



An International Study of the Marine Biogeochemical  
Cycles of Trace Elements and their Isotopes



**International Project Office**

Catherine Jeandel  
Elena Masferrer-Dodas

# GEOTRACES IPO Tasks

1. **Assisting GEOTRACES SSC:** working with co-chairs, representing the project at international meetings, liaising with other projects and sponsors, interacting with GEOTRACES national committees and groups, reports from meetings
2. **Communications/outreach:** including Website, maintenance of mailing lists, capacity building, etc.
3. **Administration/logistics:** fund raising, managing project finances, logistics for meetings
4. **Assisting the GEOTRACES Data Assembly Centre** in securing data and metadata from national field programs, as directed by the SSC

# GEOTRACES IPO Products

- **Outreach:**
  - GEOTRACES Website
  - GEOTRACES Mailing lists
  - GEOTRACES Brochures and other materials (e.g. postcards)
  - GEOTRACES Posters + Roll up banners
  - GEOTRACES eNewsletter + Special Issues
  - GEOTRACES Facebook and Twitter page
  - Outreach Resources Libraries and website
  - GEOTRACES Video
- **Databases:**
  - GEOTRACES Researchers Analytical Expertise
  - GEOTRACES Peer-reviewed Papers and PhD and Master Dissertations
    - GEOTRACES Intermediate Data Product References

## New Products

- IDP2017 References service
- NEW on-line **database** of GEOTRACES Publications
- **Video** introducing the GEOTRACES International Programme
- New special issue eNewsletter – **Discovery digest**

# IDP2017 References service/New Publications Database

**Proposal for building the IDP2017 references service and searchable database submitted to the OMP Data Centre, Toulouse – Approved in April**

**Thanks to:** Guillaume Brissebrat (OMP Data Centre, Toulouse)

## Building a **new live** IDP2017 references service

(Reiner's) IDP2017 info file contains references query which is executed on user-click

The user is directed to the IPO (SEDOO) page showing **ONLY** the results of the query

(e.g. Fe\_D\_CONC\_BOTTLE @ GP16)

The screenshot shows a web browser window with the URL [geotraces-biblio.sedoo.fr/search?campaign=GP16&param=Fe\\_D\\_CONC\\_BOTTLE](http://geotraces-biblio.sedoo.fr/search?campaign=GP16&param=Fe_D_CONC_BOTTLE). The page title is "GEOTRACES References". Below the title, it shows the search criteria: "Cruise: GP16" and "Parameter: Fe\_D\_CONC\_BOTTLE". A blue box indicates "6 publications found." The results are organized by year:

**2017**

- Fitzsimmons, J. N., John, S. G., Marsay, C. M., Hoffman, C. L., Nicholas, S. L., Toner, B. M., German, C. R., & Sherrell, R. M. (2017). Iron persistence in a distal hydrothermal plume supported by dissolved-particulate exchange. *Nature Geoscience*, 10(3), 195–201. doi:10.1038/ngeo2900
- Heller, M. I., Lam, P. J., Moffett, J. W., Till, C. P., Lee, J.-M., Toner, B. M., & Marcus, M. A. (2017). Accumulation of Fe oxyhydroxides in the Peruvian oxygen deficient zone implies non-oxygen dependent Fe oxidation. *Geochimica et Cosmochimica Acta*, 211, 174–193. doi:10.1016/j.gca.2017.05.019
- John, S. G., Helgoe, J., Townsend, E., Weber, T., DeVries, T., Tagliabue, A., Moore, K., Lam, P., Marsay, C. M., & Till, C. (2017). Biogeochemical cycling of Fe and Fe stable isotopes in the Eastern Tropical South Pacific. *Marine Chemistry*. doi:10.1016/j.marchem.2017.06.003
- Sanial, V., Kipp, L. E., Henderson, P. B., van Beek, P., Reyss, J.-L., Hammond, D. E., Hawco, N. J., Saito, M. A., Resing, J. A., Sedwick, P., Moore, W. S., & Charette, M. A. (2017). Radium-228 as a tracer of dissolved trace element inputs from the Peruvian continental margin. *Marine Chemistry*. doi:10.1016/j.marchem.2017.05.008

