

US GEOTRACES Report

Bob Anderson - US GEOTRACES Project Office

GEOTRACES SSC Meeting

Bremerhaven, Germany

2 - 4 October 2013



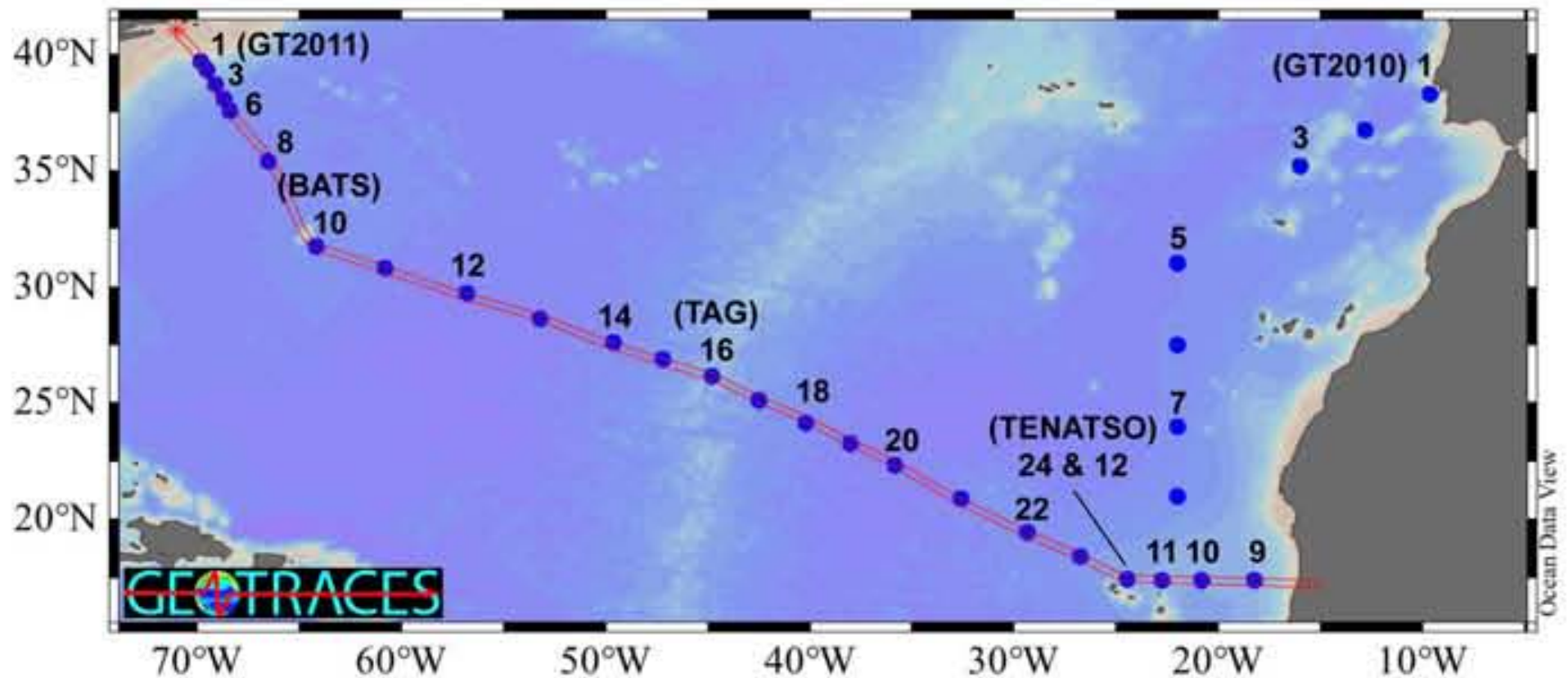
US GEOTRACES

Major events of the past year

- 1) Atlantic GA03 (Boyle, Jenkins, Cutter) data synthesis workshop (Norfolk VA) - 11-15 March 2013.
- 2) Atlantic manuscripts being submitted for DSR-II.
- 3) Arctic management proposal declined.
- 4) Pacific GP16 cruise (Moffett, German, Cutter) logistics workshop (Woods Hole) - 24-26 April, 2013
- 5) Chemical Oceanography Gordon Conference - 4-9 August 2013; Jim Moffett, Chair, Featuring GEOTRACES-related research (Chemical Geography of the Sea)
- 6) Arctic management proposal (Kadko, Landing, Cutter) resubmitted (15 August; decision expected in December)
- 7) Pacific Cruise (GP16) - Oct-Dec 2013; Loading ship next week

