



Bibliographie

Critères de recherche	
Auteur(s)	: Deleersnijder, Eric

2025

Ishimwe, Ange ; Deleersnijder, Eric ; Legat, Vincent ; Lambrechts, Jonathan. A multi-scale IMEX second order Runge-Kutta method for 3D hydrodynamic ocean models. In: Journal of Computational Physics: X, Vol. 520, p. 113482 (2025). doi:10.1016/j.jcp.2024.113482. <http://hdl.handle.net/2078.1/292217>

Patil, Amit Ravindra ; Perez, Fabricio Fiengo ; Lambrechts, Jonathan ; Deleersnijder, Eric. Numerical modelling of the transport and impact of Cs-137 and I-131 on the Meuse-Campine Canals after a potential nuclear accident. In: Journal of Radiological Protection, Vol. 45, no.1, p. 011512 (2025). doi:10.1088/1361-6498/adc1db. <http://hdl.handle.net/2078.1/300049>

Deleersnijder, Eric. Problèmes à deux corps: orbites circulaires, 2025. 11 p. <http://hdl.handle.net/2078.1/298615>

Deleersnijder, Eric. Ritter's dam break model: when and where did a water column begin to move?, 2025. 16 p. <http://hdl.handle.net/2078.1/299828>

2024

Patil, Amit Ravindra ; FIENGO PEREZ, FABRICIO ; Lambrechts, Jonathan ; Draoui, Insaf ; Deleersnijder, Eric. A Multiscale 1D-2D Coupled Model Of The Scheldt Estuary Rivers And The European Continental Shelf. In: CoastLab 2024: Physical Modelling in Coastal Engineering and Science, Vol. , no., p. (2024). doi:10.59490/coastlab.2024.692. <http://hdl.handle.net/2078.1/287426>

Oubarka, Ismail ; Kissami, Imad ; Elmahi, Imad ; Deleersnijder, Eric. A robust and well-balanced finite volume solver for investigating the effects of tides on water renewal timescale in the Nador lagoon, Morocco. In: Mathematics and Computers in Simulation, Vol. 226, p. 511-523 (2024). doi:10.1016/j.matcom.2024.07.005. <http://hdl.handle.net/2078.1/289847>

Gross, Eward ; Holleman, Rusty ; Deleersnijder, Eric ; Delhez, Eric. Estimating Effective Light Exposure by Property-Tracking Tracers. In: Water, Vol. 16, no., p. 1469 (2024). doi:10.3390/w16111469. <http://hdl.handle.net/2078.1/287554>

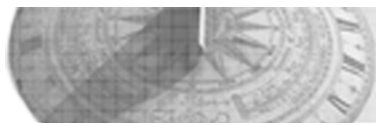
Deleersnijder, Eric. La semaine smart prend congé: et maintenant, qu'allons-nous faire?, 2024. 2 p. <http://hdl.handle.net/2078.1/287519>

Deleersnijder, Eric ; Lambrechts, Jonathan ; Fiengo Perez, Fabricio. Numerical Simulation of the Impact of Accidental Radioactive Releases into the Meuse and Scheldt Aquatic Systems. , collab. Patil, Amit Ravindra, 2024. <http://hdl.handle.net/2078.1/289371>

Oubarka, Ismail ; Kissami, Imad ; Elmahi, Imad ; Deleersnijder, Eric. Numerical computation of the residence time related to the water renewal in the Nador Lagoon. In: AIP Conference Proceedings, Vol. 3034, no. 1 (2024) (2024). doi:10.1063/5.0194765. <http://hdl.handle.net/2078.1/285774>

Patil, Amit Ravindra ; Fiengo Perez, Fabricio ; Lambrechts, Jonathan ; Draoui, Insaf ; Deleersnijder, Eric. Numerical modelling for the distribution of 137Cs and 131I in the scheldt basin after a potential nuclear accident. In: Journal of Environmental Radioactivity, Vol. 280, no.280, p. 107568 (2024). doi:10.1016/j.jenvrad.2024.107568. <http://hdl.handle.net/2078.1/293293>

Patil, Amit Ravindra ; Lambrechts, Jonathan ; Draoui, Insaf ; Perez, F. Fiengo ; Deleersnijder, Eric. Numerical modelling of navigable rivers: Influence of navigation structures in the Meuse River flow. In: Collectif, *River Flow*



2022, Taylor & Francis, CRC Press, 2024, p. 647-655. 9781003323037. doi:10.1201/9781003323037-86. <http://hdl.handle.net/2078.1/290604>

Deleersnijder, Eric. Pointwise and box-averaged water residence time in a 2D model of the Scheldt Estuary, 2024. 15 p. <http://hdl.handle.net/2078.1/295746>

