

# Journal of GLACIOLOGY

CONTENTS Vol 62 No 231 2016

**1–17 Visualizing brine channel development and convective processes during artificial sea-ice growth using Schlieren optical methods:**  
C. A. Middleton, C. Thomas, A. De Wit, J.-L. Tison

**18–30 Seasonal variations of glacier seismicity at the tongue of Rhonegletscher (Switzerland) with a focus on basal icequakes:**  
Pierre Dalban Canassy, Claudia Rössli, Fabian Walter

**31–36 Ultra-high resolution snapshots of three multi-decadal periods in an Antarctic ice core:**  
Skylar A. Haines, Paul A. Mayewski,  
Andrei V. Kurbatov, Kirk A. Maasch, Sharon B. Sneed,  
Nicole E. Spaulding, Daniel A. Dixon,  
Pascal D. Bohleber

**37–45 The control of an uncharted pinning point on the flow of an Antarctic ice shelf:**  
Sophie Berger, Lionel Favier, Reinhard Drews,  
Jean-Jacques Derwael, Frank Pattyn

**46–53 Mineralogical and morphological properties of individual dust particles in ice cores from the Tibetan Plateau:**  
Guangjian Wu, Xuelei Zhang, Chenglong Zhang,  
Tianli Xu

**54–61 Initial reconnaissance for a South Georgia ice core:**  
P. A. Mayewski, A. Kuli, G. Casassa, M. Arévalo,  
D. A. Dixon, B. Grigholm, M. J. Handley, H. Hoffmann,  
D. S. Introne, A. G. Kuli, M. Potocki, S. B. Sneed

**62–71 A SAR record of early 21st century change in Greenland:**  
Ian Joughin, Ben E. Smith, Ian M. Howat, Twila Moon,  
Ted A. Scambos

**72–81 A sensitivity study of annual area change for Greenland ice sheet marine terminating outlet glaciers: 1999–2013:**  
Trine S. Jensen, Jason E. Box, Christine S. Hvidberg

**82–93 A mass-flux perspective of the tidewater glacier cycle:**  
Jason M. Amundson

**94–102 Recent retreat of the Elbrus glacier system:**  
Iulian-Horia Holobâcă

**103–123 Densification of layered firn in the ice sheet at Dome Fuji, Antarctica:**  
Shuji Fujita, Kumiko Goto-Azuma,  
Motohiro Hirabayashi, Akira Hori, Yoshinori Iizuka,  
Yuko Motizuki, Hideaki Motoyama, Kazuya Takahashi

**124–136 Slight mass loss revealed by reanalyzing glacier mass-balance observations on Glacier Antisana 15a (inner tropics) during the 1995–2012 period:**

Rubén Basantes-Serrano, Antoine Rabatel,  
Bernard Francou, Christian Vincent, Luis Maisincho,  
Bolívar Cáceres, Remigio Galarraga, Danilo Alvarez

**137–146 Satellite archives reveal abrupt changes in behavior of Helheim Glacier, southeast Greenland:**  
Victoria V. Miles, Martin W. Miles,  
Ola M. Johannessen

**147–158 Plastic bed beneath Hofsjökull Ice Cap, central Iceland, and the sensitivity of ice flow to surface meltwater flux:**  
Brent Minchew, Mark Simons, Helgi Björnsson,  
Finnur Pálsson, Mathieu Morlighem,  
Helene Seroussi, Eric Larour, Scott Hensley

**159–169 Pointcatcher software: analysis of glacial time-lapse photography and integration with multitemporal digital elevation models:**  
Mike R. James, Penelope How, Peter M. Wynn

**170–184 Drivers of ASCAT C band backscatter variability in the dry snow zone of Antarctica:**  
Alexander D. Fraser, Melissa A. Nigro,  
Stefan R. M. Ligtenberg, Benoit Legresy, Mana Inoue,  
John J. Cassano, Peter Kuipers Munneke,  
Jan T. M. Lenaerts, Neal W. Young, Adam Treverrow,  
Michiel Van Den Broeke, Hiroyuki Enomoto

**185–198 Air temperature distribution and energy-balance modelling of a debris-covered glacier:**  
Thomas E. Shaw, Ben W. Brock, Catriona L. Fyffe,  
Francesca Pelllicciotti, Nick Rutter, Fabrizio Diotri

**199–214 Modeling the evolution of the Juneau Icefield between 1971 and 2100 using the Parallel Ice Sheet Model (PISM):**  
Florian A. Ziemann, Regine Hock, Andy Aschwanden,  
Constantine Khroulev, Christian Kienholz,  
Andrew Melkonian, Jing Zhang

Published for the International Glaciological Society, Cambridge, UK

Cambridge Journals Online  
For further information about this journal  
please go to the journal website at:  
[journals.cambridge.org/jog](http://journals.cambridge.org/jog)



MIX  
Paper from  
responsible sources  
FSC® C007785



Front cover  
Landsat-7 image from the Nenets  
Okrug, northern Russia, July 2000.  
Credit: Gareth Rees