WCRP CLIMATE AND CRYOSPHERE (CliC), IUGG – COMMISSION FOR CRYOSPHERIC SCIENCES (IUGG – CCS) and INTERNATIONAL GLACIOLOGICAL SOCIETY

INTERNATIONAL SYMPOSIUM ON CRYOSPHERIC INDICATORS OF GLOBAL CLIMATE CHANGE

Cambridge, England 21–25 August 2006



CO-SPONSORED BY British Antarctic Survey Scott Polar Research Institute

SECOND CIRCULAR

November 2005

Registered Charity

INTERNATIONAL GLACIOLOGICAL SOCIETY

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SYMPOSIUM ON CRYOSPHERIC INDICATORS OF GLOBAL CLIMATE CHANGE

The International Glaciological Society will hold an International Symposium on Cryospheric Indicators of Global Climate Change in 2006. The symposium will be held in Cambridge, England, with registration on 20 August, and sessions from 21 to 25 August..

SYMPOSIUM ORGANIZATION

Magnús Már Magnússon (International Glaciological Society)

LOCAL ARRANGEMENTS COMMITTEE

Tom Lachlan-Cope (Chairman), Gill Alexander, Liz Crilley, Hilmar Gudmundsson, Glenda Harden, Victoria I. Lytle, Magnús Már Magnússon, Ian Willis, Eric Wolff

SCIENCE STEERING AND EDITORIAL COMMITTEE

Martin Sharp (Chief Scientific Editor), Maria Ananicheva, Roger Barry, Cecilia Bitz, Ross Brown, Chad Dick, Julian Dowdeswell, Claude Duguay, Greg Flato, Duane Froese, Wouter Greuell, Jon Ove Hagen, Ola Johannesson, Andreas Kääb, Seymour Laxon, Ellsworth LeDrew, Victoria I. Lytle, Vin Morgan, Ellen Mosley-Thompson, Tony Payne, Mark Serreze, Koni Steffen.

INFORMATION ABOUT THE SYMPOSIUM MAY BE OBTAINED FROM:

International Glaciological Society, Scott Polar Research Institute,

Lensfield Rd, Cambridge CB2 1ER, UK.

Tel: +[44] (0)1223 355 974 Fax: +[44] (0)1223 354 931

Email: igsoc@igsoc.org

Web: http://www.igsoc.org/symposia/

http://www.antarctica.ac.uk/igs Available beginning February 2006

PARTICIPATION

This circular includes forms for registration and instructions for arranging accommodation. These can also be found on the symposium website. The registration form and accompanying payment should be returned by 27 May2006. There is a surcharge for late registration. The participant's registration fee includes organisation costs, a set of abstracts, the icebreaker function, coffee breaks, the banquet, the mid-week excursion and a copy of the *Annals of Glaciology*.

| Registration fees | UK₤ |
|---|-----|
| Participant (IGS member) | 270 |
| Participant (not IGS member) | 320 |
| Student or retired IGS member | 100 |
| Accompanying person over 18 | 80 |
| Late registration surcharge (after 27 May 06) | 50 |
| Post-symposium tour (estimate) | 450 |

Registration refunds will be made according to date of notification. Cancellations made before 27 May 2006 will receive a full refund. Cancellations between 27 May and 19 July

2006 will be eligible for a partial refund. After 19 July it may not be possible to make any refund.

THEME

The cryosphere, consisting of snow cover, sea-, lake- and river-ice, glaciers, ice caps and ice sheets, and frozen ground including permafrost, is a fundamentally important part of the global climate system. Many components of the cryosphere respond sensitively and very visibly to climate changes. Cryospheric changes provide important information about past climatic conditions in regions where other climate observations are sparse, and they have significant implications for global sea level, regional water resources and both terrestrial and aquatic ecosystems. Feedbacks between the cryosphere and other components of the climate system play a key role in how the climate system evolves over time. In situ observations, remote sensing, the analysis of proxy records and numerical modeling all contribute to understanding the dynamics of cryospheric change and cryosphere/climate interactions. Building on the foundation laid by the 1st CliC International Science Conference, held in Beijing in April 2005, this symposium will promote discussion of the evidence for changes in all components of the global cryosphere, their interdependence and causes, our current ability to model these changes, and what they tell us about changing global climate.

