

**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-oceanograafilist meetodit**

Mostafavi, Majid 2024 [https://www.ester.ee/record=b5671644\\*est](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 <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 : Bonn, 23-27 May 2022 2022 / 1 p [https://express.converia.de/frontend/index.php?page\\_id=22633&additions\\_conferenceschedule\\_action=detail&additions\\_conferenceschedule\\_controller=paperList&pid=67257&hash=059b7410747f987290de47d36b5b6df4330fe4bcc6b23cd94277df52d3471105](https://express.converia.de/frontend/index.php?page_id=22633&additions_conferenceschedule_action=detail&additions_conferenceschedule_controller=paperList&pid=67257&hash=059b7410747f987290de47d36b5b6df4330fe4bcc6b23cd94277df52d3471105)

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

Delpeche-Ellmann, Nicole Camille 2014 <https://digi.lib.ttu.ee/ii/?1820> [https://www.ester.ee/record=b4436090\\*est](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 Geodesy and Geophysics (IUGG) 2023 <https://doi.org/10.57757/IUGG23-4967>

**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>

### **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 [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>

### **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 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://mm.sciconf.cn/en/minisite/poster-detail-new/1646?poster_id=1563486) [https://files.sciconf.cn/upload/file/20210626/20210626085039\\_69146.pdf](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://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>

### **Diapycnal mixing and internal waves in the Saint John River Estuary, New Brunswick, Canada with a discussion relative to the Baltic Sea**

**Delpeche, Nicole; Soomere, Tarmo; Lilover, Madis-Jaak** Estonian journal of engineering 2010 / 2, p. 157-175 : ill

### **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](https://mm.sciconf.cn/en/minisite/poster-detail-new/1646?poster_id=1566532)

### **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](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>

### **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](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>

**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 I. <https://medialib.cmc.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

**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 ESRIN, 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>

**Far-field vessel wakes in Tallinn Bay**  
**Parnell, Kevin Ellis; Delpeche, Nicole; Didenkulova, Irina; Dolphin, Tony; Erm, Ants; Kask, Andres; Kelpšaitė, Loreta; Kurennoy, Dmitry; Quak, Ewald; Räämet, Andrus; Soomere, Tarmo; Terentjeva, Anna; Torsvik, Tomas; Zaitseva-Pärmaste, Inga** Estonian journal of engineering 2008 / 4, p. 273-302 : ill

**Forecasting of absolute dynamic topography by utilizing machine learning 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>

**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](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>

**Internal waves and interfacial mixing in stratified environments**  
**Delpeche, Nicole; Soomere, Tarmo** BSSC 2009 : [7th Baltic Sea Science Congress 2009] : August 17-21, 2009, Tallinn, Estonia : abstract book 2009 / p. 120

**Investigating the marine protected areas most at risk of current-driven pollution in the Gulf of Finland, the Baltic Sea, using a Lagrangian transport model**  
**Delpeche, Nicole; Soomere, Tarmo** Marine pollution bulletin 2013 / p. 121-129 : ill

**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>

### **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.cmcdn.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://mm.sciconf.cn/en/minisite/poster-detail-new/1646?poster_id=1563508) [https://files.sciconf.cn/upload/file/20210626/20210626085039\\_69146.pdf](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 <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 : Bonn, 23-27 May 2022 2022 / 1 p [https://express.converia.de/frontend/index.php?page\\_id=22770&additions\\_conferenceschedule\\_action=detail&additions\\_conferenceschedule\\_controller=paperList&pid=66768&hash=c6edadcd07d79522805fc8f6f306e4565b46e806a78f56dc65f0df9e4f142dc0](https://express.converia.de/frontend/index.php?page_id=22770&additions_conferenceschedule_action=detail&additions_conferenceschedule_controller=paperList&pid=66768&hash=c6edadcd07d79522805fc8f6f306e4565b46e806a78f56dc65f0df9e4f142dc0)

### **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](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 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](#)

