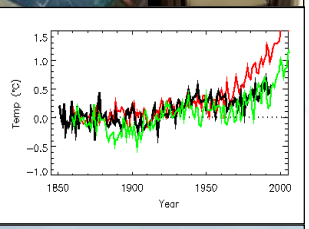




UK SOLAS

NATURAL ENVIRONMENT RESEARCH COUNCIL

The UK Surface Ocean – Lower Atmosphere Study

A Natural Environmental Research Council (NERC) directed programme

The overall aim of UK SOLAS is to advance understanding of environmentally significant interactions between the atmosphere and ocean, focusing on material exchanges that involve ocean productivity, atmospheric composition and climate.

If you have any queries regarding UK SOLAS please contact the Science Coordination Team:

Dr Phil Williamson and Dr Claire Hughes

School of Environmental Sciences

University of East Anglia

Norwich, NR4 7TJ, UK

Tel: +44 (0)1603 59 3111 or 59 1530

E-mail: p.williamson@uea.ac.uk

claire.hughes@uea.ac.uk

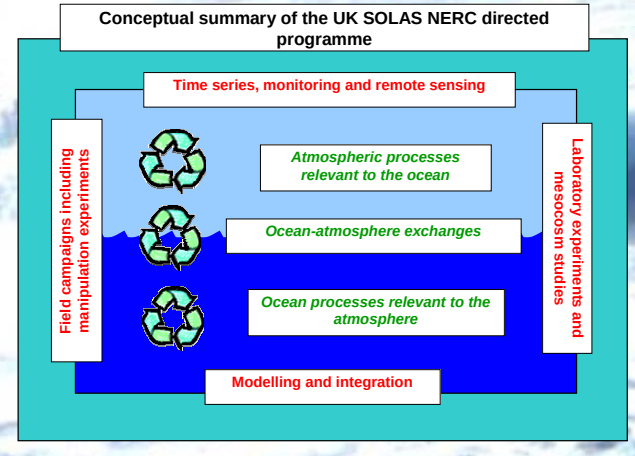
INTRODUCTION

This poster provides information on the main UK contribution to international SOLAS – the NERC directed programme funded at £12.1m over the period 2004-2009. The Science Plan for the UK SOLAS programme and other information is available at:

www.nerc.ac.uk/funding/thematics/solas

Other SOLAS-relevant activities carried out by UK researchers but not funded by the NERC programme can also be formally recognised as part of the international effort. To register other SOLAS-relevant research please contact the Science Coordination Team (contact details above) or the International SOLAS Office at www.uea.ac.uk/env/solas.

Conceptual summary of the UK SOLAS NERC directed programme



SCHEDULE

2004

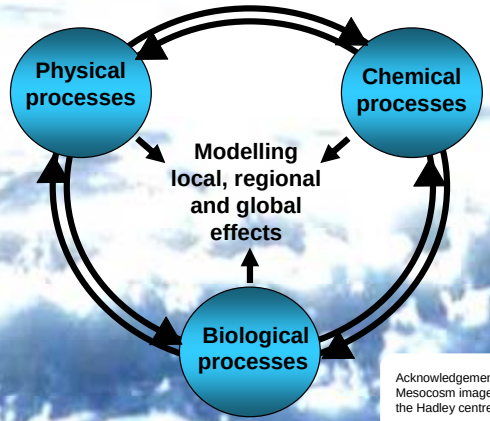
JUN	First funding round announced
AUG	Deadline for submission of project outlines
NOV	Deadline for submission of full bids (30 project outlines currently being developed as full bids)

2005

MAR	Funding decisions
MAY-OCT	Expected start of component UK SOLAS science projects

The second programme funding round is expected to take place in 2006.

MULTI-DISCIPLINARY APPROACH



GOALS

To advance our quantitative understanding of the mechanisms that control the rates of air-sea exchanges of gases, dust, nutrients, aerosols and solar radiation, and to use this information to improve estimates of air-sea exchanges.

To evaluate how these exchanges impact the chemistry of the marine atmospheric boundary layer, the biogeochemistry of the ocean mixed layer, and feedbacks between the ocean and the atmosphere.

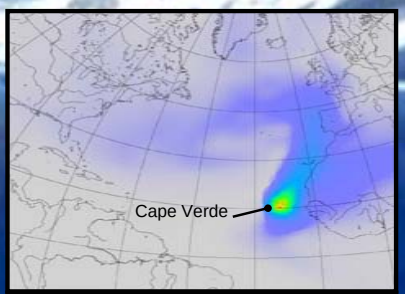
To quantify the implications of these boundary-layer processes on the global climate system through developing improved predictive modelling capabilities.

Subscribe to the UK SOLAS mailing list at:
www.uea.ac.uk/mailman/listinfo/uk-solas-academic

UK SOLAS Observatory

As one of its activities UK SOLAS proposes to establish a marine/ atmospheric observatory in the North Atlantic. The proposed facility will provide a regional focal point and long-term data context for relatively short-term UK SOLAS campaigns, experiments and process studies.

The suggested location for the Observatory – Cape Verde – is subject to influences from both atmospheric dust depositions and the Mauritanian Upwelling.



Air mass trajectory for Cape Verde showing influence from West African (and hence desert dusts) and the Mauritanian Upwelling.

(from the German-SOLAS proposal)

Acknowledgements: Images supplied by Louise Darroch (UEA), Maike Schmidt (Alfred Wegener Institut, Bremerhaven) and Martin Johnson (UEA). Mesocosm image is the facility at the Espeland Marine Biological Station, Bergen, Norway (www.amap.no/envinet/site.cfm?SiteID=7). Model output from the Hadley centre web-site (www.meto.gov.uk/research/hadleycentre). Observatory image shows the Weybourne Observatory, North Norfolk.