

Table S4: Likelihood search for a common center (coincidence) and slope (concordance) for eight genetic clines (seven microsatellites, mtDNA). For each locus, constrained and unconstrained models were compared using likelihood-ratio tests (LRT). LL: log(likelihood) of the model; D: LRT statistics, significance indicated (* = p-value < 0.05; ** = p-value < 0.01); loci with significant LRT were excluded from partially constrained models and fitted independently. The four models were compared globally using AIC (k: number of parameters), corrected for large numbers of parameters (AICc).

Transect A

| | no constrain | Center constrained | | Slope constrained | | Center and slope constrained | |
|-----------------------|--------------|--------------------|---------|-------------------|---------|------------------------------|---------|
| | LL | LL | D | LL | D | LL | D |
| Bcal10 | -93.6 | -94.7 | 2.3 | -95.7 | 4.3* | -95.0 | 2.8 |
| C203 | -93.2 | -95.7 | 4.95* | -97.8 | 9.1** | -95.7 | 5.0 |
| D105 | -94.2 | -99.9 | 11.5** | -94.2 | 8.1E-02 | -99.9 | 11.6** |
| D210 | -77.8 | -78.3 | 1.1 | -78.3 | 1.1 | -78.4 | 1.2 |
| D106 | -110.4 | -110.5 | 0.2 | -111.1 | 1.5 | -110.7 | 0.6 |
| C205 | -68.3 | -68.4 | 0.1 | -68.3 | 1.3E-02 | -68.4 | 0.2 |
| C107 | -88.2 | -88.2 | 2.8E-04 | -88.2 | 2.0E-03 | -88.2 | 3.4E-03 |
| D-loop | -54.2 | -58.5 | 8.7** | -58.5 | 8.7** | -58.5 | 8.7* |
| partially constrained | | -440.2 | | -439.7 | | -536.3 | |
| all | -679.7 | -681.7 | 3.9 | -680.7 | 1.9 | -684.6 | 9.7 |
| k | 48 | 44 | | 44 | | 38 | |
| AIC | 1455.5 | 1451.4 | | 1449.4 | | 1445.2 | |
| AICc | 1576.1 | 1543.5 | | 1541.5 | | 1505.7 | |

Transect B

| | no constrain | Center constrained | | Slopeconstrained | | Center and slope constrained | |
|-----------------------|--------------|--------------------|---------|------------------|---------|------------------------------|---------|
| | LL | LL | D | LL | D | LL | D |
| Bcal10 | -112.2 | -112.3 | 4.7E-02 | -112.2 | 1.8E-04 | -112.3 | 0.1 |
| C203 | -144.6 | -144.6 | 8.2E-03 | -144.6 | 2.0E-06 | -144.6 | 8.8E-03 |
| D105 | -133.1 | -133.4 | 0.5 | -133.3 | 0.3 | -134.8 | 3.4 |
| D210 | -102.5 | -102.9 | 0.8 | -102.5 | 6.5E-03 | -102.9 | 0.8 |
| D106 | -123.2 | -131.0 | 15.6** | -123.2 | 6.7E-04 | -131.0 | 15.6** |
| C205 | -104.8 | -105.0 | 0.4 | -105.0 | 0.4 | -105.0 | 0.4 |
| C107 | -113.7 | -113.8 | 2.0E-02 | -118.4 | 9.3** | -114.5 | 1.6 |
| D-loop | -66.2 | -79.6 | 26.8** | -79.6 | 26.8** | -79.9 | 27.3** |
| partially constrained | | -711.8 | | -722.2 | | -715.9 | |
| all | -900.4 | -901.3 | 1.7 | -902.2 | 3.6 | -905.3 | 9.8 |
| k | 48 | 43 | | 43 | | 38 | |
| AIC | 1896.8 | 1888.5 | | 1890.4 | | 1886.6 | |
| AICc | 1973.9 | 1945.8 | | 1947.7 | | 1928.4 | |