**2016**

- Boiteau, R. M., Mende, D. R., Hawco, N. J., McIlvin, M. R., Fitzsimmons, J. N., Saito, M. A., Sedwick, P. N., DeLong, E. F., & Repeta, D. J. (2016). Siderophore-based microbial adaptations to iron scarcity across the eastern Pacific Ocean. *Proceedings of the National Academy of Sciences of the United States of America*, 113(50), 14237–14242. doi:10.1073/pnas.1608594113

**2015**

- Resing, J. A., Sedwick, P. N., German, C. R., Jenkins, W. J., Moffett, J. W., Sohst, B. M., & Tagliabue, A. (2015). Basin-scale transport of hydrothermal dissolved metals across the South Pacific Ocean. *Nature*, 523(7559), 200–203. doi:10.1038/nature14577




# On-line database of GEOTRACES publications

**New on-line searchable database** of GEOTRACES Publications (peer-reviewed papers and PhD and Master dissertations):

<http://www.geotraces.org/library-88/scientific-publications/peer-reviewed-papers>

## GEOTRACES References

Simple search Advanced search Parameter search

 Reset

889 publications found.

### 2017

Abadie, C., Lacan, F., Radic, A., Pradoux, C., & Poitrasson, F. (2017). Iron isotopes reveal distinct dissolved iron sources and pathways in the intermediate versus deep Southern Ocean. *Proceedings of the National Academy of Sciences*, 114(5), 858–863. doi:10.1073/pnas.1603107114

Banerji, U. S., Bhushan, R., & Jull, A. J. T. (2017). Mid–late Holocene monsoonal records from the partially active mudflat of Diu Island, southern Saurashtra, Gujarat, western India. *Quaternary International*, 443, 200–210. doi:10.1016/j.quaint.2016.09.060

Bates, S. L., Hendry, K. R., Pryer, H. V., Kinsley, C. W., Pyle, K. M., Woodward, E. M. S., & Horner, T. J. (2017). Barium isotopes reveal role of ocean circulation on barium cycling in the Atlantic. *Geochimica et Cosmochimica Acta*, 204, 286–299. doi:10.1016/j.gca.2017.01.043

Bown, J., Laan, P., Ossebaer, S., Bakker, K., Rozema, P., & de Baar, H. J. W. (2017). Bioactive trace metal time series during Austral summer in Ryder Bay, Western Antarctic Peninsula. *Deep Sea Research Part II: Topical Studies in Oceanography*, 139, 103–119. doi:10.1016/j.dsr2.2016.07.004

Boyd, P. W., Ellwood, M. J., Tagliabue, A., & Twining, B. S. (2017). Biotic and abiotic retention, recycling and remineralization of metals in the ocean. *Nature Geoscience*, 10(3), 167–173. doi:10.1038/ngeo2876

Searchable database ->

Will be announced soon  
through the mailing list:

**Feedback is needed!!!**

# On-line database of GEOTRACES publications

## Simple search

### GEOTRACES References

Simple search Advanced search Parameter search

 Reset

889 publications found.

#### 2017

Abadie, C., Lacan, F., Radic, A., Pradoux, C., & Poitrasson, F. (2017). Iron isotopes reveal distinct dissolved iron sources and pathways in the intermediate versus deep Southern Ocean. *Proceedings of the National Academy of Sciences*, 114(5), 858–863. doi:[10.1073/pnas.1603107114](https://doi.org/10.1073/pnas.1603107114)

Banerji, U. S., Bhushan, R., & Jull, A. J. T. (2017). Mid–late Holocene monsoonal records from the partially active mudflat of Diu Island, southern Saurashtra, Gujarat, western India. *Quaternary International*, 443, 200–210. doi:[10.1016/j.quaint.2016.09.060](https://doi.org/10.1016/j.quaint.2016.09.060)

Bates, S. L., Hendry, K. R., Pryer, H. V., Kinsley, C. W., Pyle, K. M., Woodward, E. M. S., & Horner, T. J. (2017). Barium isotopes reveal role of ocean circulation on barium cycling in the Atlantic. *Geochimica et Cosmochimica Acta*, 204, 286–299. doi:[10.1016/j.gca.2017.01.043](https://doi.org/10.1016/j.gca.2017.01.043)

Bown, J., Laan, P., Ossebaar, S., Bakker, K., Rozema, P., & de Baar, H. J. W. (2017). Bioactive trace metal time series during Austral summer in Ryder Bay, Western Antarctic Peninsula. *Deep Sea Research Part II: Topical Studies in Oceanography*, 139, 103–119. doi:[10.1016/j.dsr2.2016.07.004](https://doi.org/10.1016/j.dsr2.2016.07.004)

