

Remote Sensing Geography

Dr. Nandita Singh



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RANDOM PUBLICATIONS
NEW DELHI (INDIA)

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ISBN 978-93-86372-37-6

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Published in 2017 in India by

RANDOM PUBLICATIONS

4376-A/4B, Gali Murari Lal, Ansari Road
New Delhi-110 002

Phone : +9111-43580356, 011-23289044, 011-43142548

e-mail: sales@randompublications.com,
info@randompublications.com, randomexports@gmail.com

Type Setting by : Friends Media, Delhi-110089

Printed at : Sanat Printers

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Remote sensing is the examination or the gathering of information about a place from a distance. Such examination can occur with devices (e.g. cameras) based on the ground, and/or sensors or cameras based on ships, aircraft, satellites, or other spacecraft. Today, the data obtained is usually stored and manipulated using computers. The most common software used in remote sensing is ERDAS Imagine, ESRI, MapInfo, and ERMapper. Modern remote sensing began in 1858 when Gaspard-Felix Tournachon first took aerial photographs of Paris from a hot air balloon. Remote sensing continued to grow from there; one of the first planned uses of remote sensing occurred during the U.S. Civil War when messenger pigeons, kites, and unmanned balloons were flown over enemy territory with cameras attached to them. The first governmental-organized air photography missions were developed for military surveillance during World Wars I and II but reached a climax during the Cold War. Geologic faults, fault lines or simply faults are planar rock fractures, which show evidence of relative movement. Large faults within the Earth's crust are the result of shear motion and active fault zones are the causal locations of most earthquakes. Earthquakes are caused by energy release during rapid slippage along faults. The largest examples are at tectonic plate boundaries but many faults occur far from active plate boundaries. Since faults do not usually consist of a single, clean fracture, the term fault zone is used when referring to the zone of complex deformation that is associated with the fault plane. The book also provides an Indian perspective on remote sensing technology and applications by bringing to the fore the way the Indian Remote Sensing (IRS) programme has developed and the unique applications of the technology in India and Abroad.

Contents: Principles of Remote Sensing; Sensor Systems in Remote Sensing; Cropping Systems through Remote Sensing; Data Acquisition Techniques in Remote Sensing; Application of GIS and Remote Sensing Technique; Soils Science; Map Projection and Properties in Remote Sensing; Science of Geology, Geologic Maps and Fossils.

About the Author



Dr. Nandita Singh is Assistant Professor in department of Geography, Shri Varshney College, Aligarh of Dr. B. R. Ambedkar University, Agra. She is Genius scholar of Govt. Mahakoshal Autonomous Arts & Commerce College, Rani Durgavati Vishwavidyalaya, Jabalpur, (M.P.). She obtained her Ph.D degree from Dr. Hari Singh Gaur University, Sagar (M.P.). She has valuable contribution in different branches of geography viz, Geomorphology, Environmental Management, Remote Sensing & G. I. S., Climatology & Specialization in medical geography and engaged in research work. Dr. Nandita Singh teaching geography to Post – Graduate students with advanced techniques. She has contributed numbers of research papers in the different field of geography. In Journals of National & International repute.



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PUBLISHERS • DISTRIBUTORS

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New Delhi-110002, Ph : +91-11-43142548/43580356 / 23289044
Email : randomexports@gmail.com,
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ISBN 978-93-86372-37-6



9 789386 372376

6.99 INR (approx.)