

# Ilulissat Climate Days 2015

International workshops on

## Changes of the Greenland Cryosphere

and

## Stability and Variations of Arctic Land Ice

Ilulissat, Greenland

June 2-4 and 4-5, 2015



Organized by

Technical University of Denmark (DTU)  
Geological Survey of Denmark and Greenland (GEUS)  
Danish Meteorological Institute (DMI)  
Niels Bohr Institute, Copenhagen University  
Greenland Climate Research Centre  
Greenland Survey – ASIAQ

in cooperation with

Nordforsk - SVALI (Stability and Variations of Arctic Land Ice)  
European Space Agency Climate Initiative (ESA)



DTU Space  
National Space Institute



## Background

Ongoing observations confirm the accelerating changes of the Greenland and Arctic cryosphere – the ice sheet, sea ice and permafrost. The changes of the Greenland ice sheet include a more than doubling of ice melt, more icebergs due to rapidly speeding outlet glaciers, and a thinning sea ice cover with shorter ice seasons and diminishing ice concentration.

Cryosphere changes in Greenland and the Arctic are spectacular manifestations of global climate change, and have made Greenland quite a “hotbed” for international science in recent years. Recent events, such as the summer 2012 record melt, which for the first time saw melt across the entire ice sheet, have focussed even more attention on the Greenland changes, and the potential impact on global sea level.

The Changes of the Greenland Cryosphere (CGC) workshop will especially address recent, ongoing and future changes in the ice in and around Greenland, with a special focus on the effects for the Greenland society. These effects have significant impact on traditional hunting and fisheries, but also new opportunities for hydrocarbon exploration, mining and hydropower. The CGC workshop will follow up from the similar workshop during the Nuuk Climate Days 2009, which attracted more than 150 scientists, stakeholders and policy makers.

Space monitoring uniquely documents the cryosphere changes, and space agencies such as ESA and NASA have made huge investments in polar satellites for the continued monitoring, with missions such as the GRACE, CryoSat-2, Sentinel and IceSat-2 either in orbit or under preparation, and supplemented by major airborne missions such as the NASA IceBridge and ESA CryoVEx campaigns. The space data provide the key input to e.g. the ESA Climate Change Initiative, aimed to provide consistent, long-term essential climate variable time series, including changes of the Greenland ice sheet and sea ice.

Ongoing or recent research initiatives, such as the US PARCA programme, Danish PROMICE, Nordic SVALI, Greenland GCRC, and EU projects such as ICE2SEA, ICE2ICE and ICE-ARC, are examples of major programs to understand, monitor and predict the climate-related changes and their effects.

It is the primary intention of the CGC workshop to bring together relevant researchers, stakeholders and policy makers, with the first half of the workshop planned for overview and stakeholder talks, and the second part for more specific science talks.



## SVALI and ESA CCI meetings, June 4-5

The CGC workshop will be followed by the final conference of the Nordic Center of Excellence SVALI project (<http://www.ncoe-svali.org/>), as well as meetings of the ESA Climate Change Initiative ([www.esa-cci.org](http://www.esa-cci.org)) Ice Sheets Project. The SVALI meeting will be open to all, and ESA CCI working meetings open on request. Other add-on meetings are possible.

A SVALI-supported Ph.d. summer school on field experiments of the atmosphere-cryosphere interactions will be held at the ice sheet margin of Kangerlussuaq in the week June 8-12, for more details contact Carl Egede Bøggild ([cebo@byg.dtu.dk](mailto:cebo@byg.dtu.dk)).

CGC will also coincide with the “Infinite Next” climate change art exhibition at the Ilulissat Museum by Icelandic artists Anna Lindal and Bjarki Bragason.

## Ilulissat Climate Days topics and schedule

Tuesday June 2 pm/Wednesday am:

- **Climate change effects in Greenland.** This session will consist of invited overview papers on cryosphere changes, and climate change effects on the Greenland resources, society, safety and infrastructure.

Wednesday pm/Thursday am: Sessions topics with a mix of invited and contributed papers on topics:

- **Greenland climate - past, present and future – observations and modelling**
- **Measurement of ice sheet changes by remote sensing from space and aircraft**
- **Mass balance and dynamics of Greenland glaciers**
- **Sea ice changes in the Greenland Seas and Arctic Ocean**
- **Impact of ice melt on the environment and ecosystems**
- **Permafrost and local society effects**

Thursday pm/Friday am: SVALI final conference:

- **Changes of the Arctic and North-Atlantic land ice**
- **Glacier and ice cap changes, process understanding, and impacts on sea level**

Contributed science abstracts will be assigned for either oral or poster presentation; due to the limited time and size of the meeting facilities, not all submitted abstracts can be expected to be presented as requested.

Due to the need for **early reservation of air tickets** please note the following deadlines

Submission of abstracts:	<b>January 30, 2015</b>
Confirmation of presentations:	<b>February 16, 2015</b>
Accommodation deadline (blocked rooms):	<b>March 1, 2015</b>

*It is strongly recommended to contact the secretariat as early as possible for expressions of interest, and confirmation of participation. Airline tickets to Ilulissat sell out very quickly. The program will be developed on a continuous basis, with a cap on the total number of contributed papers due to space limitations.*

A registration fee of 600 DKK (~ 80 Euro or 110 USD) will be charged to cover meeting refreshments and conference dinner.

