

Intercalibration Procedures required for GEOTRACES Cruises without Crossover Stations and recommended for cruises with crossover stations

These actions are required by all data generators/analysts affiliated with GEOTRACES Cruises before data are considered intercalibrated and can be part of GEOTRACES data products. Exceptions to these policies require approval of the GEOTRACES Standards and Intercalibration Committee.

1. Cruises without a crossover station are required to sample at least 3 depths in replicate at 2 different stations, at least for all key parameters (defined in Table 2 of the GEOTRACES Science Plan), and samples from these intercalibration depths must be distributed to at least one other laboratory for TEI determinations. Where two labs share the analyses for a parameter on a cruise, this requirement can be satisfied by alternating samples between labs. Exceptions to this requirement can be made if an alternative method to demonstrate intercalibration can be provided and approved by the Standards and Intercalibration Committee. Replicate sampling is recommended for other parameters as well.
2. The primary analysts for each TEI(s) should arrange for other independent laboratories to conduct the analyses of replicate samples. The database of analysts maintained on the GEOTRACES web site (<http://www.geotraces.org/science/geotraces-researchers-analytical-expertise-database>) provides information about qualified analysts.
3. Examine replicate data taking into account (i) Certified Reference Materials (CRM's) data for the two labs involved (e.g. SAFe and /or GEOTRACES, GoShip protocols for nutrient CRMs) and (ii) the use of isotope double spikes where appropriate.
4. Log onto GEOTRACES DOoR (<https://geotraces-portal.sedoo.fr/pi/>) and download the intercalibration report template which includes a unique dataset ID(s) which will be used to identify and track each dataset through the intercalibration and data submission process
5. This report will guide you through the process and an example template is available here: <http://www.geotraces.org/sic/intercalibrate-data/intercal-report>

Please note that all intercalibration must be submitted using the GEOTRACES DOoR.

The Standards & Intercalibration (S&I) Committee [will review](#) your report and contact you in case they have questions or if revisions are needed. Please respond to all e-mails from the S&I committee so that it is aware of progress with intercalibration.

As soon as your report has been approved by the S&I committee an approval notification e-mail will be sent to you. In this e-mail you will be requested to give permission for your data to be released as part of IDP 2021 using GEOTRACES DOoR. Please note you do not have to release your data as part of IDP2021.