**Table S6.** Summary of changes in climate suitability for threatened plant species according to nature reserve.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Nature | 2050s-Low | 2050s-Medium | 2050s-High | 2080s-Low | 2080s-Medium | 2080s-High |
| Banqiao | -0.159  | -0.193  | -0.287  | -0.126  | -0.242  | -0.537  |
| Gujingyuan | -0.243  | -0.299  | -0.359  | -0.250  | -0.331  | -0.536  |
| Qingliangfeng | -0.334  | -0.358  | -0.434  | -0.286  | -0.388  | -0.585  |
| Songshan | -0.016  | 0.015  | -0.109  | 0.078  | -0.040  | -0.127  |
| Daiyunshan | -0.405  | -0.434  | -0.485  | -0.418  | -0.479  | -0.577  |
| E'meifeng | -0.383  | -0.394  | -0.513  | -0.410  | -0.452  | -0.587  |
| Longqishan | -0.274  | -0.274  | -0.432  | -0.309  | -0.361  | -0.577  |
| Minjiangyuan | -0.154  | -0.152  | -0.239  | -0.175  | -0.230  | -0.332  |
| Tingjiangyuan | -0.494  | -0.516  | -0.618  | -0.517  | -0.554  | -0.674  |
| Xiongjianghuangchulin | -0.358  | -0.383  | -0.436  | -0.348  | -0.413  | -0.539  |
| Lianhuashan | 0.016  | 0.009  | 0.053  | 0.061  | -0.020  | -0.068  |
| Qinzhouzhenxishuishengyeshengdongwu | -0.249  | -0.379  | -0.379  | -0.213  | -0.427  | -0.642  |
| Taizishan | 0.043  | 0.019  | -0.019  | 0.046  | 0.008  | -0.148  |
| Yuhe | -0.172  | -0.326  | -0.353  | -0.128  | -0.314  | -0.542  |
| Haifengniaolei | 0.130  | 0.154  | 0.169  | 0.131  | 0.172  | 0.205  |
| Lianzhoutianxin | -0.230  | -0.266  | -0.357  | -0.257  | -0.354  | -0.502  |
| Luokeng'exi | -0.116  | -0.169  | -0.209  | -0.141  | -0.217  | -0.298  |
| Shimentai | -0.118  | -0.151  | -0.151  | -0.129  | -0.169  | -0.176  |
| Xiangtoushan | -0.022  | -0.018  | -0.019  | -0.008  | -0.027  | -0.013  |
| Yunkaishan | -0.031  | -0.064  | -0.040  | -0.059  | -0.081  | -0.054  |
| Bangliangchangbiyuan | -0.200  | -0.185  | -0.238  | -0.174  | -0.259  | -0.299  |
| Chongzuobaitouyehou | 0.074  | 0.083  | 0.037  | 0.075  | -0.151  | 0.045  |
| Daguishan'exi | -0.030  | -0.045  | -0.006  | -0.063  | -0.077  | -0.055  |
| Dayaoshan | -0.226  | -0.238  | -0.278  | -0.262  | -0.348  | -0.408  |
| Encheng | 0.146  | 0.145  | 0.135  | 0.174  | 0.117  | 0.167  |
| Fangchengjinhuacha | -0.028  | -0.025  | -0.015  | -0.036  | -0.072  | -0.021  |
| Huaping | -0.199  | -0.240  | -0.332  | -0.232  | -0.368  | -0.560  |
| Jiuwanshan | -0.311  | -0.311  | -0.385  | -0.316  | -0.415  | -0.501  |
| Qichong | -0.126  | -0.134  | -0.170  | -0.126  | -0.166  | -0.168  |
| Shiwandashan | -0.039  | -0.039  | -0.037  | -0.044  | -0.091  | -0.037  |
| Yinzhulaoshanziyuanlengshan | -0.018  | -0.067  | -0.096  | -0.003  | -0.119  | -0.318  |
