|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Bio1 | Bio2 | Bio3 | Bio4 | Bio5 | Bio6 | Bio7 | Bio8 | Bio9 | Bio10 | Bio11 | Bio12 | Bio13 | Bio14 | Bio15 | Bio16 | Bio17 | Bio18 | Bio19 |
| Bio1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 　 |  |  | 　 |  |  |
| Bio2 | -.130\* | 1 |  |  |  |  |  | 　 | 　 |  | 　 |  | 　 |  |  | 　 |  |  |  |
| Bio3 | .464\*\* | .379\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 　 |  |
| Bio4 | -.543\*\* | -.142\* | **-.958\*\*** | 1 |  |  |  |  |  | 　 |  | 　 |  |  |  |  |  | 　 |  |
| Bio5 | .569\*\* | .190\*\* | -.176\*\* | .213\*\* | 1 |  |  |  |  |  |  |  | 　 |  |  | 　 |  |  | 　 |
| Bio6 | **.901\*\*** | -.129\* | .694\*\* | **-.804\*\*** | .276\*\* | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 　 |
| Bio7 | -.615\*\* | .229\*\* | -.792\*\* | **.923\*\*** | .240\*\* | **-.867\*\*** | 1 |  |  | 　 |  | 　 |  |  |  |  |  |  | 　 |
| Bio8 | .693\*\* | -.098 | .212\*\* | -.220\*\* | .390\*\* | .482\*\* | -.284\*\* | 1 |  |  |  |  |  |  | 　 |  |  |  |  |
| Bio9 | .399\*\* | .080 | .331\*\* | -.410\*\* | .290\*\* | .545\*\* | -.400\*\* | -.203\*\* | 1 |  |  | 　 |  |  |  |  |  |  |  |
| Bio10 | .774\*\* | -.249\*\* | -.170\*\* | .108 | **.848\*\*** | .471\*\* | -.035 | .635\*\* | .198\*\* | 1 |  |  | 　 |  |  | 　 |  |  | 　 |
| Bio11 | **.918\*\*** | -.007 | .753\*\* | **-.827\*\*** | .297\*\* | **.982\*\*** | **-.838\*\*** | .546\*\* | .489\*\* | .469\*\* | 1 |  |  |  |  |  |  |  |  |
| Bio12 | .251\*\* | -.430\*\* | -.162\*\* | .050 | .118\* | .164\*\* | -.105 | .167\*\* | .013 | .310\*\* | .127\* | 1 |  |  |  |  |  |  |  |
| Bio13 | .391\*\* | -.016 | .444\*\* | -.501\*\* | .006 | .483\*\* | -.485\*\* | .188\*\* | .261\*\* | .069 | .486\*\* | .684\*\* | 1 | 　 |  |  | 　 |  |  |
| Bio14 | .039 | -.573\*\* | -.643\*\* | .556\*\* | .189\*\* | -.236\*\* | .336\*\* | .196\*\* | -.325\*\* | .438\*\* | -.259\*\* | .590\*\* | -.105 | 1 |  | 　 |  |  | 　 |
| Bio15 | .301\*\* | .384\*\* | **.806\*\*** | -.783\*\* | -.126\* | .556\*\* | -.627\*\* | .021 | .424\*\* | -.219\*\* | .581\*\* | -.236\*\* | .497\*\* | **-.842\*\*** | 1 |  |  |  | 　 |
| Bio16 | .365\*\* | -.060 | .395\*\* | -.464\*\* | .001 | .461\*\* | -.465\*\* | .142\* | .262\*\* | .068 | .452\*\* | .737\*\* | **.984\*\*** | -.069 | .453\*\* | 1 | 　 |  |  |
| Bio17 | .044 | -.567\*\* | -.652\*\* | .563\*\* | .208\*\* | -.232\*\* | .342\*\* | .198\*\* | -.305\*\* | .450\*\* | -.257\*\* | .619\*\* | -.079 | **.995\*\*** | -.843\*\* | -.040 | 1 |  |  |
| Bio18 | .506\*\* | -.204\*\* | .040 | -.081 | .256\*\* | .283\*\* | -.154\*\* | .668\*\* | -.181\*\* | .501\*\* | .344\*\* | .528\*\* | .452\*\* | .468\*\* | -.142\* | .414\*\* | .486\*\* | 1 |  |
| Bio19 | -.204\*\* | -.256\*\* | -.293\*\* | .197\*\* | -.037 | -.086 | .068 | -.453\*\* | .279\*\* | -.075 | -.203\*\* | .492\*\* | .293\*\* | .103 | -.041 | .368\*\* | .133\* | -.340\*\* | 1 |

Table S1 Correlation analysis of environmental variables

\*\*: significant at the 0.05 level \*: significant at the 0.1 level