

Absolute Dynamic Topography : corrected Nemo-Nordic Model for the Baltic Sea

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 2023 <https://doi.org/10.17882/96784>

Absolute dynamic topography through synergizing sea level data sources utilizing a common and stable reference surface

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 <https://doi.org/10.57757/IUGG23-1756>

Accurate dynamic topography by satellite altimetry and marine geoid model

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 13th Coastal Altimetry Workshop & Coastal Altimetry Training, 6-10 February 2023, Universidad de Cádiz, Spain : abstract 2023 / p. 36
<https://www.coastalaltimetry.org/NikalWebsitePortal/coastal-altimetry-workshop/esa/ExtraContent/ContentSubPage?page=8&subPage=3>

Accurate sea surface heights from Sentinel-3A and Jason-3 retracers by incorporating high-resolution marine geoid and hydrodynamic models

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Journal of geodetic science 2021 / p. 58-74
<https://doi.org/10.1515/jogs-2020-0120> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Airborne laser scanning derived sea surface height datasets in the Gulf of Finland (10.05.2018)

Varbla, Sander; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille SEANOE 2020 <https://doi.org/10.17882/76491>

Along-track satellite altimetry to identify coastal sea level dynamics using a synergized geodetic-oceanographic approach = Satelliitaltimeetria pikiorbitse andmestikuga rannikumere veetaseme dünaamika tuvastamine kasutades sünergilist geodeetilise-okeanograafilist meetodit

Mostafavi, Majid 2024 https://www.ester.ee/record=b5671644*est <https://doi.org/10.23658/taltech.11/2024>
<https://digikogu.taltech.ee/et/Item/49eaa519-adfc-42a0-98dd-a69ba649331a>

Application of deep conditional generative adversarial networks to fill the gaps of satellite altimetry-based absolute dynamic topography

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 / 1 p <https://doi.org/10.57757/IUGG23-1627>

Applications of airborne laser scanning for determining marine geoid and surface waves properties

Varbla, Sander; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille European journal of remote sensing 2021 / p. 558–568
<https://doi.org/10.1080/22797254.2021.1981156> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Applying machine learning with satellite altimetry data for prediction of absolute dynamic topography for the Baltic Sea

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic Geodetic Commission General Assembly 2022 in Copenhagen : Poster Session 2022 / 26 I. <https://medialib.cmcdn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

An assessment and quantification of sea surface currents using satellite altimetry, in-situ and hydrodynamic model data for the Gulf of Finland, Baltic Sea

Delpeche-Ellmann, Nicole Camille; Viikmäe, Bert; Pindsoo, Katri; Soomere, Tarmo 2019 European Space Agency Living Planet Symposium 2019 / [1] p <https://lps19.esa.int/NikalWebsitePortal/living-planet-symposium-2019/lps19/Speaker>

Assessment of hydrodynamic model sea level performance through Geoid-Referenced Tide-Gauge and Satellite Altimetry : poster

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Living Planet Symposium (LPS22) 2022 / 1 p
<https://www.lps22.eu/>

Barotropic trends through the Barents Sea opening for the period 1975–2021

Jahanmard, Vahidreza; Löptien, Ulrike; Sandø, Anne Britt; Gierisch, Andrea M. U.; Dietze, Heiner; Lien, Vidar; Delpeche-Ellmann, Nicole Camille; Hordoir, Robinson Journal of Geophysical Research: Oceans 2025 / art. e2024JC021663
<https://doi.org/10.1029/2024JC021663>

A case study of transverse jets in coastal upwellings from a Lagrangian transport perspective

Delpeche-Ellmann, Nicole Camille; Soomere, Tarmo 55th International Liège Colloquium on Ocean Dynamics: Ocean Extremes: Liège, Belgium, 27-31 May 2024 2024 / 1 poster <https://gher-uliege.github.io/liege-colloquium-2024/>

Circulation patterns in the Gulf of Finland applied to environmental management of marine protected areas = Soome lahe pinnahoovuste mustrite rakendamiseest looduskaitsealade haldamisest

Delpeche-Ellmann, Nicole Camille 2014 <https://digi.lib.ttu.ee/i/?1820> https://www.ester.ee/record=b4436090*est

Coastal sea level trend using multi mission along track satellite altimetry for the Baltic Sea

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of

Comparison of dynamic topography bias in HIROMB and NEMO-Nordic model by utilizing marine geoid

