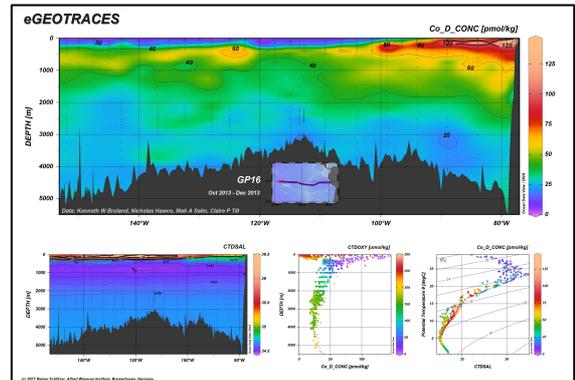
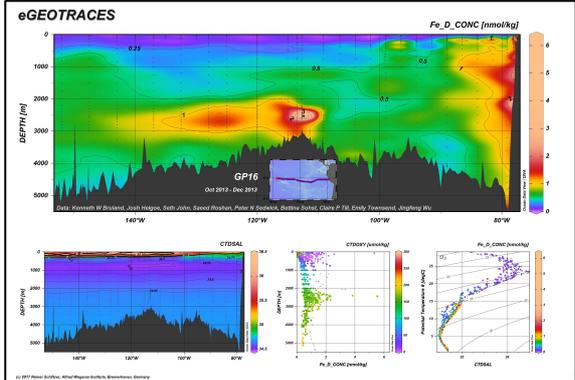


New version of data product!

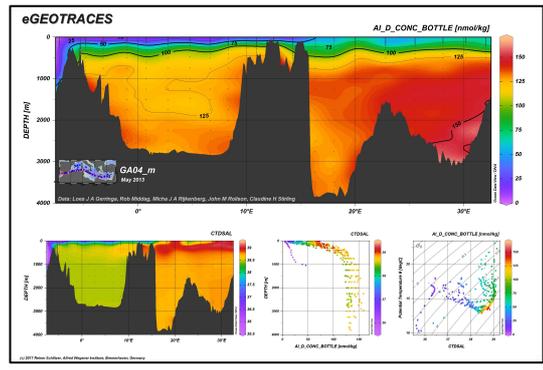


NEW features in oceanic basins not yet documented...

For example, in the Pacific Ocean...



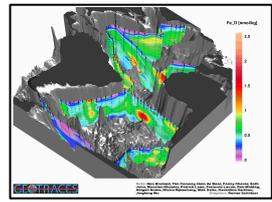
or in the Mediterranean Sea...



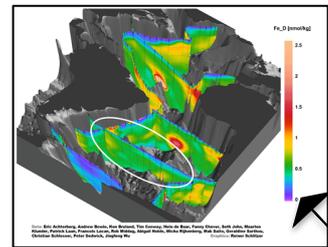
Figures (above)*: These figures compare full-depth distributions of iron (Fe, left) and cobalt (Co, right) along a GEOTRACES section between Peru and Tahiti. Their contrasting distributions reflect strong differences in their internal biogeochemical cycles and show the importance of high-resolution sampling to distinguish small-scale features.

Figure (left)*: Zonal section of the dissolved aluminium (Al) distribution in the Mediterranean Sea, revealing a west-east positive gradient and suggestion of a sediment source.

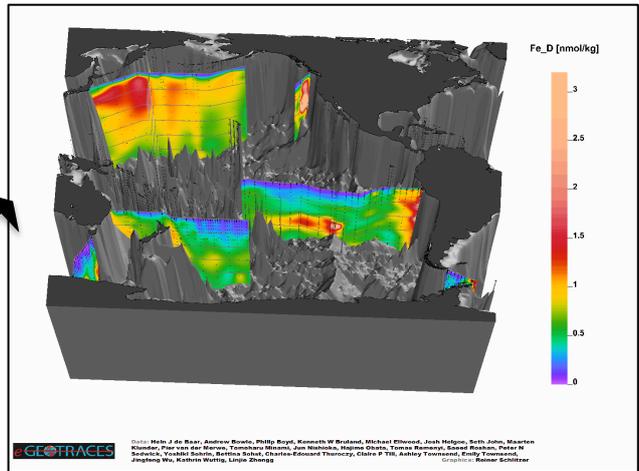
the number of data is increasing!



Data product 2014



Data product 2017



Figures*: 3D scenes showing the distribution of dissolved iron (DFe) in the Atlantic (additional data in data product 2017) and the Pacific. The diversity of hydrothermal iron inputs is identified along Mid Oceanic Ridges in the two basins. Important release of DFe from the sediments are indicated along the African, South American, Asian and Peruvian coasts.

*Note all figures in this page follow the same colour code: warm colours (red, orange, etc.) indicate high concentrations.



New GEOTRACES Intermediate Data Product 2017

GEOTRACES is releasing the **new version** of its intermediate data product (IDP2017) gathering data acquired during the first 6 years of the programme to intensify collaboration within the broader ocean research community but also seeking feedback from the community to help us improve future data products.



The new data product expands on the collection of results from the Atlantic and Arctic Oceans, released in 2014, and adds newer data from the Pacific and Southern Oceans. It contains trace elements that serve as micronutrients, tracers of continental sources to the ocean (e.g., aerosols and boundary exchange), contaminants (e.g., Pb and Hg), radioactive and stable isotopes used in paleoceanography and a broad suite of hydrographic parameters used to trace water masses. In addition, it provides biological data, for the first time.

The Product

The IDP2017 consists of two parts:

- (1) the **digital data** and
- (2) the **eGEOTRACES Electronic Atlas**.

The **digital data** (available at <http://www.bodc.ac.uk/geotraces/data/idp2017/> for bulk data download or <https://webodv.awi.de/geotraces> to download subsets of data) contains hydrographic and biogeochemical data for about 2000 stations from more than 40 cruises. The data product covers the global ocean, data density being the highest in the Atlantic.

Novelty! The new product offers an on-line service that allows selecting and downloading subsets of digital data. This service is available here: <https://webodv.awi.de/geotraces>

Data Access: Users are required to register and agree to usage rules asking for proper citations of the product itself and of the relevant original papers associated with the particular data used. The data are available in 4 formats: ASCII, Microsoft Excel, NetCDF and ODV collections (for use with the popular *Ocean Data View* software, odv.awi.de). A special effort has been made to link information about data originators, original publications and analytical methods with every data value.

The **eGEOTRACES Electronic Atlas** (available at www.egeotraces.org) is based on the digital data package and provides section plots and animated 3D scenes for many of the parameters. The 3D scenes provide geographical context crucial for correctly assessing extent and origin of tracer plumes as well as for inferring processes acting on the tracers and shaping their distribution. The numerous links to other tracers, sections and basins allow quick switching between parameters and domains and facilitate comparative studies. In addition, eGEOTRACES can help in teaching and outreach activities and can also facilitate conveying societally relevant scientific results to interested laymen or decision makers.

Usage: Users select parameters, cruise tracks and ocean basins using list-boxes and interactive maps. eGEOTRACES then presents parameter distributions along the selected sections, or animated 3D scenes showing parameter distributions along all available sections in the selected basin. Section plots and 3D animations contain the names of the scientists who produced or are responsible for the data. Section pages also contain a link to the original publications associated with the given parameter and cruise.

GEOTRACES is an international programme, which aims to understand biogeochemical cycles and large-scale distribution of trace elements and their isotopes in all major ocean basins.

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