**SUPPORTING INFORMATION**

**Table S1** Computing conventional *F*-Statistics from haplotype frequencies, population pairwise *FST* values (below diagonal) and *p* values (above diagonal) based on mtDNA data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | Changning | Changsha | Guangde | Guangning | Guilin | Hengyang | Huarong | Jianou | Jinyunshan | Jinping | Mayanghe | Mengla | Menglun | Nanjing | Quanzhou | Quzhou | Rongan | Shicheng | Shuangpai | Shucheng | Taojiang | Taoyuan | Wuhan | Zijinshan | Ziyang |
| Changning | \* | 0.004  | 0.251  | 0.106  | 0.159  | 0.557  | 0.013  | 0.282  | 0.010  | 0.388  | 0.999  | 0.004  | 0.000  | 0.999  | 0.060  | 0.162  | 0.102  | 0.052  | 0.100  | 0.288  | 0.000  | 0.001  | 0.217  | 0.019  | 0.543  |
| Changsha | 0.250  | \* | 0.096  | 0.000  | 0.006  | 0.114  | 0.636  | 0.004  | 0.000  | 0.050  | 0.466  | 0.006  | 0.003  | 0.440  | 0.000  | 0.004  | 0.000  | 0.000  | 0.001  | 0.003  | 0.066  | 0.999  | 0.010  | 0.445  | 0.044  |
| Guangde | 0.023  | 0.108  | \* | 0.089  | 0.160  | 0.521  | 0.264  | 0.287  | 0.011  | 0.444  | 0.999  | 0.010  | 0.001  | 0.999  | 0.037  | 0.156  | 0.088  | 0.029  | 0.082  | 0.329  | 0.009  | 0.048  | 0.480  | 0.303  | 0.522  |
| Guangning | 0.045  | 0.362  | 0.063  | \* | 0.300  | 0.999  | 0.000  | 0.344  | 0.096  | 0.688  | 0.999  | 0.001  | 0.000  | 0.999  | 0.236  | 0.444  | 0.298  | 0.163  | 0.289  | 0.202  | 0.000  | 0.000  | 0.279  | 0.000  | 0.710  |
| Guilin | 0.082  | 0.416  | 0.114  | 0.022  | \* | 0.999  | 0.013  | 0.493  | 0.999  | 0.999  | 0.999  | 0.001  | 0.000  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.354  | 0.000  | 0.001  | 0.540  | 0.026  | 0.999  |
| Hengyang | -0.023  | 0.316  | -0.002  | -0.070  | 0.000  | \* | 0.219  | 0.999  | 0.999  | 0.999  | 0.999  | 0.011  | 0.003  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.718  | 0.013  | 0.076  | 0.999  | 0.224  | 0.999  |
| Huarong | 0.147  | -0.030  | 0.020  | 0.242  | 0.287  | 0.184  | \* | 0.023  | 0.000  | 0.096  | 0.551  | 0.021  | 0.003  | 0.517  | 0.002  | 0.011  | 0.003  | 0.001  | 0.004  | 0.013  | 0.069  | 0.506  | 0.048  | 0.843  | 0.114  |
| Jianou | 0.011  | 0.312  | 0.026  | -0.004  | 0.009  | -0.101  | 0.193  | \* | 0.130  | 0.999  | 0.999  | 0.002  | 0.000  | 0.999  | 0.556  | 0.999  | 0.571  | 0.164  | 0.713  | 0.585  | 0.000  | 0.000  | 0.794  | 0.026  | 0.999  |
| Jinyunshan | 0.175  | 0.542  | 0.229  | 0.077  | 0.000  | 0.000  | 0.408  | 0.093  | \* | 0.999  | 0.999  | 0.000  | 0.000  | 0.999  | 0.457  | 0.339  | 0.422  | 0.999  | 0.418  | 0.047  | 0.000  | 0.000  | 0.078  | 0.000  | 0.999  |
| Jinping | 0.031  | 0.360  | 0.055  | -0.020  | 0.000  | 0.000  | 0.231  | -0.044  | 0.000  | \* | 0.999  | 0.002  | 0.001  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.519  | 0.001  | 0.015  | 0.708  | 0.088  | 0.999  |
| Mayanghe | -0.190  | 0.218  | -0.170  | -0.241  | 0.000  | 0.000  | 0.062  | -0.292  | 0.000  | 0.000  | \* | 0.040  | 0.059  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.111  | 0.229  | 0.999  | 0.615  | 0.999  |
| Mengla | 0.366  | 0.309  | 0.356  | 0.556  | 0.643  | 0.452  | 0.283  | 0.481  | 0.803  | 0.538  | 0.286  | \* | 0.703  | 0.052  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.002  | 0.128  | 0.010  | 0.000  | 0.011  | 0.007  |