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Geophysical research abstracts 2020 / p. EGU2020-20134 <https://doi.org/10.5194/egusphere-egu2020-20134>

A comparison of the motions of surface drifters with offshore wind properties in the Gulf of Finland, the Baltic Sea

Delpeche-Ellmann, Nicole Camille; Torsvik, Tomas; Soomere, Tarmo Estuarine, coastal and shelf science 2016 / p. 154-164 : ill <https://doi.org/10.1016/j.ecss.2016.02.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A data-fusion technique for forecasting of absolute sea levels in the Baltic Sea

Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 2023 Machine Learning And Data Analysis In Oceanography, University of Liège, Belgium 2023 / 1 p [A data-fusion technique for forecasting of absolute sea levels in the Baltic Sea](#)

Deeper insights into the validation of hydrodynamic models using a synergy of remote sensing data

Delpeche-Ellmann, Nicole Camille; Varbla, Sander; Jahanmard, Vahidreza; Ellmann, Artu Baltic Earth Workshop Climate projections and uncertainties in the northern Baltic Sea region, Helsinki, Finland, 19-20 November, 2019 : Programme, Abstracts, Participants 2019 / p. 14-15

Determination of Accurate Dynamic Topography for the Baltic Sea Using Satellite Altimetry and a Marine Geoid Model

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu; Jahanmard, Vahidreza Remote sensing 2023 / art. 2189 <https://doi.org/10.3390/rs15082189> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Determining the Accuracy of Sentinel-3A and Sentinel-6 Satellite Altimetry Data in the Gulf of Finland using a synergy of data : [poster presentation]

Heinoja, Lenne-Liisa; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu The Gulf of Finland Science Days 2021 "New start for the Gulf of Finland co-operation" : Estonian Academy of Sciences, Tallinn, 29-30 November 2021 : abstracts 2021 / p. 45 <https://www.gulfoffinland.fi>

Development of continuous dynamic vertical reference for maritime and offshore engineering by applying geodetic and machine learning strategies

Ellmann, Artu; Delpeche-Ellmann, Nicole Camille; Varbla, Sander; Rajabi Kiasari, Saeed; Jahanmard, Vahidreza; Kupavõh, Aleksei EGU General Assembly 2025 2025 / art. EGU25-20596 <https://doi.org/10.5194/egusphere-egu25-20596>

Development of continuous dynamic vertical reference for maritime and offshore engineering by applying machine learning strategies

Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 2023 Machine Learning And Data Analysis In Oceanography, University of Liège, Belgium 2023 / 1 p [Development of continuous dynamic vertical reference for maritime and offshore engineering by applying machine learning strategies](#)

Development of synergized method to determine accurate sea level using satellite altimetry and high-resolution geoid model

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Geodesy for a Sustainable Earth, Scientific Assembly of the International Association of Geodesy : abstract book 2021 / S5-053 https://mm.sciconf.cn/en/minisite/poster-detail-new/1646?poster_id=1563486 https://files.sciconf.cn/upload/file/20210626/20210626085039_69146.pdf

Developments towards deriving realistic dynamic topography by synergizing high-resolution geoid with sea level data = Merepinna realistliku dünaamilise topograafia saavutamise täppisgeoidi ja meretaseme andmestike kooskasutamisel

Jahanmard, Vahidreza 2024 https://www.ester.ee/record=b5649955*est <https://digikogu.taltech.ee/et/Item/3cfc4a1d-ff3c-4366-b26b-86571453f628> <https://doi.org/10.23658/taltech.3/2024>

Evaluating of sea surface heights from multi-mission satellite altimetry by utilizing hydrodynamic and geoid models

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Geodesy for a Sustainable Earth, Scientific Assembly of the International Association of Geodesy : abstract book 2021 / S5-032; 1 p https://mm.sciconf.cn/en/minisite/poster-detail-new/1646?poster_id=1566532

Evaluation of swot sea level data in the coastal areas of the Baltic Sea

Kupavõh, Aleksei; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 30 years of progress in radar altimetry symposium, Montpellier, France, 2-7. Sept. 2024 : Abstract book 2024 / p. 213, art. 426 <https://az659834.vo.msecnd.net/eventsairwesteuprod/production-nikal-public/338507f0dac84686b1d40a263ba347c6>

Examination of the effects of wind induced forcings on surface drifters circulation patterns in the Gulf of Finland