Boyd, P. W., Ellwood, M. J., Tagliabue, A., & Twining, B. S. (2017). Biotic and abiotic retention, recycling and remineralization of metals in the ocean. *Nature Geoscience*, 10(3), 167–173. doi:[10.1038/ngeo2876](https://doi.org/10.1038/ngeo2876)



# On-line database of GEOTRACES publications

## Advanced search

### GEOTRACES References

[Simple search](#)[Advanced search](#)[Parameter search](#)

-- Document type --

-- Cruise --

Min year Max year 

Q

Reset

889 publications found.

2017


Abadie, C., Lacan, F., Radic, A., Pradoux, C., & Poitrasson, F. (2017). Iron isotopes reveal distinct dissolved iron sources and pathways in the intermediate versus deep Southern Ocean. *Proceedings of the National Academy of Sciences*, 114(5), 858–863. doi:[10.1073/pnas.1603107114](https://doi.org/10.1073/pnas.1603107114)

Banerji, U. S., Bhushan, R., & Jull, A. J. T. (2017). Mid–late Holocene monsoonal records from the partially active mudflat of Diu Island, southern Saurashtra, Gujarat, western India. *Quaternary International*, 443, 200–210. doi:[10.1016/j.quaint.2016.09.060](https://doi.org/10.1016/j.quaint.2016.09.060)

Bates, S. L., Hendry, K. R., Pryer, H. V., Kinsley, C. W., Pyle, K. M., Woodward, E. M. S., & Horner, T. J. (2017). Barium isotopes reveal role of ocean circulation on barium cycling in the Atlantic. *Geochimica et Cosmochimica Acta*, 204, 286–299. doi:[10.1016/j.gca.2017.01.043](https://doi.org/10.1016/j.gca.2017.01.043)

Bown, J., Laan, P., Ossebaer, S., Bakker, K., Rozema, P., & de Baar, H. J. W. (2017). Bioactive trace metal time series during Austral summer in Ryder Bay, Western Antarctic Peninsula. *Deep Sea Research Part II: Topical Studies in Oceanography*, 139, 103–119. doi:[10.1016/j.dsr2.2016.07.004](https://doi.org/10.1016/j.dsr2.2016.07.004)

Boyd, P. W., Ellwood, M. J., Tagliabue, A., & Twining, B. S. (2017). Biotic and abiotic retention, recycling and remineralization of metals in the ocean. *Nature Geoscience*, 10(3), 167–173. doi:[10.1038/ngeo2876](https://doi.org/10.1038/ngeo2876)

The logo for GEOTRACES, featuring the word "GEOTRACES" in a bold, blue, sans-serif font. A red line, resembling a stylized heartbeat or a path, runs through the center of the letters, with a small globe icon integrated into the letter "O".

# On-line database of GEOTRACES publications

## Parameter search

Feedback  
welcome!!!


### GEOTRACES References

[Simple search](#) [Advanced search](#) [Parameter search](#)

-- KEYWORD --

-- SUBGROUP --

-- PARAMETER --



*Please, note that the parameter search box tool will only list those publications included in the GEOTRACES Intermediate Data Product.*

889 publications found.

#### 2017

Abadie, C., Lacan, F., Radic, A., Pradoux, C., & Poitrasson, F. (2017). Iron isotopes reveal distinct dissolved iron sources and pathways in the intermediate versus deep Southern Ocean. *Proceedings of the National Academy of Sciences*, 114(5), 858–863. doi:[10.1073/pnas.1603107114](https://doi.org/10.1073/pnas.1603107114)

Banerji, U. S., Bhushan, R., & Jull, A. J. T. (2017). Mid–late Holocene monsoonal records from the partially active mudflat of Diu Island, southern Saurashtra, Gujarat, western India. *Quaternary International*, 443, 200–210. doi:[10.1016/j.quaint.2016.09.060](https://doi.org/10.1016/j.quaint.2016.09.060)

Bates, S. L., Hendry, K. R., Pryer, H. V., Kinsley, C. W., Pyle, K. M., Woodward, E. M. S., & Horner, T. J. (2017). Barium isotopes reveal role of ocean circulation on barium cycling in the Atlantic. *Geochimica et Cosmochimica Acta*, 204, 286–299. doi:[10.1016/j.gca.2017.01.043](https://doi.org/10.1016/j.gca.2017.01.043)