| Yuanbaoshan | -0.389  | -0.375  | -0.475  | -0.378  | -0.481  | -0.606  |
| Dashahe | -0.395  | -0.407  | -0.554  | -0.384  | -0.503  | -0.747  |
| Fodingshan | -0.482  | -0.468  | -0.653  | -0.426  | -0.578  | -0.860  |
| Leigongshan | -0.357  | -0.312  | -0.468  | -0.284  | -0.443  | -0.655  |
| Yinggeling | -0.087  | -0.104  | -0.122  | -0.104  | -0.128  | -0.139  |
| Changlihuangjinhai'an | -0.027  | -0.324  | -0.202  | -0.229  | -0.447  | -0.450  |
| Qingyazhai | -0.209  | -0.287  | -0.421  | -0.192  | -0.467  | -0.521  |
| Tuoliang | 0.050  | 0.057  | -0.038  | 0.060  | -0.035  | -0.138  |
| Xiaowutaishan | -0.138  | -0.119  | -0.230  | -0.048  | -0.209  | -0.325  |
| Baotianman | -0.291  | -0.403  | -0.450  | -0.278  | -0.490  | -0.599  |
| He'nandabieshan | -0.077  | -0.133  | -0.245  | -0.084  | -0.236  | -0.475  |
| Gaoleshan | -0.410  | -0.468  | -0.463  | -0.371  | -0.497  | -0.508  |
| Huangheshidi | -0.333  | -0.440  | -0.511  | -0.299  | -0.550  | -0.617  |
| Jigongshan | -0.456  | -0.497  | -0.590  | -0.450  | -0.574  | -0.741  |
| Beijicun | 0.017  | 0.031  | -0.059  | 0.053  | 0.031  | -0.131  |
| Chuonahe | 0.222  | 0.197  | 0.137  | 0.180  | 0.191  | 0.063  |
| Daxiagu | -0.045  | -0.095  | -0.080  | -0.024  | -0.145  | -0.293  |
| Dongbeihu | -0.057  | -0.100  | -0.150  | -0.048  | -0.144  | -0.338  |
| Dongfanghong | -0.049  | -0.104  | -0.136  | -0.051  | -0.131  | -0.296  |
| Duobuku'er | 0.035  | 0.059  | -0.009  | 0.063  | 0.047  | -0.182  |
| Fenglin | -0.037  | -0.076  | -0.115  | -0.025  | -0.116  | -0.294  |
| Fenghuangshan | -0.034  | -0.074  | -0.092  | 0.001  | -0.120  | -0.340  |
| Gongbielahe | 0.075  | 0.054  | -0.006  | 0.069  | 0.066  | -0.139  |
| Lingfeng | 0.053  | 0.096  | 0.106  | 0.081  | 0.150  | 0.119  |
| Maolan'gou | 0.029  | 0.023  | -0.004  | 0.053  | 0.011  | -0.138  |
| Mingshui | -0.094  | -0.193  | -0.158  | -0.026  | -0.166  | -0.153  |
| Mudanfeng | -0.027  | -0.119  | -0.142  | -0.007  | -0.188  | -0.469  |
| Pingdingshan | -0.022  | -0.062  | -0.084  | -0.017  | -0.108  | -0.270  |
| Qixingfengdongbeihu | -0.031  | -0.068  | -0.104  | -0.016  | -0.137  | -0.292  |
| Sanhuanpao | -0.084  | -0.065  | -0.128  | -0.075  | -0.105  | -0.287  |
| Shankou | 0.063  | 0.026  | -0.026  | 0.071  | 0.001  | -0.180  |
| Taipinggou | 0.049  | 0.031  | 0.005  | 0.084  | -0.007  | -0.179  |
| Wuyiling | 0.008  | -0.003  | -0.001  | 0.034  | -0.009  | -0.180  |
| Wuyu'erhe | 0.229  | 0.145  | 0.235  | 0.239  | 0.170  | 0.313  |
