

PREFACE

Glaciers and ice sheets in a warming climate is the theme of *Annals of Glaciology* 54(63). Few corners of modern glaciology remain untouched by this theme, which has helped bring our community's research into the scientific mainstream and increasingly into the public spotlight. As an indication of this exposure, the most recent Assessment Reports of the Intergovernmental Panel on Climate Change include chapters focused exclusively on observations from the cryosphere, with an increasing volume and diversity of glaciological research cited.

With a broad theme that underpins much current glaciological research, this issue of *Annals of Glaciology* includes a notably diverse suite of papers, addressing topics ranging from the dynamics of melting ice shelves to ice-core pollen records. Contributions were solicited under the sub-themes of (1) observations of glacier change, (2) glacier mass balance–climate interactions, (3) ice dynamics, (4) glacier–ocean interactions, (5) the role of subglacial processes in glacier change, (6) ice-sheet modelling, (7) future projections, (8) impact of glacier changes and (9) proxies and modelling of past glacier changes. This breadth of scope reflects our understanding that to study glaciers and ice sheets in a warming climate requires attention to subaerial, submarine, subglacial and englacial processes, and involves looking back in time as well as forward. It also acknowledges the significant role of ice dynamics in cryosphere–climate interactions, whether this takes the form of ice-shelf break-up, tidewater glacier cycles, meltwater modulation of glacier motion, ice streaming, or any number of other dynamic phenomena.

A comprehensive understanding of glaciers and ice sheets in a warming climate also demands a range of methods of inquiry, including theory, field observation, laboratory experiments, remote sensing and numerical modelling. All the above are represented in this *Annals of Glaciology*. The diversity of topics addressed and methods employed required skilful and diligent work by the Scientific Editors and myriad reviewers. Their selfless contributions to this issue are gratefully acknowledged. IGS Secretary General, Magnús Már Magnússon, and staff, particularly Craig Baxter, provided constant support throughout production, while IGS Chief Editor Jo Jacka was a valued and reliable source of guidance. Regine Hock originally conceived of this issue and proposed its theme.

This issue of the *Annals of Glaciology* is dedicated to our colleagues Mark Meier and Austin Post, both of whom passed away in November 2012. Mark and Austin left career-long scientific legacies closely tied to the theme of this issue, Austin through his photographic documentation of glaciers, particularly in Alaska, and Mark most recently through his work on glaciers and sea level. They inspired many of us as colleagues and friends, and their work will continue to inspire those who seek to better understand the response of the cryosphere to climate.

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