## Scientific Committee

Prof. Koni Steffen, ETH Zürich/Lausanne, Switzerland  
Prof. Ian Joughin, University of Washington, USA  
Dr. Mark Drinkwater, European Space Agency  
Prof. Peter Wadhams, Cambridge University, UK  
Prof. Jason Box, GEUS, Denmark  
Prof. Jon-Ove Hagen, University of Oslo, Norway  
Dr. Gudfinna Adalgeirsdottir, University of Iceland

## Arrangement Committee

Rene Forsberg, DTU Space (lead)  
Andreas Ahlstrøm, GEUS  
Dorthe Dahl-Jensen, NBI, Copenhagen University  
Carl Egede Bøggild, DTU Artek  
Jens Hesselbjerg Christensen, DMI  
Peter Schmidt Mikkelsen, Greenland Climate Research Centre, Nuuk  
Dorthe Petersen, Asiaq, Nuuk  
Tomas Johannesson, Iceland Meteorological Office, Reykjavik  
*Secretariat:* Lene Bettenhaus, Sabina Askholm Larsen (DTU Space)

## Venue

The workshop will be held at the Hotel Arctic, Ilulissat, Greenland ([www.hotelarctic.gl](http://www.hotelarctic.gl)), Greenlands premier 4\* hotel with an impressive view over the stranded icebergs from the Jakobshavn Glacier, the largest on the northern hemisphere. The main “Greenland” meeting room to be used has a capacity for 120 persons.

Ilulissat is the 3<sup>rd</sup> largest city in Greenland with about 4500 inhabitants (and some 3500 sled dogs), and is located on the W Coast 250 km north of the Arctic Circle. The climate in early June is usually sunny with light winds, with daytime temperatures of 5-8°C, and no mosquitoes that early (climate change dependent!). Boat trips to the ice fjord and glacier flights are popular excursions. Special trips will be offered in connection with the Climate Days. For more details see <http://www.greenland.com/en/destinations/north-greenland/ilulissat/>.



## Travel (flight connections)

The workshop is timed so that it is possible to participate in the workshop by flying into Greenland from Copenhagen on Monday, June 1, or Tuesday, June 2 (early flight connection), leaving Greenland on Friday (June 5) to Copenhagen or Saturday (June 6) to Iceland.

Participants from Nuuk have the opportunity to participate on a short term basis as well (e.g., Tue-Wed or Tue-Thu).

Air Greenland flights from Copenhagen to Ilulissat (via the main airport of Kangerlussuaq) can be booked online at [www.airgreenland.gl](http://www.airgreenland.gl). Ilulissat IATA code is JAV. Note that an overnight in Copenhagen will usually be needed to catch the 09:00 am flight to Greenland. Also note that some foreign travel agents and web sites are unable to book “through” tickets with Air Greenland flight legs.

Air Iceland flights direct to Ilulissat depart from the Reykjavik domestic airport (RKV), not the international airport Keflavik (KEF). Transit between the airports is by bus or taxi (40 min). Air Iceland tickets are available online at [www.airiceland.is](http://www.airiceland.is). The flights depart Tuesday, Thursday and Saturday at 11:15 am, and can usually not be booked as part of international tickets to Iceland. A block-booking of seats on the June 2 departure has been done for the CGC/SVALI-workshops; please contact Tomas Johannesson ([tj@vedur.is](mailto:tj@vedur.is)) if you wish to travel on the June 2 Reykjavik-Ilulissat connection (the Iceland connection fit well with North American flights to KEF).

A 3<sup>rd</sup> option for North American travel could be via Canada (Ottawa-Iqaluit-Nuuk-Ilulissat); it is undecided at present if this route will operate in 2015, check [www.airgreenland.gl](http://www.airgreenland.gl) or [www.firstair.ca](http://www.firstair.ca).

## Accommodation

A block of rooms have been set aside at the Arctic Hotel for participants at the meeting. International participants can make their own reservations at the Arctic Hotel ([booking@hotel-arctic.gl](mailto:booking@hotel-arctic.gl)). A 25% discount applies for registered meeting participants. For online booking please use code 59236869 (after selecting dates press “special rates” and “enter corporate number”). Note that the online booking option covers only the period June 2-6; for extended stays please write a remark in the comment field (e.g, if you wish to stay over the weekend, and catch the southbound flight on Monday, June 8; the 25% discount applies here too).

*Please note that Arctic Hotel and the meeting secretariat will exchange information on Arctic Hotel room bookings utilizing the "Climate Days" flag, to keep the list of Ilulissat Climate Days attendants in synchronization; your consent on this is by default assumed.*

Some larger Danish/Greenlandic/SVALI groups will be booked centrally. Hotel cars usually meet all incoming flights to Ilulissat. The telephone number for the Hotel Arctic reception is +299-944153.

Other accommodation options include:

Hotel Hvide Falk – [www.hotelhvidefalk.gl](http://www.hotelhvidefalk.gl) – tel. +299-943343

Hotel Icefiord – [www.hotelicefiord.gl](http://www.hotelicefiord.gl) – tel. +299-944480

Hotel Avannaá – [www.hotelavannaá.gl](http://www.hotelavannaá.gl) – tel. +299-944002

Hostel-style accommodation is also available, e.g. through *booking.com* or the tourist office in Ilulissat.

**Note – flights sell out quickly – book early, and please confirm your itinerary to the secretariat.**

Meeting information, registration form and abstract submission information available at

<http://www.polar.dtu.dk/english/Ilulissat-Climate-Days>

**For expressions of interest and registration please contact for the workshop secretariat:**

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Tomas Johannesson (Iceland flights), [tj@vedur.is](mailto:tj@vedur.is)

Peter Schmidt Mikkelsen (Greenland questions), [pemi@natur.gl](mailto:pemi@natur.gl)

