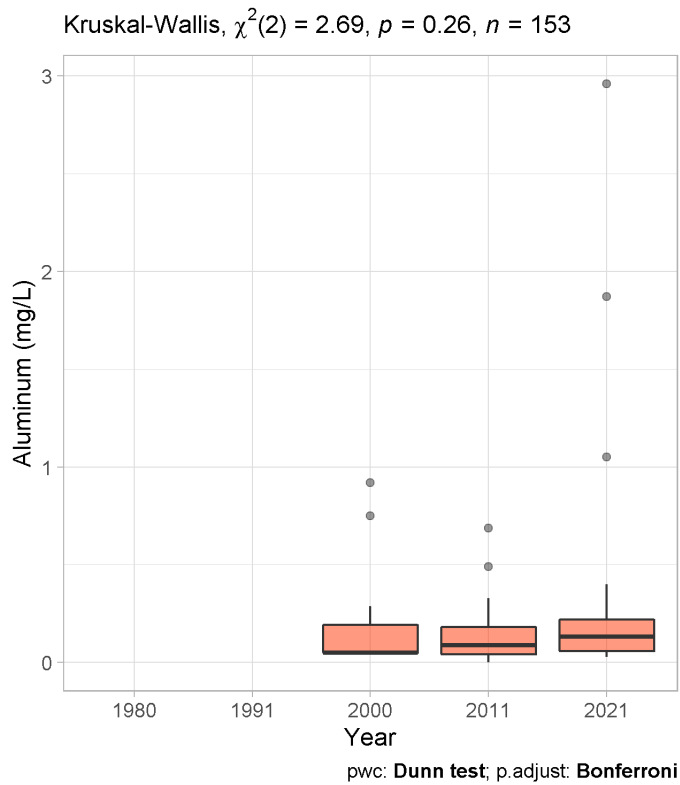


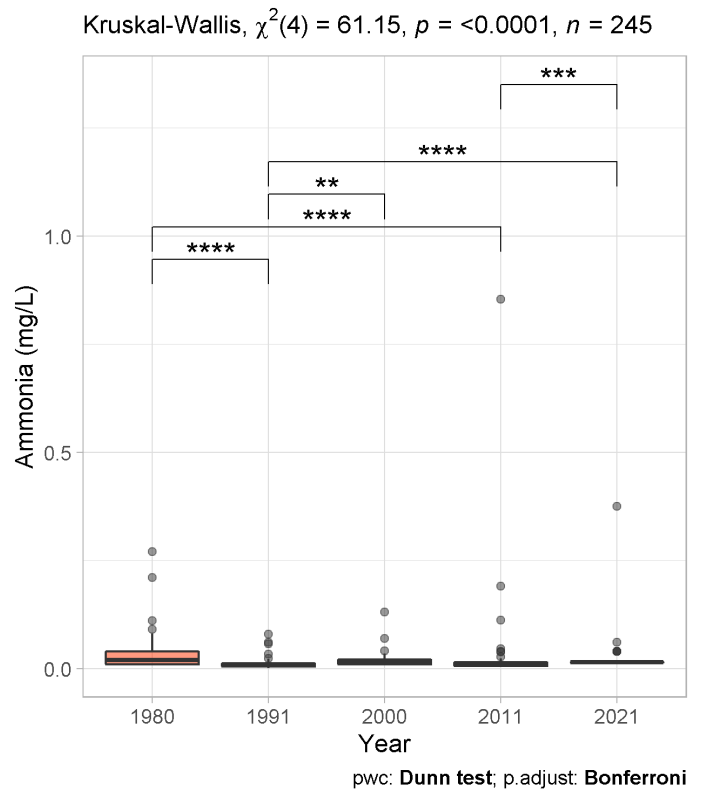
## **Electronic Supplement 1**

*Figure A.2. a) – v) Twenty-two subplots (boxplots with Kruskal Wallis results including pairwise comparisons) evaluate collective differences among years in 22 water quality parameters, labelled a) – v).*