Delpeche-Ellmann, Nicole Camille; Torsvik, Tomas 10th Baltic Sea Science Congress : Science and innovation for future of the Baltic and the European regional seas : 15-19 June, 2015, Riga, Latvia : abstract book 2015 / p. 48 http://www.bssc2015.lv/wp-content/uploads/2015/07/10th_BSSC_AbstractBook_final.pdf

Examining and quantifying the role of transverse jets in coastal upwellings, from a Lagrangian transport perspective

Delpeche-Ellmann, Nicole Camille; Soomere, Tarmo; Ellmann, Artu IUGG 2019 : abstract book 2019 / [1] p., abstract: IUGG19-2212 <http://iugg2019montreal.com/abstract-book.html>

Examining coastal upwellings from a Lagrangian perspective in the Gulf of Finland, Baltic Sea

Delpeche-Ellmann, Nicole Camille; Mingelaite, Toma; Soomere, Tarmo Geophysical research abstracts 2017 / p. EGU2017-18648 <https://meetingorganizer.copernicus.org/EGU2017/EGU2017-18648.pdf>

Examining Lagrangian surface transport during a coastal upwelling in the Gulf of Finland, Baltic Sea

Delpeche-Ellmann, Nicole Camille; Mingelaite, Toma; Soomere, Tarmo Journal of marine systems 2017 / p. 21-30 : ill <https://doi.org/10.1016/j.jmarsys.2016.10.007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Examining mean dynamic topography using geodetic and oceanographic approaches for the Baltic Sea

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic Geodetic Commission General Assembly 2022 in Copenhagen : Session 1 - Planet Ocean and Geodesy 2022 / 2 p <https://medialib.cmcdn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/66B785FC-3925-ED11-84B6-00155D0B0940.pdf> <https://www.conferencemanager.dk/nkg-2022/sessions>

Examining surface circulation patterns of the Baltic Sea using satellite data, ocean models and in-situ observations

Delpeche-Ellmann, Nicole Camille; Torsvik, Tomas; Soomere, Tarmo Sentinel-3 for Science Workshop: Abstract Book 2015 / p. 284 http://seom.esa.int/S3forScience2015/page_session28.php

Examining the performance of along track multi-mission satellite altimetry – a case study for Sentinel-6

Heinoja, Lenne-Liisa; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Journal of geodetic science 2023 / art. 20220159 <https://doi.org/10.1515/jogs-2022-0159> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Examining the performance of satellite altimetry along track sea level data for Sentinel-6, Jason3 and Sentinel-3

Heinoja, Lenne-Liisa; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic Geodetic Commission General Assembly 2022 in Copenhagen : Poster Session 2022 / 24 l. <https://medialib.cmcdn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

Examining the performance of satellite altimetry (SWOT) sea level data in the coastal areas of the Baltic Sea

Kupavõh, Aleksei; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu; Soomere, Tarmo Journal of coastal research 2024 / p. 534-538 <https://doi.org/10.2112/JCR-S113-105.1>

Examining the performance of the sentinel-3 coastal altimetry in the Baltic Sea using a regional high-resolution Geoid model

Birgiel, Elzbieta; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille 2018 Baltic Geodetic Congress : BGC Geomatics, Olsztyn, Poland, 21-23 June, 2018 : proceedings 2018 / p. 196–201 : ill <https://doi.org/10.1109/BGC-Geomatics.2018.00043>

Examining the performance sentinel-3A SAR altimetry retracers and hydrodynamic models sing a high-Resolution Geoid model in the Baltic Sea

Delpeche-Ellmann, Nicole Camille; Mostafavi, Majid; Ellmann, Artu 12th Coastal Altimetry Workshop : Coastal Altimetry Training Course, 4-7 February, 2020 : European Space Agency ESRI, Frascati, Italy : abstracts 2020 / p. 14 <https://az659834.vo.msecnd.net/eventsairwesteuprod/production-nikal-public/ae128dad984c40168397660cc8d0ede7>

Examining the role of bottom topography on coastal upwelling jets using a synergy of in-situ, satellite and model data in the Gulf of Finland, Baltic Sea

Delpeche-Ellmann, Nicole Camille; Döös, Kristofer; Viikmäe, Bert; Soomere, Tarmo Geophysical research abstracts 2018 / p. EGU2018-15364 <https://meetingorganizer.copernicus.org/EGU2018/EGU2018-15364.pdf>

