**Supplementary Table S3.** Ancestry coefficients of 79 individuals estimated with the program sNMF assuming that the number of ancestral populations is K = 3. Balsfjord samples are indicated in italics.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q1** | **Q2** | **Q3** | **Region** | **Ind** |
| 0,99 | 1,43E-02 | 1,00E-04 | Baltic Sea | BF16\_HastKar\_Baltic\_Spring |
| 0,99 | 1,04E-02 | 1,00E-04 | Baltic Sea | BF18\_HastKar\_Baltic\_Spring |
| 0,99 | 1,44E-02 | 1,00E-04 | Baltic Sea | BF19\_HastKar\_Baltic\_Spring |
| 0,98 | 1,52E-02 | 1,00E-04 | Baltic Sea | BF21\_HastKar\_Baltic\_Spring |
| 0,99 | 1,40E-02 | 1,00E-04 | Baltic Sea | BM14\_HastKar\_Baltic\_Spring |
| 0,99 | 1,12E-02 | 1,00E-04 | Baltic Sea | BM15\_HastKar\_Baltic\_Spring |
| 0,99 | 1,12E-02 | 1,00E-04 | Baltic Sea | BM16\_HastKar\_Baltic\_Spring |
| 0,99 | 1,29E-02 | 1,00E-04 | Baltic Sea | BM19\_HastKar\_Baltic\_Spring |
| 0,99 | 1,00E-04 | 5,06E-03 | Baltic Sea | Fehmarn3\_Fehmarn\_Baltic\_Autumn |
| 1,00 | 1,00E-04 | 3,67E-03 | Baltic Sea | Fehmarn44\_Fehmarn\_Baltic\_Autumn |
| 0,99 | 1,00E-04 | 8,23E-03 | Baltic Sea | Fehmarn6\_Fehmarn\_Baltic\_Autumn |
| 0,99 | 6,50E-03 | 2,06E-03 | Baltic Sea | Gavle100\_Gavle\_Baltic\_Autumn |
| 0,99 | 1,25E-02 | 1,00E-04 | Baltic Sea | Gavle54\_Gavle\_Baltic\_Autumn |
| 0,99 | 5,96E-03 | 4,81E-03 | Baltic Sea | Gavle98\_Gavle\_Baltic\_Autumn |
| 0,99 | 1,00E-04 | 1,01E-02 | Atlantic | AAL1\_CelticSea\_Atlantic\_Winter |
| 0,99 | 1,40E-02 | 1,00E-04 | Atlantic | AAL2\_CelticSea\_Atlantic\_Winter |
| 0,99 | 1,00E-04 | 1,01E-02 | Atlantic | AAL3\_Celticsea\_Atlantic\_Winter |
| 0,99 | 1,02E-02 | 1,00E-04 | Atlantic | AF29\_Norway\_Atlantic\_Spring |
| 0,98 | 1,61E-02 | 1,00E-04 | Atlantic | AF30\_Norway\_Atlantic\_Spring |
| 0,98 | 1,66E-02 | 1,00E-04 | Atlantic | AF31\_Norway\_Atlantic\_Spring |
| 0,99 | 1,10E-02 | 2,49E-03 | Atlantic | AF8\_Norway\_Atlantic\_Spring |
| 0,98 | 1,81E-02 | 1,00E-04 | Atlantic | AK1\_Downs\_Atlantic\_Winter |
| 0,98 | 1,57E-02 | 1,00E-04 | Atlantic | AK2\_Downs\_Atlantic\_Winter |
| 0,98 | 1,59E-02 | 1,00E-04 | Atlantic | AK3\_Downs\_Atlantic\_Winter |
| 0,98 | 4,43E-03 | 1,12E-02 | Atlantic | AM27\_Norway\_Atlantic\_Spring |
| 0,99 | 8,28E-03 | 1,00E-04 | Atlantic | AM29\_Norway\_Atlantic\_Spring |
| 0,98 | 1,56E-02 | 5,70E-04 | Atlantic | AM33\_Norway\_Atlantic\_Spring |
| 0,99 | 1,19E-02 | 1,00E-04 | Atlantic | AM8\_Norway\_Atlantic\_Spring |
| 0,99 | 2,88E-03 | 1,04E-02 | Atlantic | F3L312\_Canada\_Atlantic\_Autumn |
| 0,99 | 6,83E-03 | 6,06E-03 | Atlantic | F3L337\_Canada\_Atlantic\_Autumn |
| 0,98 | 1,00E-04 | 1,64E-02 | Atlantic | F4TH327\_Canada\_Atlantic\_Autumn |
| 0,99 | 1,00E-04 | 7,77E-03 | Atlantic | F4TH337\_Canada\_Atlantic\_Autumn |
| 0,98 | 1,73E-02 | 1,00E-04 | Atlantic | F4XQgb402\_Canada\_Atlantic\_Autumn |
| 0,98 | 4,47E-03 | 1,13E-02 | Atlantic | F4XQgb408\_Canada\_Atlantic\_Autumn |
| 0,99 | 1,00E-04 | 5,43E-03 | Atlantic | NSSH33\_Norway\_Atlantic\_Spring |
| 0,99 | 8,77E-03 | 1,00E-04 | Atlantic | NSSH34\_Norway\_Atlantic\_Spring |
| 0,99 | 8,31E-03 | 1,15E-03 | Atlantic | NSSH36\_Norway\_Atlantic\_Spring |
| 0,99 | 1,00E-04 | 9,80E-03 | Atlantic | NorthSea13\_NorthSea\_Atlantic\_Autumn |
