

**GLOBAL CHANGE AND REMOTE SENSING** by K.Y. Kondratyev, A.A. Buznikove, and O.M. Pokrovsky. West Sussex: Wiley & Sons, 1996.

The book, published by Wiley & Sons in cooperation with Praxis publishing house, is presented as a follow-up to the United Nations conference on Environment and Development held in 1992. The book is part of a series on Remote Sensing published by Wiley-Praxis, which are all leading books for those interested in remote sensing of the environment.

The authors use a commonly accepted definition of global change as violations of the global biogeochemical cycles which result in a series of consequential changes to the terrestrial environment, and in particular, to anthropogenically induced changes in the composition of the atmosphere. The book discusses international collaboration on global change and defines several issues that should be assessed by remote sensing. This book is the only available textbook on remote sensing that discusses in detail the leading remote sensing effort on this subject: the Earth Observation System (EOS). Most of the U.S. and European governmental satellites that are observing Earth or are planned to be launched and observe earth are part of EOS. This includes many systems and it is highly recommended that students of the new millennia be introduced to new platforms and not only the well-known, somewhat obsolete Landsat TM and MSS, AVHRR, and early Spot systems.

Following the introduction, the book provides a detailed description of available remote sensing systems. Although the physical background provided to the reader is lacking, this book is more robust than some of the older remote sensing textbooks. Some parts of the text provide in-depth analysis of the physics problems not available in any other textbook. For example, there is a detailed and physically-anchored discussion, on the optimization of hydrometeorological problems. It seems to be assumed that the reader either has a strong background in physics or otherwise is not interested in the physics, but rather in the capabilities of remote sensing.

Two attractions of this book are: a) the detailed information on Eastern European remote sensing tools and, b) the detailed information regarding the physical features to be observed and the required temporal and spatial resolution, as well as other requirements from the system.

The information about Eastern European systems is very valuable as this is not provided in most textbooks and hardly in any other forums of English language scientific literature. For example, the Kosmos and Almaz radar, the Mir space station, and the Priroda measurement complex are not widely known in the remote sensing communities in the West; however, they provide very useful measurements. The Kosmos SAR system provided multiple incidence angles from a free flying radar system long before the Canadian RADARSAT or even the shuttle based SIR-C. Another example would be that of the MKS-M spectrometer aboard Salut-7 and now aboard the MIR space station. This spectrometer provides 18 spectral bands in the visible to red edge range. Much of this information does not exist in the West. Interestingly, the book does not stop at the Eastern European systems but provides

basic information on SIR-C, which operated in 1994. However, if one is to use this as a textbook for teaching remote sensing, it is highly recommended to use it in conjunction with a book that summarizes the western technology including both those of NASA and ESA (the European Space Agency).

The final part of the book discusses the requirements of remote sensing data for global change observation and is summarized by defining how to optimize observing systems. This part is interesting, but also studious in detail—much more than most readers of this book would be able to handle. The reference list of this book follows the general character of the book by having an extensively detailed reference list of 602 items, many of which are in Russian.

Reading this book brings to mind the notion that global change is a purely physical phenomenon for the physical scientist. However, socio-political changes are occurring daily on a global scale. Many of these leave their impact on the physical environment and thus can be documented and mapped by current remote sensing systems. The release of the Soviet technology should in fact encourage this direction of research. Many of the former Soviet remote sensing systems were designed for gathering political and social information. Hence, many of the systems described uniquely in this book are suitable for monitoring global change in the human arena. Finally, this book makes a real contribution to the remote sensing literature as it summarizes a set of operative instruments unfamiliar in to the West before. The disappointing part of the book is that it really does not deal much with global change, but rather with remote sensing of phenomena that can show evidence of global change. Obviously, the authors are affiliated with Russian institutions that have a lot to offer in the field.

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**SURVEYING CONTEMPORARY CULTURAL GEOGRAPHY** by Mike Crang.  
London and New York: Routledge, 1998.

Mike Crang's *Cultural Geography* celebrates an important development in the area of human (or should it be humanistic?) geography: the institutionalization of a new branch of geographical knowledge and field of inquiry—only that the name “cultural geography” was already occupied. Crang's cultural geography is about contemporary cultural geography, which is substantially different from the older, mainly the American school of cultural geography. This is most manifest in the bibliographical list attached to the book, where articles that have appeared in journals such as *Society and Space*, *Ecumene* and *Antipode* predominate. Significantly, the author fails to warrant a single mention of an article published in the *Journal of Cultural Geography*, which testifies that contemporary cultural geography is different from traditional cultural geography. In this sense, Crang's book is a celebration of a specific strand of cultural geography that is contemporary, social-theory oriented and affiliated with radical approaches to society and culture.