**Table S3. Global locus-by-locus AMOVA for the SNP and microsatellite marker-sets performed for all regions and the North Sea to the Baltic Sea sub-regions.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SNP marker-set | | Microsatellite marker-set | |
| Source of variation | Percentage of variation | P-value | Percentage of variation | P-value |
| All regions\* | | | | |
| Among regions | 7.39 | 0.000 | 4.25 | 0.000 |
| Among sub-regions within regions | 1.05 | 0.366 | 2.21 | 0.014 |
| Within sub-regions | 91.66 | <0.001# | 93.56 | <0.001# |
| North Sea – Baltic Sea\*\* | | | | |
| Among regions | 2.06 | 0.000 | 1.01 | 0.221 |
| Among sub-regions within regions | 0.52 | 0.311 | 1.66 | 0.075 |
| Within sub-regions | 97.41 | 0.003# | 97.33 | 0.015# |

#Significance of FST among all sub-regions (across regions)

\*AMOVA based on 672 SNPs and 13 microsatellites

\*\*AMOVA based on 870 SNPs and 13 microsatellites