

PERSONAL INFORMATION

Family name, First name: **Eldevik, Tor**

Research ID: <https://scholar.google.no/citations?user=Ha2AsL4AAAAJ>

Date of birth: **28.02.1970; male; married; 2 daughters; Norwegian**

WWW: www.uib.no/persons/Tor.Eldevik; folk.uib.no/tel083; twitter: @TorEldevik

EDUCATION

1996 – 2000 Doctor scientiarum (Dr. scient.), Department of Mathematics, University of Bergen, Norway; supervisors K.B. Dysthe and J. Berntsen

1998 – 1999 Honorary Associate, School of Mathematics, Uni. of New South Wales, Sydney, Australia; host M. Banner

1989 – 1995 Candidatus scientiarum (Cand. scient.), Dept. of Mathematics, University of Bergen, Norway; supervisor A.H. Øien

CURRENT POSITION

2019 – Head of Department, Geophysical Institute, University of Bergen, Norway

2013 – Full professor, Geophysical Institute, University of Bergen, Norway

PREVIOUS RELEVANT WORK EXPERIENCE, selected

2014 – 2019 Deputy director, Bjerknes Centre for Climate Research, Bergen, Norway

2012 – 2019 Research leader, Bjerknes Centre for Climate Research, Bergen, Norway

2010 – 2012 Associate professor, Geophysical Institute, University of Bergen, Norway

2006, 2009 3.5 + 3.5 months of paternal leave

2001 – 2010 Research scientist and Deputy leader (from 2004), G.C. Rieber Climate Institute, Nansen Environmental and Remote Sensing Center, Bergen, Norway

1996 – 2000 Research fellow (“stipendiat”), Dept. of Math., University of Bergen

1995 Teacher, Mathematics and Computing, Bergen Federal Penitentiary, Norway

1990 – 1991 Radar operator, Royal Norwegian Navy, *KNM Gnist*, 22nd MTB Squadron

FELLOWSHIPS AND AWARDS, not including student awards

2014 Nansen Medal, the Norwegian Academy of Science and Letters

MAJOR GRANTS AND MANAGEMENT SKILLS, selected

2018 – 2023 Trond Mohn Foundation (TMS), *Bjerknes Climate Prediction Unit (project co-leader)*

2017 – 2024 Norwegian Ministry of Education and Research Council of Norway (RCN), *The Nansen legacy*, establishing the knowledge base for the future Barents Sea (**project co-leader**)

2017 – 2021 EU H2020, *Blue Action: Arctic Impact on Weather and Climate (task leader)*

2014 – 2018 RCN, *NORTH: NORthern constraints on the Atlantic ThermoHaline circulation (project leader)*

2008 – 2012 EC Environment, *THOR: Thermohaline Circulation - at Risk? (core theme co-leader)*

2003– 2012 RCN, Norwegian Centre of Excellence SFF: *The Bjerknes Centre for Climate Research (research group leader)*

2007 – 2010 Research Council of Norway, *POCAHONTAS: Polar Climate and Heat Transport (project co-leader)*

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2010 – 5 Postdoctoral fellows / 9 PhD students (incl. 4 ongoing) / 5 Master students
Geophysical Institute, University of Bergen, Norway

2001 – 2010 1 Postdoctoral fellow/ 4 PhD students
Nansen Environmental and Remote Sensing Center, Bergen, Norway

1999 – 2001 2 Master students
Department of Mathematics, University of Bergen, Norway

I was main supervisor for 5 out of the 9 completed PhDs; I am for 2 of the ongoing 4.

The above includes: Ingvild Lygren, MSc student; now PeTec leader Equinor / Natasha Ridenour, MSc; postdoc UAlberta / Dorotea Iovino, PhD; scientist CMCC, Bologna / Erwin Lambert, PhD; postdoc UUtrecht / Helene Langehaug, PhD; postdoc UiB / Ben Marzeion, PhD; professor UBremen / Ingrid H. Onarheim, PhD; senior researcher Equinor / Marius Årthun, postdoc; researcher, code “1183” UiB / Carina Bringedal, postdoc; Jr Professor UStuttgart / Mirjam Glessmer, postdoc; didactics consultant UKiel, adjoint assoc. prof UiB / Kevin Oliver, postdoc; lecturer USouthampton / Kjetil Våge, postdoc; professor UiB

