**15 years of Argo – the importance of observing the interior ocean**

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More than 90% of the excess energy entering the climate system goes into the ocean. Due to the large heat capacity of the ocean as compared to the atmosphere, small changes in this percentage can induce large changes in the atmosphere. Therefore, a good knowledge of ocean heat content variations is essential to understand climate variability and change. However, in the ocean the heat is out of sight of most observing systems. Satellites only see the upper millimetre or so of the ocean, and ship-board measurements are expensive and consequently sparse. The situation changed in 2000, when the Argo program started. Argo floats are autonomous devices that drift freely in the ocean. Every ten days, they actively move up and down through the water column down to a depth of 2 km and measure vertical profiles of temperature and salinity. Presently, nearly 4000 of these floats are active, providing a wealth of data from all parts of the ocean, including those that are hard to reach by ship like the Southern Ocean.

The vast amount of data gathered since 2000 has greatly improved our knowledge of the ocean. It is possible to derive closed heat and sea level budgets for the ocean, revealing, e.g., that the excess heat has mainly been stored in the Southern Ocean. Investigating the drift of the floats it has been possible to derive flow patterns in the ocean interior that would be hard or even impossible to obtain by other means.

As technology improves it becomes possible to widen the scope of Argo measurements. It is becoming possible to go deeper than 2 km, and sensor development makes it possible to equip Argo floats with bio-geochemical sensors (e.g., O2, chlorophyll, pH). The latter development will make it possible to investigate the interplay between physical and biological processes in the ocean.