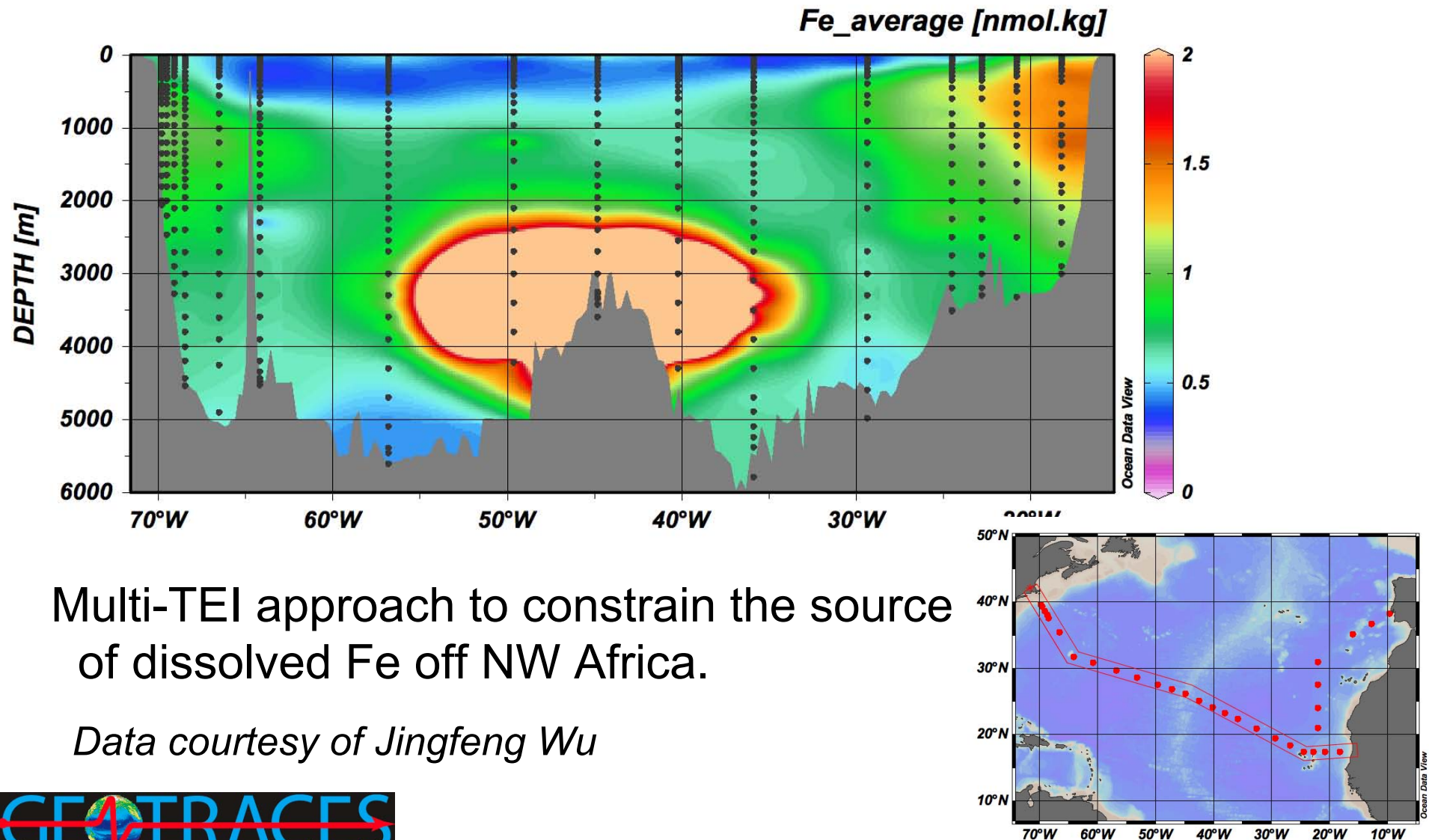


US GEOTRACES - GA03



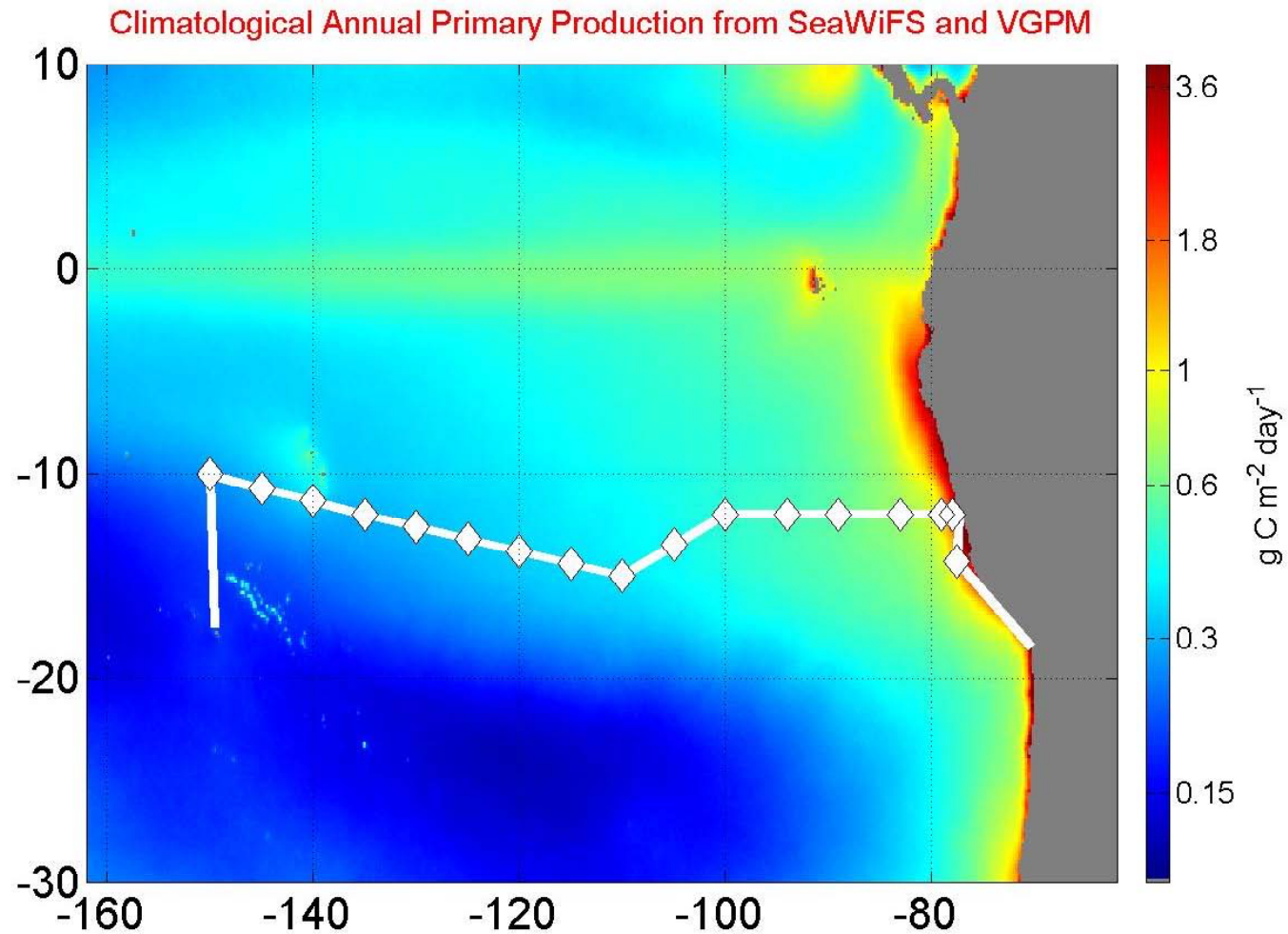
US GEOTRACES GA03 Data Synthesis

Source of Fe in eastern section?



