## SOLAS

SOLAS (Surface Ocean -Lower Atmosphere Study) is a new international research initiative that has as its goal:

To achieve quantitative understanding of the key biogeochemical-physical interactions and feedbacks between the ocean and the atmosphere, and of how this coupled system affects and is affected by climate and environmental change.

Achievement of this goal is important in order to understand and quantify the



role that ocean-atmosphere interactions play in the regulation of climate and global change.

The domain of SOLAS is focussed on processes at the air-sea interface and includes a natural emphasis on the atmospheric and upper-ocean boundary layers, while recognising that some of the processes to be studied will, of necessity, be linked to significantly greater height and depth scales.

SOLAS research covers all ocean areas including coastal seas and ice-covered areas. A fundamental characteristic of SOLAS is that the research is not only interdisciplinary, but also involves closely coupled studies requiring marine and atmospheric scientists to work together. Such research will require a shift in attitude within the academic and funding communities, both of which are generally organised on a medium-by-medium basis in most countries.

SOLAS deals with 3 issues or foci, namely:

- Focus 1: Biogeochemical Interactions and Feedbacks Between Ocean and Atmosphere
- Focus 2: Exchange Processes at the Air-Sea Interface and the Role of Transport and Transformation in the Atmospheric and Oceanic Boundary Layers
- Focus 3: Air-Sea Flux of CO<sub>2</sub> and Other Long-Lived Radiatively Active Gases

More details on the science of SOLAS can be found in the Science Plan and Implementation Strategy, available at www.solas-int.org

SOLAS is based on national and trans-national research programmes and currently has activity in 23 countries around the world. It also runs educational and community-building events like the biennial summer schools and open science conferences. The work of SOLAS is led by a Scientific Steering Committee (Chaired by Professor Peter Liss) and is implemented by the SOLAS International Project Office, based at the University of East Anglia, Norwich, UK