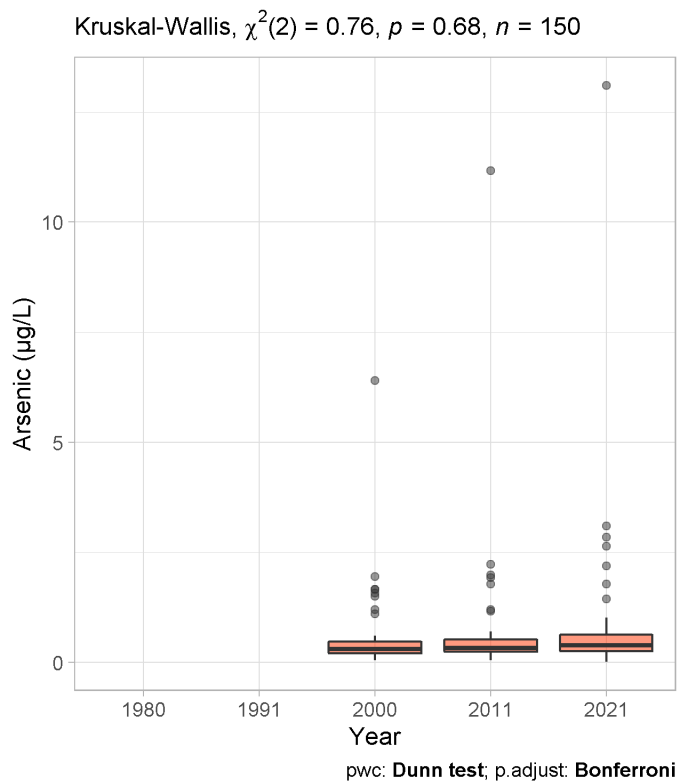
a) Aluminum



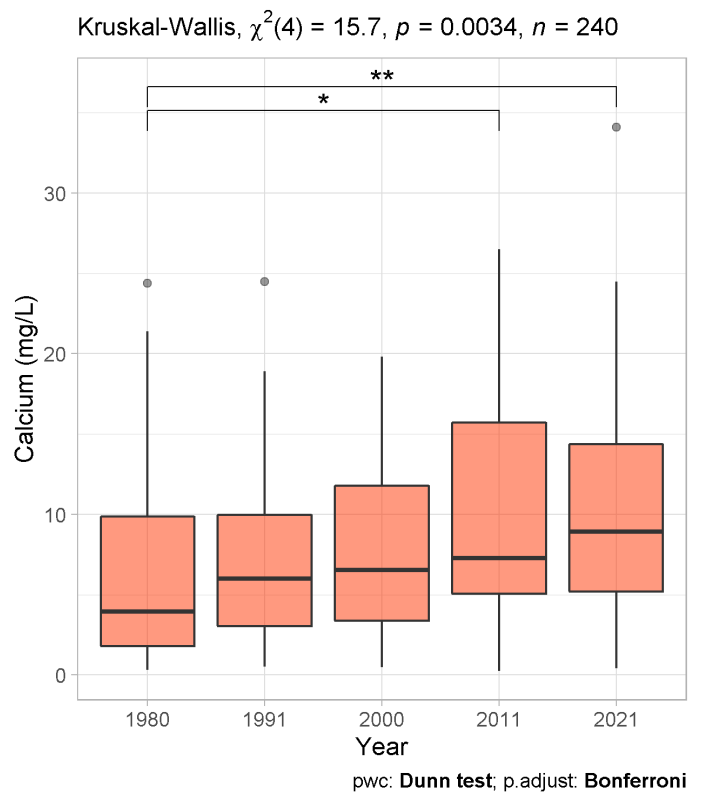
b) Ammonia



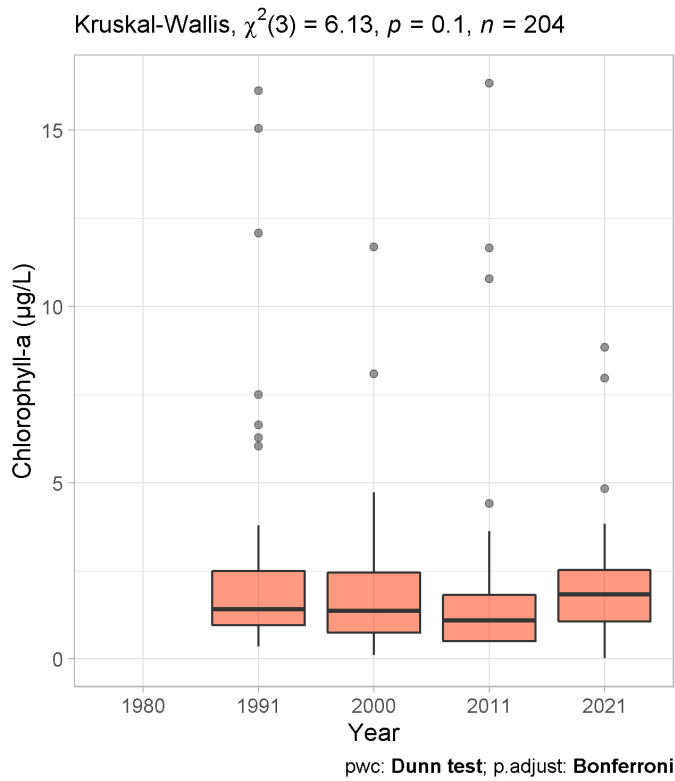
c) Arsenic



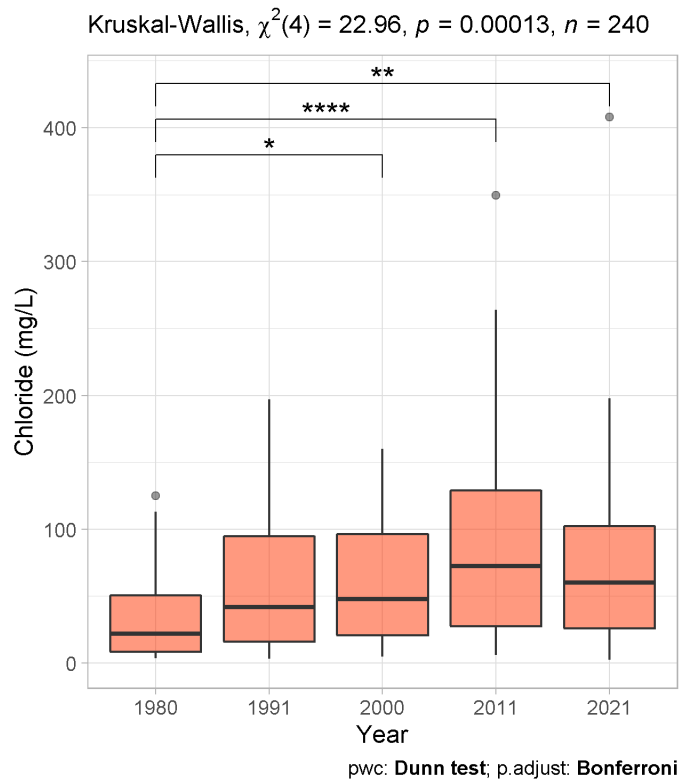
