FILCHNER-RONNE ICE SHELF PROGRAMME (FRISP)


compiled by

Hans Oerter

Alfred-Wegener-Institut für Polar- und Meeresforschung
Alfred-Wegener-Institute for Polar and Marine Research
Bremerhaven

2000
14th International Workshop of the Filchner-Ronne Ice Shelf Programme
held at
Madingley Hall,
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Introduction

The 14th International Workshop of the Filchner-Ronne Ice Shelf Programme (FRISP) was held in U.K. at Madingley Hall, Cambridge, on 15th-16th June 1999. We are grateful to Dr. Elisabeth Morris, Dr. Keith Nicholls and colleagues from British Antarctic Survey for organising the workshop in an excellent manner and in the friendly atmosphere of Madingley Hall. In total 25 participants from Belgium, Germany, The Netherlands, Norway, the United Kingdom, and the USA came together.

We thank Prof. Olav Orheim, Norsk Polarinstitutt, for acting as FRISP chairman since 1994. Dr. Hans Oerter, Alfred-Wegener-Institut for Polar and Marine Research was elected as chairman for the next three years.

There was a committed discussion about the goals and future of FRISP and whether or not to change the name. All participants agreed that FRISP has been a useful focus for European Antarctic glaciology with planning and reporting on fieldwork at its heart. The SCAR Working Group on Glaciology initiated FRISP. The discussion showed that the scope needs to be broadened, but desirable to keep many of FRISP’s characteristics. To continue with FRISP means to provide a forum in which to report recent Antarctic fieldwork and get field results into a citeable report as soon as possible. The FRISP workshops shall provide a forum for discussion of priorities and facilitate collaborative links. Therefore the workshops have to be kept to manageable numbers of participants. FRISP will be kept as an acronym, being a Forum for Ice Shelf Processes. The Filchner-Ronne-Schelfeis will be only one out of a number of investigated ice shelf areas. FRISP shall have a European focus, but all are welcome to join the workshops and the scientific discussion. AWI will take care of a FRISP home page under http://www.awi-bremerhaven.de/Research/geowissensek2.html.

One highlight of the 1998/99 Antarctic season was the successful hot water drilling by BAS south of Berkner Island. These new data together with the data from the recovered Norwegian moorings in front of Ronne Ice Shelf stimulated a lively discussion on the water circulation underneath Filchner-Ronne-Schelfeis

The FRISP Report No. 13 combines 12 extended summaries of in total 14 talks which were presented at the workshop. The papers collected in this volume present a good overview of the latest state of FRISP and the cooperation between the participating groups. Oceanography and the ice-shelf ocean interaction are still one of the major topics.

The work on the Berkner Island ice cores was discussed during a separate one-day workshop on June 14th. R. Mulvaney, BAS, compiled a small report on this meeting.

The Institute of Geophysics, University of Münster, will host the 15th FRISP workshop at the end of June 2000.

It is gratefully acknowledged that once more Alfred-Wegener-Institute covers the expenses for printing this report.

Hans Oerter
Participants and adresses

Hugh F.J. Corr  
British Antarctic Survey, Ice and Climate Division, High Cross, Madingley Road, Cambridge, CB3 0ET, UK  
Tel.: +44-1223-221-496  Fax.: +44-1223-221-616e-mail: hfjc@bas.ac.uk

Chris M. S. Doake  
British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET, UK  
Tel.: +44-1223-251-488  Fax.: +44-1223-362616  e-mail: csmd@bas.ac.uk

Wolfgang Graf  
GSF-Institut für Hydrologie, Postfach 1129, 85758 Oberschleissheim  
Tel.: +49-89-3187-2670  Fax.: +49-89-3187-3361  e-mail: wolgagan.graf@gsf.de

Wolf-Dieter Hermichen  
Alfred-Wegener-Institut, AWI-Potsdam, PF 600 149, 14401 Potsdam, Germany  
Tel.: +49-0331-288-2117  Fax.: +49-0331-288-2137  e-mail: whermich@awi-potsdam.de

Adrian Jenkins  
British Antarctic Survey, Ice and Climate Division, High Cross, Madingley Road, Cambridge, CB3 0ET, UK  
Tel.: +44-1223-221-493  Fax.: +44-1223-362616  e-mail: a.jenkins@bas.ac.uk