| Wudalianchihuoshandizhiyiji | 0.028  | 0.004  | -0.049  | 0.043  | -0.019  | -0.145  |
| Xiaobeihu | -0.023  | -0.065  | -0.060  | -0.010  | -0.105  | -0.263  |
| Xinqingbaitouhe | 0.041  | 0.026  | -0.011  | 0.051  | -0.011  | -0.169  |
| Youhao | -0.014  | -0.038  | -0.062  | 0.010  | -0.068  | -0.282  |
| Zhongyangzhanheizuisongji | 0.353  | 0.305  | 0.204  | 0.330  | 0.288  | 0.040  |
| Badongjinsihou | -0.213  | -0.233  | -0.337  | -0.189  | -0.319  | -0.569  |
| Duheyuan | -0.212  | -0.238  | -0.315  | -0.184  | -0.292  | -0.616  |
| Hubeidabieshan | -0.154  | -0.206  | -0.302  | -0.169  | -0.280  | -0.509  |
| Mulinzi | -0.077  | -0.090  | -0.150  | -0.092  | -0.161  | -0.502  |
| Nanhe | -0.575  | -0.589  | -0.683  | -0.516  | -0.676  | -0.807  |
| Qizimeishan | -0.633  | -0.637  | -0.710  | -0.621  | -0.698  | -0.822  |
| Saiwudang | -0.293  | -0.316  | -0.398  | -0.236  | -0.372  | -0.602  |
| Sanxiadalaoling | -0.295  | -0.305  | -0.408  | -0.267  | -0.385  | -0.625  |
| Shennongjia | -0.190  | -0.213  | -0.258  | -0.174  | -0.255  | -0.468  |
| Shibalichangxia | -0.084  | -0.094  | -0.145  | -0.062  | -0.129  | -0.359  |
| Wudaoxia | -0.653  | -0.679  | -0.764  | -0.604  | -0.745  | -0.891  |
| Xianfengzhongjianheda'ni | -0.529  | -0.537  | -0.667  | -0.521  | -0.653  | -0.857  |
| Xingdoushan | -0.333  | -0.350  | -0.472  | -0.321  | -0.459  | -0.692  |
| Ye'rengu | -0.214  | -0.232  | -0.328  | -0.171  | -0.308  | -0.599  |
| Baiyunshan | -0.386  | -0.430  | -0.568  | -0.361  | -0.537  | -0.746  |
| Dong'anshunhuangshan | -0.104  | -0.160  | -0.259  | -0.122  | -0.242  | -0.415  |
| Dongdongtinghu | -0.420  | -0.448  | -0.475  | -0.444  | -0.540  | -0.535  |
| Gaowangjie | -0.437  | -0.462  | -0.586  | -0.443  | -0.590  | -0.750  |
| Hupingshan | -0.224  | -0.249  | -0.361  | -0.218  | -0.349  | -0.649  |
| Jintongshan | -0.304  | -0.358  | -0.430  | -0.319  | -0.442  | -0.612  |
| Jiuyishan | -0.177  | -0.202  | -0.279  | -0.186  | -0.293  | -0.474  |
| Wuyunjie | -0.310  | -0.421  | -0.462  | -0.296  | -0.410  | -0.592  |
| Xidongtinghu | -0.059  | -0.056  | -0.042  | -0.018  | -0.027  | 0.025  |
| Baishanyuanshe | -0.097  | -0.196  | -0.200  | -0.058  | -0.232  | -0.370  |
| Boluohu | -0.007  | -0.197  | -0.149  | -0.178  | -0.017  | 0.000  |
| Hunchundongbeihu | -0.116  | -0.188  | -0.239  | -0.101  | -0.243  | -0.435  |
| Ji'an | -0.318  | -0.434  | -0.482  | -0.260  | -0.507  | -0.709  |
| Jingyu | -0.164  | -0.273  | -0.282  | -0.139  | -0.351  | -0.601  |
| Shihu | -0.017  | -0.099  | -0.143  | 0.011  | -0.175  | -0.433  |