TOPICS

The suggested topics include:

- 1. Observed historical changes in the cryosphere.
- 2. Processes that lead to changes in the cryosphere and how these make interpretation difficult.
- Actual records of climate in cryospheric regions, and their relation to changes in the cryosphere, including statistical/model interpretation.
- 4. Extension of climate records back in time, using observations of cryospheric changes.
- 5. Synthesis of records by geographical region, and ultimately globally.
- 6. Linkage of historical cryospheric records to palaeo-records of climate.
- 7. Modeling of all of the above. How well do models capture the observed changes?

SESSIONS AND POSTERS

Oral presentations will be held on four full days and one half-day. There will also be a poster session. The poster boards will accommodate A0 size (90cm by 120 cm.).

PUBLICATION

Selected papers from the symposium will be published by the Society in the *Annals of Glaciology*. All papers (including those based on posters) will be refereed and edited according to the Society's regular standards before being accepted for publication.

PAPERS

(1) SUBMISSION OF ABSTRACTS

Participants who want to contribute to the Symposium should submit an abstract of their proposed presentation. This abstract must contain sufficient detail for its scientific merit and relevance to the symposium theme to be judged by the Editorial Board. A web site will be available at the beginning of 2006 where authors can upload their abstract and all the relevant contact information. The abstract itself should not exceed 400 words. References and illustrations should not be included.

You will be required to enter all your details with the submission and in particular to state whether you intend to submit a paper for publication in the *Annals of Glaciology*. We will only solicit referees for abstracts that have explicitly stated that they intend to submit a paper. Referees are a scarce commodity and we do not want to trouble them unnecessarily.

Those that are unable to submit their abstract via the internet can submit electronic files on a CD or diskette to the IGS office where a member of staff will upload them onto the web site.

LAST DATE FOR RECEIPT OF ABSTRACTS: 28 FEB 2006

Final versions of papers accepted for publication should not exceed five printed pages in the *Annals of Glaciology*. Extra pages will be charged at the rate of UK £90 per page. Papers with colour figures will accrue page charges, at the colour rate of UK £150 for all pages. Honouring page charges (also £90 per page) for the first five pages is encouraged.

(2) SELECTION OF ABSTRACTS

Each abstract will be assessed on its scientific quality and relevance to the Symposium theme. Authors whose abstracts are accepted will be invited to make either an oral or poster presentation at the Symposium and submit a paper for publication in the *Annals of Glaciology* (included in the ISI Science Citation Index®). First or corresponding authors will be advised by 17 April 2006 of the acceptance or otherwise; other authors will not be informed separately. Authors who have not received notification by that date should contact the IGS office in Cambridge in case their abstract was not received. Acceptance of an abstract means that the paper based on it should be submitted to the *Annals of Glaciology* and not to another publication. Note: abstracts alone will not be published in the *Annals of Glaciology*.

(3) DISTRIBUTION OF ABSTRACTS

A set of the accepted abstracts will be provided to participants upon registration on 20 August 2006.

(4) SUBMISSION OF PAPERS AND PUBLICATION

Manuscripts should be submitted as a PDF file to the IGS office by e-mail annals@igsoc.org stating clearly the abstract number in the file name and in the subject line of the e-mail. Papers should be prepared in accordance with the instructions sent to authors with the abstract acceptance notification and must be submitted as PDFs (portable document format). Authors who submit in other electronic formats will be asked to re-submit as PDF. All manuscripts should be submitted by 19 June 2006. ALL AUTHORS ARE EXPECTED TO ADHERE TO THIS DEADLINE. Papers will be referred according to the usual standards of the Society before being accepted for publication. Final papers, based on presentations at the Symposium, which have been submitted and accepted by the Editorial Board following review, will be published in English in the *Annals of Glaciology* (Vol. 46). Final, revised versions of papers must be submitted by 2 October 2006. Timely publication of the *Annals of Glaciology* will depend upon strict adherence to deadlines.

