## **Supplementary Materials**

## Stock structure of Pacific cod (*Gadus macrocephalus*) around the Korean Peninsula: an otolith microchemical perspective

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**Fig. S1.** Original otolith edge element : Ca concentrations by region. Original elemental data ( $\mu$ g element : g Ca) has been cube-root transformed and multivariate outliers in the transformed elemental data were identified and excluded by using Q-Q plots to compare estimated Mahalanobis distances for the sample to theoretical values from a chi-squared distribution. Elemental data has not been mean centred or scaled.



**Fig. S2.** Original element : Ca concentrations of the otolith region corresponding to the age-0 spring–summer signatures (i.e. the average of otolith track sections 0B and 0C). Original elemental data ( $\mu$ g element : g Ca) has been cube-root transformed and multivariate outliers in the transformed elemental data were identified and excluded by using Q-Q plots to compare estimated Mahalanobis distances for the sample to theoretical values from a Chi-Square distribution. Elemental data has not been mean centred or scaled.



**Fig. S3.** Original otolith element : Ca concentrations during the first two years of life (i.e. otolith sections 0B-1D) for all specimens and regions. Original elemental data ( $\mu$ g element : g Ca) has been cube-root transformed and multivariate outliers in the transformed elemental data were identified and excluded by using Q-Q plots to compare estimated Mahalanobis distances for the sample to theoretical values from a chi-squared distribution. Elemental data has not been mean centred or scaled.