| Wangqing | -0.059  | -0.118  | -0.159  | -0.031  | -0.156  | -0.384  |
| Yanminghu | -0.064  | -0.115  | -0.085  | -0.042  | -0.141  | -0.218  |
| Yanchengshidizhenqin | -0.283  | -0.318  | -0.349  | -0.257  | -0.350  | -0.466  |
| Ganjiangyuan | -0.326  | -0.340  | -0.444  | -0.336  | -0.459  | -0.595  |
| Jiulingshan | -0.127  | -0.174  | -0.228  | -0.087  | -0.189  | -0.409  |
| Lushan | -0.291  | -0.302  | -0.351  | -0.234  | -0.305  | -0.389  |
| Qiyunshan | -0.161  | -0.175  | -0.246  | -0.150  | -0.240  | -0.432  |
| Tongboshan | -0.155  | -0.166  | -0.244  | -0.161  | -0.228  | -0.397  |
| Wuyuansenlinniaolei | -0.222  | -0.240  | -0.322  | -0.214  | -0.300  | -0.479  |
| Yangjifeng | -0.315  | -0.334  | -0.440  | -0.335  | -0.427  | -0.602  |
| Bailangshan | -0.274  | -0.324  | -0.321  | -0.160  | -0.453  | -0.585  |
| Daheishan | 0.104  | 0.106  | -0.167  | 0.201  | -0.018  | -0.162  |
| Hongluoshan | 0.051  | -0.062  | -0.420  | -0.110  | -0.228  | -0.521  |
| Louzishan | -0.234  | -0.268  | -0.339  | -0.094  | -0.413  | -0.561  |
| Nulu'erhushan | 0.107  | -0.028  | -0.177  | 0.162  | -0.015  | -0.189  |
| Qinglonghe | -0.267  | -0.359  | -0.321  | -0.219  | -0.465  | -0.574  |
| Yalujiangkoushidi | -0.343  | -0.436  | -0.458  | -0.267  | -0.508  | -0.704  |
| Zhanggutai | -0.046  | -0.131  | -0.130  | 0.021  | -0.193  | -0.262  |
| Alu | 0.145  | 0.164  | 0.187  | 0.157  | 0.207  | 0.188  |
| Bilahe | 0.086  | 0.092  | 0.000  | 0.072  | 0.050  | -0.119  |
| Gaogesitaihanwula | 0.198  | 0.152  | -0.119  | 0.273  | 0.254  | -0.177  |
| Hanshan | 0.520  | 0.531  | 0.387  | 0.561  | 0.563  | 0.564  |
| Hanma | 0.161  | 0.188  | 0.204  | 0.174  | 0.224  | 0.190  |
| Qingshan | 0.148  | 0.117  | 0.001  | 0.186  | 0.135  | 0.018  |
| Wulanba | 0.919  | 0.881  | 0.611  | 0.844  | 0.862  | 0.405  |
| Datongbeichuanheyuanqu | -0.360  | -0.368  | -0.401  | -0.359  | -0.444  | -0.512  |
| Huanghesanjiaozhou | -0.292  | -0.375  | -0.374  | -0.303  | -0.409  | -0.505  |
| Heichashan | -0.112  | -0.095  | -0.119  | -0.088  | -0.151  | -0.068  |
| Lingkongshan | 0.290  | -0.075  | 0.266  | 0.362  | 0.172  | 0.272  |
| Guanyinshan | -0.118  | -0.206  | -0.241  | -0.111  | -0.265  | -0.569  |
| Hanchenghuanglongshanhemaji | -0.157  | -0.231  | -0.280  | -0.140  | -0.301  | -0.489  |
| Huangbaiyuan | -0.114  | -0.150  | -0.156  | -0.105  | -0.200  | -0.350  |
| Huanglongshanhemaji | 0.013  | -0.030  | -0.060  | 0.033  | -0.079  | -0.301  |
| Lueyuangzhenxishuishengdongwu | -0.185  | -0.241  | -0.335  | -0.187  | -0.347  | -0.663  |
| Micangshan | -0.205  | -0.251  | -0.304  | -0.208  | -0.310  | -0.602  |
