794\*\*\* | 1575.5100 |
| Shrub | 0.8325\*\*\* | 4034.6530  |  | Alga | 0.7891\*\*\* | 1669.1860 |
| Vine | 0.8262\*\*\* | 3860.0490  |  | Succulent | 0.5959\*\*\* | 657.6794 |
| Aquatic | 0.7852\*\*\* | 2968.4460  |  | All biomes | 0.8108\*\*\* | 1910.8020 |
| Fern | 0.7960\*\*\* | 3167.4760  |  |  |  |  |
| Alga | 0.7742\*\*\* | 2784.1780  |  |  |  |  |
| Succulent | 0.6821\*\*\* | 1742.5340  |  |  |  |  |
| All biomes | 0.8478\*\*\* | 4522.3950  |  |  |  |  |

Terrestrial represents terrestrial ecoregions; Freshwater represents freshwater ecoregions; Codes used in this table are defined as follows: For terrestrial ecoregions: BF: Boreal Forests/Taiga; DXS: Deserts and Xeric Shrublands; FGS: Flooded Grasslands and Savannas; IW: Inland Water; MG: Mangroves; MFWS: Mediterranean Forests, Woodlands and Scrub; MGS: Montane Grasslands and Shrublands; RI: Rock and Ice; TBMF: Temperate Broadleaf and Mixed Forests; TCF: Temperate Conifer Forests; TGSS: Temperate Grasslands, Savannas and Shrublands; TSCF: Tropical and Subtropical Coniferous Forests; TSDBF: Tropical and Subtropical Dry Broadleaf Forests; TSGSS: Tropical and Subtropical Grasslands, Savannas and Shrublands; TSMBF: Tropical and Subtropical Moist Broadleaf Forests; TD: Tundra. For freshwater ecoregions: LL: Large Lakes; LRD: Large River Deltas; MF: Montane Freshwaters; OI: Oceanic Islands; PF: Polar Freshwaters; TCR: Temperate Coastal Rivers; TFRW: Temperate Floodplain Rivers and Wetlands; TUR: Temperate Upland Rivers; TSCR: Tropical and Subtropical Coastal Rivers; TSFRWC: Tropical and Subtropical Floodplain Rivers and Wetland Complexes; TSUR: Tropical and Subtropical Upland Rivers; XFEB: Xeric Freshwaters and Endorheic (closed) Basins. *P*<0.05\*; *P*<0.01\*\*; *P*<0.001\*\*\*.