

Contents

<i>Preface</i>	page vi
<i>Acronyms and abbreviations</i>	viii
Part 1 Past theories of rain and snow	
1 The ancients	3
2 A renaissance	21
Part 2 Present theories of precipitation	
3 Basic processes	57
4 Cloud formation	70
5 Cloud droplets, ice particles and precipitation	106
6 Lightning	119
Part 3 Measuring precipitation	
7 Early attempts to measure rainfall	139
8 Measuring precipitation with raingauges	151
9 Measuring snow	182
10 Measuring precipitation with radar	190
11 Measuring precipitation from satellites	202
Part 4 The global distribution of precipitation	
12 Raingauge and satellite datasets	231
13 Precipitation means and trends	246
14 Precipitation variability and extremes	258
Part 5 Future developments	
15 The future of precipitation measurement	279
<i>Index</i>	287