**Supplemental table 2.** Generalized Variance Inflation Factor (VIF) used for final calibration and prediction of climatic space (bold numbers represent variable with high VIF value which were removed in the final model).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| VIF test | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Climate factor | Run1 | Run 2 | | Run 3 | | | Run 4 | | Run 5 | | Run 6 | | Run 7 | | Run 8 | | Run 9 | | Run 10 | | Run 11 | | Run 12 | | Run 13 | |
| Bio1 | 2682.83 | 2682.83 | | 2304.95 | | | 505.21 | | 486.68 | | 232.46 | | 143.14 | | 30.54 | | 30.52 | | 30.46 | | 30.14 | | 1.97 | | 1.86 | |
| Bio2 | 79.23 | 79.23 | | 71.40 | | | 70.67 | | 70.67 | | 27.32 | | 26.90 | | 12.61 | | 12.54 | | 12.48 | | 2.67 | | 2.67 | | 2.61 | |
| Bio3 | 69.94 | 69.94 | | 69.14 | | | 68.94 | | 68.65 | | 48.83 | | 48.82 | | 45.11 | | 42.33 | | **41.91** | |  | |  | |  | |
| Bio4 | 5169.25 | 5169.25 | | 1720.91 | | | 577.20 | | 570.01 | | 162.65 | | 62.48 | | 42.36 | | 40.88 | | 40.76 | | 14.38 | | 1.53 | | 1.22 | |
| Bio5 | Inf |  | |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| Bio6 | Inf | 726.65 | | 589.80 | | | 505.21 | | 496.97 | | 233.39 | | **212.03** | |  | |  | |  | |  | |  | |  | |
| Bio7 | Inf | 1269.62 | | 974.33 | | | 973.36 | | **970.87** | |  | |  | |  | |  | |  | |  | |  | |  | |
| Bio8 | 400.79 | 400.79 | | 399.38 | | | 341.76 | | 309.50 | | **298.94** | |  | |  | |  | |  | |  | |  | |  | |
| Bio9 | 39.24 | 39.24 | | 39.23 | | | 38.83 | | 37.90 | | 37.26 | | 36.88 | | 32.08 | | 31.96 | | 31.96 | | **31.88** | |  | |  | |
| Bio10 | 9367.92 | **9367.92** | |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| Bio11 | 6122.14 | 6122.14 | | **3591.81** | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| Bio12 | 218.44 | 218.44 | | 218.44 | | | 218.32 | | 90.14 | | 83.01 | | 71.59 | | 70.98 | | 30.85 | | 30.31 | | 30.19 | | **28.38** | |  | |
| Bio13 | 136.58 | 136.58 | | 126.89 | | | 125.08 | | 108.99 | | 107.51 | | 95.39 | | 92.05 | | 26.90 | | 26.55 | | 26.46 | | 26.34 | | 3.02 | |
| Bio14 | 40.63 | 40.63 | | 40.33 | | | 39.05 | | 39.01 | | 38.94 | | 38.74 | | 38.55 | | 37.37 | | 5.68 | | 4.87 | | 4.84 | | 4.63 | |
| Bio15 | 5.46 | 5.46 | | 5.46 | | | 5.16 | | 4.47 | | 4.46 | | 4.45 | | 4.41 | | 4.40 | | 4.39 | | 4.26 | | 4.23 | | 1.96 | |
| Bio16 | 1094.53 | 1094.53 | | 1076.04 | | | **1033.65** | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| Bio17 | 155.18 | 155.18 | | 154.86 | | | 154.65 | | 135.97 | | 134.53 | | 133.70 | | 133.67 | | **126.89** | |  | |  | |  | |  | |
| Bio18 | 698.09 | | 698.09 | | 643.52 | 579.79 | | 225.37 | | 221.72 | | 183.00 | | **169.08** | |  | |  | |  | |  | |  | |
| Bio19 | 50.65 | | 50.65 | | 50.04 | 50.00 | | 44.01 | | 43.60 | | 43.42 | | 43.41 | | 43.33 | | 4.99 | | 3.86 | | 3.45 | | 3.07 | |