The world’s high-mountain cryosphere is undergoing unprecedented changes, with significant implications for both humans and the environment. This edited volume, showcasing cutting-edge research, addresses two primary questions: what are the main drivers of change in high mountains and what are the risks implied by these changes?

Applying an interdisciplinary methodology, this comprehensive book provides a definitive overview of the global drivers of high-mountain cryospheric change, from climate, to economy and culture. From a physical perspective, it examines the complex interplay between climate and the high-mountain cryosphere, with further chapters covering tectonics, volcano–ice interactions, hydrology, slope stability, erosion, ecosystems, and glacier- and snow-related hazards. Societal dimensions, both global and local, of high-mountain cryospheric change are also explored. The book offers unique perspectives on high-mountain cultures, livelihoods, governance, and natural resources management, focusing on how global change influences societies and how people respond to climate-induced cryospheric changes.

An invaluable reference for researchers and professionals in cryospheric science, geomorphology, climatology, environmental studies, and human geography, this volume will also be of interest to practitioners working in global change and risk, including NGOs and policy advisors, as well as to graduate students.

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THE HIGH-MOUNTAIN CRYOSPHERE
Environmental Changes and Human Risks

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Cambridge University Press is part of the University of Cambridge. It furthers the University’s mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107065840

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First published 2015

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data

The high-mountain cryosphere : environmental changes and human risks / edited by Christian Huggel, University of Zurich, Switzerland, Mark Carey, University of Oregon, USA, John J. Clague Simon Fraser University, Canada, Andreas Kääb, University of Oslo, Norway.

pages cm

ISBN 978-1-107-06584-0 (Hardback)


GBS01.2.H52 2015

577.5’3—dc23 2015005312

ISBN 978-1-107-06584-0 Hardback

Additional resources for this publication at www.cambridge.org/9781107065840

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Acknowledgments

This book is a contribution to the Glacier and Permafrost Hazards in Mountains (GAPHAZ) Standing Group of the International Association for the Cryospheric Sciences (IACS) and the International Permafrost Association (IPA). M. Carey acknowledges funding support from the US National Science Foundation under grants 1010132 and 1253779. A. Kääb acknowledges support by the European Research Council under the European Union’s Seventh Framework Programme (FP/2007–2013)/ERC grant agreement no. 320816. Special thanks for providing reviews for the individual chapters are due to Marta Chiarle, Pascal Haegeli, and many other anonymous referees.