Contents

face	vii
of contributors	xi
of acronyms	xiii
Remote sensing the land surface water budget	
R.J. Gurney	1
The use of visible satellite imagery over ice sheets	
	9
history in mountain belts	
B.L. Isacks	21
Applications of satellite remote sensing techniques to volcanology	
	37
Soil/vegetation characteristics at microwave wavelengths	
A.M. Shutko	53
Synergistic use of multispectral satellite data for monitoring arid lands	
	67
P.R. Rowntree	77
Atmosphere-biosphere exchange of CO ₂	
	85
	1 130
	101
	121
	133
	CHOIL.
	147
	163
	175
temperature determined from space	
F. Becker and ZL. Li	185
Extracting surface properties from satellite data in the visible and near-	
infrared wavelengths	
M.M. Verstraete and B. Pinty	203
Remote sensing and geographical information systems	
P.M. Mather	211
Automated knowledge-based segmentation of SAR images	
S. Quegan, R. Caves and P. Harley	221
Large-scale environmental databases: the example of CORINE	
B.K. Wyatt	233
ex a which wordy the man attract of the fairth, including its form	249
	of contributors of acronyms Remote sensing the land surface water budget R.J. Gurney The use of visible satellite imagery over ice sheets D.G. Vaughan and C.S.M. Doake 'Long-term' land surface processes: erosion, tectonics and climate history in mountain belts B.L. Isacks Applications of satellite remote sensing techniques to volcanology P. Francis and C. Oppenheimer Soil/vegetation characteristics at microwave wavelengths A.M. Shutke Synergistic use of multispectral satellite data for monitoring arid lands B.J. Choudhury and S.E. Nicholson Remote sensing inputs to climate models P.R. Rowntree Atmosphere-biosphere exchange of CO2 P.G. Jarvis and J.B. Moncrieff Observational studies of the land/atmosphere interaction W.J. Shuttleworth Monitoring global tropical deforestation: a challenge for remote sensing J.P. Malingreau, M. M. Verstraete and F. Achard Achievements and unresolved problems in vegetation monitoring M.D. Steven, T.J. Malthus and J.A. Clark ERS-1 land and ice applications C.G. Rapley The EOS Data and Information System (EOSDIS) J. Dozier The ESA Earth Observation Polar Platform Programme M. Rast and C.J. Readings Temperature-independent thermal infrared spectral indices and land surface temperature determined from space F. Becker and ZL. Li Extracting surface properties from satellite data in the visible and near-infrared wavelengths M.M. Verstraete and B. Pinty Remote sensing and geographical information systems P.M. Mather Automated knowledge-based segmentation of SAR images S. Quegan, R. Caves and P. Harley Large-scale environmental databases: the example of CORINE B.K. Wyatt