TEACHING ACTIVITIES, selected

- 2010 – Graduate/bachelor level, Data Analysis in Meteorology and Oceanography (2010–2012, 2017); Geophysical Institute, University of Bergen, Norway
- 1999 – 2005 Graduate/bachelor level, different courses in calculus, differential equations, hydrodynamics; Department of Mathematics, University of Bergen, Norway
- 2011 – 2012 UiB basic pedagogical training (“basismodul”)
- 2010 – 2011 UiB Faculty of Mathematics and Natural Science’s *Working group on learning outcomes*

ORGANISATION OF CONFERENCES, MEETINGS, selected

- 2021 Moderator *Climate change, the ocean and its people: Unprecedented challenges, workable solutions and a sustainable future*, 3rd Ocean Sustainability Bergen Conference, 21/10/21
- 2018 Co-convener *Seeing the Future: Predicting Variability and Change of the Polar Climate and Environment*. POLAR2018, Davos, Switzerland.
- 2015 Co-chair *Moana, the Rising Ocean: The Pacific Islands and Global Climate Change*. International symposium in collaboration with the Bergen International Festival, 29/5/2015
- 2015 Leader scientific committee *Arctic climate change – global implications*, Arctic Frontiers, Tromsø, 18–23/1/2015
- 2008 Convener *The Nordic Seas and the North Atlantic's Subpolar Gyre: Similarities, Differences, and Interconnection*, ASLO/AGU 2008 Ocean Sciences, Orlando, 2–7/3/2008

INSTITUTIONAL RESPONSIBILITIES, selected

- 2021 Working group member, *Gender equality and diversity policy*, UiB
- 2021 Working group member, *Policy on the use of academic positions*, Faculty of Mathematics and Natural Sciences, UiB
- 2020 Working group member, *Open science policy*, UiB
- 2019 – Head of Dept. responsibilities incl personnel (150p), budget (140 mill NOK/yr), strategy
- 2017 – 2019 Member of UiB’s strategic committee on *Climate and Energy Transformation*; coordinator of the *Climate System* theme.
- 2004 – 2019 Member Bjerknes Centre for Climate Research *Leader Group*

COMMISSIONS OF TRUST, selected

- 2021 – Board member *Arctic Frontiers AS*
- 2020 – Board member *iEarth*, a Centre of Excellence in Education (SFU)
- 2020 – 2022 Leader steering committee for *UiB’s Action plan for The high north*
- 2019 – Board member *Climate and Polar Portfolio* Research Council of Norway
- 2019 – Member advisory board *Nansen-Zhu International Research Centre*, Institute of Atmospheric Physics, Chinese Academy of Sciences
- 2018 – 2021 Leader Expert Group of the European Academies' Science Advisory Council’s (EASAC) policy report *A Sea of Change: Europe’s future in the Atlantic realm*
- 2018 Member Norwegian delegation, 2nd *Arctic Science Ministerial*, Berlin, Germany.
- 2017 – Task co-leader CLIVAR/CLIC *NORP Northern Oceans Regional Panel*
- 2017 – 2019 Member *Faculty Board*, Faculty of Mathematics and Natural Sciences, University of Bergen
- 2015 – International Scientific Steering Group, *ASOF Arctic–Subarctic Ocean Fluxes*
- 2015 International Advisory Panel, EU FP7 project *NACLIM North Atlantic Climate*
- 2014 – 2017 Steering committee, NAVIS – *North Atlantic Virtual InStitute* (NSF)
- 2012 – 2014 Leader of working group *The Nansen legacy*, original research plan commissioned by *The Nansen legacy*, original research plan the Norwegian Ministry of Education

REVIEWER

Journals Bull Am Met Soc, Clim Dyn, Deep Sea Res, Geophys Res Lett, J Climate, J Fluid Mech, J Geophys Res, J Oceanogr, J Phys Oceanogr, Nature Climate Change, Nature Geoscience, Ocean Sci, Polar Res, Science, Tellus; *Proposals/reports* The German Federal Ministry of Education and Research (BMBF), Intergovernmental Panel on Climate Change (IPCC), Natural Environment Research Council (NERC), US National Science Foundation (NSF); *Other* Proceedings of the 2017 conference for YOUng MARine REsearchers (Springer)

INVITED PRESENTATIONS, summary

I have given about 30 invited peer presentations. I have presented at peer and public arrangements hosted by the Royal Norwegian embassies in Rome, Italy; Berlin, Germany; and Washington DC, USA; and given briefings for, e.g., the Norwegian ministers of Foreign Affairs, and Climate and Environment, and for the Canadian Minister of Fisheries and Oceans. I was an opening speaker at the policy brief *The slowing Gulf Stream? What we know and potential impacts* for the European Commission's Director DG Climate Action and MEPs at the European Parliament, Brussels, Sept 2018.

