



**British
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Ice-Ocean Modeller

British Antarctic Survey

Location: Cambridge

Salary: £28,200 to
£30,600
per annum

Hours: Full Time

Contract Type: Contract /
Temporary

Placed on: 10th
March
2017

Closes: 9th April
2017

Job Ref: BAS
36/17

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Profile

Duration: Fixed Term Appointment (2 Years)

Description

The British Antarctic Survey is currently looking for an Ice-Ocean Modeller to join the Ice Dynamics and Palaeo-climate Team. The successful candidate will be an experienced Ice Ocean Modeller with an excellent academic profile including a strong mathematical background and a track record of running ocean models on high-performance computing facilities and interpreting the results.

Purpose

The successful candidate will have to demonstrate that they have previously been involved in developing numerical ice-flow models and run the model.

To run a regional ice flow model (Ua) of Ronne-Filchner ice shelf and all tributaries and to couple this model with an ocean model (MITgcm). Forecast the contribution of the area to global sea level change on a time scale of centuries.

Qualification

- First degree in physical science/mathematics plus PhD (or equivalent)

Duties

- Set up and develop a regional ice flow model. Invert for model parameters such as basal slipperiness and englacial viscosity.

- Carry out simulations with the numerical ice-flow model in support of the objectives of the Ua-MITgcm projects.
- Test sensitivity of model to melt around the grounding line, and determine the length-scales of horizontal stress transmission across grounding lines.
- Couple the ice-flow model with an ocean plume model and test and develop the plume model by comparing calculated melt rates with new estimates of ocean-induced ice-shelf melting.
- Run a fully coupled ice-ocean model of Ronne-Filchner ice shelf using the ice flow model Úa and the ocean circulation model MITgcm.
- Attend project meetings to report on progress and share results.
- Present model developments and scientific results in the peer-reviewed literature and at conferences.

On-line application forms and further information are available on our website at www.bas.ac.uk/jobs

These are also available from the Human Resources Section, British Antarctic Survey, High Cross, Madingley Road, Cambridge, CB3 0ET. Tel: (01223) 221508.

Benefits: We offer [generous benefits](#)

- [Description](#)
- [Skills specification](#)
- [How to apply](#)

Closing date for receipt of application forms is: 9th April 2017

Interviews are scheduled to be held on: w/c 1st May 2017

Start Date: June 2017