d) Calcium



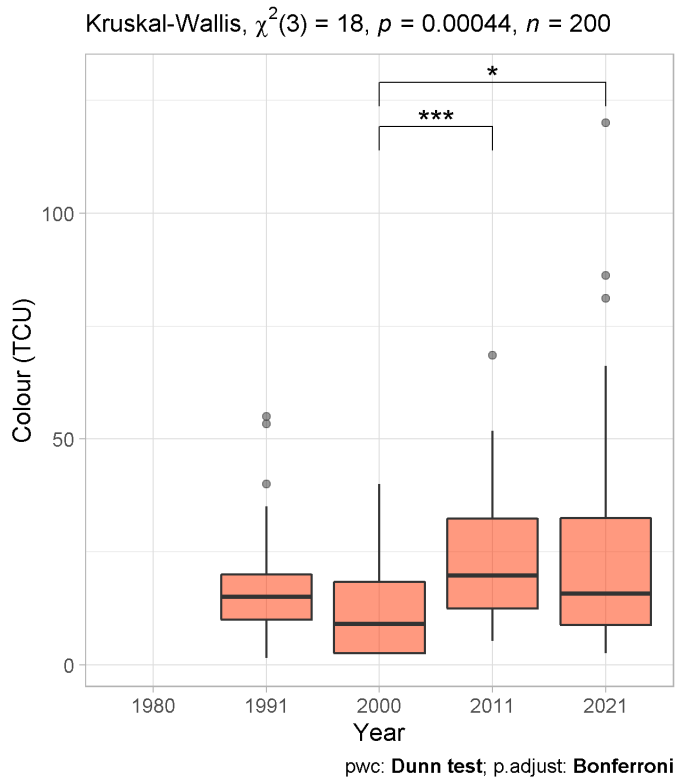
e) Chlorophyll *a*



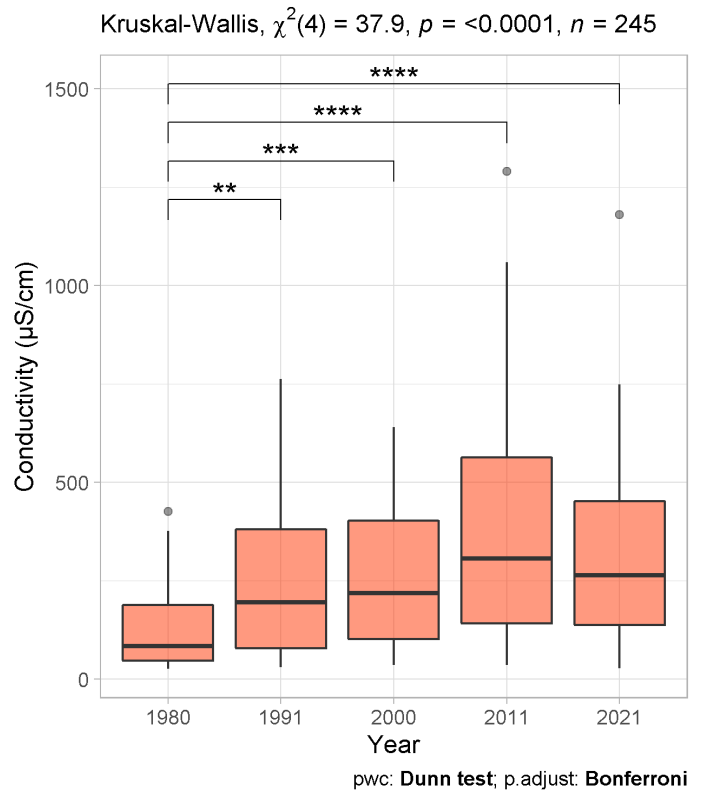
f) Chloride



g) Color

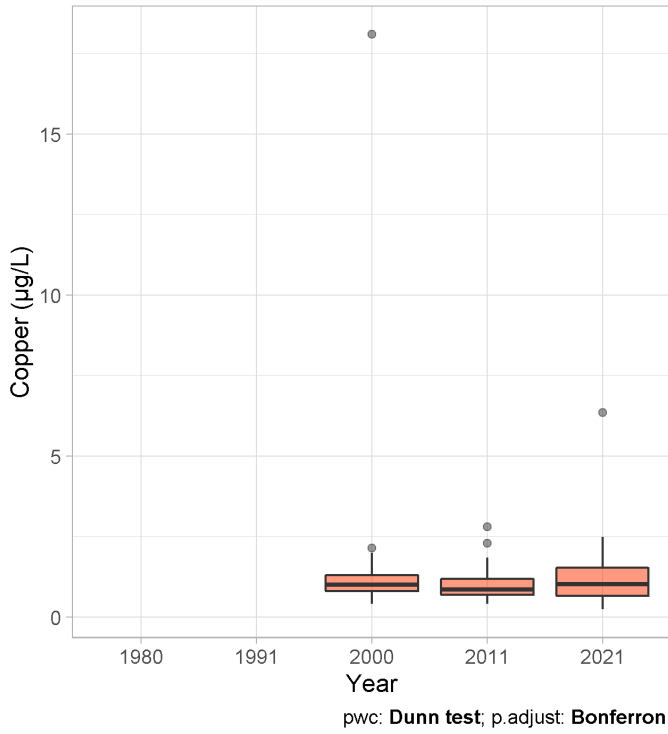


h) Conductivity



