

# Deserts and arid lands

Edited by

**FAROUK EL-BAZ**

*Itek Optical Systems*

*Liton Industries, Inc.*

*Lexington, Mass., U.S.A.*



**1986 MARTINUS NIJHOFF PUBLISHERS**

a member of the KLUWER ACADEMIC PUBLISHERS GROUP

**DORDRECHT / BOSTON / LANCASTER**



# Contents

## Preface

by *Farouk El-Baz* V

1. The desert in the space age  
by *Farouk El-Baz* 1
2. A classification of dunes based on aeolian dynamics and the sand budget  
by *Monique Mainguet* 31
3. Space observations of Saharan aeolian dynamics  
by *Monique Mainguet* 59
4. Landforms of the Australian deserts  
by *J.A. Mabbutt* 79
5. The sandy deserts and the gobi of China  
by *Chao Sung-chiao* 95
6. Analysis of desert terrain in China using Landsat imagery  
by *Chao Sung-chiao* 115
7. Aeolian landforms in the Taklimakan Desert  
by *Zhu Zhenda* 133
8. North American deserts  
by *Harold E. Dregne* 145
9. Natural resource survey and environmental monitoring in arid-Rajasthan using remote sensing  
by *H.S. Mann, K.A. Shankaranarayan and R.P. Dhir* 157
10. Landsat surveys of southeastern Arabia  
by *John R. Everett, Orville R. Russell and David A. Nichols* 171
11. Measuring spectra of arid lands  
by *Anne Kahle* 195
- Index 219