

TABLE OF CONTENTS

<i>Synopsis</i>	ix
<i>Acronyms and abbreviations</i>	xiii
<i>Preface</i>	xv
<i>Introduction</i>	xvii
Chapter 1 Remote sensing: The Preliminary Idea	1
1.1 Types of Data Acquisition Techniques	5
1.2 Geodetic Remote Sensing.....	8
1.3 Acoustic and Near-Acoustic Remote Sensing	8
1.4 General Overview	10
1.5 General Observations on Remote Sensing In Geography.....	19
Chapter 2 Evolution and Advances in Remote Sensing of the Environment	23
2.1 Urban Mapping Applications.....	27
2.2 Hydrological Applications	31
2.3 Mapping of Watersheds and Hydrologic Features	33
2.4 The Future Directions of Remote Sensing.....	41
Chapter 3 Remote Sensing on Biomass Estimation	43
3.1 Biomass Modeling.....	45
Chapter 4 Urban Mapping Applications and Detection of tree Crowns	65
4.1 The Need For Urban Trees.....	67
4.2 Semi-Automated Approach for Urban Trees Mapping From Integrated LIDAR Point Cloud And The Digital Imagery Datasets	69
Chapter 5 The Effect of Climatic Factors on the Glacier's Variations	87
5.1 Glacier Fluctuations.....	92
5.2 Remote Sensing of Glacier Change in the Central Qinghai–Tibet Plateau And The Relationship With The	