Bjerknes Centre for Climate Research

Photo: Stian Rondestveit
Bjerknes Centre for Climate Research

- Named after Vilhelm and Jack Bjerknes
- University of Bergen, UNI Research AS, Nansen Centre, Institute of Marine Res.
- National centre of excellence, 2003-2012. Direct funding from government 2010-2021
- 150 scientists, 25 nationalities. Recruiting from top institutions
- Past, present and future climate. Observations, theory and modeling
- Largest Nordic climate research centre, among top-five Europe
- Coordinates Earth System modeling, national research training.
Research groups

- RG1: Climate model development and projections
- RG2: Climate predictions and regional scenarios
- RG3: Carbon cycle and biogeochemistry
- RG4: Large scale atmosphere-ocean dynamics
- RG5: Atmosphere, cryosphere and ocean processes
- RG6: Natural variability – extending instr.l records
- RG7: Paleoclimate - from greenhouse to icehouse
Internally funded projects

IPCC: IPCC AR5 work (2 yrs)
   A. Sorteberg (UiB)

IMMUNITY: Multi-decadal natural climate variability
   O.H. Otterå (UNI)

PRACTICE: Predictability of Arctic / North Atlantic climate
   Tor Eldevik (SKD-UiB)

REGSCEN: Regionalisation of climate scenarios
   A.B. Sandø (IMR), Stefan Sobolowski (UNI)

DYNAWARM: Dynamics of past warm climate
   B. Risebrobakken (UNI), Camille Li (UiB)

SEALEV: Ice sheet dynamics and sea level change
   J.E.Ø. Nilsen (NERSC)

BIOFEEDBACK: Biogeochemical feedbacks in the climate system
   A. Olsen (UiB), Jerry Tjiputra (UNI)

Total budget 70 MNOK from SKD, 100 MNOK in kind.
New projects will start spring 2015.
Externally funded projects (starting 2014)

- RCN: KLIMAFORSK call. 9 of 13 projects to Bjerknes centre
  FRINAT call: 4 research projects, 2 postdoc stipends
  (Decadal prediction, ocean carbon update, northern MOC, ...)

- NordForsk: GREENICE. Predictability Arctic climate

- EU: Preface, 9 M€. 28 partners, 9 European, 9 African
  countries (Tropical Atlantic – predictability and impacts)
  Ice2Ice (EU synergy). 12,6 M€. 4 partners, 2 countries
  (Ocean - Sea ice – Greenland ice. Paleo, modern, future)

- 12 Feb. SFI proposal on climate services submitted
Research training

Norwegian Research School in Climate Dynamics (RCN)

- 3 MNOK / year for 8 yrs. Ca 80 PhD students in Norway.
  (summer schools, workshops, graduate conferences, various support actions, )

Norwegian – North America partnership in climate (SIU)

- Ca 600 KNOK / year. 4+4 yrs. Mobility, internationalization.
- ACDC summer schools 2009 – 2016
Advanced Climate Dynamics Courses

ACDC2009: “AMOC variability”
UiB Marine Research Station, Bergen

Summer school on ice – ocean interactions
June 2010, MIT Fjällbäck, Lyngen, Norway

Summer school on landscapes and climate
August 2012, Svalbard, Lofoten, Norway

ACDC2013: “Dynamics of the last deglaciation”
Nyksund, Vesterålen, Norway

Next ACDC in 2014 will be on the
“Dynamics of the Greenland Ice Sheet”

16th – 31st of August, 2014, Arctic Station, Disko Island, West Greenland

Target: Advanced PhD candidates and early career scientists.

Goal: To mix students and lecturers with empirical and dynamical training within climate science and focus on understanding the basic principles and dynamics behind changes to the Greenland ice sheet in the past, present and future.

Lecturers: Tamás Stroeve (NHM), Karen H. Nystuen (UiB), Patrick Hornbeck (MIT). David Battist (University of Washington), Camilla Sverrisson Andreassen (GEUS), Øystein Paasche (UiB), Helen Seroussi (Imperial), and Tatsuya Gomes (Harvard), Christies School (UBC).

Open for applications end-January at: http://www.uib.no/nc/acdc/