**Appendix S1**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Maxent** | | **GARP** | | **1980s to 2000s** | |
| **Country** | **District/department /prefecture/province**  **/region** | **Area included (1000 km2)** | **1980s (%)** | **2000s (%)** | **1980s (%)** | **2000s (%)** | **Maxent**  **% change** | **GARP**  **% change** |
| Democratic | Bas-Uele | 147.94 | 78.85 | 92.65 | 75.06 | 90.93 | 13.80 | 15.87 |
| Republic | Équateur | 103.46 | 67.84 | 97.79 | 63.53 | 96.64 | 29.95 | 33.11 |
| of Congo | Haut-Katanga | 101.64 | 22.06 | 5.01 | 18.09 | 3.69 | -17.04 | -14.40 |
|  | Haut-Lomami | 110.03 | 15.12 | 14.45 | 12.51 | 12.91 | -0.67 | 0.39 |
|  | Haut-Uele | 91.75 | 44.61 | 76.78 | 39.50 | 71.70 | 32.17 | 32.20 |
|  | Ituri | 64.69 | 60.29 | 89.65 | 58.09 | 87.73 | 29.36 | 29.64 |
|  | Kasai | 97.10 | 59.99 | 64.01 | 54.69 | 56.88 | 4.02 | 2.19 |
|  | Kasai oriental | 10.55 | 43.75 | 37.50 | 29.57 | 16.59 | -6.25 | -12.98 |
|  | Kinshasa | 10.98 | 9.47 | 17.55 | 4.85 | 5.31 | 8.08 | 0.46 |
|  | Kongo central | 54.04 | 7.27 | 11.31 | 6.19 | 7.65 | 4.04 | 1.45 |
|  | Kwango | 89.01 | 27.41 | 34.25 | 23.30 | 24.90 | 6.84 | 1.60 |
|  | Kwilu | 80.99 | 54.92 | 45.55 | 37.23 | 24.83 | -9.36 | -12.40 |
|  | Lomami | 52.82 | 37.30 | 45.03 | 33.51 | 35.38 | 7.73 | 1.87 |
|  | Lualaba | 123.27 | 22.96 | 15.53 | 19.30 | 12.63 | -7.43 | -6.67 |
|  | Lulua | 56.02 | 66.64 | 57.63 | 59.08 | 46.27 | -9.01 | -12.81 |
|  | Mai-Ndombe | 126.00 | 77.20 | 92.27 | 67.68 | 87.48 | 15.07 | 19.80 |
|  | Maniema | 128.72 | 50.85 | 79.96 | 44.60 | 76.81 | 29.12 | 32.21 |
|  | Mongala | 57.46 | 94.09 | 99.87 | 91.97 | 99.21 | 5.78 | 7.24 |
|  | Nord-Kivu | 59.82 | 71.81 | 81.81 | 67.74 | 75.88 | 10.00 | 8.14 |
|  | Nord-Ubangi | 56.07 | 79.92 | 92.09 | 78.20 | 87.52 | 12.17 | 9.32 |
|  | Sankuru | 105.29 | 87.14 | 97.59 | 81.14 | 91.86 | 10.45 | 10.72 |
|  | Sud-Kivu | 62.00 | 50.06 | 68.88 | 44.29 | 64.05 | 18.81 | 19.75 |
|  | Sud-Ubangi | 52.31 | 82.06 | 96.27 | 77.41 | 94.18 | 14.20 | 16.77 |
|  | Tanganyika | 121.62 | 8.51 | 18.68 | 7.01 | 17.10 | 10.18 | 10.09 |
|  | Tshopo | 196.83 | 59.19 | 96.06 | 55.27 | 94.74 | 36.87 | 39.47 |
|  | Tshuapa | 134.73 | 91.76 | 99.85 | 88.24 | 99.70 | 8.09 | 11.46 |
| Republic | Bouenza | 12.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| of the | Brazzaville | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Congo | Cuvette | 39.76 | 72.51 | 97.96 | 67.60 | 95.09 | 25.45 | 27.49 |
|  | Cuvette-Ouest | 29.59 | 47.56 | 95.03 | 34.02 | 82.52 | 47.47 | 48.50 |
|  | Kouilou | 13.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Lékoumou | 21.22 | 0.00 | 8.84 | 0.00 | 2.15 | 8.84 | 2.15 |
|  | Likouala | 66.54 | 76.03 | 98.48 | 70.27 | 97.52 | 22.45 | 27.25 |