| Menglun | 0.359  | 0.307  | 0.348  | 0.537  | 0.589  | 0.424  | 0.284  | 0.457  | 0.751  | 0.496  | 0.288  | -0.003  | \* | 0.055  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.021  | 0.001  | 0.000  | 0.002  | 0.003  |
| Nanjing | -0.190  | 0.218  | -0.170  | -0.241  | 0.000  | 0.000  | 0.062  | -0.292  | 0.000  | 0.000  | 0.000  | 0.286  | 0.288  | \* | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.999  | 0.118  | 0.217  | 0.999  | 0.602  | 0.999  |
| Quanzhou | 0.086  | 0.436  | 0.116  | 0.025  | -0.040  | -0.138  | 0.306  | 0.002  | 0.011  | -0.083  | -0.331  | 0.670  | 0.628  | -0.331  | \* | 0.999  | 0.999  | 0.999  | 0.999  | 0.212  | 0.000  | 0.000  | 0.327  | 0.002  | 0.999  |
| Quzhou | 0.048  | 0.378  | 0.071  | 0.005  | -0.026  | -0.132  | 0.251  | -0.023  | 0.044  | -0.075  | -0.328  | 0.586  | 0.548  | -0.328  | -0.027  | \* | 0.999  | 0.392  | 0.999  | 0.364  | 0.000  | 0.000  | 0.517  | 0.015  | 0.999  |
| Rongan | 0.074  | 0.418  | 0.102  | 0.019  | -0.037  | -0.136  | 0.289  | -0.006  | 0.019  | -0.081  | -0.330  | 0.646  | 0.605  | -0.330  | -0.027  | -0.031  | \* | 0.455  | 0.999  | 0.211  | 0.000  | 0.001  | 0.387  | 0.003  | 0.999  |
| Shicheng | 0.144  | 0.500  | 0.191  | 0.061  | 0.000  | 0.000  | 0.367  | 0.066  | 0.000  | 0.000  | 0.000  | 0.760  | 0.705  | 0.000  | -0.003  | 0.023  | 0.003  | \* | 0.462  | 0.073  | 0.000  | 0.000  | 0.228  | 0.000  | 0.999  |
| Shuangpai | 0.074  | 0.418  | 0.102  | 0.019  | -0.037  | -0.136  | 0.289  | -0.029  | 0.019  | -0.081  | -0.330  | 0.646  | 0.605  | -0.330  | -0.027  | -0.031  | -0.029  | 0.003  | \* | 0.202  | 0.000  | 0.000  | 0.351  | 0.005  | 0.999  |
| Shucheng | 0.009  | 0.279  | 0.021  | 0.019  | 0.055  | -0.057  | 0.167  | -0.013  | 0.153  | 0.000  | -0.236  | 0.419  | 0.405  | -0.236  | 0.051  | 0.016  | 0.040  | 0.120  | 0.040  | \* | 0.002  | 0.001  | 0.457  | 0.021  | 0.693  |
| Taojiang | 0.214  | 0.079  | 0.158  | 0.357  | 0.370  | 0.256  | 0.069  | 0.280  | 0.508  | 0.307  | 0.141  | 0.049  | 0.067  | 0.141  | 0.409  | 0.344  | 0.390  | 0.463  | 0.390  | 0.244  | \* | 0.040  | 0.000  | 0.052  | 0.000  |
| Taoyuan | 0.237  | -0.035  | 0.112  | 0.321  | 0.350  | 0.284  | -0.014  | 0.280  | 0.423  | 0.315  | 0.200  | 0.294  | 0.298  | 0.200  | 0.361  | 0.324  | 0.350  | 0.398  | 0.350  | 0.257  | 0.075  | \* | 0.000  | 0.267  | 0.040  |
| Wuhan | 0.025  | 0.263  | -0.015  | 0.010  | 0.017  | -0.084  | 0.145  | -0.020  | 0.088  | -0.030  | -0.264  | 0.508  | 0.486  | -0.264  | 0.016  | -0.008  | 0.009  | 0.066  | 0.009  | 0.001  | 0.284  | 0.237  | \* | 0.041  | 0.999  |
| Zijinshan | 0.121  | -0.010  | 0.008  | 0.213  | 0.254  | 0.150  | -0.038  | 0.163  | 0.372  | 0.198  | 0.021  | 0.261  | 0.264  | 0.021  | 0.273  | 0.219  | 0.256  | 0.332  | 0.256  | 0.138  | 0.070  | 0.005  | 0.122  | \* | 0.111  |
| Ziyang | 0.009  | 0.341  | 0.032  | -0.040  | 0.000  | 0.000  | 0.211  | -0.067  | 0.000  | 0.000  | 0.000  | 0.500  | 0.464  | 0.000  | -0.105  | -0.098  | -0.103  | 0.000  | -0.103  | -0.023  | 0.285  | 0.302  | -0.052  | 0.178  | \* |