

Date and place of birth: 6 January 1966, Norway

Present position: Research Scientist at Institute of Marine Research, Bergen

Education

- PhD, “An isopycnic model of the Mediterranean Sea”, University of Bergen, 1999
- Cand.scient. in hydro dynamics, “On the Vertical Structure of Tidal Waves”, University of Bergen, 1992

Research fields

Sandø has expertise in numerical ocean modeling with focus on the North Atlantic, Nordic Seas and Arctic Ocean. Her research interests are atmosphere-ocean-ice interaction and mechanisms for variability on inter-annual to decadal time scales. She has long-term experience from evaluating and analyzing regional and global ocean models.

Employment and working history

2009-present, Research Scientist, Institute of Marine Research, Bergen

2005-2009, Research Scientist at Nansen Environmental and Remote Sensing Center, Bergen

2001-2005, Post. Doc. in numerical ocean modelling at Nansen Environmental and Remote Sensing Center, Bergen

2003-present, Affiliated with the Bjerknes Centre for Climate Research

Involvement in research projects

“West-Nordic Ocean Climate programme”, Nordic Council of Ministers

POCAHONTAS: “Polar Climate and Heat Transport”, Research of Council Norway

NORCLIM: “Climate of Norway and the Arctic in the 21st Century”, Research Council of Norway

“Subpolar Gyre Synthesis”, Bjerknes Centre for Climate Research

“Downscaling Synthesis”, Bjerknes Centre for Climate Research

“Barents Sea Synthesis”, Bjerknes Centre for Climate Research

IPCC: “IPCC AR5”, Centre of Climate Dynamics

PRACTICE: “Predictability of Arctic/North Atlantic climate”, Centre of Climate Dynamics

REGSCEN: “Regional Downscaling”, Centre of Climate Dynamics

Graduate Student Advises

Kristin Richter *Influence of the atmosphere on North Atlantic - Nordic Seas ocean circulation*

Katherine Duarte *Norsk pressedeckning av klimaendringer i 2007- et studie av klimajournalistikk i fem norske aviser*

Outreach

Influence of the Atlantic Subpolar Gyre on the Thermohaline Circulation, GCRCI 16. sep. 2005.

Fryktar dårlegare kår for langrenn, Bergens Tidende 12. des. 2012

Utfylling av kystområder, Bergens Tidende 5. aug. 2008

Kronikk: Klimaforskernes krystallkule, Bergens Tidende 14. jul. 2008

Antarktis, Bergens Tidende 4. jun. 2008

Oversettelse til norsk fra FNs klimarapport: Sammendrag for beslutningstakere, sft.no 1. des. 2007

Slipper isvintre i Norden?, *aftenposten.no* 02. des. 2005

Er Golfstrømmen svekket?, *forskning.no* 02. des. 2005

Minidokumentar om Golfstrømmen, *forskning.no* (Web-TV) 4. nov. 2005

Avblåser frykten for en ny istid, *Aftenposten* 20. sep. 2005

Norske forskere avlyser istiden, *forskning.no* 20. sep. 2005

Dramatisk klimafunn, *Bergens Tidende* 17. sep. 2005

Friskmelder Golfstrømmen, *På høyden* 16. sep. 2005

Publications

Peer review articles in journals:

1. Smedsrud, L, I. Esau, R. Ingvaldsen, T. Eldevik, P. Haugan, C. Li, V. Lien, A. Olsen, A. Omar, O. Otterå, B. Risebrobakken, **A. B. Sandø**, V. Semenov, S. Sorokina, The role of the Barents Sea in the Arctic climate system, conditionally accepted for publication in *Review of Geophysics*
2. **Sandø, A. B.**, J. E. Ø. Nilsen, T. Eldevik and Mats Bentsen. Mechanisms for variable North Atlantic-Nordic Seas exchanges, *J. Geophys. Res.*, **117**, C12006, doi:10.1029/2012JC008177
3. **Sandø, A. B.**, J. E. Ø. Nilsen, Y. Gao and K. Lohmann. Importance of heat transport and local air-sea heat fluxes for the Barents Sea climate variability, *J. Geophys. Res.*, **115**, C07013, doi:10.1029/2009JC005884
Eldevik, T., J. E. Ø. Nilsen, D. Iovino, K. A. Olsson, **A. B. Sandø**, and H. Drange (2009): Observed sources and variability of Nordic Seas overflow, *Nature Geosciences*, doi:10.1038/NGEO518
4. Hatun, H., M. Payne, G. Beaugrand, P. C. Reid, **A. B. Sandø**, H. Drange, B. Hansen, J. A. Jacobsen and D. Bloch (2009), Large biogeographical shifts in the north-eastern Atlantic Ocean: From the subpolar gyre, via plankton, to blue whiting and pilot whales, *Prog. Oceanogr.*, doi:10.1016/j.pocean.2009.03.001
5. **Sandø, A. B.** and Furevik, T. (2008). The relation between the wind stress curl in the North Atlantic and the Atlantic inflow to the Nordic Seas, *J. Geophys. Res.*, **113**, C06028, doi:10.1029/2007JC004236
6. Mauritzen, C., Hjøllo, S. and **Sandø, A. B.** (2006). Passive tracers and active dynamics - a model study of hydrography and circulation in the northern North Atlantic, *J. Geophys. Res.*, **111**, C08014, doi:10.1029/2005JC003252
7. Hatun, H., **A. B. Sandø**, H. Drange B. Hansen and H. Valdimarsson (2005), Influence of the Atlantic Subpolar Gyre on the Thermohaline Circulation, *Science*, **309**, 1841-1844
8. Hatun, H., **Sandø, A. B.**, Drange, H. and Bentsen, M. (2005), Seasonal to decadal temperature variations in the Faroe-Shetland inflow waters. In *The Nordic Seas. An Integrated Perspective*, H. Drange, T. M. Dokken, T. Furevik, R. Gerdes, and W. Berger, Eds., Geophysical Monograph Series 158, AGU, pp 239-248.
9. Eldevik, T., Straneo, F., **Sandø, A. B.**, and Furevik, T. (2005). Ventilation and spreading of Greenland Sea Water. In *The Nordic Seas. An Integrated Perspective*, H. Drange, T.M. Dokken, T. Furevik, R. Gerdes, and W. Berger, Eds., Geophysical Monograph Series 158, AGU, pp 89-103.

Reports and strategic documents:

1. **Sandø, A.B.** (1999), *An isopycnic model of the Mediterranean Sea*, PhD thesis, Nansen Environm. Remote Sensing Centr. and Dep. of Math., Univ. of Bergen, Bergen, Norway

2. **Sandø, A. B.**, Drange, H., and Haugan, P. M. (1993), Diffusion of CO₂ to the atmosphere from a source in the deep ocean, *Energy Convers. Mgmt*, **34**, 849-856
3. **Sandø, A. B.**, Drange, H., and Haugan, P. M. (1993), Injection of CO₂ in the Ocean : Diffusion of CO₂ from the Deep Ocean to the Atmosphere, Technical Report, **66**, Nansen Environmental and Remote Sensing Center, Bergen
4. **Sandø, A.B.** (1992), *On the Vertical Structure of Tidal Waves*, Master thesis, Nansen Environm. Remote Sensing Centr. and Dep. of Math., Univ. of Bergen, Bergen, Norway

Selected presentations at conferences and workshops

1. **Sandø, Anne Britt**; Melsom, Arne; Budgetell, William Paul. Downscaling IPCC models using ROMS. ICES Annual Science Conference; 2012-09-17 - 2012-09-17
2. Hátún, Hjálmar; Payne, Mark; Beaugrand, Gregory; Reid, Philip Chris; **Sandø, Anne Britt**; Drange, Helge; Hansen, Bogi; Jacobsen, Jan Arge; Bloch, Dorete. Large bio-geographical shifts in the north-eastern Atlantic Ocean: From the subpolar gyre, via plankton, to blue whiting and pilot whales. NAFO/ICES Decadal Symposium 2000-2009; 2011-05-09 - 2012-05-12
3. **Sandø, Anne Britt**. Klima etter København. Foredrag på Studentersamfunnet i Bergen; 2010-03-23
4. **Sandø, Anne Britt**; Nilsen, Jan Even Øie; Eldevik, Tor; Bentsen, Mats. Mechanisms behind the North Atlantic-Nordic Seas Exchanges. NorClim project meeting; 2010-09-03
5. **Sandø, Anne Britt**; Nilsen, Jan Even Øie; Gao, Yongqi; Lohmann, Katja. The importance of heat transports and local air-sea heat fluxes to the Barents Sea climate variability. Arctic Frontiers; 2009-01-20 - 2009-01-23
6. **Sandø, Anne Britt**; Furevik, Tore. The relation between the wind stress curl in the North Atlantic and the Atlantic inflow to the Nordic Seas. Bjerknes Days; 2007-11-27 - 2007-11-27