Deleersnijder, Eric. Sciences et technologies: vers des examens moins calculatoires?, 2024. 3 p. <http://hdl.handle.net/2078.1/287361>

Deleersnijder, Eric. Seiche: the phenomenon that rocked the Earth in September 2023, 2024. 29 p. <http://hdl.handle.net/2078.1/292916>

Deleersnijder, Eric. Seiches: a tale of misconceptions?, 2024. 33 p. <http://hdl.handle.net/2078.1/291029>

Draoui, Insaf ; Lambrechts, Jonathan ; Legat, Vincent ; Deleersnijder, Eric. The discontinuous Galerkin method for river-delta continuum by means of a coupled 1D-2D shallow water model. In: Collectif, *River Flow 2022*, Taylor & Francis, CRC Press, 2024, p. 137-145. 9781003323037. doi:10.1201/9781003323037-19. <http://hdl.handle.net/2078.1/290605>

Oubarka, I. ; Yachouti, A. ; Elmahi, I. ; Deleersnijder, Eric. Unstructured Finite Volume Solver for the Computation of the Residence Time in the Nador Lagoon, Morocco. In: D. Sbibi et al., *SEMA SIMAI Springer Series : New Trends in Shape Modelling and Approximation Methods*, Springer Nature, 2024, p. 173-192. 9783031627149. doi:10.1007/978-3-031-62715-6_10. <http://hdl.handle.net/2078.1/292237>

Dewals, Benjamin ; Archambeau, Pierre ; Erpicum, Sébastien ; Piroton, Michel ; Deleersnijder, Eric. What does the volume-averaged water age distribution function reveal about flow fields in rectangular shallow reservoirs?. In: *Environmental Fluid Mechanics*, Vol. 24, no.1, p. 75-93 (2024). doi:10.1007/s10652-024-09967-z. <http://hdl.handle.net/2078.1/286912>

2023

Ishimwe, Ange ; Deleersnijder, Eric ; Legat, Vincent ; Lambrechts, Jonathan. A split-explicit second order Runge-Kutta method for solving 3D hydrodynamic equations. In: *Ocean Modelling*, Vol. 186, no.186, p. 102273 (2023). doi:10.1016/j.ocemod.2023.102273. <http://hdl.handle.net/2078.1/278291>

Deleersnijder, Eric ; Mouchet, Anne ; Delhez, Eric JM. Diagnostic timescales in fluid flows: from partial differential equations to simple models, 2023. 28 p. <http://hdl.handle.net/2078.1/271049>

Deleersnijder, Eric. Reactive transport equations for estuarine, coastal and shelf sea modelling, 2023. 39 p. <http://hdl.handle.net/2078.1/277721>

Le, Hoang-Anh ; Nguyen, Thong ; Gratiot, Nicolas ; Deleersnijder, Eric ; Soares Frazao, Sandra. The Multi-Channel System of the Vietnamese Mekong Delta: Impacts on the Flow Dynamics under Relative Sea-Level Rise Scenarios. In: *Water*, Vol. 15, no.20, p. 3597 (2023). doi:10.3390/w15203597. <http://hdl.handle.net/2078.1/278824>

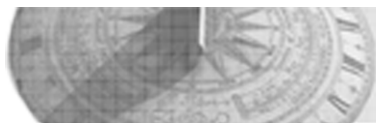
Sterckx, Kevin ; Delandmeter, Philippe ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Verburg, Piet ; Thiery, Wim. The impact of seasonal variability and climate change on lake Tanganyika's hydrodynamics. In: *Environmental Fluid Mechanics*, Vol. 23, p. 103-123 (2023). doi:10.1007/s10652-022-09908-8. <http://hdl.handle.net/2078.1/273900>

2022

Vincent, David ; Lambrechts, Jonathan ; Tyler, Robert H. ; Karatekin, Özgür ; Dehant, Véronique ; Deleersnijder, Eric. A numerical study of the liquid motion in Titan's subsurface ocean. In: *Icarus*, Vol. 388, no., p. 115219 (2022). doi:10.1016/j.icarus.2022.115219. <http://hdl.handle.net/2078.1/264783>

Ishimwe, Ange Pacifique ; Lambrechts, Jonathan ; Legat, Vincent ; Deleersnijder, Eric. A split-explicit Runge-Kutta method for 3D hydrodynamic equations for coastal applications. EGU General Assembly 2022 (Vienna, du 23/05/2022 au 27/05/2022). doi:10.5194/egusphere-egu22-2452. <http://hdl.handle.net/2078.1/261080>

