

Curriculum Vitae – Lasse Sander

Physical Geographer, PhD

Full Name	Lasse Sander
Date and place of birth	July 19, 1982, Hannover, Germany
Citizenship	German
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Employment

APR 2016 – PRESENT	RESEARCH ASSOCIATE, Wadden Sea Research Station, Alfred-Wegener-Institute, Helmholtz Center for Polar and Marine Research, List/Sylt, Germany.
DEC 2014 – JUN 2015	POSTDOC, Geological Survey of Denmark and Greenland (GEUS), Department of Stratigraphy, Copenhagen, Denmark
APR – MAY 2013	VISITING SCIENTIST, Instituto Argentino de Oceanografía (IADO-CONICET), Bahía Blanca, Argentina
SEP 2011 – SEP 2014	PHD STUDENT, Dept. Geosciences and Natural Resource Management, University of Copenhagen, Denmark
FEB – AUG 2011	INTERN, Dept. Plant and Environmental Sciences, University of Copenhagen, Denmark. Awardee of Leonardo Da Vinci Scholarship (European Union)
SEP – DEC 2010	INDEPENDENT RESEARCHER, Andescrop, Fundación PROINPA, Uyuni/La Paz, Bolivia, in cooperation with University of Copenhagen, Denmark

Education & Degrees

FEB 2015	PHD DEFENSE
SEP 2011 – SEP 2014	PHD STUDIES, Dept. Geosciences and Natural Resource Management, University of Copenhagen, Denmark. Topic: <i>'The Holocene Evolution of the Coastal Landscape in Denmark: Beach Ridge and Lagoon Systems as Indicator of Sea-Level Change'</i>
APR 2010	DIPLOM (eq. MSc), Physical Geography and Landscape Ecology, University of Hannover, Germany
MAY 2009 – FEB 2010	DIPLOMARBEIT (eq. MSc thesis). Topic: <i>'The Influence of Agrarian Reforms on Erosion Patterns in the Central Ecuadorian Andes'</i> , University of Hannover, in cooperation with Université Catholique de Louvain, Louvain-la-Neuve, Belgium and Universidad de Cuenca, Ecuador
APR 2006 – MAR 2009	HAUPTSTUDIUM (eq. MSc studies) in Physical Geography and Landscape Ecology (minors: Geology, Meteorology), University of Hannover, Germany
OCT 2003 – OCT 2005	GRUNDSTUDIUM (eq. BSc studies) in Geography (minors: Geosciences, Ecology), University of Bremen, Germany

Publications (peer reviewed)

Sander L (2016) Date-prints on stranded macroplastics: Inferring the timing and extent of overwash deposition on the Skallingen peninsula, Denmark. *Marine Pollution Bulletin* **109** (1), 373-377.

Sander L, Hede MU, Fruergaard M, Nielsen L, Clemmensen LB, Kroon A, Johannessen PN, Nielsen LH, Pejrup M (2016) Coastal lagoons and beach ridges as complementary sedimentary archives for the reconstruction of Holocene relative sea-level changes. *Terra Nova*, **28** (1), 43-49.

Sander L, Fruergaard M, Pejrup M (2016) Coastal landforms and the Holocene evolution of the Island of Samsø, Denmark. *Journal of Maps*, **12** (2), 276-286.

Hede MU, Sander L, Clemmensen LB, Kroon A, Pejrup M, Nielsen L (2015) Changes in Holocene relative sea-level and coastal morphology: A study of a raised beach ridge system on Samsø, southwest Scandinavia. *The Holocene*, **25** (9), 1402-1414.

Sander L, Raniolo LA, Alberdi E, Pejrup M (2015) Elevation trends in wide beach-ridge systems retrieved from Landsat images and the SRTM digital surface model. *Journal of Coastal Research*, **31** (5), 1241-1252.

Sander L, Fruergaard M, Koch J, Johannessen PN, Pejrup M (2015) Sedimentary indications and absolute chronology of Holocene relative sea-level changes retrieved from coastal lagoon deposits on Samsø, Denmark. *Boreas*, **44** (4), 706-720.

Fruergaard M, Møller I, Johannessen PN, Nielsen LH, Andersen TJ, Nielsen L, Sander L, Pejrup M (2015) Stratigraphy, evolution, and controls of a Holocene transgressive-regressive barrier island under changing sea level: Danish North Sea coast. *Journal of Sedimentary Research*, **85** (7), 820-844.

Sander L (2014) Kite aerial photography (KAP) as a tool for field teaching. *Journal of Geography in Higher Education*, **38** (3), 425-430.

Manuscripts (submitted)

Sander L, Pejrup M, Murray AS, Perillo GME, Raniolo LA, Fruergaard M (in revision) Chronology and late Holocene evolution of Caleta de los Loros, NE Patagonia, Argentina. *The Holocene*.