Forecasting of absolute dynamic topography by utilizing machinelearning with synergy of satellite altimetry data

Delpeche-Ellmann, Nicole Camille; Rajabi-Kiasari, Saeed; Ellmann, Artu 13th Coastal Altimetry Workshop & Coastal Altimetry Training, 6-10 February 2023, Universidad de Cádiz, Spain : abstract 2023 / p. 42 <https://www.coastalaltimetry.org/NikalWebsitePortal/coastal-altimetry-workshop/esa/ExtraContent/ContentSubPage?page=8&subPage=3>

Forecasting of absolute dynamic topography using deep learning algorithm with application to the Baltic Sea

Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Computers & geosciences 2023 / art. 105406, 16 p. : ill <https://doi.org/10.1016/j.cageo.2023.105406> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Forecasting of Sea Level Extremes using Deep Learning and Extreme Value Analysis

Delpeche-Ellmann, Nicole Camille; Rajabi-Kiasari, Saeed; Soomere, Tarmo; Ellmann, Artu EGU General Assembly 2025 2025 / art. EGU25-13350 <https://meetingorganizer.copernicus.org/EGU25/EGU25-13350.html> <https://doi.org/10.5194/egusphere-egu25-13350>

Forecasting sea level maxima using machine learning models in the Baltic Sea

Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu International Liège Colloquium 2024 : Ocean Extremes 2024 / 1 p https://gher-uliege.github.io/liege-colloquium-2024/abstracts/2024-01-26_12:01:45_IP_193.40.250.130.pdf

Fourier neural operators for emulating ocean models : Towards a knowledge-driven machine learning
Jahanmard, Vahidreza; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille EGU General Assembly 2025 2025 / art. EGU25-4354 <https://doi.org/10.5194/egusphere-egu25-4354>

Hidden secrets of transverse coastal upwelling jets revealed using a synergy of data in the Gulf of Finland, Baltic Sea
Delpeche-Ellmann, Nicole Camille; Soomere, Tarmo Abstracts : [BSSC 2019] 2019 / p. 112
https://www.su.se/polopoly_fs/1.446756.1566224624!/menu/standard/file/abstracts_A5_ny.pdf

Influence of wind and waves on Lagrangian transport using a synergy of satellite and in-situ surface drifters for Baltic Sea
Delpeche-Ellmann, Nicole Camille; Giudici, Andrea; Soomere, Tarmo; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 <https://doi.org/10.57757/IUGG23-3642>

Instantaneous sea surface height prediction using satellite altimetry and deep learning
Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Living Planet Symposium (LPS25) 2025
<https://lps25.esa.int/>

Integrating satellite altimetry and deep learning for enhanced sea level forecasting
Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu EGU General Assembly 2025 2025 / art. EGU25-9951
<https://meetingorganizer.copernicus.org/EGU25/EGU25-9951.html> <https://doi.org/10.5194/egusphere-egu25-9951>

An iterative approach for near-coast Marine Geoid Modelling and sea level analysis using satellite altimetry, in-situ and modeled data
Delpeche-Ellmann, Nicole Camille; Ellmann, Artu IUGG 2019 : abstract book 2019 / [1] p., abstract: JG06 p-107
<http://iugg2019montreal.com/abstract-book.html>

Long-term and decadal sea-level trends of the Baltic Sea using along-track satellite altimetry
Mostafavi, Majid; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille Remote sensing 2024 / art. 760
<https://doi.org/10.3390/rs16050760> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning Forecasting of Absolute Dynamic Topography in the Baltic Sea
Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic Geodetic Commission General Assembly 2022 in Copenhagen : Poster Session 2022 / 36 I. <https://medialib.cmcndn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

Machine learning prediction for filling the interruptions of tide gauge data using a least square estimation method from nearest stations
Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Geodesy for a Sustainable Earth, Scientific Assembly of the International Association of Geodesy : abstract book 2021 / S5-030 p. 529 https://mm.sciconf.cn/en/minisite/poster-detail-new/1646?poster_id=1563508 https://files.sciconf.cn/upload/file/20210626/20210626085039_69146.pdf

A multivariate-multistep-ahead forecasting of dynamic topography using convolutional encoder-decoder network in the Baltic Sea
Rajabi Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 / 1 p <https://doi.org/10.57757/IUGG23-1664>