Bown, J., Laan, P., Ossebaar, S., Bakker, K., Rozema, P., & de Baar, H. J. W. (2017). Bioactive trace metal time series during Austral summer in Ryder Bay, Western Antarctic Peninsula. *Deep Sea Research Part II: Topical Studies in Oceanography*, 139, 103–119. doi:[10.1016/j.dsr2.2016.07.004](https://doi.org/10.1016/j.dsr2.2016.07.004)

# On-line database of GEOTRACES publications/IDP references

- Updated **EVERY WEEK!**
  - Those publications including "**GEOTRACES**" in either the title, abstract or **keywords** are directly collected by the IPO and included in the database –  
*Issue - I need to know the IDP2017 parameter to link it with the data!!!*
  - Please inform the IPO of any new publication related to data included in the IDP2017. Please include the IDP2017 parameter name if you know it.
- > Also, PLEASE remind:
- \*your colleagues about the need to include “GEOTRACES”...!
  - \*your students to send the URL of their PhD/Master dissertation!

# Video presenting the GEOTRACES Programme

All what you need to know about GEOTRACES (to be presented soon!)



Original idea of Ed Urban. Filmed in Toulouse (during the SSC meeting).  
English/French (editing and subtitles IPO).

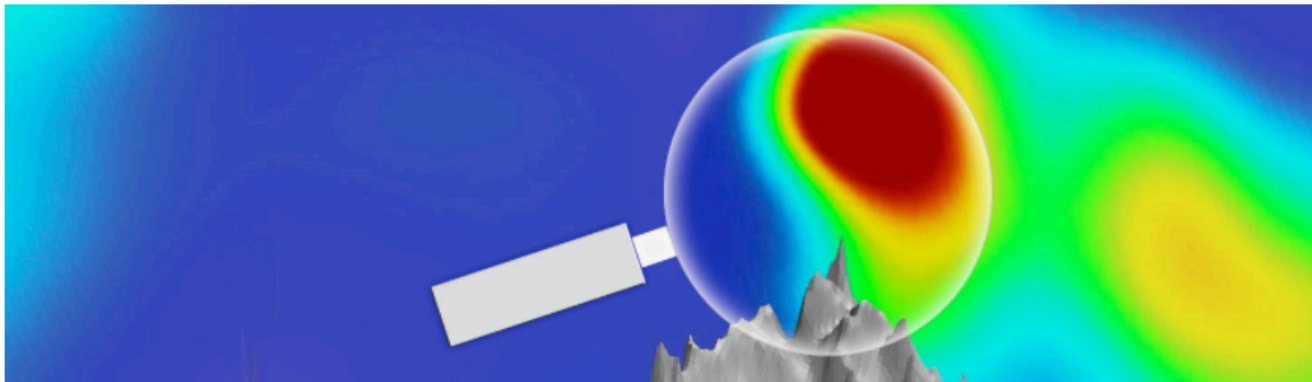
**Thanks to:** Jean-Hugues Barbary (camera and video editing) and Jean François Hait (scenario and reporting)

# Discovery Digest – New type of eNewsletter Special Issue

Designed to highlight the progress in a given GEOTRACES-relevant topic

Distributed on 31st March 2017 – Very positive feedback received

**1452** hits (coming from the e-mail)





# IDP2017 release

## Organizing IDP2017 launch event at Goldschmidt

**Communicating** the IDP2017 release to the GEOTRACES Community, stakeholders, press (Goldschmidt press officer – New Scientist),...

- Brochure, eNewsletter, ad-hoc announcements...





## Ressources SSC – login in – GEOTRACES site

A menu devoted to SSC members is available on the GEOTRACES site (need to log in). This includes:

- **Lecture and presentations (ppt files)**

<http://www.geotraces.org/library-88/resources-ssc/lectures>

>>Includes lectures and general GEOTRACES Presentations made at international meetings or conferences that you can use on your presentations

**Lectures developed using the GEOTRACES data are valuable outreach activity that could be shared with the broader oceanographic community**