Klingbeil, Knut ; Deleersnijder, Eric ; Fringer, Oliver ; Umlauf, Lars. Basic Equations of Marine Flows. In: H. Schuttelaars, A. Heemink and E. Deleersnijder (eds.), *Mathematics of Planet Earth : The Mathematics of Marine Modelling*, 2022, p. 1-9. 9783031095580. doi:10.1007/978-3-031-09559-7_1. <http://hdl.handle.net/2078.1/267967>



Deleersnijder, Eric. Force de frottement et dissipation d'énergie dans le cours d'introduction à la mécanique classique LBIR1121 (Mécanique générale) — Réponse à une interpellation de Laurent Delannay, 2022. 6 p. <http://hdl.handle.net/2078.1/267705>

Figueiredo, Joana ; Thomas, Christopher J. ; Deleersnijder, Eric ; Lambrechts, Jonathan ; Baird, Andrew H. ; Connolly, Sean R. ; Hanert, Emmanuel. Global warming decreases connectivity among coral populations. In: Nature Climate Change, Vol. 12, p. 83-87 (2021). doi:10.1038/s41558-021-01248-7. <http://hdl.handle.net/2078.1/255383>

Yang, Yun ; Guan, Weibing ; Deleersnijder, Eric ; He, Zhiguo. Hydrodynamic and sediment transport modelling in the Pearl River Estuary and adjacent Chinese coastal zone during Typhoon Mangkhut. In: Continental Shelf Research, Vol. 233, p. 104645 (2022). doi:10.1016/j.csr.2022.104645. <http://hdl.handle.net/2078.1/255855>

Heemink, Arnold ; Deleersnijder, Eric ; Shah, Syed Hyder Ali Muttaqi ; Gräwe, Ulf. Lagrangian Modelling of Transport Phenomena Using Stochastic Differential Equations. In: Dan Crisan, Ken Golden, Darryl D. Holm, et.al. (eds.), *Mathematics of Planet Earth : The Mathematics of Marine Modelling*, 2022, p. 213-242. 9783031095580. doi:10.1007/978-3-031-09559-7_9. <http://hdl.handle.net/2078.1/267968>

Reijnders, Daan ; Deleersnijder, Eric ; van Sebille, Erik. Lagrangian ocean ventilation: improved subgrid-scale dispersion on neutral surface. EGU General Assembly 2022 (Vienna, du 23/05/2022 au 27/05/2022). <http://hdl.handle.net/2078.1/260975>

Patil, Amit Ravindra ; Fiengo Perez, Fabricio ; Lambrechts, Jonathan ; Draoui, Insaf ; Deleersnijder, Eric. Numerical Modelling Of Navigable Rivers: Influence Of Navigation Structures In The Meuse River Flow. River Flow 2022 (Canada, du 08/11/2022 au 10/11/2022) (Accepté/Sous presse). <http://hdl.handle.net/2078.1/279041>

Reijnders, Daan ; Deleersnijder, Eric ; Sebille, Erik. Simulating Lagrangian Subgrid-Scale Dispersion on Neutral Surfaces in the Ocean. In: Journal of Advances in Modeling Earth Systems, Vol. 14, no.2, p. (2022). doi:10.1029/2021ms002850. <http://hdl.handle.net/2078.1/258104>

The Mathematics of Marine Modelling : Water, Solute and Particle Dynamics in Estuaries and Shallow Seas, éd. Schuttelaars, Henk ; Heemink, Arnold ; Deleersnijder, Eric (Mathematics of Planet Earth; 9), 2022. doi:10.1007/978-3-031-09559-7. <http://hdl.handle.net/2078.1/267943>

Draoui, Insaf ; Lambrechts, Jonathan ; Legat, Vincent ; Deleersnijder, Eric. The discontinuous Galerkin method for coupling a 1D river model to a 2D shallow water one. EGU22 (Vienna, du 23/05/2022 au 27/05/2022). doi:10.5194/egusphere-egu22-1084. <http://hdl.handle.net/2078.1/261072>

Tracer and Timescale Methods for Passive and Reactive Transport in Fluid Flows, éd. Deleersnijder, Eric ; Koszalka, Inga M. ; Lucas, Lisa V., MDPI, 2022. 978-3-0365-3521-0. 352 p. doi:10.3390/books978-3-0365-3522-7. <http://hdl.handle.net/2078.1/260978>

Oubarka Ismail ; Kissami Imad ; Elmahi Imad ; Deleersnijder, Eric. Unstructured finite volume solver for the computation of the water dynamics in the Nador Lagoon. Third Edition of the International Symposium on Trends in Approximation and Applications (Oujda, Maroc, du 27/06/2022 au 28/06/2022). <http://hdl.handle.net/2078.1/263150>

2021

Lucas, Lisa ; Deleersnijder, Eric. Diagnostic timescales: old concepts, new methods and the ageless power of simplification. In: CERF's Up!, Vol. 47, no. 1, p. 14-15 (2021). <http://hdl.handle.net/2078.1/244361>

