



National Centre for Polar & Ocean Research
(Ministry of Earth Sciences, Govt. of India)
Headland Sada, Vasco-da-Gama, Goa - 403 804.



Invites Nominations from Scientists/Researchers for forthcoming IODP expeditions

IODP-India invites nominations in a prescribed format along with detailed bio-data and research experience, from geoscientists/researchers working in established national institutions/organizations and universities, to participate in the forthcoming International Ocean Discovery Program (IODP) expeditions; **Expedition 390: (South Atlantic Transect 1 and Expedition 393: (South Atlantic Transect 2)**. NCPOR will provide the requisite financial support to the selected candidates towards their participation in the said expedition. However, it will be the responsibility of the candidates to obtain the necessary Visas / permissions from the countries of embarkation and disembarkation on their own. A scientific plan is mandatory for a successful nomination.

Further details and format can be obtained at www.ncaor.gov.in or by email to iodp.india@ncaor.gov.in

Last date by which IODP- India/NCPOR receives nominations for expeditions 390 and 393 : 1st August, 2019.

For and on behalf of NCPOR
Group Director (IODP-India)

Complete nominations may kindly be emailed to iodp.india@ncaor.gov.in

Information on forthcoming IODP Expedition:

Expedition 390: (South Atlantic Transect 1): 5 October to 5 December 2020

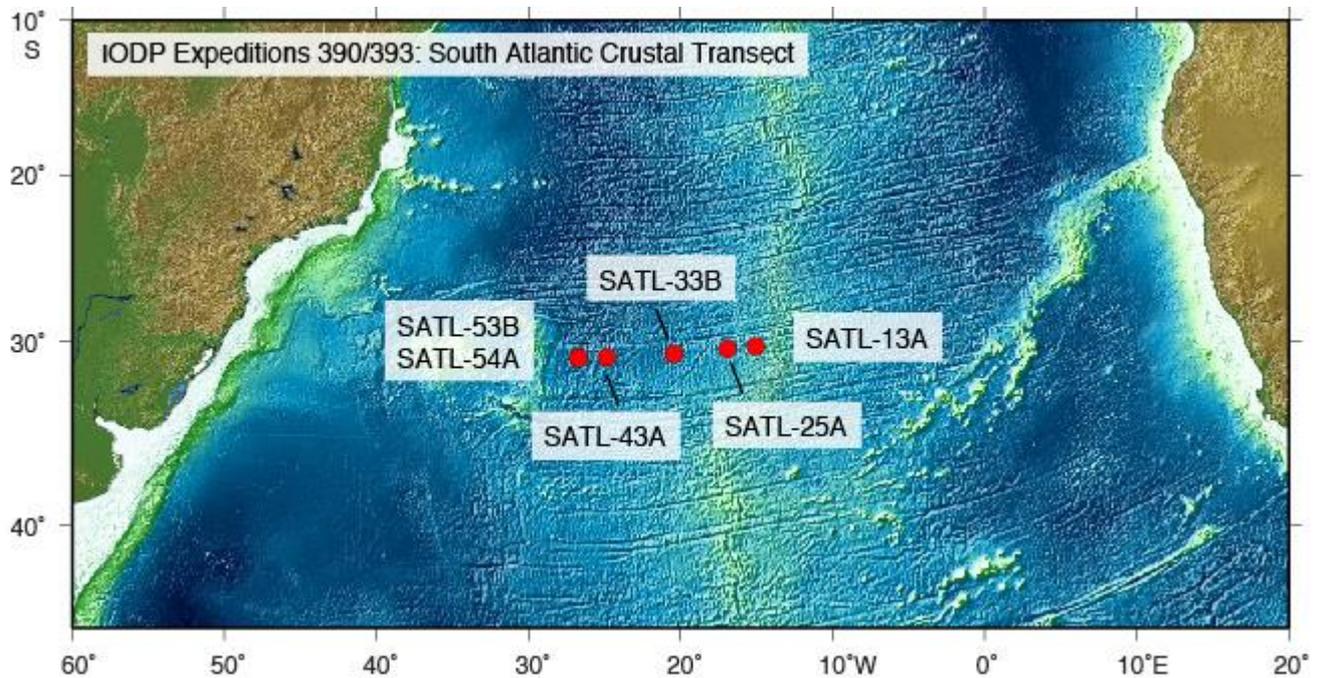
Expedition 393: (South Atlantic Transect 2): 6 April to 6 June 2021

South Atlantic Transect Expeditions 390 and 393 (based on IODP Proposals 853-Full2 and 853-Add) are a multidisciplinary and joint scientific ocean drilling project that aims to recover complete sedimentary sections and ~200 m of oceanic crust along a crustal age transect at ~31°S across the South Atlantic Ocean to:

(1) investigate the history of low-temperature hydrothermal interactions between the aging ocean crust and the evolving South Atlantic Ocean; (2) quantify past hydrothermal contributions to global geochemical cycles; (3) investigate sediment and basement-hosted microbial community variation with substrate composition and age in the low energy South Atlantic Gyre seafloor biosphere; and (4) investigate the responses of Atlantic Ocean circulation patterns and the Earth's climate system to rapid climate change, including elevated CO₂ during the Cenozoic.

The South Atlantic Transect expeditions will target six primary sites on 7, 15, 31, 48, and 63 Ma ocean crust. The proposed transect, which follows a Mid-Atlantic Ridge crustal flow-line, will fill critical gaps in our sampling of intact in-situ ocean crust with regards to crustal age, spreading rate, and sediment thickness. The transect traverses the previously unexplored sediment- and basalt-hosted deep biosphere beneath the South Atlantic gyre, samples of which are essential to refine global biomass estimates and investigate microbial ecosystems' responses to variable conditions in a low energy gyre and aging ocean crust. The transect is located near World Ocean Circulation Experiment (WOCE) line A10, providing

access to records of carbonate chemistry and deep-water mass properties across the western South Atlantic through key Cenozoic intervals of elevated atmospheric CO₂ and rapid climate change. Reconstruction of the history of the deep western boundary current and deep-water formation in the Atlantic basins will yield crucial data to test hypotheses regarding the role of evolving thermohaline circulation patterns in climate change, and the effects of tectonic gateways and climate on ocean acidification.



Important Notes:

1. For more information on IODP Expedition 390 and 393 please visit www.iodp.org and use the link iodp.tamu.edu/scienceops/
2. Applications in prescribed format available on the website www.ncaor.gov.in shall be considered.
3. **Last date by which IODP- India/ NCPOR receives nominations for expeditions 390 and 393: 1st August, 2019.**
4. A scientific plan is mandatory for a successful nomination. Once nominated candidates will have to submit a detailed science plan along with sample data request which may also form a basis for collaborative research programs between their host organization and NCPOR.