

PREFACE

Volume 54(64) of the *Annals of Glaciology* is dedicated to The Geophysics of the Cryosphere. It was inspired by the 2012 New Advances in Geophysics (NAG) meeting of the British Geophysical Association on The Geophysics of the Cryosphere and Glacial Products: Properties, Processes and Technical Advances at the Geological Society of London, Burlington House, London. As Chief Editor of this volume I would like to thank the president of the British Geophysical Association, Michael Kendall, and the Chief Editor of the International Glaciological Society (IGS), Jo Jacka, for instigating the NAG meeting and this volume respectively. Papers were solicited from all areas of geophysics and associated disciplines as applied or relevant to present-day ice masses, ice cores, sea ice, or frozen ground or snow. Just as strongly encouraged were contributions on the application of geophysical and associated techniques to glacial materials and products to reconstruct past ice masses, dynamics and hydrology. What has resulted from this broadly themed but geophysically rooted call is a collection of twenty-six inspiring papers that together define the cutting edge of geophysics as applied to cryospheric problems. A variety of borehole, surface, air, marine or satellite-borne seismic, radar, electromagnetic, electrical or gravity techniques is used to probe the East and West Antarctic or Greenland ice sheets, mountain glaciers in the High Arctic, Himalayas, Andes, Alaska, the European Alps and Arctic Scandinavia, Arctic sea ice or legacies of former glaciations in the UK and central USA. Electrical geophysical techniques are applied to ice samples in the laboratory, and several new seismic and wireless geophysical techniques are developed. These papers demonstrate clearly that the application of geophysical techniques to cryospheric problems is flourishing, and leave no doubt that there is much more to come in the future. I would like to thank the Scientific Editors, Adam Booth, John Bradford, Olaf Eisen, Bryn Hubbard, Jo Jacka, Edward King, Matt King, Colm O’Cofaigh, Andy Smith and John Woodward for their conscientious work, and the Secretary General of the IGS, Magnús Már Magnússon, and his staff at the Cambridge office for their support and production of this volume of the *Annals of Glaciology*.

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