

**FILCHNER-RONNE ICE SHELF PROGRAMME
(FRISP)**

Report No. 13 (2000)

compiled by

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**14th International Workshop of the
Filchner-Ronne Ice Shelf Programme
held at
Madingley Hall,
Cambridge, U.K.
on 15th-16th June 1999**

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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 Polarinstitut, for acting as FRISP chairmen since 1994. Dr. Hans Oerter, Alfred-Wegener-Institut for Polar and Marine Research was elected as chairmen 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 co-operation 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

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Presentations at the workshop

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| 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 Wokshop in front of Madingley Hall