Geoinformatics for Climate Change Studies

Editors
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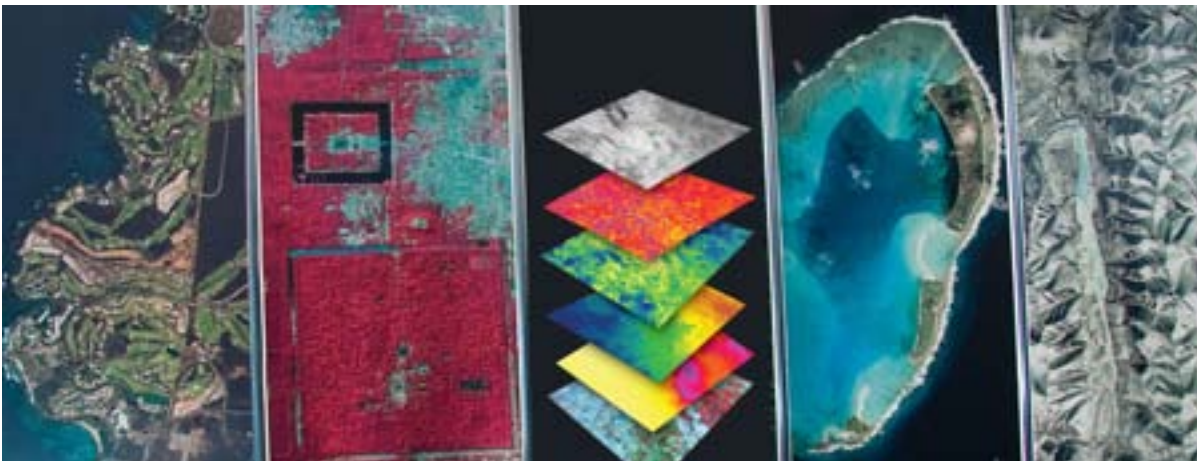


The Energy and Resources Institute

Foreword

"Warming of the climate system is unequivocal!" While climate change debate has been at the fore of international political agenda for the past few decades, the uncertainty surrounding the science, and its mitigation and adaptation aspects have brought the scientific community to the limelight. Anthropologically forced climate change is one of the most significant challenges humankind has ever faced and presents a significant opportunity for increasing the scientific understanding about our planet and about the human activities having major impacts on the global processes governing it.

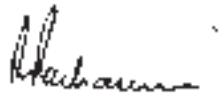
The science demands a huge amount of spatio-temporal data to dwell with. Handling spatio-temporal data gathered from different sources, for example, the earth observation satellites, weather stations, GPS, and society, requires a very specific skilled and trained cadre in geoinformatics. As the technology is developing by leaps and bounds to collect and make available such data, it places greater responsibility on us to handle it well.

The book *Geoinformatics for Climate Change Studies* is a unique combination of two sciences—climate change and geoinformatics. While the former is the most exigent challenge of the era, the latter brings the knowledge of the most sophisticated technology to handle the wide variety of data required addressing such a challenge. This book provides an in-depth understanding of geoinformatics (remote sensing, GIS, GPS, ICT, and others) as well as an awareness of the causes and consequences of climate change.

A large part of the process of addressing climate change is our ability to learn from the previous experiences. This book brings such experiences in a lucid way so that students, researchers, and professionals interested in climate change and geoinformatics can gain from these. These case studies will also hold immense relevance from an academic standpoint as many of the institutions are coming up with promising programmes to develop a special cadre of trained and skilled manpower to provide solution to make the earth sustainable.

Better understanding of these processes will ultimately give researchers sufficient insights into how to move forward to preserve the ecosystems and environment we have and slow down the negative impact of our past actions. As geoinformatics holds a key role in enhancing our knowledge to address climate change, a thorough understanding of the procedures and techniques used in geoinformatics is a must.

I congratulate the editors in bringing out such a wonderful compendium on the much needed subject. I am sure readers will find the contents of the book interesting and worth applying in their subject areas.



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