|  | Niari | 25.56 | 0.00 | 1.39 | 0.00 | 0.00 | 1.39 | 0.00 |
|  | Plateaux | 39.76 | 73.85 | 86.16 | 53.70 | 56.44 | 12.31 | 2.74 |
|  | Pool | 35.37 | 7.24 | 15.48 | 4.01 | 5.66 | 8.24 | 1.65 |
|  | Sangha | 57.79 | 46.29 | 88.15 | 43.26 | 86.22 | 41.86 | 42.96 |
| Central | Bamingui-Bangora | 8.55 | 0.00 | 6.53 | 0.00 | 4.75 | 6.53 | 4.75 |
| African | Bangui | 3.04 | 40.83 | 86.67 | 34.17 | 70.00 | 45.83 | 35.83 |
| Republic | Basse-Kotto | 16.31 | 37.01 | 62.67 | 35.93 | 54.74 | 25.66 | 18.82 |
|  | Haut-Mbomou | 52.82 | 21.17 | 42.49 | 17.43 | 37.45 | 21.32 | 20.02 |
|  | Haute-Kotto | 51.48 | 32.46 | 57.59 | 28.52 | 50.49 | 25.12 | 21.97 |
|  | Kémo | 16.38 | 7.12 | 67.34 | 5.57 | 45.20 | 60.22 | 39.63 |
|  | Lobaye | 9.76 | 34.81 | 45.45 | 33.25 | 43.38 | 10.65 | 10.13 |
|  | Mambéré-Kadéï | 29.75 | 14.07 | 31.20 | 12.36 | 23.36 | 17.14 | 11.00 |
|  | Mbomou | 60.38 | 68.92 | 85.13 | 67.49 | 83.24 | 16.21 | 15.75 |
|  | Nana-Grébizi | 17.04 | 4.32 | 52.53 | 4.02 | 41.67 | 48.21 | 37.65 |
|  | Nana-Mambéré | 27.16 | 1.68 | 14.01 | 1.68 | 10.46 | 12.32 | 8.78 |
|  | Ombella-M'Poko | 37.25 | 22.26 | 46.77 | 19.88 | 36.83 | 24.51 | 16.95 |
|  | Ouaka | 49.09 | 5.89 | 47.52 | 3.72 | 36.26 | 41.63 | 32.54 |
|  | Ouham | 45.52 | 4.35 | 20.61 | 2.95 | 14.54 | 16.27 | 11.59 |
|  | Ouham-Pendé | 31.98 | 0.79 | 7.14 | 0.56 | 5.00 | 6.34 | 4.44 |
|  | Vakaga | Outside of study area | | | | | | |
|  | Sangha-Mbaéré | 18.33 | 74.69 | 96.13 | 69.85 | 93.64 | 21.44 | 23.79 |
| Gabon | Estuaire | 19.60 | 0.91 | 2.33 | 0.26 | 0.39 | 1.42 | 0.13 |
|  | Haut-Ogooue | 33.83 | 23.91 | 61.24 | 2.40 | 22.94 | 37.33 | 20.54 |
|  | Moyen-Ogooue | 16.53 | 0.31 | 14.42 | 0.00 | 1.23 | 14.11 | 1.23 |
|  | Ngounie | 38.57 | 0.00 | 4.14 | 0.00 | 0.79 | 4.14 | 0.79 |
|  | Nyanga | 22.34 | 0.45 | 0.34 | 0.00 | 0.00 | -0.11 | 0.00 |
|  | Ogooue-Ivindo | 43.49 | 0.23 | 31.49 | 0.29 | 20.76 | 31.25 | 20.47 |
|  | Ogooue-Lolo | 28.98 | 4.72 | 55.29 | 3.50 | 38.50 | 50.57 | 35.00 |
|  | Ogooue-Maritime | 23.76 | 0.75 | 7.15 | 0.00 | 0.11 | 6.40 | 0.11 |
|  | Woleu-Ntem | 37.58 | 0.00 | 8.57 | 0.00 | 2.97 | 8.57 | 2.97 |
| Cameroon | Adamaoua | 60.63 | 2.84 | 25.43 | 2.22 | 23.80 | 22.58 | 21.58 |
|  | Centre | 68.57 | 0.52 | 35.32 | 0.33 | 32.10 | 34.80 | 31.77 |
|  | Est | 108.84 | 12.14 | 46.60 | 9.72 | 45.01 | 34.46 | 35.30 |
|  | Extreme-Nord | Outside of study area | | | | | | |
|  | Littoral | 20.34 | 2.74 | 18.45 | 2.12 | 12.84 | 15.71 | 10.72 |
|  | Nord | 9.53 | 0.00 | 2.13 | 0.00 | 1.60 | 2.13 | 1.60 |
|  | Nord-Ouest | 17.40 | 35.71 | 34.55 | 30.47 | 29.59 | -1.17 | -0.87 |
|  | Ouest | 14.00 | 20.29 | 38.95 | 13.77 | 35.69 | 18.66 | 21.92 |
|  | Sud | 47.47 | 0.37 | 11.97 | 0.37 | 3.90 | 11.59 | 3.53 |
|  | Sud-Ouest | 24.72 | 21.85 | 41.03 | 14.97 | 26.46 | 19.18 | 11.49 |