Approximately 800 million people live within 100 km of active volcanoes worldwide, and with ever-growing populations, the likelihood of volcanic emergencies is increasing. Volcanic eruptions can cause extreme societal and economic disruption through loss of life and livelihoods, and damage to critical infrastructure.

Originally prepared for the United Nations Office for Disaster Risk Reduction, this is the first comprehensive assessment of global volcanic hazard and risk, drawing on a wide range of international expertise. It presents the state of the art in our understanding of global volcanic activity, as well as a thorough introduction to volcanology, accessible to a broad audience. It also looks at our assessment and management capabilities, and considers the preparedness of the global scientific community and government agencies to manage volcanic hazards and risk.

Volcanic hazard profiles and local case studies are provided online for all countries with active volcanoes, with invaluable information on volcanic hazard and risk at the local, national and global scale. Particular attention is paid to volcanic ash, the most frequent and wide-ranging volcanic hazard. The first global ash fall hazard map is presented along with a discussion of the characteristics and impacts associated with volcanic ash fall.

Of interest to all those concerned with reducing the impact of natural hazards and disaster risk reduction, including government officials, the private sector, students, researchers and professional scientists, this book is a key resource for the disaster risk reduction community and for those interested in volcanology and natural hazards. A non-technical summary report is also included for policy makers and general interest readers. This title is also available as Open Access via www.cambridge.org/volcano.

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Global Volcanic Hazards and Risk

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