**PLEASE SEND THEM TO US!**

# REMINDER: We need your contribution

## Inform us about:

Outreach materials

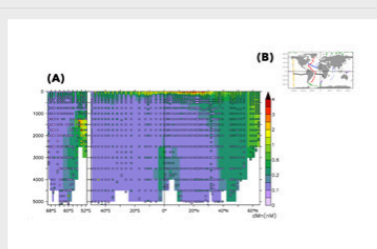
GEOTRACES-related national activities

Cruise information

Science Highlights: **135** published (**30** since last SSC)

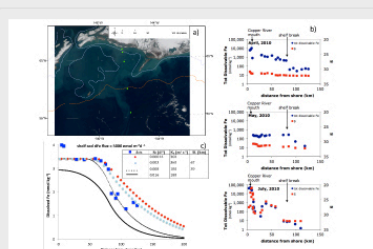
### SCIENCE HIGHLIGHTS

DEFAULT TITLE DATE RANDOM



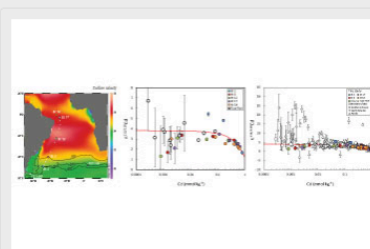
Manganese in the west Atlantic Ocean in the context of the first global ocean circulation model of manganese

[Read More](#)



Shelf sediment dissolved iron source via non-reductive dissolution in the Gulf of Alaska

[Read More](#)



Surprising cadmium isotope results north of the Subantarctic Front in the South West Atlantic Ocean

[Read More](#)

[LOAD ALL](#)

# GEOTRACES Researchers Analytical Expertise Database

**Need update!?**

*e.g. include a link to their publications and intercalibration participations on the web form – Request from S&I  
Update parameter names?*

- **138** researchers registered
  - To **facilitate search** when an analytical expertise is needed
  - To allow to show « **who does what** » in the Programme
- **On-line form to register available** on the GEOTRACES Web site
- **S&I Committee validates** each new registration before the data is published on the site

# GEOTRACES media

## GEOTRACES Website:

Frequency of updating has increased considerably!!!

2600 sessions/month (average)

## GEOTRACES Mailing list:

1022 subscribers

## GEOTRACES eNewsletter:

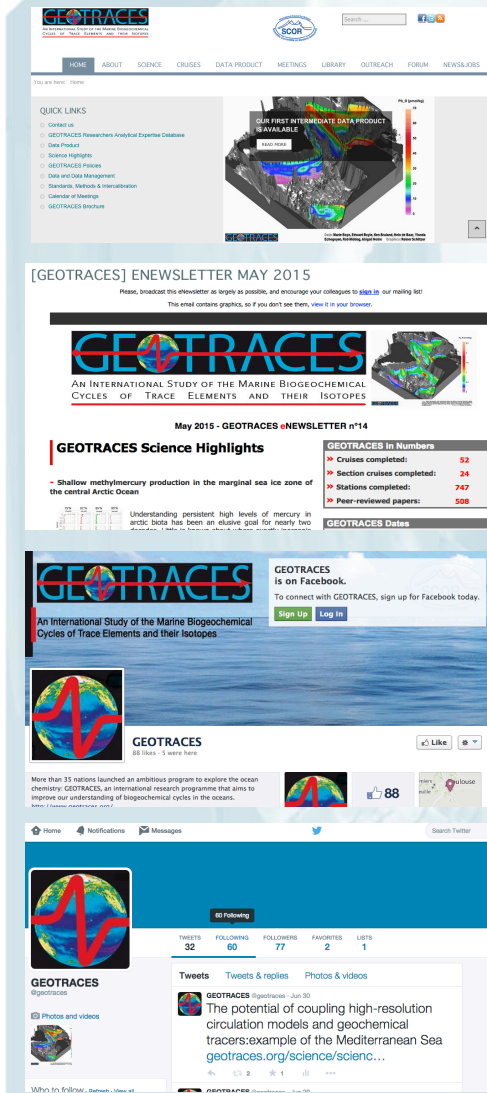
26 issues (5 new + 1 sp issue)

## GEOTRACES Facebook:

390 likes/397 followers/3,2k reach

## GEOTRACES Twitter:

544 followers



# THANK YOU FOR YOUR ATTENTION ...



# GEOTRACES Web site: Statistics

- **Some statistics** (September 2016 to September 2017):
  - **Total sessions:** 31.393 → 2.616 sessions/month
  - **Absolute Unique Visitors:** 17.523
  - **Pageviews:** 76. 302