LAST DATE FOR RECEIPT OF PAPERS: 19 June 2006

LAST DATE FOR RECEIPT OF REVISED PAPERS: 2 October 2006

EXCURSIONS

MID WEEK FIELD TRIPS:

Option 1: A walking tour around Cambridge visiting some of the magnificent buildings in this historic city, e.g. Kings College chapel. It may be possible to take in a chauffeured punting trip on the River Cam.

Option 2: Visit to the historic city of Ely. A short coach trip through the Fens, rich in history and folklore, to Ely Cathedral where you will enjoy a guided tour of this historic and beautiful building. Maybe visit to the home of Oliver Cromwell and round off the trip with tea and cakes in the historic Almonry nearby.

BANQUET to be held on Thursday evening, 24 August at St. John's College.

POST-SYMPOSIUM TOUR: LAKE DISTRICT, HADRIAN'S WALL, THE PENNINES AND THE YORKSHIRE DALES

This four day tour of the Lake District, Hadrian's Wall, the Pennines and the Yorkshire Dales is based at Penrith, near Ullswater.

Approximate cost is £450 per person, including breakfasts and lunches, luxury bus travel and accommodation on twin share basis.

25 August: Depart Cambridge for the Lake District – leaving Cambridge at about 5.00pm. The journey will take about 6 hours plus a stop for refreshments en route.

26 August: In the footsteps of Beatrix Potter and William Wordsworth - Hawkshead and Grasmere

Drive over the dramatic Kirkstone Pass, the highest road pass in the Lake District, to Windermere and on to Hawkshead. Here you can join an optional walking tour with your guide and explore the hidden alleyways and squares of this historic village where William Wordsworth attended school. There will be time to visit the Beatrix Potter Gallery and view a selection of her original illustrations and enjoy some time at leisure in the village before continuing on to visit Hill Top, Beatrix Potter's farm. Travel on through the heart of the Lake District to Grasmere for lunch on your own and time to wander around this attractive village. Visit the famous Grasmere Gingerbread Shop, the ancient church of St. Oswald and possibly Dove Cottage, the home of William Wordsworth.

This afternoon drive across Dunmail raise to Keswick on Derwentwater. We shall take a short walk along the lakeshore before driving into the beautiful valley of Borrowdale. Stop for a cup of tea before returning to the hotel.

27 August: The Eden valley, the Pennines and Hadrian's Wall

Discover the hidden and aptly named Eden valley – an unspoilt area of pretty sandstone villages in the lee of the Pennines. Drive by way of Brampton, an old town associated with Bonnie Prince Charlie, to Lanercost priory. Here we shall stop to visit the evocative monastic ruins and part of the priory church that is intact and in use today. An exciting and fascinating drive now awaits - along Hadrian's Wall. We shall follow the course of this World Heritage Site just over the border into Northumberland stopping to view a Roman fort nearly 2,000 years old. After lunch we shall drive up into the Pennines, stopping at Alston, the highest market town in England before descending back to the Eden valley enjoying spectacular views towards the Solway Firth and Scotland, weather permitting!

28 August: Day at leisure

Day at leisure - guide to be on duty to help with suggestions of things to do, places to see etc.

An optional walk in the Ullswater valley will be offered.

29 August: Dent fault and the Yorkshire Dales National Park

This morning we shall drive through the Yorkshire Dales National Park. We begin with a stop to view the Dent Fault, named after the 19th century geologist Adam Sedgwick, a renowned geologist who attended Cambridge University. We will stop in the market town of Hawes (it is market day) and then drive through Wensleydale, a beautiful limestone valley made famous by the vet James Herriot . This afternoon the journey takes us through Masham and Ripon before joining the A1 and returning to Cambridge for the early evening.