Observations of Lagrangian transport using a synergy of satellite and in-situ surface drifters in the Baltic Sea for the period 2011-2018
Delpeche-Ellmann, Nicole Camille; Giudici, Andrea; Rätsep, Margus; Soomere, Tarmo; Ellmann, Artu Living Planet Symposium (LPS22) 2022 / 1 p <https://www.lps22.eu/>

Observations of surface drift and effects induced by wind and surface waves in the Baltic Sea for the period 2011–2018
Delpeche-Ellmann, Nicole Camille; Giudici, Andrea; Rätsep, Margus; Soomere, Tarmo Estuarine, coastal and shelf science 2021 / art. 107071, 13 p. : ill., map <https://doi.org/10.1016/j.ecss.2020.107071> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance of sentinel-3 and CryoSat-2 altimetry in the coastal regions of the Baltic Sea ; S6-P2
Birgiel, Elzbieta; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille International Symposium Gravity, Geoid and Height Systems 2 : GGHS2018 : "Gravity Field Of The Earth" : The 2nd joint meeting of the International Gravity Field Service and Commission 2 of the International Association of Geodesy, Copenhagen, Denmark, Sept. 17-21, 2018 : abstract book 2018 / p. 143-144

Performance of sentinel-3A SAR altimetry retracers: The SAMOSA coastal sea surface heights for the Baltic Sea
Birgiel, Elzbieta; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille Fiducial Reference Measurements for Altimetry : Proceedings of the International Review Workshop on Satellite Altimetry Cal/Val Activities and Applications 2020 / p. 23-32
https://doi.org/10.1007/1345_2019_59

Possible presence of shear instabilities at steep slopes during an upwelling event in the Gulf of Finland, Baltic Sea

Delpeche-Ellmann, Nicole Camille; Soomere, Tarmo Journal of coastal research Proceedings of the 15th International Coastal Symposium, Haeundae, Busan, 13-18 May 2018 / p. 481–485 <https://doi.org/10.2112/SI85-097.1>
<https://www.jcronline.org/doi/abs/10.2112/SI85-097.1> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

The potential of SWOT altimetry data for validating the accuracy of marine geoidmodels in the Baltic Sea
Kupavõh, Aleksei; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille; Varbla, Sander GGHS2024 : Gravity, Geoid and Height Systems : Book of Abstracts 2024 / p. 18-19 <https://www.gghs2024.com/appsfiles/go/boa/Book-of-Abstracts.pdf?v=1725460868>

Properties of in-situ Lagrangian surface drifters and the relationship with Stokes drift in the Baltic Sea
Delpeche-Ellmann, Nicole Camille; Giudici, Andrea Journal of coastal research 2024 / p. 417-421 <https://doi.org/10.2112/JCR-SI113-082.1>

Quantification of hydrodynamic model sea level bias utilizing deep learning and synergistic integration of data sources
Jahanmard, Vahidreza; Hordoir, Robinson; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Ocean modelling 2023 / art. 102286 : ill., map <https://doi.org/10.1016/j.ocemod.2023.102286> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Quantifying absolute dynamic topography by synergy of satellite, geoid and hydrodynamic model
Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 <https://doi.org/10.57757/IUGG23-2385>

Realistic coastal dynamic topography by a synergy of satellite altimetry data and marine geoid
Ellmann, Artu; Jahanmard, Vahidreza; Varbla, Sander; Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille Living Planet Symposium (LPS22) 2022 / 1 p <https://www.lps22.eu/>

Realistic dynamic topography through coupling geoid and hydrodynamic models of the Baltic Sea
Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Continental shelf research 2021 / art. 104421 <https://doi.org/10.1016/j.csr.2021.104421> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reanalysis of ocean model-based dynamic topography utilizing deep neural network and geoid-referenced observations
Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 2023 Machine Learning And Data Analysis In Oceanography, University of Liège, Belgium 2023 / 1 p [Reanalysis of ocean model-based dynamic topography utilizing deep neural network and geoid-referenced observations](#)

Reconstruction of dynamic topography using cyclostationary empirical orthogonal functions in the Baltic Sea
Mostafavi, Majid; Rajabi-Kiasari, Saeed; Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic Geodetic Commission General Assembly 2022 in Copenhagen : Poster Session 2022 / 25 l.
<https://medialib.cmcdn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

Retrieval of directional power spectral density and wave parameters from airborne LiDAR point cloud
Jahanmard, Vahidreza; Varbla, Sander; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Ocean engineering 2022 / art. 112694 <https://doi.org/10.1016/j.oceaneng.2022.112694> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