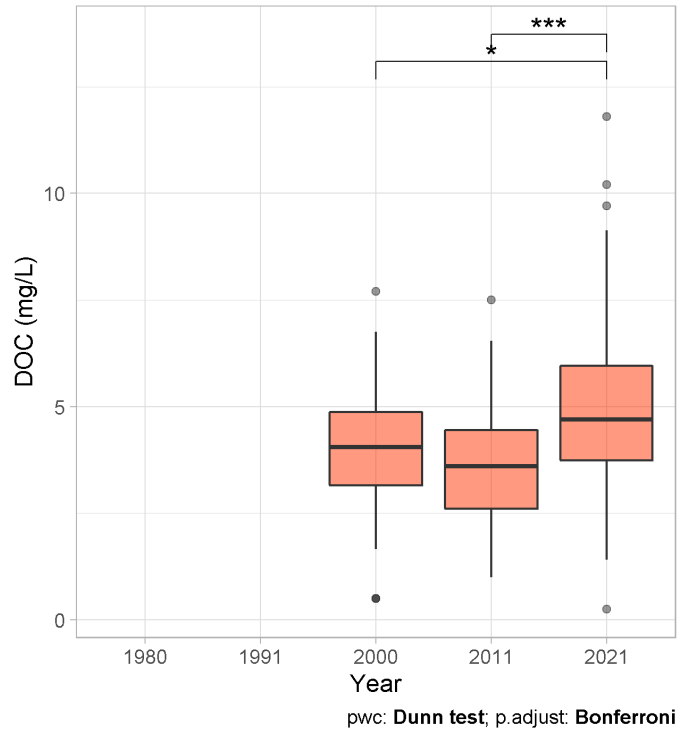
### i) Copper

Kruskal-Wallis,  $\chi^2(2) = 3.23, p = 0.2, n = 150$



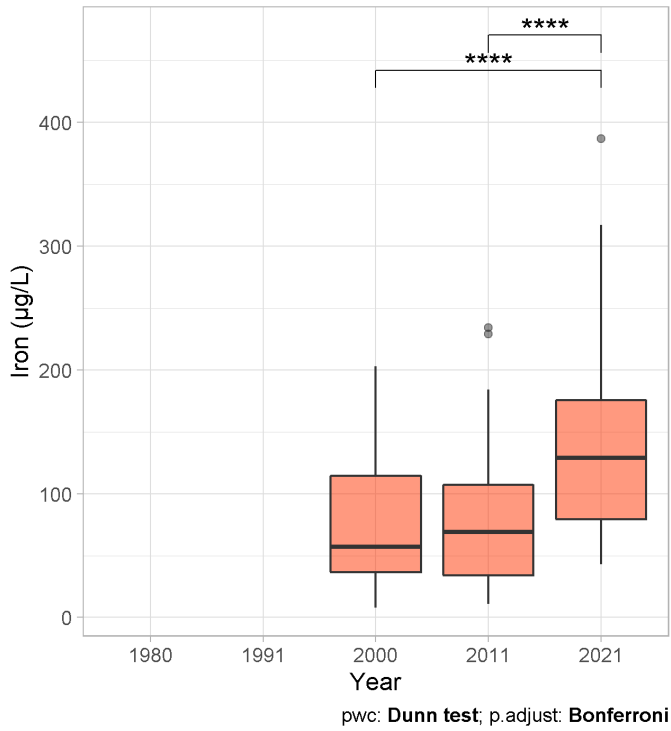
### j) Dissolved organic carbon (DOC)

Kruskal-Wallis,  $\chi^2(2) = 16.69, p = 0.00024, n = 153$



