



From HMS Challenger to Argo and Beyond: Ocean Profile Data; their History, Uses and Future Prospects

Wednesday 21 November 2018, 11:00 - 17:00

National Oceanography Centre, University of Southampton, European Way, Southampton, Hampshire, SO14 3ZH

Knowledge of the temperature and salinity of the oceans is fundamental to our understanding of their internal dynamics and is increasingly important to a wide range of ocean and climate applications. This meeting will show how our ability to collect, process and collate these observations has developed up to the present day with the information from about 3,800 Argo profilers provides global-scale, high-quality information throughout the year.

The meeting will then show how these individual profiles are assembled into products and how those products are used in a wide range of applications, including climate change studies. To conclude, the meeting will first explore the international framework within which these data are collected and co-ordinated. Finally it will look towards the future, discussing how the collection of ocean profile data is expected to expand to other parameters and using new observing systems.

We plan that there will be opportunities to see Argo floats being prepared for deployment, together with the wide range of NOC's ocean gliders and autonomous vehicles that will be an integral part of the future of ocean profiling.

While focused on the scientific aspects of ocean profiles, the meeting will highlight key points in the development over the past 140 years of our present-day capabilities.

TIME	TITLE	SPEAKER
10:30	Registration, Tea and Coffee	-
11:00	Introduction	Prof C K Folland
11:10	From thermometers to robots - evolution and revolution	W J Gould
11:40	Argo - How it came about, how it works, what it delivers	Dr B King
12:10	How good are past and present ocean profile data?	Dr V Gouretski
12:40	Lunch	-
13:40	Making a data product from ocean profiles – the EN4 experience.	Dr R Killick
14:10	How ocean profile products are used – climate change applications.	Dr M Palmer
14:40	The use and impact of Argo products in seasonal - to - decadal prediction.	Dr L Hermanson
15:10	Refreshments	-
15:30	Global Coordination of Ocean Observations: Progress, challenges and opportunities	K Hill
16:00	Beyond Argo: ocean gliders and sensors on seals	Prof K Heywood
16:30	Wrap-up discussion and time to explore what the Challenger Soc. and RMets might do to promote the coverage of marine science history	-

If you're posting on Twitter about this meeting, please use **#RMetsMeet**

This meeting is part of the Royal Meteorological Society National Meetings programme, open to all, from expert to enthusiast, for topical discussions on the latest advances in weather and climate. Non-members are welcome to attend these meetings.