

Contents

<i>Preface</i>	ix		
<i>Acknowledgments</i>	xii		
Part I The dryland environment			
1	Introduction to dryland environments	3	
2	The geomorphologic background	24	
3	Vegetation of the dryland regions	46	
Part II The meteorological background			
4	The general atmospheric circulation	67	
5	The global distribution of arid climates and rainfall	83	
6	Radiation, heat, and surface exchange processes	100	
7	Water balance	115	
8	Evaporation	127	
Part III The climatic environment of drylands			
9	Defining aridity: the classification and character of dryland climates	151	
10	Desert microclimate	162	
11	Precipitation in the drylands	188	
12	Hydrologic processes in the drylands	212	
13	Desert winds and dust	230	
Part IV The earth's drylands			
14	North America	257	
15	South America	275	
16	Sub-Saharan Africa	293	
17	The Mediterranean lands	323	
18	Australia	337	
19	Asia	351	
20	Coastal deserts	374	
Part V Life and change in the dryland regions			
21	Drought and other hazards	407	
22	Desertification	431	
23	People in the dryland environments	448	
24	Plant and animal life in the desert	468	
25	Climatic variability and climatic change	482	
	<i>Index</i>	510	