

BRIEF CONTENTS

Preface xii

Prologue: Energy Flows 1

- 1** Natural Disasters and the Human Population 7
- 2** Internal Energy and Plate Tectonics 26
- 3** Earthquake Geology and Seismology 50
- 4** Plate Tectonics and Earthquakes 79
- 5** Earthquakes Throughout the United States and Canada 110
- 6** Volcanic Eruptions: Plate Tectonics and Magmas 143
- 7** Volcano Case Histories: Killer Events 174
- 8** Tsunami versus Wind-Caused Waves 203
- 9** External Energy Fuels Weather and Climate 228
- 10** Tornadoes, Lightning, Heat, and Cold 250
- 11** Hurricanes 282
- 12** Climate Change 312
- 13** Floods 347
- 14** Fire 377
- 15** Mass Movements 405
- 16** Coastal Processes and Hazards 439
- 17** Impacts with Space Objects 450

Epilogue: Mass Extinctions* 473

Glossary G-1

Credits C-1

Index I-1

*Available in expanded form as chapter 18 The Great Dyings