| Motianling | -0.130  | -0.185  | -0.240  | -0.125  | -0.233  | -0.528  |
| Pingheliang | -0.197  | -0.305  | -0.326  | -0.239  | -0.320  | -0.503  |
| Taibaishan | -0.171  | -0.249  | -0.249  | -0.189  | -0.247  | -0.398  |
| Taibaixushuihe | -0.137  | -0.195  | -0.198  | -0.130  | -0.213  | -0.360  |
| Wuliangshan | -0.342  | -0.510  | -0.568  | -0.387  | -0.536  | -0.755  |
| Zhouzhilaoxiancheng | -0.095  | -0.119  | -0.126  | -0.071  | -0.167  | -0.336  |
| Anzihe | -0.143  | -0.142  | -0.242  | -0.126  | -0.223  | -0.441  |
| Baihe | -0.219  | -0.255  | -0.208  | -0.130  | -0.276  | -0.300  |
| Caopo | -0.243  | -0.246  | -0.249  | -0.242  | -0.319  | -0.309  |
| Gexigou | -0.095  | -0.148  | -0.242  | -0.076  | -0.201  | -0.455  |
| Heizhugou | -0.372  | -0.314  | -0.399  | -0.309  | -0.372  | -0.495  |
| Jiudingshan | -0.291  | -0.309  | -0.416  | -0.241  | -0.418  | -0.650  |
| Laojunshan | -0.517  | -0.528  | -0.627  | -0.494  | -0.591  | -0.728  |
| Liziping | -0.361  | -0.348  | -0.437  | -0.380  | -0.443  | -0.641  |
| Nuoshuihezhenxishuishengdongwu | -0.172  | -0.265  | -0.326  | -0.178  | -0.336  | -0.599  |
| Qianfoshan | -0.126  | -0.131  | -0.210  | -0.037  | -0.214  | -0.473  |
| Xiaozhaizigou | -0.161  | -0.114  | -0.128  | -0.066  | -0.175  | -0.322  |
| Xuebaoding | -0.151  | -0.154  | -0.163  | -0.076  | -0.205  | -0.277  |
| Ailaoshan | -0.605  | -0.331  | -0.714  | -0.477  | -0.622  | -0.887  |
| Daweishan | -0.134  | -0.151  | -0.148  | -0.119  | -0.199  | -0.170  |
| Jiaozishan | -0.241  | -0.182  | -0.260  | -0.197  | -0.200  | -0.268  |
| Lvchunhuanglianshan | -0.086  | -0.077  | -0.096  | -0.038  | -0.144  | -0.185  |
| Nangunhe | -0.051  | -0.072  | -0.110  | -0.065  | -0.055  | -0.068  |
| Tongbiguan | -0.025  | -0.014  | -0.005  | -0.024  | -0.019  | -0.007  |
| Wenshan | -0.209  | -0.148  | -0.294  | -0.131  | -0.250  | -0.348  |
| Wumengshan | -0.460  | -0.478  | -0.670  | -0.438  | -0.558  | -0.775  |
| Yuanjiang | -0.170  | -0.006  | -0.205  | -0.015  | -0.152  | -0.269  |
| Yunlongtianchi | -0.213  | -0.203  | -0.266  | -0.203  | -0.255  | -0.355  |
| Wuyanling | -0.081  | -0.118  | -0.169  | -0.086  | -0.177  | -0.291  |
| Changxingyangzi'e | -0.272  | -0.299  | -0.365  | -0.203  | -0.314  | -0.404  |
| Dabashan | -0.262  | -0.309  | -0.362  | -0.248  | -0.352  | -0.605  |
| Jinfoshan | -0.464  | -0.489  | -0.609  | -0.456  | -0.560  | -0.760  |
| Wulipo | -0.305  | -0.333  | -0.398  | -0.286  | -0.393  | -0.607  |
| Xuebaoshan | -0.217  | -0.252  | -0.311  | -0.209  | -0.311  | -0.583  |