### **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>

### **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>

### **Rapid estimate of sediment loss for "almost equilibrium" beaches**

**Kask, Andres; Soomere, Tarmo; Healy, Terry; Delpeche, Nicole** Journal of coastal research 2009 / Special issue 56, Proceedings of the 10th International Coastal Symposium ICS 2009. Volume II, p. 971-975 : ill <https://www.jstor.org/stable/25737931>

### **Realistic coastal dynamic topography by a synergy of satellite altimetry data and marine geoid : [poster]**

**Ellmann, Artu; Jahanmard, Vahidreza; Varbla, Sander; Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille** Living Planet Symposium : Bonn, 23-27 May 2022 2022 / 1 p [https://express.converia.de/frontend/index.php?page\\_id=22743&additions\\_conferenceschedule\\_action=detail&additions\\_conferenceschedule\\_controller=paperList&pid=67137&hash=a1163e52ec54485b30c276db107fa5d86c2ef04bebfeda3ddc6f3cced2129ff8](https://express.converia.de/frontend/index.php?page_id=22743&additions_conferenceschedule_action=detail&additions_conferenceschedule_controller=paperList&pid=67137&hash=a1163e52ec54485b30c276db107fa5d86c2ef04bebfeda3ddc6f3cced2129ff8)

### **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/eventsairwesteuropa/production-nikal-public/ae128dad984c40168397660cc8d0ede7>

**Satelliitaltimeetria andmetel põhineva merepinna kõrguste täpsuse tuvastamine erinevate andmetike koostmõjul**  
**Heinoja, Lenne-Liisa; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu** Geodeet 2022 / lk. 26-30 : ill  
[http://www.eester.ee/record=b1072198\\*est](http://www.eester.ee/record=b1072198*est)

**Satellite altimetry performance verified to enhanced hydrodynamic model of the Baltic Sea**  
**Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu** Living Planet Symposium : Bonn, 23-27 May 2022 2022 / 1 p  
[https://express.converia.de/frontend/index.php?page\\_id=22633&additions\\_conferenceschedule\\_action=detail&additions\\_conferenceschedule\\_controller=paperList&pid=66983&hash=2781a43409d1dcb2374d7818af0d07c0904d92d56f69ccfa7a7a5c1549b986e](https://express.converia.de/frontend/index.php?page_id=22633&additions_conferenceschedule_action=detail&additions_conferenceschedule_controller=paperList&pid=66983&hash=2781a43409d1dcb2374d7818af0d07c0904d92d56f69ccfa7a7a5c1549b986e)

**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**  
**Rakishcheva, Zaura 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](#)

**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 generation and dissipation of a solitonic wave that travels in the reverse direction to the flow in the Saint John River Estuary, New Brunswick, Canada**  
**Delpeche, Nicole; Clarke, J. Hughes; Haigh, S** International Conference on Complexity of Nonlinear Waves : October 5-7, 2009 : book of abstracts 2009 / p. 12

**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 identification of areas of reduced risk in the Gulf of Finland, the Baltic Sea**

**Soomere, Tarmo; Viikmäe, Bert; Delpeche, Nicole; Myrberg, Kai** Proceedings of the Estonian Academy of Sciences 2010 / 2, p. 156-165 : ill

**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://artiklid.elnet.ee/record=b2740528*est)

**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 : Bonn, 23-27 May 2022 2022 / 1 p  
[https://express.converia.de/frontend/index.php?page\\_id=22770&additions\\_conferenceschedule\\_action=detail&additions\\_conferenceschedule\\_controller=paperList&pid=66993&hash=1a58b51e563fd3a889a69bc2839cb84bb1cbe77506963ef2c9c35a9d46c45678](https://express.converia.de/frontend/index.php?page_id=22770&additions_conferenceschedule_action=detail&additions_conferenceschedule_controller=paperList&pid=66993&hash=1a58b51e563fd3a889a69bc2839cb84bb1cbe77506963ef2c9c35a9d46c45678)

**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.gulfoffinland.fi>

**Using Lagrangian models to assist in maritime management of Coastal and Marine Protected Areas**

**Delpeche, Nicole; Soomere, Tarmo** Journal of coastal research 2013 / p. 36-41 : ill

**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](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](#)

**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.cmcdn.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-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>