Building up DeepIso
A global open database of stable isotope ratios and elemental contents for deep-sea ecosystems

Loïc N. Michel, James B. Bell, Stanislas F. Dubois, Gilles Lepoint, Karine Olu, William D. K. Reid, Jozée Sarrazin, Gauthier Schaal & Brian Hayden

What is this about?

Stable isotopes have been instrumental to many key findings about deep-sea ecosystems, but constraining sampling logistics commonly limit the scope, extent and insights drawn from studies.

➔ It is crucial that all generated data are easily discoverable, available and reusable.

DeepIso is a collaborative effort, led by Ifremer, to produce a global open database and to help deep-sea researchers to use stable isotopes at their full efficiency.

More info: loicnmichel.com/deepiso (or scan ▶)

What is the project status?

The database is freely available at doi.org/10.17882/76595 (◀ or scan)

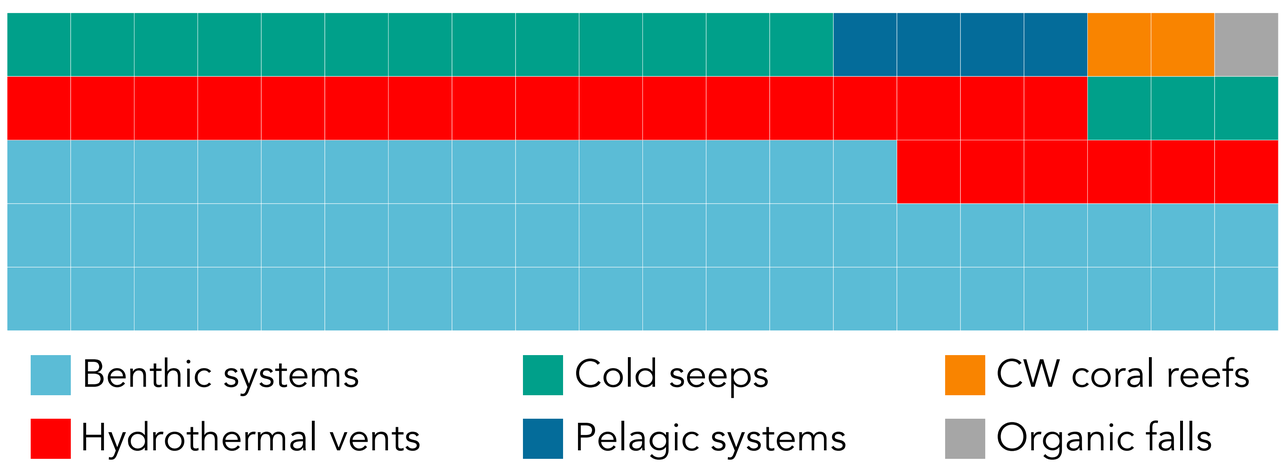

Fig. 2: Ecosystem coverage of the database

So far: 38335 fully documented measurements (Fig. 1) from 7248 samples taken in multiple ecosystems worldwide (Figs. 2,3), between 1985 and 2018. Max. depth: 5338 m. 881 valid taxa (Fig. 4).