ACCOMPANYING PERSONS PROGRAMME

The accompanying persons registration fee includes the icebreaker, the banquet, the mid-week field trip and the services of the accompanying persons coordinator. The coordinator will be able to assist accompanying persons to make further arrangements through the local tourist office. Tourist information is available at http://www.cam.ac.uk/cambarea/tourist.html

LOCATION AND WEATHER

Cambridge is a city of contrasts - a place where more than 800 years of history are preserved unchanged in stone and brick, but which inspires ideas that have changed the world. The population of this medieval city is around 100,000. Although the area around Cambridge has the lowest rainfall in the UK, these things are relative and you should still pack waterproof clothing. The average temperature during August is 16.3°C but daytime temperatures are more likely to be around 20°C.

TRAVEL AND ACCOMMODATION

Please check with your respective embassies to see if you require a visa to enter the UK. The local organising committee will supply you with an invitational letter if needed.

The Local Organising Committee has reserved accommodation in Downing College, http://www.dow.cam.ac.uk/ at very competitive rates (£48 for a standard room and £57 to £95 for rooms with en-suite). Those interested MUST confirm their booking by contacting the IGS office BEFORE the 10 February. After that date it is not possible to guarantee that rooms will be available. NOTICE that you MUST confirm and pay your deposit for the Downing College accommodation BEFORE the pre-registration deadline.

Alternate accommodation can be found at http://www.visitcambridge.org/visitors/wheretostay.php

IMPORTANT DATES

| 10 Feb 06 |
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| 28 Feb 06 |
| 17 Apr 06 |
| 27 May 06 |
| 19 Jun 06 |
| 3 Jul 06 |
| 5 Aug 06 |
| 20 Aug 06 |
| 21 Aug 06 |
| 25 Aug 06 |
| 2 Oct 06 |
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INTERNATIONAL GLACIOLOGICAL SOCIETY SYMPOSIUM ON CRYOSPHERIC INDICATORS OF GLOBAL CLIMATE CHANGE Cambridge, England, 21–25 August 2006

DECISTRATION FORM

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| Participant (member o | f the IGS) | | | | | | | 270 | | | | _ | |
| Participant (not a men | ber of the I | GS) | | | | | | 320 | | | | _ | |
| Student or retired IGS | member | | | | | | | 100 | | | | | |
| Accompanying person | aged 21 or | over | | | | | | 80 | | | | | |
| Late registration surch | arge (after 2 | 7 May) | | | | | | 50 | | | | | |
| Post-symposium tour | (estimate) | | | | | | | 450 | | | | _ | |
| TOTAL REGISTRATION | FEES | | | | | | | | | | _ | | |
| ACCOMMODATIO The Local Organisir competitive rates (£48 MUST confirm their bis not possible to guar deposit for the Downin Alternate accommodate. | ag Committed for a stand cooking by cantee that rong College action can be f | ard roor ontactin oms wil ccommo ound at | n and g the l be a odation http:// | £57 IGS vaila n BE | to £95 office ble. N EFORE w.visite | 5 for BEF otice the | ro FOI e, th pro | oms with RE the 10 hat you M e-registrat dge.org/vi | en-s Feb IUST tion | suite ruar Γ cor dead |). Th y. Af nfirm line. nereto | ose inter that and particular that and particular that and particular that are the control of th | terested t date it ay your |
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(ANY BANK OR TRANSFER CHARGES MUST BE INCLUDED).

SWIFT/BIC code: NWB KGB 2L

IBAN number: GB83 NWBK 5210 4654 7700 84

Mail or fax to: Secretary General, International Glaciological Society, Scott Polar Research

Institute, Lensfield Road, Cambridge CB2 1ER, UK

If payment made after 27 May 2006, add £50 for each person

PLEASE RETURN AS SOON AS POSSIBLE TO:

Secretary General, International Glaciological Society, Scott Polar Research Institute, Lensfield Road,

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