I am regularly interviewed by national and regional media, and have also contributed, e.g., to two featured stories by Reuters, and one in Le Monde, Der Spiegel, and The Strait Times, respectively.

I regularly chair or participate in public panel debates involving government members (incl. an "Ocean talk" with prime minister Solberg, Bergen, 17/9/21), key stakeholders and business leaders, NGOs, journalists, and scientific experts (e.g., Arendalsuka, Arctic Frontiers).

PUBLICATIONS [for full list, see: https://people.uib.no/tel083/CV/eldevik_REFS_Oct21.pdf]

Peer review, selected (* indicates supervisor/mentorship role; for full list see)

1. Dörr, J., M. Årthun, **T. Eldevik**, and E. Madonna, 2021(*): Mechanisms of regional winter sea-ice variability in a warming Arctic. *J. Climate*, **34**, 8635–8653.
2. EASAC, 2021: A sea of change: Europe's future in the Atlantic realm. *EASAC policy report 42*. (leader of expert group)
3. Årthun, M., I.H. Onarheim, J. Dörr, and **T. Eldevik**, 2021: The seasonal and regional transition to an ice-free Arctic. *Geophys. Res. Lett.*, **48**, e2020GL090825.
4. **Eldevik, T.**, and P.M. Haugan, 2020: That's a lot of water. *Nature Physics*, **16**, 496–496.
5. **Eldevik, T.**, L.H. Smedsrud, C. Li, M. Årthun, E. Madonna, and L. Svendsen, 2020: The Arctic Mediterranean. *Interacting Climates of Ocean Basins: Observations, Mechanisms, Predictability, and Impacts*, C.R. Mechoso, Ed., CUP, 2020.
6. Skagseth, Ø., **T. Eldevik**, M. Årthun, H. Asbjørnsen, V. Lien, and L.H. Smedsrud, 2020: Reduced efficiency of the Barents Sea cooling machine. *Nature Clim. Change*, **10**, 661–666.
7. Asbjørnsen, H., M. Årthun, Ø. Skagseth, and **T. Eldevik**, 2019(*): Mechanisms of ocean heat anomalies in the Norwegian Sea. *J. Geophys. Res.*, **124**, 2908–2923.
8. Årthun, M., **T. Eldevik**, and L.H. Smedsrud, 2019: The role of Atlantic heat transport in future Arctic winter sea ice loss. *J. Climate*, **32**, 3327–3341.
9. Bringedal, C., **T. Eldevik**, Ø. Skagseth, M. Spall, and S. Østerhus, 2018(*): Structure and forcing of observed exchanges across the Greenland-Scotland Ridge. *J. Climate*, **31**, 9881–9901.
10. Onarheim, I.H., **T. Eldevik**, L.H. Smedsrud, and J.C. Stroeve, 2018(*): Seasonal and regional manifestation of Arctic sea ice loss. *J. Climate*, **31**, 4917–4932.
11. Årthun, M., E.W. Kolstad, **T. Eldevik**, and N.S. Keenlyside, 2018: Time scales and sources of European temperature variability. *Geophys. Res. Lett.*, **45**, 3597–3604.
12. Ferreira, D., P. Cessi, H. Coxhall, A. de Boer, H.A. Dijkstra, S.S. Drijfhout, **T. Eldevik**, N. Harnik, J.F. McManus, D.P. Marshall, J. Nilsson, F. Roquet, T. Schneider, and R.C. Wills, 2018: Atlantic-Pacific Asymmetry in Deep-Water Formation. *Ann. Rev. Earth Pl. Sci.*, **46**:1.
13. Årthun, M., **T. Eldevik**, E. Viste, H. Drange, T. Furevik, H.L. Johnson, and N.S. Keenlyside, 2017(*): Skillful prediction of northern climate provided by the ocean. *Nature Communications*, **8**, DOI: 10.1038/ncomms15875.
14. Lambert, E., **T. Eldevik**, and P.M. Haugan, 2016(*): How northern freshwater input can stabilize thermohaline circulation. *Tellus A*, **68**, 31051, DOI 10.3402/tellusa.v68.31051.
15. **Eldevik, T.**, B. Risebrobakken, A.E. Bjune, C. Andersson, H.J.B. Birks, T.M. Dokken, H. Drange, M.S. Glessmer, C. Li, J.E.Ø. Nilsen, O.H. Otterå, K. Richter, and Ø. Skagseth, 2014: A brief history of climate – the northern seas from the Last Glacial Maximum to global warming. *Quat. Sci. Rev.*, **106**, 225–246.
16. Glessmer, M.S., **T. Eldevik**, K. Våge, J.E.Ø. Nilsen, and E. Behrens, 2014(*): Atlantic origin of observed and modelled freshwater anomalies in the Nordic Seas. *Nature Geoscience*, **7**, 801–805.