Klemann V, Steffen H, Wehr J, Latinović M, Ojala A, Berglund M, Peterson G, Schoning C, Bennike O, Nielsen L, Clemmensen LB, Hede MU, Kroon A, Pejrup M, Sander L, Statteregger K, Schwarzer K, Lampe R, Lampe M, Uścinowicz S, Bitinas A, Grudzinska I, Rosentau A, Kublitskiy YA, Vassiljev J, Subetto DA (submitted) A Holocene sea-level database for the Baltic Sea. *Quaternary Science Reviews*.

Conference presentations (selection of recent contributions)

Sander L, Michaelis R, Papenmeier S, Pravkin S, Wiltshire K (2018) Characteristics of wave-built sedimentary archives in Buor Khaya Bay (71°N/130°E), Siberian Arctic, Russia. 33rd Nordic Geological Winter Meeting, Lyngby, Denmark, 10-12 January, 2018.

Sander L, Hass HC (2017) Long-term observations on surface dynamics in tidal and shelf-sea habitats from optical and acoustic sensors. *Workshop: Deutsche Bucht im Wandel – Die Bedeutung von Langzeitdaten*, List - Germany, 22 - 24 November 2017.

Sander L, Papenmeier S, Michaelis R, Mielck F, Hass HC (2017) Mapping benthic habitats in the Sylt-Rømø Bight, *European Geosciences Union - General Assembly 2017*, Vienna - Austria, 23 - 28 April 2017.

Michaelis R, Mielck F, Papenmeier S, Sander L, Hass HC. (2017) Characterisation of hard-substrate habitats in the German Bight (SE North Sea) from video observation. *European Geosciences Union - General Assembly 2017*, Vienna - Austria, 23 - 28 April 2017.

Sander L, Fruergaard M, Murray AS, Perillo GME, Pejrup M (2017) The Holocene evolution of Caleta de los Loros, NE Patagonia, Argentina. 35th Annual Conference of the Working Group „Geography of Seas and Coasts“ (AMK), Kiel University, 19 - 22 April 2017.

Sander L (2016) Date prints on stranded macroplastics: Exploring the potential of marine litter assemblages as chronological markers in recent coastal deposits, *AGU Fall Meeting 2016*, San Francisco - USA, 12 - 16 December 2016.

Expeditions and research cruises (selection of recent activities)

Multibeam survey (chief scientist): RV “Mya II”, Lister Deep tidal inlet, Denmark/Germany. 23 November – 12 December 2016.

Hydrographic survey (chief scientist): RV “Ural”, Samoylov Research Station and Lena river delta, Russian Federation, Project: Expedition Lena 2017 (AWI, AARI, PIY). 30 Juli - 13 August 2017.

Exploration of wave-built palaeoenvironmental archives (chief scientist): RV “Nicole”, Buor Khaya Bay, Russian Federation, Project: Expedition Lena 2017 (AWI, AARI, PIY). 14 – 21 August 2017.

Video-based habitat mapping (participant): FK “Uthörn”, Helgoland, Germany. 26 - 30 Juni 2017.

Acoustic seafloor mapping (participant): RV “Heincke”, Dogger Bank, Sylt Outer Reef, German Bight, Project: AMIN II (BSH). 1 – 15 March 2017.

Multibeam survey (chief scientist): RV “Mya II”, Lister Deep tidal inlet, Denmark/Germany. 21 November – 2 December 2016.

Acoustic seafloor mapping (participant): RV “Heincke”, Dogger Bank, Sylt Outer Reef, German Bight, Project: AMIN II (BSH). 12 – 20 October 2016.

Experience with selected methods and software

Geodata: Multispectral satellite data, aerial imagery and orthophotos, digital terrain and surface models (e.g. LiDAR, SRTM).

Hydroacoustic sensors for seafloor and habitat mapping: Multibeam (*Wärtsilä ELAC SeaBeam 1180*; *HYPACK*), Side-scan sonar (*YellowFin*, *Starfish*, *Edgetech*; *SonarWiz*), Acoustic ground discrimination systems (*RoxAnn*, *Biosonics*), acoustic sub-bottom profiler (*Innomar SES-2000*).

Mapping tools: DGPS, GPS-RTK, ArcGIS, QGIS, Kite- and UAV-based survey and photogrammetric applications (Agisoft Photoscan), video observation.

Sediments: Vibracoring, core log description and interpretation, laser-diffraction granulometry (Malvern Mastersizer, Cilas), XRF data, grab sampling, AMS ¹⁴C dating, OSL dating.

Biological monitoring: Benthic foraminifera.

Languages

German	Native proficiency
English	Full professional proficiency
Danish	Professional working proficiency (reading/writing)
Spanish	Professional working proficiency (reading/writing)
French	Elementary proficiency (reading)

Last updated: January 17, 2018