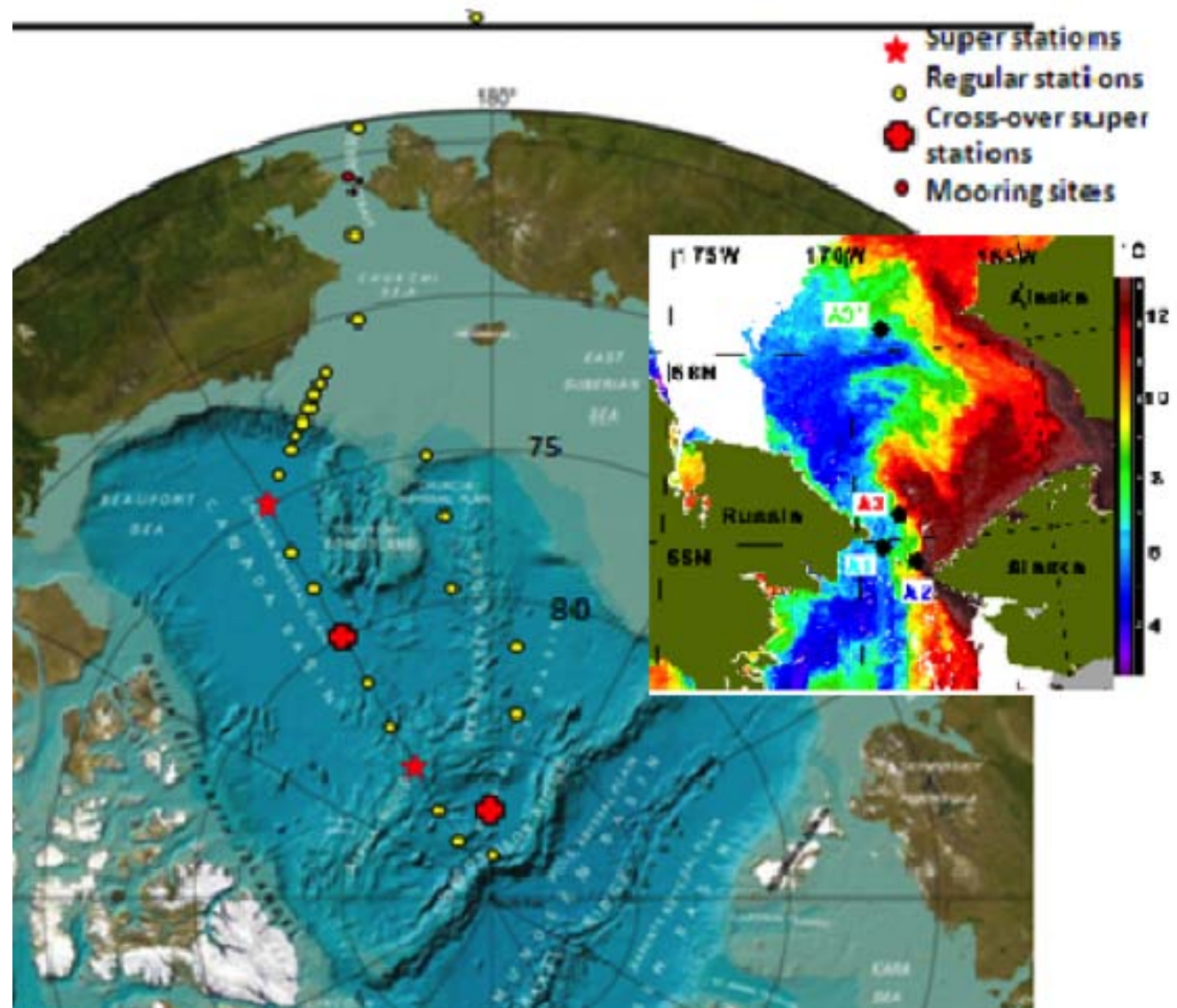
US GEOTRACES - GP16

Planned October - December 2013



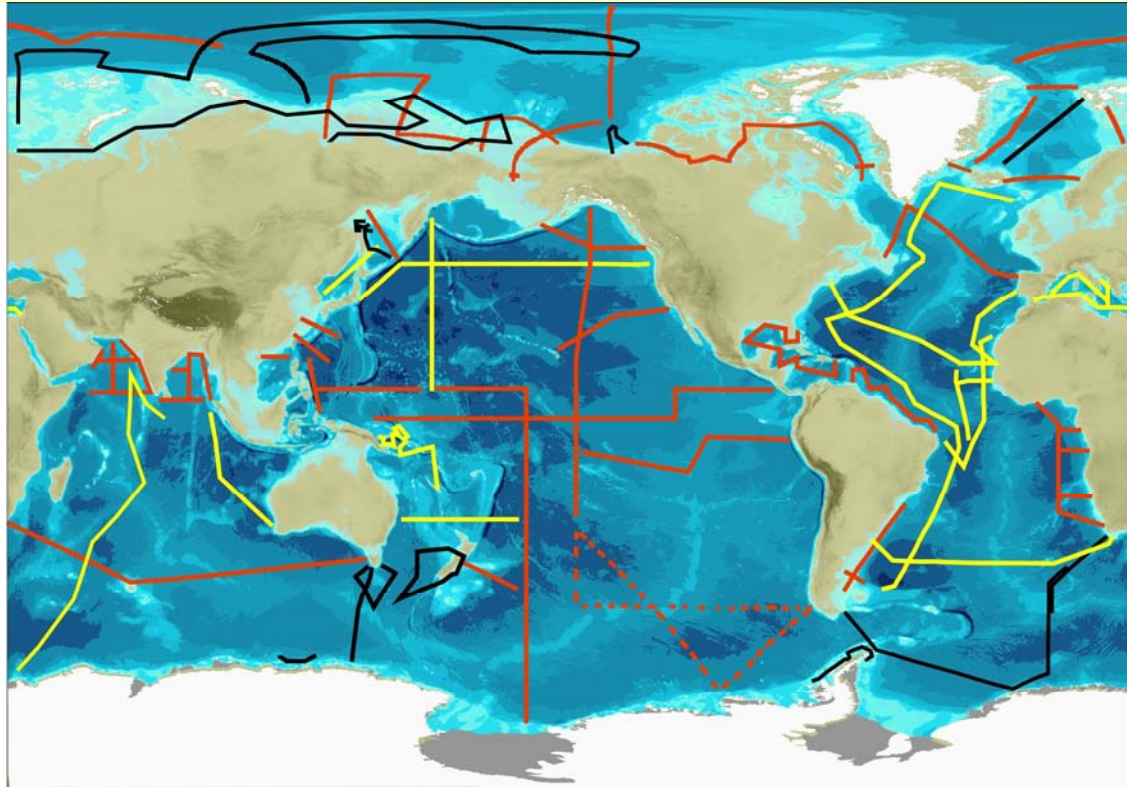
Proposed Arctic cruise track for 2015

Includes Bering Strait choke point.



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Long-range plans



The US GEOTRACES SSC has approved:

2017: Alaska - Tahiti (GP15)

2019: Tahiti - Antactica (GP17)

Contingent on funding



US GEOTRACES Publications 2012-2013

- Baskaran, M., Church, T., Hong, G., Kumar, A., Qiang, M., Choi, H., Rigaud, S. and Maiti, K., 2013. Effects of flow rates and composition of the filter, and decay/ingrowth correction factors involved with the determination of in situ particulate ^{210}Po and ^{210}Pb in seawater. *Limnology and Oceanography: Methods*, 11: 126-138.
- Bishop, J.K.B., Lam, P.J. and Wood, T.J., 2012. Getting good particles: Accurate sampling of particles by large volume in-situ filtration. *Limnology and Oceanography: Methods*, 10: 681-710.
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- Buck, C.S. and Paytan, A., 2012. Evaluation of commonly used filter substrates for the measurement of aerosol trace element solubility. *Limnology and Oceanography: Methods*, 10: 790-806.
