

In preparation of the SCOR Coordination Meeting, Venice, 23-24 September 2004

IMAGES (International Marine Global Change Study)

Marine program of IGBP-PAGES, affiliated to SCOR in 1995)

IMAGES (International Marine Global Change Study) is a core program of Past Global Changes (PAGES), a core project of the International Geosphere-Biosphere Programme (IGBP), and is affiliated with SCOR. IMAGES was initiated to respond to the challenge of understanding the mechanisms and consequences of climatic changes using oceanic sedimentary records. The overriding IMAGES science issue is to quantify climate and chemical variability of the ocean on time scales of oceanic and cryospheric processes; to determine its sensitivity to identified internal and external forcings, and to determine its role in controlling atmospheric CO₂. In order to achieve these scientific objectives, IMAGES proposes to coordinate a global program to collect and study marine sediment records to address three fundamental questions:

1. How have changes in surface ocean properties controlled the evolution of global heat transfer through the deep and surface ocean and thereby modified climate?
2. How have changes in ocean circulation, ocean chemistry, and biological activity interacted to generate the observed record of atmospheric pCO₂ over the past 300 kyr?
3. How closely has continental climate linked to ocean surface and deep-water properties?

IMAGES accomplishes these objectives through (1) the planning and coordination of oceanic cruises to retrieve and exploit in international collaboration giant sediment cores from long, continuous time series in high sedimentation rate areas of the ocean, and (2) the support of symposia, working groups and their workshops.

IMAGES Administration

The program has a permanent office hosted at the University of Bremen in Germany. Our budget covers, in addition to the day to day expenses of the office:

- Full-time salary for a data manager.
- Six months of salary per year for an Assistant Director
- Funding or co-funding (with SCOR and PAGES, mainly) of working group meetings and symposia
- Support for training of young scientists (participation to symposia and oceanic cruises)

Chair

William B. Curry
Woods Hole Oceanographic Institution
Woods Hole, MA 02543
USA

IMAGES Office

Ralph Schneider, Executive Director
Fachbereich Geowissenschaften
Universitaet Bremen
28359 Bremen, Germany

Membership

26 countries with national consortia of university or governmental research institutes as well as represented by a single institute only are members and 23 of them contribute to the budget

F. Abrantes	PORTUGAL	H. Kawahata	JAPAN
J. Backman	SWEDEN	K.L. Knudsen	DENMARK
H. Neil	NEW ZEALAND	D. Kroon	NETHERLANDS
M.T. Chen	TAIWAN	J. Lee-Thorp	SOUTH AFRICA
J. Eriksson	ICELAND	C. Lange	CHILE
J.A. Flores	SPAIN	M.L. Machain-Castillo	MEXICO
F. Florindo	ITALY	A. Mackensen	GERMANY
B. Flower	USA	B. Manighetti	NEW ZEALAND
J. Grimalt	SPAIN	B. Opdyke	AUSTRALIA
F. Grousset	FRANCE	V. Ramaswamy	INDIA
W. Hantoro	INDONESIA	E. Rohling	UK
J.C. Herguera	MEXICO	J. Rogers	SOUTH AFRICA
C. Hillarie-Marcel	CANADA	A. Mackensen	GERMANY
E. Ivanova	RUSSIA	J. Sopaheluwakan	INDONESIA
E. Jansen	NORWAY	T. Stocker	SWITZERLAND
N. Kallel	TUNISIA	Z. Jian	CHINA

Data Archiving and Synthesis

Archiving of IMAGES data, including shipboard and laboratory data has been continued effectively. A new bibliography has been installed on the IMAGES website, which is in service with all recent information concerning our activities (workshops, past and future cruises, database).

Working Groups

IMAGES supports the activity of several IMAGES and SCOR-IMAGES. There are currently seven active Working Groups, whose main task is to coordinate the acquisition of cores and laboratory data in key areas. Two new SCOR/IMAGES WG on the “**Reconstruction of Past Ocean Circulation (PACE)**” (SCOR 123) and on the “**Present Oceanic Processes and Paleorecords (LINKS)**” (SCOR 124) were installed in 2004. IMAGES has financially supported the first meetings of the new WG’s in 2004. The other active working groups comprise:

- *EPILOG: Re-evaluation of the LGM conditions*
- *Southern Ocean*
- *Icesheet-Ocean Interaction*
- *Holocene Climate Variability*
- *PEPD: Past Equatorial Pacific Dynamics*

A complete list of all former and still active working groups and their workshop reports can be found on the IMAGES website.