17. **Eldevik, T.** and J.E.Ø. Nilsen, 2013: The Arctic–Atlantic thermohaline circulation. *J. Climate*, **26**, 8698–8705.
18. Smedsrud, L.H., I. Esau, R.B. Ingvaldsen, **T. Eldevik**, P.M. Haugan, C. Li, V.S. Lien, A. Olsen, A.M. Omar, O.H. Otterå, B. Risebrobakken, A.B. Sandø, V.A. Semenov, and S.A. Sorokina, 2013: The role of the Barents Sea in the Arctic climate system. *Rev. Geophys.*, **51**, 415–449.
19. Årthun, M., **T. Eldevik**, L.H. Smedsrud, Ø. Skagseth, and R. Ingvaldsen, 2012: Quantifying the influence of Atlantic heat on Barents Sea ice variability and retreat. *J. Climate*, **25**, 4736–4743.
20. Langehaug, H.R., I. Medhaug, **T. Eldevik**, and O.H. Otterå, 2012(*): Arctic/Atlantic exchanges via the Subpolar Gyre. *J. Climate*, **25**, 2421–2439.
21. **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 Geoscience*, **2**, 406–410.
22. Oliver, K.I.C., **T. Eldevik**, D.P. Stevens and A. Watson, 2008(*): A Greenland Sea perspective on the dynamics of post-convective eddies. *J. Phys. Oceanogr.*, **38**, 2755–2771.
23. **Eldevik, T.**, 2002: On frontal dynamics in two model oceans. *J. Phys. Oceanogr.*, **32**, 2915–2925.
24. **Eldevik, T.** and K.B. Dysthe, 2002: Spiral eddies. *J. Phys. Oceanogr.*, **32**, 851–869.

Non-review. I have contributed about 20 reports, book chapters, proceedings or similar.

Popular outreach (mostly in Norwegian)

Science, policy, and university debate, selected

1. **Eldevik, T.**, 2021: Fra det moderne Norges ånds liv. Debattinnlegg *Khrono*, 28/9/21.
2. **Eldevik, T.**, and L.H. Smedsrud, 2021: Hundreårs stormflo fra Atlanterhavet årlig eller hvert femte år? Debattinnlegg *Dagens Næringsliv*, 8/6/21.
3. **Eldevik, T.**, 2021: Norges siste valgte rektor? Debattinnlegg *Khrono*, 22/3/21.
4. **Eldevik, T.**, 2020: Iskanten: Femten er ikke midt mellom tre og aldri. Debattinnlegg *Dagens Næringsliv*, 6/6/20.
5. **Eldevik, T.**, 2019: Slapt om slappe studenter. Debattinnlegg *Khrono*, 23/12/19.
6. **Eldevik, T.**, and T. Furevik, 2019: Vi må ha kutt og nedrustning av møtevirksomhet. Debattinnlegg *Khrono*, 4/7/19.
7. **Eldevik, T.**, 2019: Plan A. Kronikk *Morgenbladet*, 11/1/19.
8. **Eldevik, T.**, 2018: Fisk i olje – med omdømmet i behold? Debattinnlegg *Dagens Næringsliv*, 26/8/18.
9. **Eldevik, T.**, 2018: Hva er vi for når vi hele tiden er mot? Debattinnlegg *Morgenbladet*, 11/5/18.
10. **Eldevik, T.**, 2017: Når substansen skal sjekkes. Debattinnlegg *Morgenbladet*, 8/12/17.
11. **Eldevik, T.**, 2016: Stø kurs, men hvor? Debattinnlegg *På Høyden*, 23/5/16.
12. **Eldevik, T.**, 2012: Universitetsrangeringer sier lite om UiB. Debattinnlegg *På Høyden*, 22/10/12.
13. **Eldevik, T.**, 2011: Smi mens reaktoren er varm. Debattinnlegg *Bergens Tidende*, 17/3/11.