Mark R. Johnson  
British Antarctic Survey, Ice and Climate Division, High Cross, Madingley Road, Cambridge, CB3 0ET, UK  
Tel.: +44-1223-251619  Fax.: +44-1223-362616  e-mail: MRJ@pcmail.nerc-bas.ac.uk

Frederik Jung-Rothenhäsler  
AWI, Sektion Geophysik/Glaziologie, Postfach 120161, D-27515 Bremerhaven, Germany  
Tel.: +49-471-4831-1347  Fax.: +49-471-4831-1149  e-mail: fjung@awi-bremerhaven.de

Torleif Lothe  
Christian Michelsen Research AS, P.O.B 6031 Postterminalen, N-5892 Bergen, Norway  
Tel.: +47 55574040  Fax.: 47 55574041  e-mail: Torleif.Lothe@cmr.no

Ala Khazendar  
Universite Libre de Bruxelles, Faculte des Sciences, CP 160/03 Av. F.D. Roosevelt 50, B-1050 Bruxelles, Belgium  
Tel.: +32 2 650 2227  Fax.: +32 2 650 2226  e-mail: glaciol@ulb.ac.be

Keith Makinson  
British Antarctic Survey, Ice and Climate Division, High Cross, Madingley Road, Cambridge, CB3 0ET, UK  
Tel.: +44-1223-251-620  Fax.: +44-1223-362616  e-mail: K.Makinson@bas.ac.uk

Elizabeth Morris  
British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET,UK  
Tel.: +44-1223-61188  Fax.: +44-1223-62616  e-mail: emmo@bas.ac.uk

Robert Mulvaney  
British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET, UK  
Tel.: +44-1223-61188  Fax.: +44-1223-62616  e-mail: rnu@bas.ac.uk

Chandrika Nath  
British Antarctic Survey, Ice and Climate Division, High Cross, Madingley Road, Cambridge, CB3 0ET, UK  
Tel.: +44-1223-221-0  Fax.: +44-1223-362616  e-mail: CHNA@bas.ac.uk

Keith W. Nicholls  
British Antarctic Survey, Ice and Climate Division, High Cross, Madingley Road, Cambridge, CB3 0ET, UK  
Tel.: 0044-1223-251-490  Fax.: 0044-1223-362616  e-mail: K.Nicholls@bas.ac.uk

Hans Oerter  
AWI, Sektion Geophysik/Glaziologie, Postfach 120161, D-27515 Bremerhaven, Germany  
Tel.: +49-471-4831-1347  Fax.: +49-471-4831-1149  e-mail: hoerter@awi-bremerhaven.de
Presentations at the workshop

C. Doake  Recent glaciological investigations on Brunt Ice Shelf

A. Smith  Basal conditions on Rutford Ice Stream and Carlson Inlet: Implication for ice stream flow

W.D. Hermichen  Subfossil algae and fossil glacier ice trace Holocene ice volume changes in the aerea of Shackleton Range, Antarctica

C. Reijmer  The climate of Berkner Island as observed using an Automatic Weather Station

H. Oerter  Some results from the Berkner Island ice cores

F. Jung-Rothenhäusler  Breakaway and movement of iceberg A-38

C. Nath  First results of an investigation into fracture formation in streams

A. Khazendar  Evidence for ice accretion at the bottom of an Antarctic ice shelf, near its grounding line

H. Corr  Identification of an „ice-plain“ at the grounding line of Pine Island Glacier, Antarctica

S. Osterhus  Current meter measurements near Ronne Ice Shelf: Implications for circulation and melting underneath Filchner-Ronne Ice Shelf

K. Nicholls  Oceanographic observations south of Berkner Island: Preliminary results

A. Jenkins  New Results from the application of the ocean model MICOM to the Filchner-Ronne Ice Shelf

L. Padman  Analysis of Sub-Ice-Shelf Tides in the Weddell Sea Using SAR Interferometry

T. Lothe  IFIX - Inductive Data Acquisition System - System for sub ice shelf data acquisition

General Discussion on the future of FRISP, on field work plans, future research and links with other programmes.
Participants of the 14th FRISP Workshop in front of Madingley Hall