"MERCURY STABLE ISOTOPES DISCRIMINATE DIFFERENT POPULATIONS OF COMMON SEABASS AROUND EUROPE AND PROVIDE INSIGHT ON MERCURY CYCLE"

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Context

Mercury = evil



Weapon:

Mental and physical disorders

Favorite target:

Fœtus (and hatters)



Context

Hg in marine organisms: Where does it come from?



Local or global?



Context

Hg in marine organisms: Where does it come from?

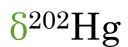


Local or global?





Hg Stable Isotopes

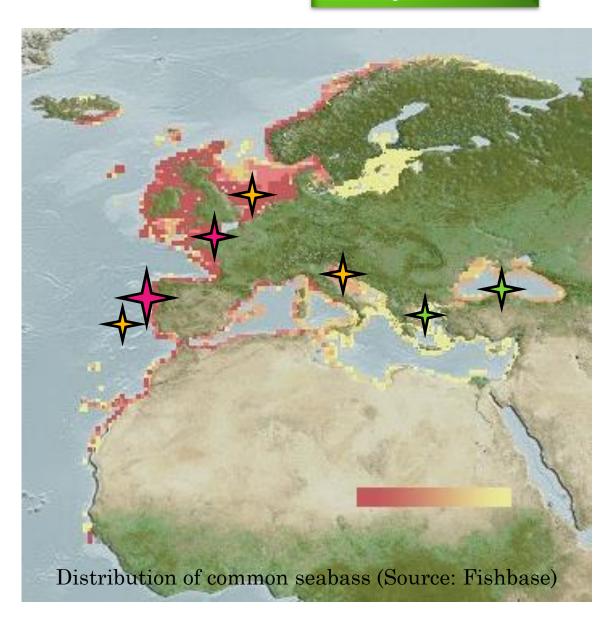


 Δ^{199} Hg

Classic... similar to δ^{13} C and δ^{15} N

« anomaly »

Objective



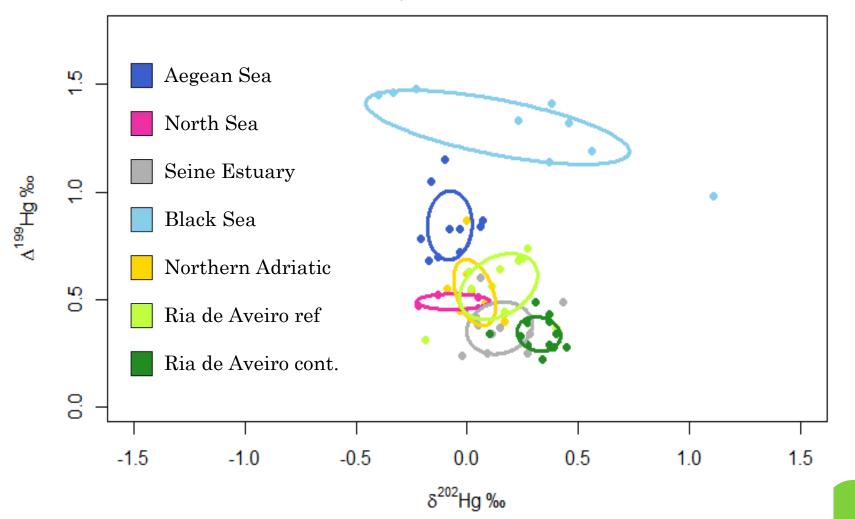
- > THg
- $\succ \delta^{202} Hg$
- $ightharpoonup \Delta^{199} \mathrm{Hg}$ in seabass



Can we discriminate sampling sites?

Results

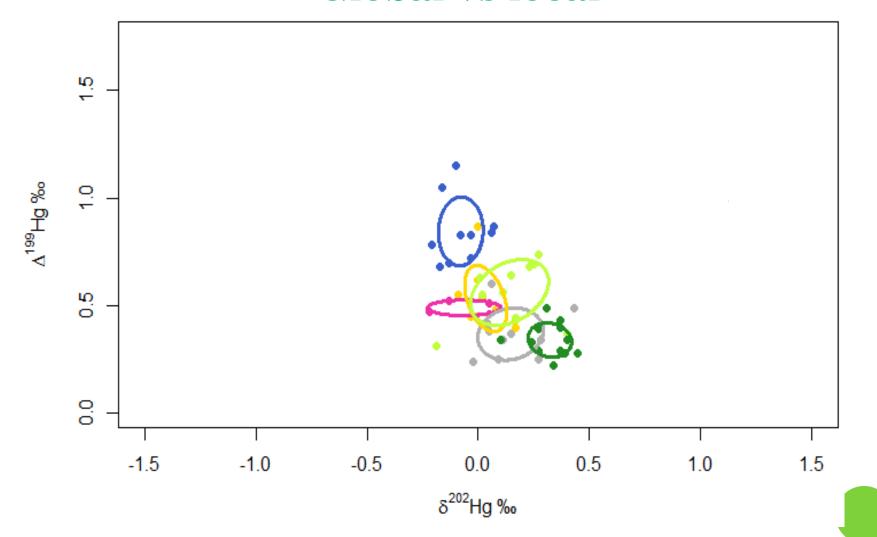
Yes, we can!



Core Hg isotopic niches (SIBER)

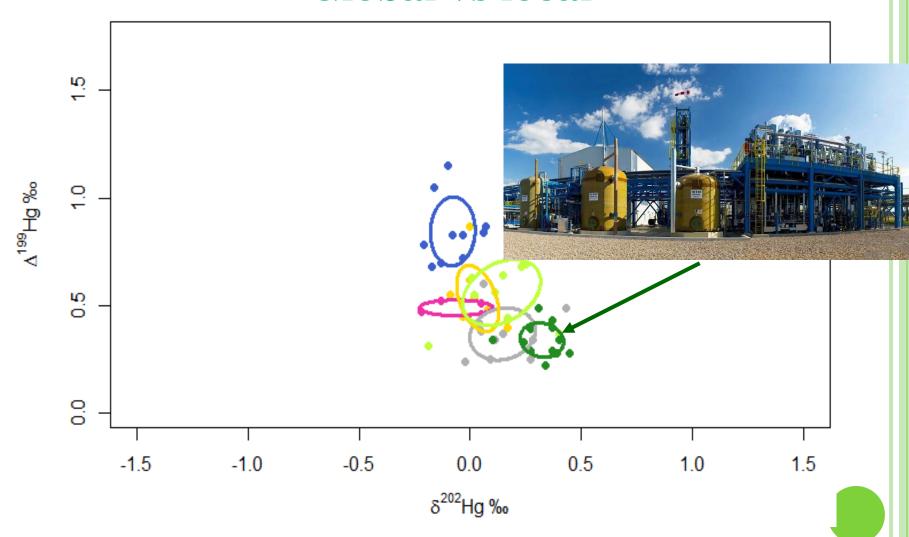
Results

Global vs local



Results

Global vs local



 $Picture\ credit:\ www.leuna-harze.de: chlor-alkali-electrolysis-plant$

Take home message

Hg isotopes:

- discriminate distinct populations
 - > Help investigate Hg sources

Many thanks to my supervisors K. Das, J. Schnitzler, and to David Amouroux, to the lab and to my collegues from Liège and Pau University. This study was funded by FNRS.

Thank you!

Related publication coming very soon...