| 0,99 | 1,42E-02 | 1,00E-04 | Atlantic | NorthSea19\_NorthSea\_Atlantic\_Autumn |
| 0,99 | 1,00E-04 | 5,55E-03 | Atlantic | NorthSea34\_NorthSea\_Atlantic\_Autumn |
| 0,99 | 1,00E-04 | 1,46E-02 | Atlantic | S3Ps246\_Canada\_Atlantic\_Spring |
| 0,99 | 1,02E-02 | 1,00E-04 | Atlantic | S3Ps259\_Canada\_Atlantic\_Spring |
| 0,99 | 7,58E-04 | 1,31E-02 | Atlantic | S4TH231\_Canada\_Atlantic\_Spring |
| 0,99 | 1,00E-04 | 1,14E-02 | Atlantic | S4TH244\_Canada\_Atlantic\_Spring |
| 0,99 | 1,84E-03 | 8,81E-03 | Atlantic | S4TM205\_Canada\_Atlantic\_Spring |
| 0,99 | 1,00E-04 | 1,17E-02 | Atlantic | S4TM211\_Canada\_Atlantic\_Spring |
| 0,98 | 1,63E-02 | 1,00E-04 | Atlantic | Z12\_IsleofMan\_Atlantic\_Autumn |
| 0,99 | 1,00E-04 | 8,28E-03 | Atlantic | Z14\_IsleofMan\_Atlantic\_Autumn |
| 0,99 | 1,00E-04 | 7,18E-03 | Atlantic | Z4\_IsleofMan\_Atlantic\_Autumn |
| 1,00E-04 | 0,49 | 0,51 | Sea of Japan | HWS11\_Japan\_SeaofJapan |
| 1,00E-04 | 0,57 | 0,43 | Sea of Japan | HWS12\_Japan\_SeaofJapan |
| 1,00E-04 | 0,51 | 0,49 | Sea of Japan | HWS13\_Japan\_SeaofJapan |
| 1,00E-04 | 0,53 | 0,47 | Sea of Japan | HWS14\_Japan\_SeaofJapan |
| 1,00E-04 | 0,34 | 0,66 | Pechora Sea | HWS21\_PechoraSea\_BarentsSea |
| 3,45E-03 | 0,33 | 0,66 | Pechora Sea | HWS22\_PechoraSea\_BarentsSea |
| 1,00E-04 | 0,31 | 0,69 | Pechora Sea | HWS23\_PechoraSea\_BarentsSea |
| 1,00E-04 | 0,12 | 0,88 | Pechora Sea | HWS24\_PechoraSea\_BarentsSea |
| 1,00E-04 | 1,00E-04 | 1,00 | White Sea | HWS31\_WhiteSea\_WhiteSea |
| 1,00E-04 | 1,00E-04 | 1,00 | White Sea | HWS32\_WhiteSea\_WhiteSea |
| 1,00E-04 | 1,00E-04 | 1,00 | White Sea | HWS33\_WhiteSea\_WhiteSea |
| 1,00E-04 | 1,55E-02 | 0,98 | White Sea | HWS34\_WhiteSea\_WhiteSea |
| 1,00E-04 | 0,13 | 0,87 | Kandalaksha Bay (S) | HWS41\_KandalakshaBay\_WhiteSea\_Spring |
| 1,50E-03 | 0,26 | 0,73 | Kandalaksha Bay (S) | HWS42\_KandalakshaBay\_WhiteSea\_Spring |
| 5,01E-03 | 0,27 | 0,72 | Kandalaksha Bay (S) | HWS43\_KandalakshaBay\_WhiteSea\_Spring |
| 6,21E-03 | 0,27 | 0,72 | Kandalaksha Bay (S) | HWS44\_KandalakshaBay\_WhiteSea\_Spring |
| 1,00E-04 | 1,00E-04 | 1,00 | Kandalaksha Bay (U) | HWS51\_KandalakshaBay\_WhiteSea\_Summer |
| 1,00E-04 | 1,00E-04 | 1,00 | Kandalaksha Bay (U) | HWS52\_KandalakshaBay\_WhiteSea\_Summer |
| 1,00E-04 | 1,00E-04 | 1,00 | Kandalaksha Bay (U) | HWS53\_KandalakshaBay\_WhiteSea\_Summer |
| 1,00E-04 | 1,00E-04 | 1,00 | Kandalaksha Bay (U) | HWS54\_KandalakshaBay\_WhiteSea\_Summer |
| 0,24 | 0,14 | 0,62 | Balsfjord | HWS61\_Balsfjord\_Atlantic |
| 0,23 | 0,13 | 0,65 | Balsfjord | HWS62\_Balsfjord\_Atlantic |
| 0,23 | 0,13 | 0,64 | Balsfjord | HWS63\_Balsfjord\_Atlantic |
| 0,22 | 0,14 | 0,64 | Balsfjord | HWS64\_Balsfjord\_Atlantic |
| 1,00E-04 | 1,00 | 1,00E-04 | Pacific (Vancouver) | Pacific16\_Vancouver\_Pacific |
| 1,00E-04 | 1,00 | 1,00E-04 | Pacific (Vancouver) | Pacific30\_Vancouver\_Pacific |
| 1,00E-04 | 1,00 | 1,00E-04 | Pacific (Vancouver) | Pacific35\_Vancouver\_Pacific |
| 1,00E-04 | 1,00 | 1,00E-04 | Pacific (Vancouver) | Pacific3\_Vancouver\_Pacific |
| 1,00E-04 | 1,00 | 1,00E-04 | Pacific (Vancouver) | Pacific44\_Vancouver\_Pacific |
| 1,00E-04 | 1,00 | 1,00E-04 | Pacific (Vancouver) | Pacific5\_Vancouver\_Pacific |