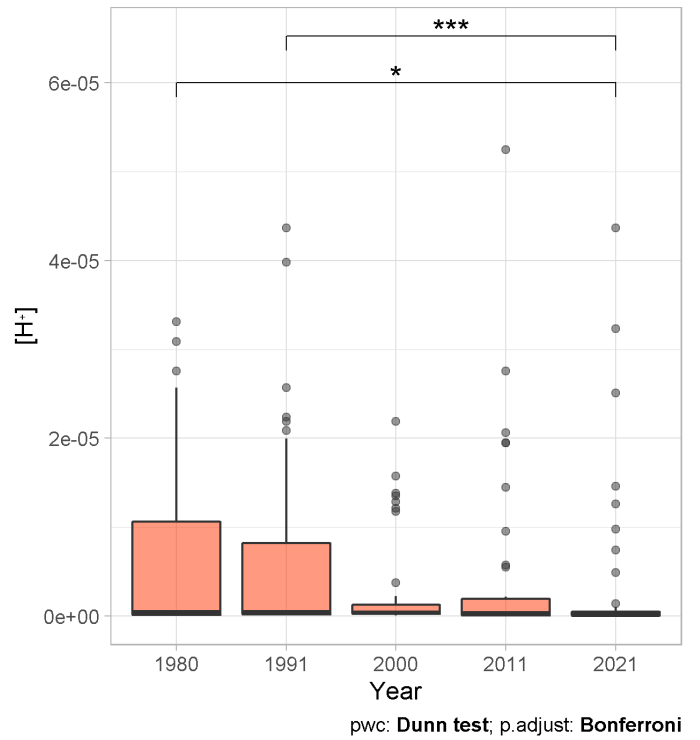
### k) Iron

Kruskal-Wallis,  $\chi^2(2) = 27.29, p = <0.0001, n = 150$



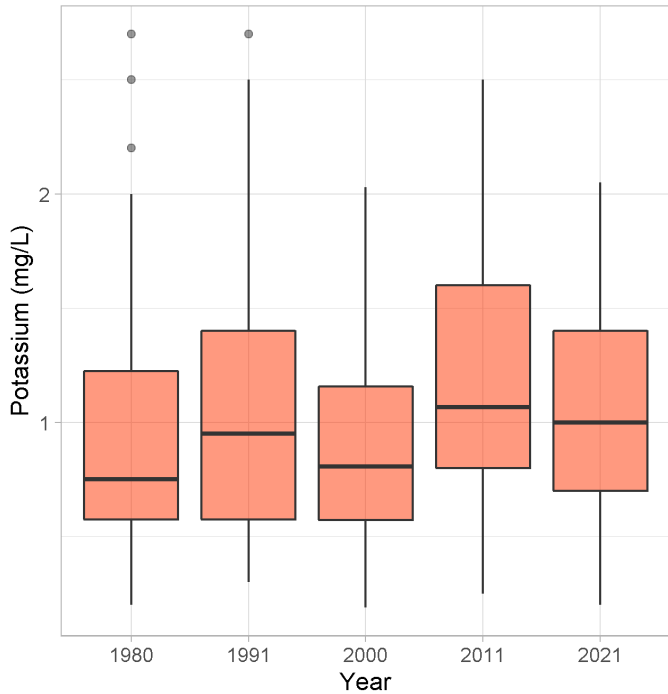
### l) [H<sup>+</sup>]