We hope that this is just the beginning, and that DeepIso will continue to grow…

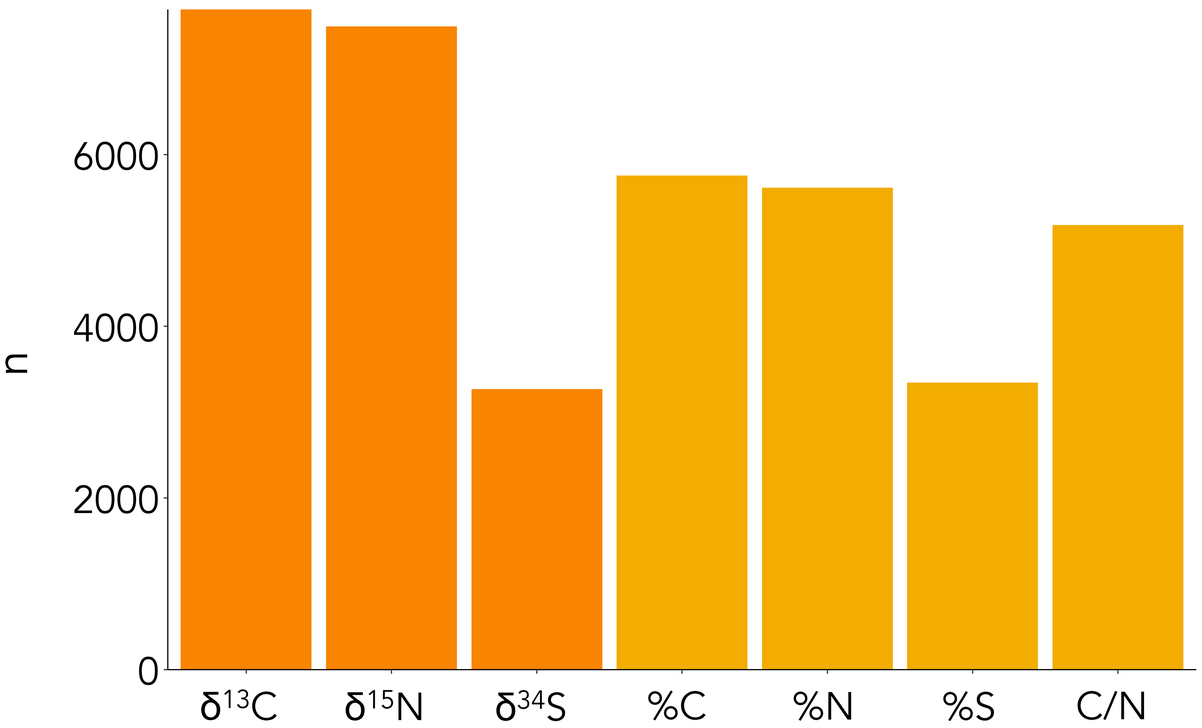

Fig. 1: Number of measurements for each archived parameter

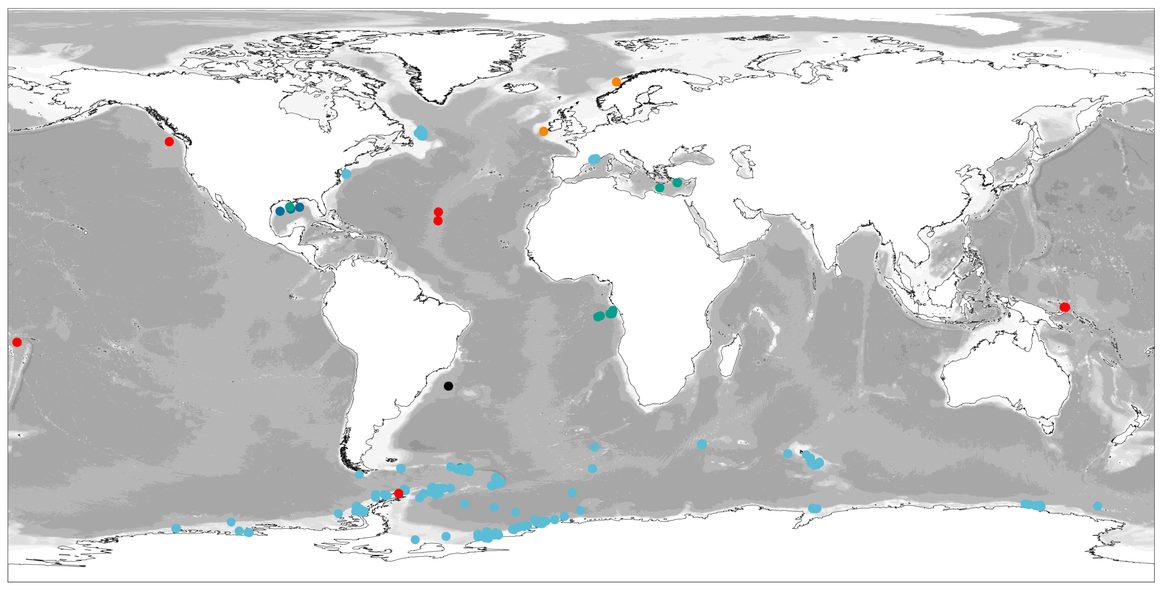

Fig. 3: Map of collected samples

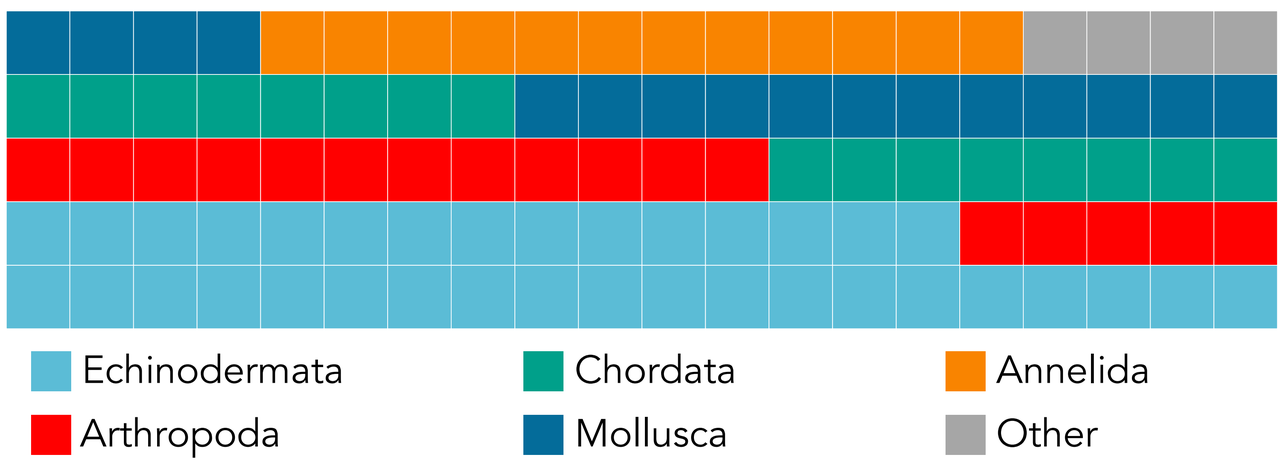

Fig. 4: Taxonomic coverage of the database

How can you contribute?

If you are willing to contribute to DeepIso, or if you have questions or feedback about the database, please get in touch via loicnmichel@gmail.com (or scan ▶)