

Argo and the Antarctic Treaty System

A Guide to Environmental Compliance for Float Deployments

It is important for Principal Investigator's (PIs) to give particular consideration to the environmental implications of deploying Argo floats in the Southern Ocean, south of 60°S. PIs should be aware of the required mandatory environmental compliance with the Antarctic Treaty System and its subsequent conventions to ensure that "Antarctica shall continue for ever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord" and "freedom of scientific investigation in Antarctica and cooperating to the that end... shall continue".

The Antarctic Treaty is an international agreement signed on 1 December 1959 originally by 12 counties: Argentina, Australia, Belgium, Chile, French Republic, Japan, New Zealand, Norway, South Africa, Russia, UK and USA, now acceded by 52 counties. These parties consult on Antarctic matters with a commitment to ensure Antarctica is used for peaceful purpose, alongside addition provisions such as freedom to conduct scientific research and promote international scientific cooperation. The Treaty is supplemented by additional agreements, which have been adopted at the Antarctic Treaty Consultative Meetings for ratification by signed parties into national law. These include:

- Convention on the Conservation of Antarctic Marine Living Resources (London, 1972)
- Convention for the Conservation of Antarctic Seals (Canberra, 1980)
- Protocol on Environmental Protection to the Antarctic Treaty (Madrid, 1991)

The Protocol on Environment Protection was signed on the 4 October 1991 and was initially created because of increased pressure for mining activities on the continent, highlighting the need for environmental legislation to protect the Antarctic environment. There are six annexes to be adopted by signed parties' national law:

- Annex I: Environmental Impact Assessment
- Annex II: Conservation of Antarctic Flora and Fauna
- Annex III: Waste Disposal and Management
- Annex IV: Prevention of Marine Pollution
- Annex V: Area Protection and Management
- Annex VI: Liability Arising from Environmental Emergencies

How does the Protocol on Environmental Protection affect the Argo community?

Article (3) and (8) of the Protocol state that all proposed activities in Antarctica are subject to prior assessment by national authorities. An Initial Environment Evaluation (IEE) is required to determine if the proposed deployments have a "less than minor or transitory impact".

Each country has their own method for an IEE for Antarctic activities; therefore, PIs are *advised to* contact their national environmental regulatory body for further advice.

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Usually an IEE will involve submitting a form for review by the national authority, where it will be expected to provide information such as:

- Define the proposed activity
- Outline the deployment locations
- Identify and evaluate environmental impacts
- Consideration of alternatives to the proposed activity

If the national authority conclude there is a "less than minor or transitory impact", the activity can then proceed. Approval provided by the Environmental Regulatory Body must be retained as PIs may be asked to provide proof of evidence from other national regulatory bodies, if deploying on other nations research vessels or opportunistic passage vessels.

If an IEE concludes, the activity is to have "more than a minor or transitory impact" then the state has to initiate a Comprehensive Environmental Evaluation (CEE), to be submitted to the Antarctic Treaty Consultative Meeting for review. It is highly unlikely this will be the case for Argo float deployments.

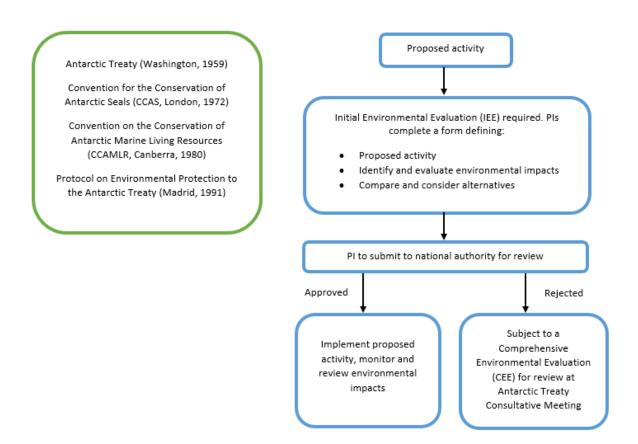


Figure 1: Summary of Environmental Assessment Process, adapted from Final Report of ATCM Final Report of 39th Antarctic Treaty Consultative Meeting.