Kruskal-Wallis,  $\chi^2(4) = 18.37, p = 0.001, n = 240$



m) Potassium

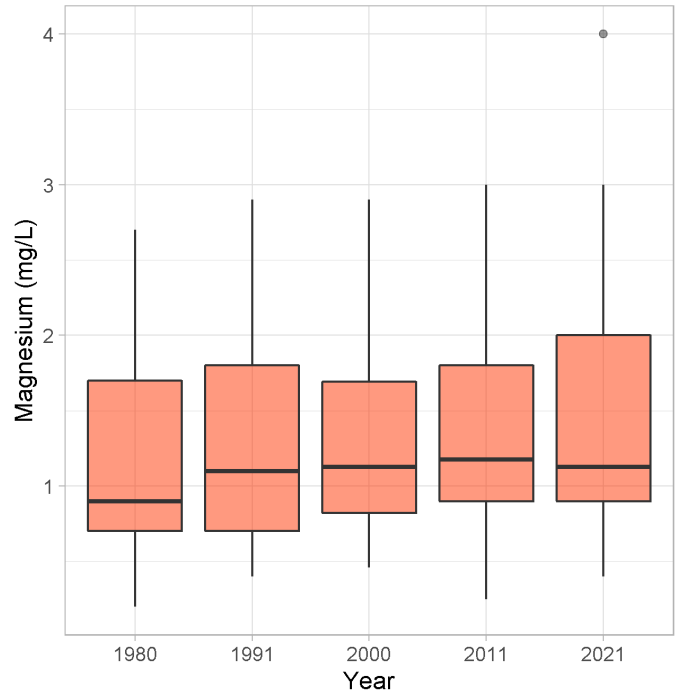
Kruskal-Wallis,  $\chi^2(4) = 9.44$ ,  $p = 0.051$ ,  $n = 240$



pwc: Dunn test; p.adjust: Bonferroni

n) Magnesium

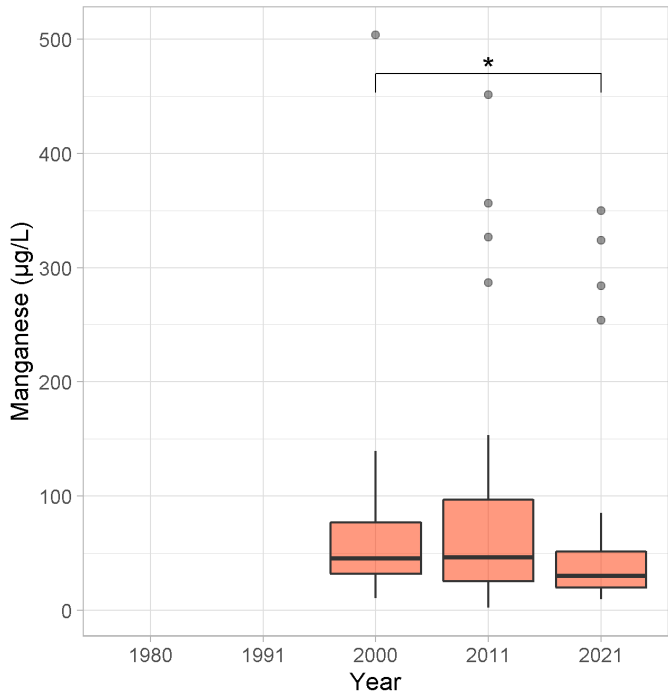
Kruskal-Wallis,  $\chi^2(4) = 6.99$ ,  $p = 0.14$ ,  $n = 240$



pwc: Dunn test; p.adjust: Bonferroni

o) Manganese

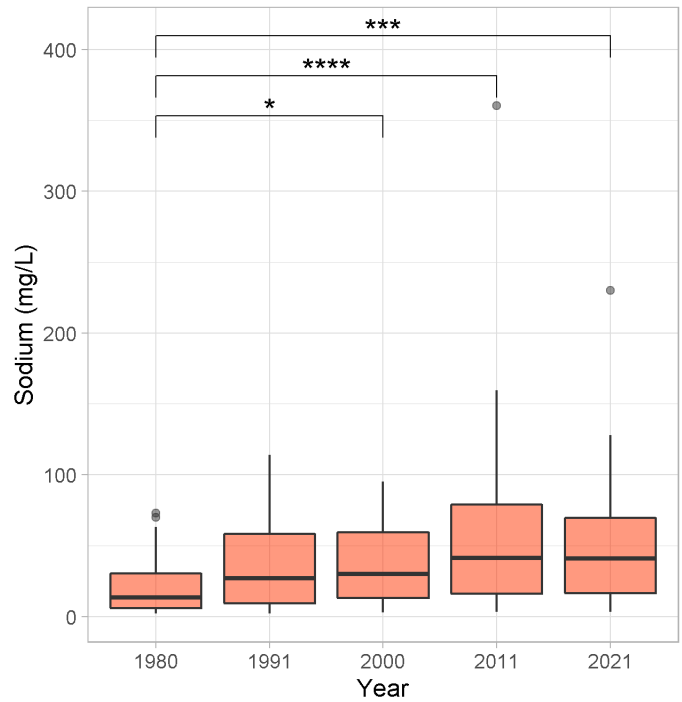
Kruskal-Wallis,  $\chi^2(2) = 7.12$ ,  $p = 0.028$ ,  $n = 150$