River water level monitoring from satellite radar altimetry multi missions a case study of the Amazon and Danube rivers
Mostafavi, Majid; Shirzad, R.; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 12th Coastal Altimetry Workshop : Coastal Altimetry Training Course, 4-7 February, 2020 : European Space Agency ESRI, Frascati, Italy : abstracts 2020 / p. 34-35
<https://az659834.vo.msecnd.net/eventsairwesteuprod/production-nikal-public/ae128dad984c40168397660cc8d0ede7>

Satelliitaltimeetria andmetel põhineva merepinna kõrguste täpsuse tuvastamine erinevate andmestike koosmõjul
Heinoja, Lenne-Liisa; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Geodeet 2022 / lk. 26-30 : ill
http://www.ester.ee/record=b1072198*est

Satellite altimetry derived dynamic topography using high-resolution geoid model with synergized sealevel data sources
Kupavõh, Aleksei; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 30 years of progress in radar altimetry symposium, Montpellier, France, 2-7. Sept. 2024 : Abstract book 2024 / p. 184-185, art. 362
<https://az659834.vo.msecnd.net/eventsairwesteuprod/production-nikal-public/338507f0dac84686b1d40a263ba347c6>

Satellite altimetry performance verified to enhanced hydrodynamic model of the Baltic Sea
Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Living Planet Symposium (LPS22) 2022 / 1 p
<https://www.lps22.eu/>

Sea level forecasting using deep recurrent neural networks with high-resolution hydrodynamic model
Rajabi-Kiasari, Saeed; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille Applied ocean research 2025 / art. 104496
<https://doi.org/10.1016/j.apor.2025.104496>

Sea level time series gap-filling with satellite altimetry using a bi-directional SARIMA model

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu 2023 Machine Learning And Data Analysis In

Oceanography, University of Liège, Belgium 2023 / 1 p [Sea level time series gap-filling with satellite altimetry using a bi-directional SARIMA model](#)

Shipborne GNSS acquisition of sea surface heights in the Baltic Sea

Liibus, Aive; Varbla, Sander; Ellmann, Artu; Vahter, Kaimo; Uiboupin, Rivo; Delpeche-Ellmann, Nicole Camille Journal of geodetic science 2022 / 21 p. : ill., map <https://doi.org/10.1515/jogs-2022-0131> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Studying upwelling phases in the Kazakhstan part of the Caspian sea

Rakisheva, Zaure Bayanovna; Delpeche-Ellmann, Nicole Camille; Sakhayeva, Aigerim International journal of mathematics and physics 2020 / p. 45–50 : ill <https://doi.org/10.26577/ijmph.2020.v11.i1.06> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

SWOT-derived geometric marine geoid surface complements gravimetric geoid modelling approaches

Kupavõh, Aleksei; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille; Varbla, Sander EGU General Assembly 2025 2025 / art. EGU25-10957 <https://doi.org/10.5194/egusphere-egu25-10957>

A synergy approach for the validation of coastal altimetry data in the Baltic Sea

Delpeche-Ellmann, Nicole Camille; Pindsoo, Katri; Kudryavtseva, Nadezhda; Soomere, Tarmo 10th Coastal Altimetry workshop, 21-24 February 2017, Florence, Italy : abstracts 2017 / p. 37 <http://old.esaconferencebureau.com/docs/default-source/17c07-img/abstract-book.pdf?sfvrsn=0>

Synergy of in-situ and hydrodynamic modelling to develop machine learning strategies for dynamic vertical Reference for Maritime and Offshore Engineering

Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 <https://doi.org/10.57757/IUGG23-3653>

The effects of wind and waves on in-situ surface drift in the Baltic Sea [Online resource]

Delpeche-Ellmann, Nicole Camille; Giudici, Andrea; Soomere, Tarmo Geophysical research abstracts 2020 / p. EGU2020-11496 <https://doi.org/10.5194/egusphere-egu2020-11496>

The role of bathymetry and shear instabilities in the evolution of upwelling process : a transverse surface jet perspective

Delpeche-Ellmann, Nicole Camille; Soomere, Tarmo The 15th International Coastal Symposium 2018 Haeundae, Busan, Republic of Korea 13th – 18th May 2018 : book of abstracts 2018 / p. 313