Popular science (generally based on my own research), selected

1. **Eldevik, T.**, K. Kleiven, and T. Furevik, 2021: Å beregne verden. Kronikk *Khrono*, 23/10/21.
2. **Eldevik, T.**, M. Årthun, and Are Olsen, 2019: Hvor går grensen for iskanten? “Forskning viser at...”, *Dagens Næringsliv*, 6/7/19.
3. Reigstad, M., **T. Eldevik**, and S. Gerland, 2019: The Nansen Legacy. *Fram Forum 2019* (J. Holmén, Ed.), 100–105.
4. Langehaug, H.R., and **T. Eldevik**, 2016: Norskehavets hukommelse gjør klimavarsling mulig. *Naturen*, **1**, 42–47.
5. **Eldevik, T.**, 2015: En kort historie om klima – de nordlige hav fra siste istid til global oppvarming. Nansen Minneforelesning, *Det Norske Videnskaps-Akademi Årbok 2014*.
6. Onarheim, I.H., and **T. Eldevik**, 2015(*): Et sted må grensen gå. “Forskning viser at...”, *Dagens Næringsliv*, 8/8/15.
7. **Eldevik, T.**, 2014: Arktis smelter, Golfstrømmen består. *Aftenposten Viten*, 1/10/14.
8. **Eldevik, T.**, B. Risebrobakken, and A. Bjune, 2014: Tilbake til fremtiden. “Forskning viser at...”, *Dagens Næringsliv*, 20/9/14.
9. **Eldevik, T.**, and M. Reigstad, 2014: Arven etter Nansen. Kronikk *Bergens Tidende*, 1/4/14.
10. **Eldevik, T.**, and M. Årthun, 2012(*): Nansen fikk rett. “Forskning viser at...”, *Dagens Næringsliv*, 25/8/12.
11. Lie, Ø., and **T. Eldevik**, 2009: Klima i de lange linjers perspektiv. Kronikk *forskning.no*, 18/6/09.
12. **Eldevik, T.**, 2006: En ny istid truer? Kronikk *Dagbladet*, 13/1/06.
13. **Eldevik, T.**, 2004: Klimaet og "The Day After Tomorrow". Kronikk *Bergens Tidende*, 2/9/04.
14. **Eldevik, T.**, H. Drange, and S. Sætre Hjøllo, 2002: Dypvannsdannelse i ny form. *Cicerone*, **3**, 20–22.

Climate debate, selected

1. **Eldevik, T.**, 2014: Hans Borge tar feil. Debattinnlegg *Bergens Tidende*, 2/12/14.
2. **Eldevik, T.**, 2011: Forunderlige klimamyter. Debattinnlegg *forskning.no*, 30/6/11.
3. Drange, H., **T. Eldevik**, T. Furevik, and E. Jansen, 2010: Klimaskepsis på tynn is. Debattinnlegg *På Høyden*, 25/5/10.
4. **Eldevik, T.**, 2008: Kampen mot kunnskap. Debattinnlegg *Dagbladet*, 9/4/08.
5. **Eldevik, T.**, 2008: Utrolig klimakompetanse. Debattinnlegg *Aftenposten*, 1/4/08.
6. **Eldevik, T.**, 2007: Dårlig kjemi i klimadebatten. Debattinnlegg *Bergens Tidende*, 4/10/07.
7. **Eldevik, T.**, 2006: Golfstrømmen tok ikke pause. Debattinnlegg *Aftenposten*, 2/11/06.
8. **Eldevik, T.**, 2005: Det må være lov... Debattinnlegg *Bergens Tidende*, 25/2/05.