- Church, T., Rigaud, S., Baskaran, M., Kumar, A., Friedrich, J., Masque, P., Puigcorb , V., Kim, G., Radakovitch, O. and Hong, G., 2012. Intercalibration studies of ^{210}Po and ^{210}Pb in dissolved and particulate seawater samples. *Limnology and Oceanography: Methods*, 10: 776-789.
- Henderson, P.B., Morris, P.J., Moore, W.S. and Charette, M.A., 2012. Methodological advances for measuring low-level radium isotopes in seawater. *Journal of Radioanalytical and Nuclear Chemistry*, 296(1): 357-362.
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- Morton, P.L., Landing, W.M., Hsu, S.-C., Milne, A., Aguilar-Islas, A.M., Baker, A.R., Bowie, A.R., Buck, C.S., Gao, Y. and Gichuki, S., 2013. Methods for the sampling and analysis of marine aerosols: results from the 2008 GEOTRACES aerosol intercalibration experiment. *Limnology and Oceanography: Methods*, 11: 62-78.
- Sharma, M., Chen, C. and Blazina, T., 2012. Osmium contamination of seawater samples stored in polyethylene bottles. *Limnology and Oceanography: Methods*, 10: 618-630.
- Twining, B.S. and Baines, S.B., 2013. The Trace Metal Composition of Marine Phytoplankton. *Annual Review of Marine Science*, 5(1): 191-215.
- Twining, B.S., Baines, S.B., Vogt, S. and Nelson, D.M., 2012. Role of diatoms in nickel biogeochemistry in the ocean. *Global Biogeochemical Cycles*, 26(4): GB4001 doi:10.1029/2011GB004233.