

19 January 2010

***The Breathing Ocean***  
**Finale event for UK Surface Ocean – Lower Atmosphere Study**  
**Tuesday 23 March 2010, 10.30 – 16.00**  
**Met Office, FitzRoy Road, Exeter EX1 3PB**

Dear Colleague

Please find enclosed an invitation to “The Breathing Ocean”, the finale event of the NERC Surface Ocean – Lower Atmosphere Study (UK SOLAS). This meeting will present the latest research in a key area of Earth system science: how the sea and sky are connected by chemical, physical and biological processes.

Such connections between ocean and atmosphere play a crucial role in determining marine productivity, air quality and the global climate. The UK SOLAS community has investigated these processes with the Met Office and other national and international partners, through a five year, £11M research programme that is now nearing completion.

You are invited to discuss the programme’s exciting and important findings with leading researchers, and public and private sector stakeholders. Topics covered at the event include:

- The role of ocean-derived aerosols in the global climate system
- New insights from the new SOLAS observatory at Cape Verde
- Sea surface state and CO<sub>2</sub> exchange
- Atmospheric controls of productivity in the tropical North Atlantic
- How microbes at the sea-surface affect air-sea exchanges
- Production and fate of marine biogases

The programme for the day is overleaf and the location of the Met Office is shown on the enclosed invitation card. There is no attendance fee but prior registration is essential, through [www.nerc.ac.uk/events](http://www.nerc.ac.uk/events) by **17 March**. Places are limited and early registration is therefore recommended.

I would be delighted if you could attend and look forward to seeing you.

Yours faithfully



**Dr Philip Newton**  
*Director, Science Delivery*

Please address queries on the finale event to Rebecca Farncombe, Events Manager at [rem@nerc.ac.uk](mailto:rem@nerc.ac.uk), 01793 411568. For information on associated technical workshops, to be held on 22 March, please contact Chris Adams [Christopher.adams@uea.ac.uk](mailto:Christopher.adams@uea.ac.uk) 01603 591628.

## The Breathing Ocean: UK SOLAS finale event – 23 March 2010

### Programme (talk titles provisional)

- 10:30 Coffee/tea and registration
- 11:00 Welcome  
*Met Office; Howard Cattle, UK SOLAS Chair*
- 11:10 Introduction to the Surface Ocean – Lower Atmosphere Study (SOLAS)  
*Peter Liss, University of East Anglia*
- 11:25 Marine aerosol dynamics and their climatic implications: a modelling approach  
*Ken Carslaw, Leeds University*
- 11:45 Coffee/tea
- 12:05 Achievements of the Cape Verde observatory; the first three years  
*Lucy Carpenter, York University*
- 12:25 Sea surface state and CO<sub>2</sub> fluxes  
*Rob Upstill-Goddard, Newcastle University*
- 12:45 Lunch
- 13:45 Ocean-atmosphere interactions in global climate models  
*Olivier Boucher, Met Office*
- 14:05 The microbiology of the sea surface microlayer  
*Michael Cunliffe, University of Warwick/Marine Biological Association*
- 14:25 Tea/coffee
- 14:45 Atmospheric impacts on productivity in the tropical north east Atlantic  
*Eric Achterberg, National Oceanography Centre, Southampton*
- 15:05 Production and fate of marine biogases  
*Phil Nightingale, Plymouth Marine Laboratory*
- 15:25 Conclusions and future directions; general discussion
- 16:00 Close

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**Note:** Information on travel to the Met Office at [www.metoffice.gov.uk/corporate/location/exeter.html](http://www.metoffice.gov.uk/corporate/location/exeter.html). From London Paddington, rail departures at 06.45 and 07.30 are scheduled to arrive Exeter St Davids at 09.43 and 10.12 respectively. From there take taxi or H1 bus, the latter leaving station at 09.46 and 10.16, arriving Met Office at 10.18 and 10.48. For return, H1 bus from Met Office departs 16.05 and 16.35, arriving Exeter St Davids at 16.43 and 17.13. London Paddington trains are at 17.02 and 17.23, arriving 19.24 and 20.32.