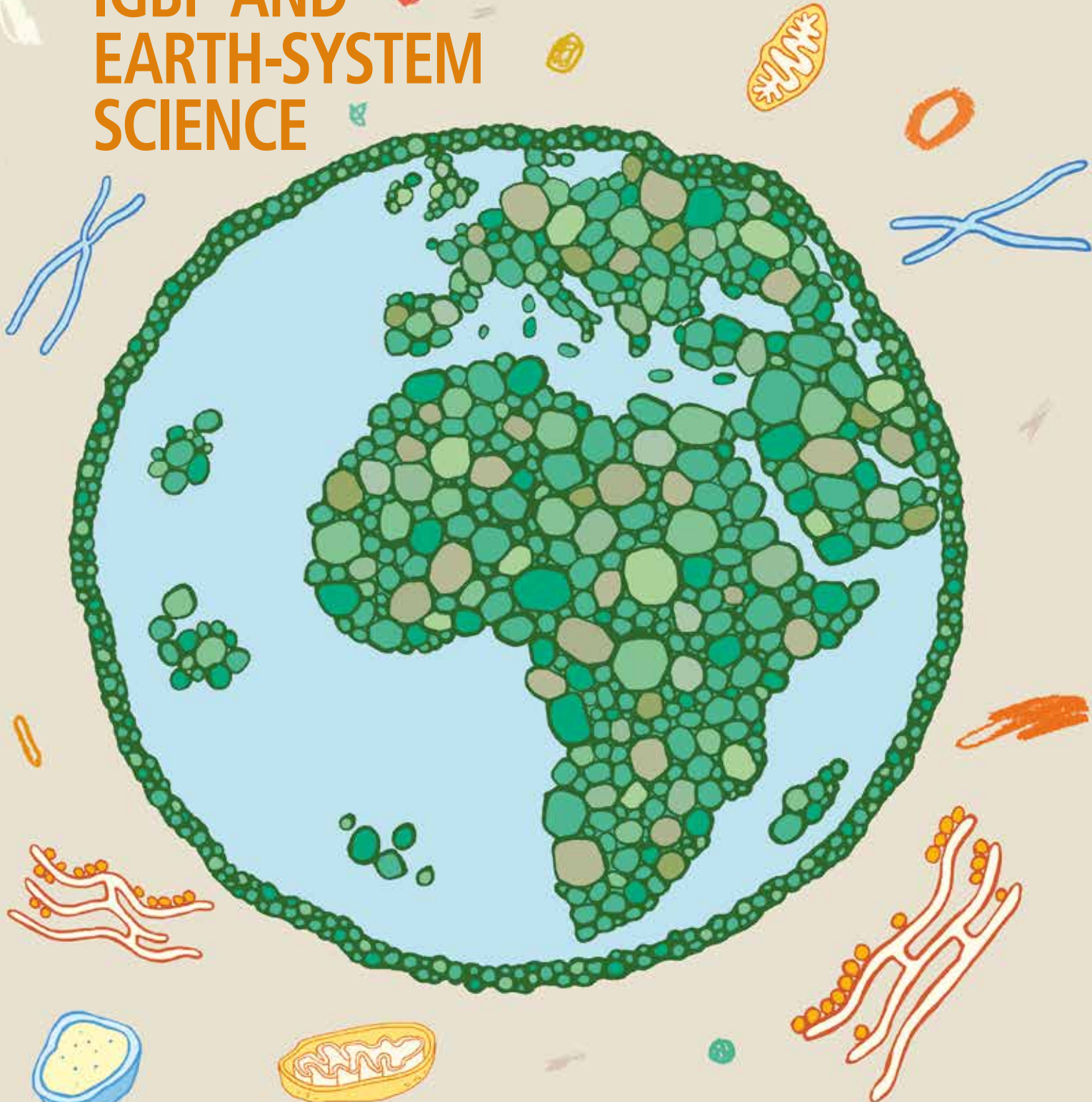


# Global Change

International Geosphere-Biosphere Programme Issue 84 ■ November 2015

## IGBP AND EARTH-SYSTEM SCIENCE



## Cover image

The Earth system crystallised as an object of inquiry in the early 1980s. IGBP was set up to focus on the interactive physical, chemical and biological processes that regulate this system as well as the influence of human actions. Here the system is represented as a cell under a microscope. The elements surrounding the cell could be creatively interpreted as the various Earth-observation satellites that have been crucial to IGBP research over the decades.

Cover Illustration: ©Brian Cairns • www.briancairns.com

## REGULARS

- 3** Editorial: Sybil Seitzinger and James Syvitski
- 4** Editorial: Ninad Bondre
- 6** News

## INFOGRAPHICS

- 18** Timeline of global-change research
- 28** IGBP by numbers

## FEATURE

- 8** Reflections on Earth-system science  
Former chairs and executive directors reflect on IGBP's contributions to the discipline and the way ahead.
- 14** Growing with IGBP  
Pauline Dube speaks about her longstanding relationship with the programme.
- 20** Engaging policy: IGBP's three-decade legacy  
On the programme's interaction with and contributions to various policy processes.
- 24** IGBP and Earth observation: a co-evolution  
Jack Kaye and Cat Downy on the close and productive interaction between IGBP and Earth-observation agencies.
- 30** A personal note on IGBP and the social sciences  
João Morais on the history of social-science engagement.
- 32** Towards Future Earth: evolution or revolution?  
IGBP's institutional and scientific history may offer some lessons for Future Earth..

*Global Change* has primarily published research and opinion from within the extensive IGBP network.

Published by:  
IGBP Secretariat,  
The Royal Swedish Academy of Sciences,  
Box 50005, SE-104 05, Stockholm, SWEDEN

*Global Change* Issue 84 is the final issue of the magazine to be published by IGBP.

ISSN 0284-5865

Editor: Ninad Bondre  
ninad.bondre@igbp.kva.se

Graphic Designer: Hilarie Cutler  
hilarie@igbp.kva.se

Production Manager: Naomi Lubick  
nlubick@nasw.org

Printed by Bergs Grafiska, Sweden





**IGBP core and joint projects and activities 1987-2015**

Joint Global Ocean Flux Study (JGOFS) 1989-2003

Biosphere Aspects of the Hydrological Cycle (BAHC) 1990-2003

Global Change and Terrestrial Ecosystems (GCTE) 1990-2003

International Global Atmospheric Chemistry (IGAC) 1990-

Past Global Changes (PAGES) 1991-

Data and Information Systems (DIS) 1993-2001

Global Analysis Integration and Modelling (GAIM) 1993-2004

Land-Ocean Interactions in the Coastal Zone (LOICZ) 1993-

Global Ocean Ecosystem Dynamics (GLOBEC) 1995-2010

Land Use and Cover Change (LUCC) 1995-2005

Global Carbon Project (GCP) 2001-

International Nitrogen Initiative (INI) 2003-

Integrated Land Ecosystem-Atmosphere Processes Study (ILEAPS) 2004-

Surface Ocean-Lower Atmosphere Study (SOLAS) 2004-

Analysis, Integration and Modelling of the Earth System (AIMES) 2005-

Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) 2005-

Global Land Project (GLP) 2006-

Global Water System Project (GWSP) 2004-

**Future Earth**

Global-change research continues with Future Earth,  
a ten-year international research initiative.  
See [futureearth.org](http://futureearth.org) for more information.

