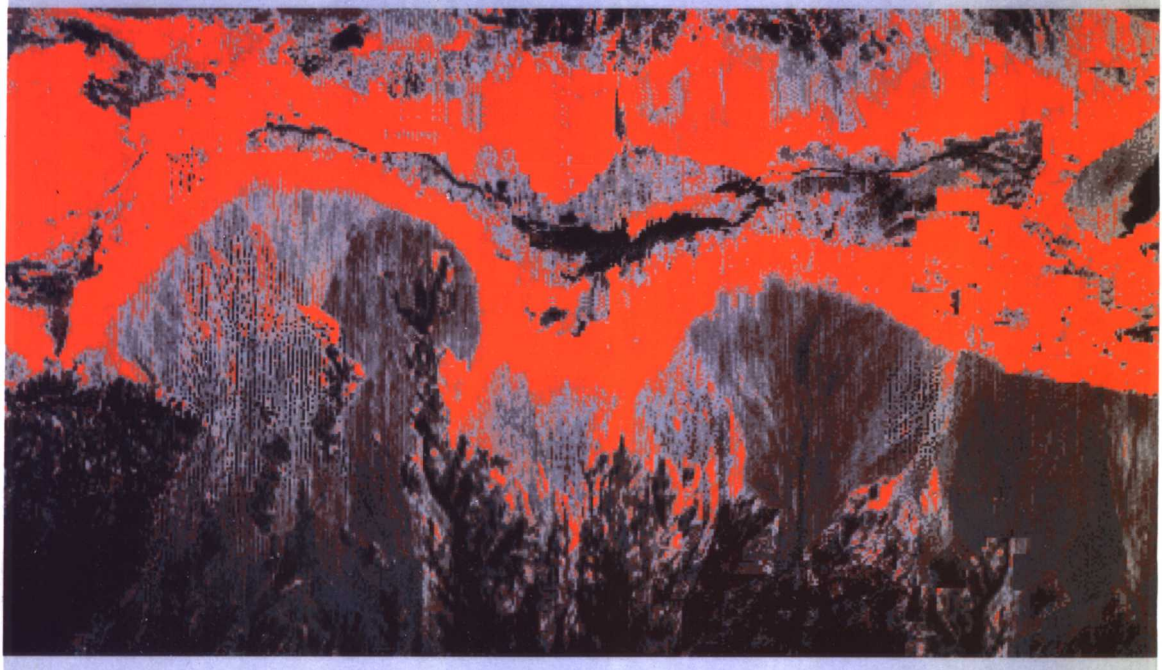

ENVIRONMENTAL MODELLING WITH GIS AND REMOTE SENSING

EDITED BY ANDREW SKIDMORE

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Edited by Andrew Skidmore

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Preface

This book is the summary of lectures presented at a short course entitled "Environmental Modelling and GIS" at the International Institute for Aerospace Survey (ITC), The Netherlands. Previous books on environmental modelling and GIS are detailed in Chapter 1. This book aims to bring the literature up to date, as well as provide new perspectives on developments in environmental modelling from a GIS viewpoint.

Environmental modelling remains a daunting task – decision makers, politicians and the general public demand faster and more detailed analyses of environmental problems and processes, and clamour for scientists to provide solutions to these problems. For GIS users and modellers, the problems are multi-faceted, ranging from access to data, data quality, developing and applying models, as well as institutional and staffing issues. These topics are covered within the book. But the main emphasis of the book is on environmental models; a good overview of currently available data, models and approaches is provided.

There is always difficulty in developing a coherent book from submitted chapters. We have tried to ensure coherence through authors refereeing each other's chapters, by cross-references, by indexing, and finally by editorial input. Ultimately, it was not possible to rewrite every chapter into a similar style – it would destroy the unique contribution of authors of each chapter. And the editor would overstep the bounds of editorship and drift into authorship.

It is assumed that the reader has basic knowledge about GIS and remote sensing, though most chapters are accessible to beginners. An introductory text for GIS is Burrough and McDonnell (1993) and for remote sensing Avery and Berlin (1992).

The editor and authors would like to acknowledge the assistance of the following:

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ITC, Enschede, The Netherlands
November 2001

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