The role of nearshore slope on cross-shore surface transport during a coastal upwelling event in Gulf of Finland, Baltic Sea

Delpeche-Ellmann, Nicole Camille; Soomere, Tarmo; Kudryavtseva, Nadezhda Estuarine, coastal and shelf science 2018 / p. 123-135 : ill <https://doi.org/10.1016/j.ecss.2018.03.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Towards realistic dynamic topography from coast to offshore by incorporating hydrodynamic and geoid models

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Ocean modelling 2022 / art. 102124 <https://doi.org/10.1016/j.ocemod.2022.102124> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tracks of surface drifters from a major fairway to marine protected areas in the Gulf of Finland

Delpeche-Ellmann, Nicole Camille; Torsvik, Tomas; Soomere, Tarmo Proceedings of the Estonian Academy of Sciences 2015 / p. 226-233 : ill https://artiklid.elnet.ee/record=b2740528*est <https://doi.org/10.3176/proc.2015.3.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

24 years sea level trend of Baltic Sea using resampled machine learning satellite altimetry data : poster

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Living Planet Symposium (LPS22) 2022 / 1 p <https://www.lps22.eu/>

24 years sea level trend of Gulf of Finland using resampled machine learning satellite altimetry data [Poster presentation]

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu The Gulf of Finland Science Days 2021 “New start for the Gulf of Finland co-operation” : Estonian Academy of Sciences, Tallinn, 29-30 November 2021 : abstracts 2021 / p. 64 <https://www.gulffinland.fi>

Utilising airborne laser scanning and geoid model for examining marine processes

Varbla, Sander; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille Abstracts : [BSSC 2019] 2019 / p. 166 https://www.su.se/polopoly_fs/1.446756.1566224624!/menu/standard/file/abstracts_A5_ny.pdf

Utilizing airborne laser scanning and geoid model for near-coast improvements in sea surface height and marine dynamics

Varbla, Sander; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille Journal of coastal research 2020 / p. 1339-1343

<https://doi.org/10.2112/SI95-257.1> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uued inimesed ja positsioonid

Delpeche-Ellmann, Nicole Camille; Leoste, Janika; Kallakas, Heikko; Püüa, Margus; Spalatu, Nicolae; Reinsalu, Kristo
Mente et Manu 2024 / lk. 60-63 : fot https://www.ester.ee/record=b1242496*est

Validation of conventional and retracked Sentinel-3 observations along the Norwegian coast

Mostafavi, Majid; Jahanmard, Vahidreza; Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic
Geodetic Commission General Assembly 2022 in Copenhagen : Poster Session 2022 / 27 I.
<https://medialib.cmcnd.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

Validation of marine geoid models by utilizing hydrodynamic model and shipborne GNSS profiles

Varbla, Sander; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille Marine geodesy 2020 / p. 134-162
<https://doi.org/10.1080/01490419.2019.1701153> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Validation of multi-satellite altimetry data utilizing a high-resolution marine geoid for the Baltic Sea

Mostafavi, Majid; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille 12th Coastal Altimetry Workshop : Coastal Altimetry
Training Course, 4-7 February, 2020 : European Space Agency ESRIN, Frascati, Italy : abstracts 2020 / p. 27
<https://az659834.vo.msecnd.net/eventsairwesteuprod/production-nikal-public/ae128dad984c40168397660cc8d0ede7>

Validation of the new Sentinel-3 satellite altimetry data in the Baltic Sea basin

Kudryavtseva, Nadezhda; Delpeche-Ellmann, Nicole Camille; Soomere, Tarmo The 11th Baltic Sea Science Congress "Living
Along Gradients : Past, Present, Future" : June 12-16, 2017 : abstracts 2017 / p. 311 [https://www.io-](https://www.io-warnemuende.de/tl_files/conference/bssc2017/bssc2017-abstract-book.pdf)
[warnemuende.de/tl_files/conference/bssc2017/bssc2017-abstract-book.pdf](https://www.io-warnemuende.de/tl_files/conference/bssc2017/bssc2017-abstract-book.pdf)

Validation of the Sentinel-3A SRAL altimeter data for the coastal waters of the Baltic Sea

Delpeche-Ellmann, Nicole Camille; Ellmann, Artu; Birgiel, Elzbieta IUGG 2019 : abstract book 2019 / [1] p., abstract: JM09p-113
<http://iugg2019montreal.com/abstract-book.html>