pwc: Dunn test; p.adjust: Bonferroni

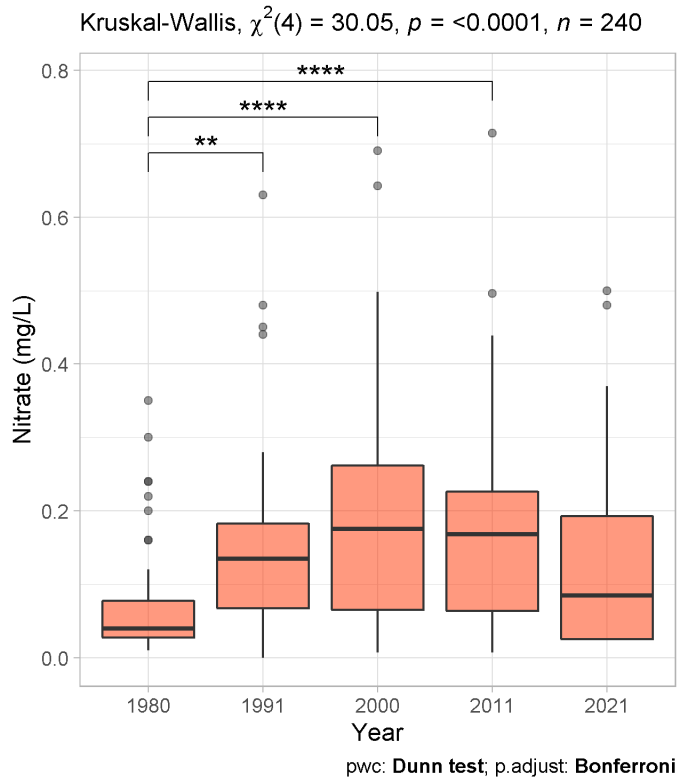
p) Sodium

Kruskal-Wallis,  $\chi^2(4) = 23.91$ ,  $p = <0.0001$ ,  $n = 240$

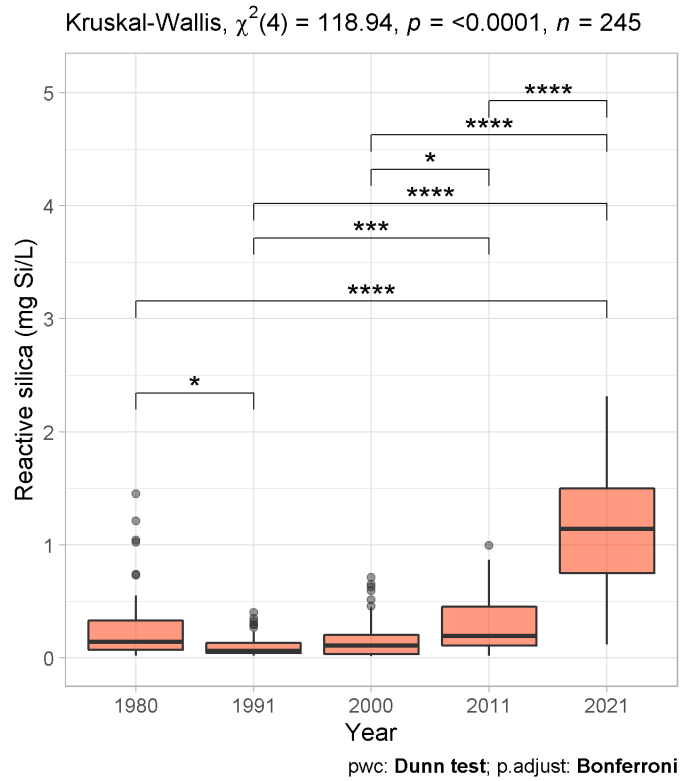


pwc: Dunn test; p.adjust: Bonferroni

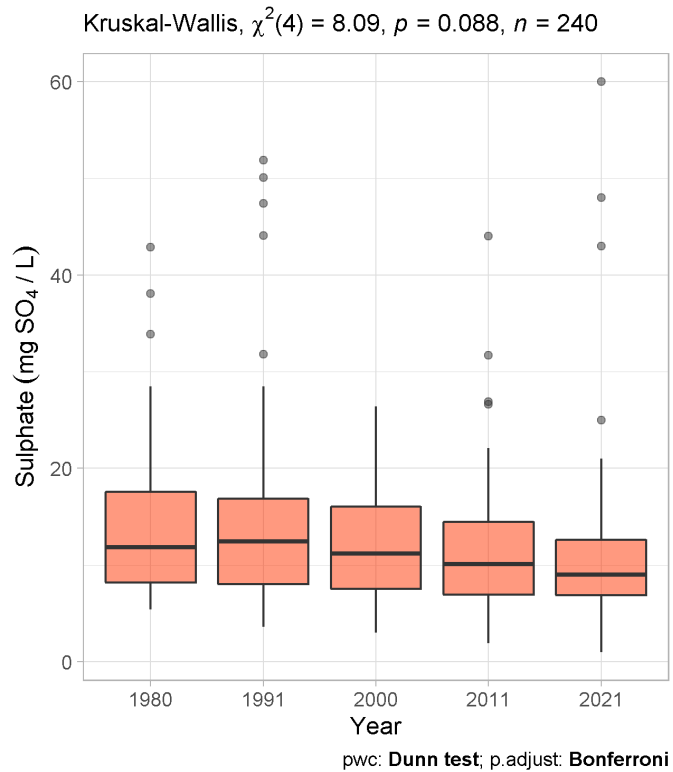
q) Nitrate



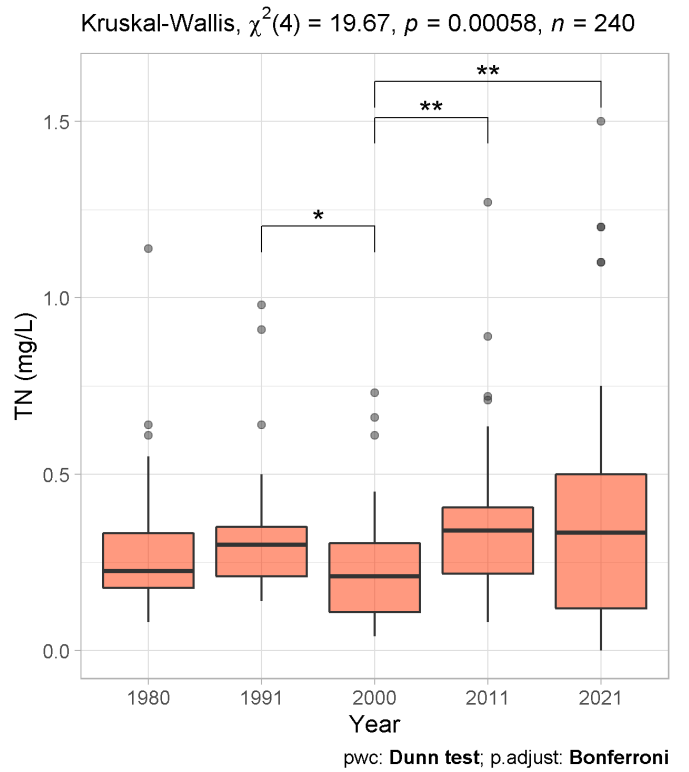
r) Reactive silica



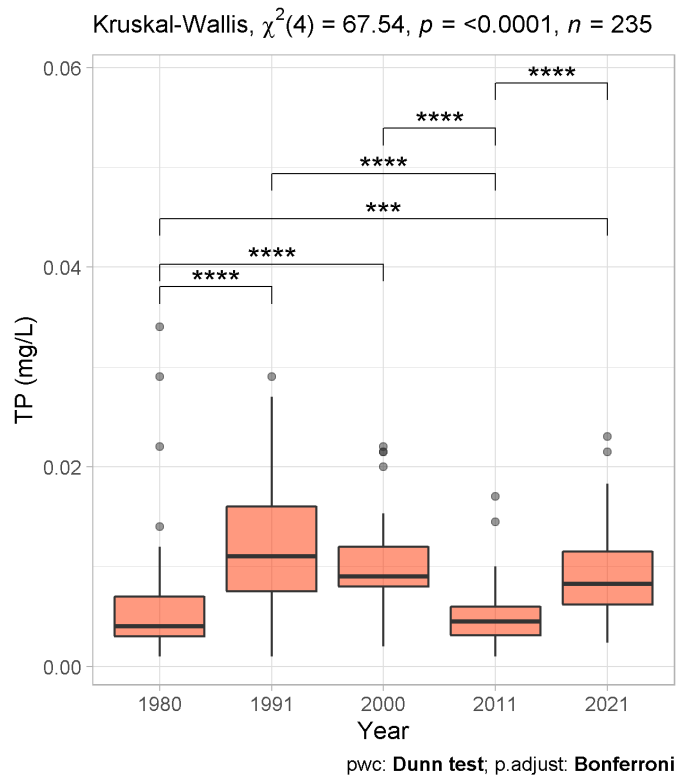
s) Sulphate



t) Total nitrogen (TN)



### u) Total phosphorus (TP)



### v) Zinc