Draoui, Insaf ; Lambrechts, Jonathan ; Legat, Vincent ; Soares Frazao, Sandra ; Hoitink Ton ; Deleersnijder, Eric. Discontinuous Galerkin method for 1D shallow water models. 52nd Liège Colloquium on Ocean Dynamics: Toward an understanding and assessment of human impact on coastal marine environment (Liège, Belgium, du 17/05/2021 au 21/05/2021). <http://hdl.handle.net/2078.1/246503>

Deleersnijder, Eric. Fonction de distribution globale de l'âge dans un bassin peu profond, 2021. 5 p. <http://hdl.handle.net/2078.1/246569>

Deleersnijder, Eric. On the (a)symmetry of the stress tensor in continuum mechanics, 2021. 6 p. <http://hdl.handle.net/2078.1/249743>

Deleersnijder, Eric. On the method for estimating the mean property experienced by a tracer pioneered by Gross et al. (2019), 2021. 30 p. <http://hdl.handle.net/2078.1/247973>



Lucas, Lisa V. ; Shen, Jian ; Deleersnijder, Eric. Timescale methods for assessing biophysical interactions in aquatic ecosystems -- an attempt at bringing order to the chaos. 52nd Liège Colloquium on Ocean Dynamics: Toward an understanding and assessment of human impact on coastal marine environment (Liège, Belgium, du 17/05/2021 au 21/05/2021). <http://hdl.handle.net/2078.1/246338>

Lucas, Lisa V. ; Deleersnijder, Eric. Tracers and Timescales: Tools for Distilling and Simplifying Complex Fluid Mechanical Problems. In: Water, Vol. 13, no.19, p. 2796 (2021). doi:10.3390/w13192796. <http://hdl.handle.net/2078.1/251688>

Vallaes, Valentin ; Lambrechts, Jonathan ; Delandmeter, Philippe ; Pätsch, Johannes ; Spitz, Alejandro ; Hanert, Emmanuel ; Deleersnijder, Eric. Understanding the circulation in the deep, micro-tidal and strongly stratified Congo River estuary. In: Ocean Modelling, Vol. 167, p. 101890 (2021). doi:10.1016/j.ocemod.2021.101890. <http://hdl.handle.net/2078.1/250912>

2020

Deleersnijder, Eric. A conjecture about age inequalities, 2020. 7 p. <http://hdl.handle.net/2078.1/227647>

Deleersnijder, Eric. A quick refresher on exposure and residence times in a well-mixed domain, 2020. 4 p. <http://hdl.handle.net/2078.1/229804>

Dewals, Benjamin ; Archambeau, Pierre ; Bruwier, Martin ; Erpicum, Sebastien ; Piroton, Michel ; Adam, Tom ; Delhez, Eric ; Deleersnijder, Eric. Age of Water Particles as a Diagnosis of Steady-State Flows in Shallow Rectangular Reservoirs. In: Water, Vol. 12, no.10, p. 2819 (2020). doi:10.3390/w12102819. <http://hdl.handle.net/2078.1/236618>

Deleersnijder, Eric. An attempt at defining a position-dependent flushing time, 2020. 14 p. <http://hdl.handle.net/2078.1/231030>

Le, Hoang-Anh ; Lambrechts, Jonathan ; Ortleb, Sigrun ; Gratiot, Nicolas ; Deleersnijder, Eric ; Soares Frazao, Sandra. An implicit wetting-drying algorithm for the discontinuous Galerkin method: application to the Tonle Sap, Mekong River Basin. In: Environmental Fluid Mechanics, (2020). doi:10.1007/s10652-019-09732-7. <http://hdl.handle.net/2078.1/224836>

Vallaes, Valentin ; Pätsch, Johannes ; Delandmeter, Philippe ; Hanert, Emmanuel ; Spitz, Alejandro ; Deleersnijder, Eric. Carbon and oxygen budget in the deep, strongly stratified Congo River Estuary. EGU General Assembly 2020 (Vienna, Austria, du 04/05/2020 au 08/05/2020). <http://hdl.handle.net/2078.1/243269>

Deleersnijder, Eric ; Draoui, Insaf ; Lambrechts, Jonathan ; Legat, Vincent ; Mouchet Anne. Consistent boundary conditions for age calculations. In: Water, Vol. 12, p. 1274 (2020). doi:10.3390/w12051274. <http://hdl.handle.net/2078.1/229684>

Draoui, Insaf ; Lambrechts, Jonathan ; Legat, Vincent ; Soares Frazao, Sandra ; Hoitink, Ton (A.J.F.) ; Deleersnijder, Eric. Discontinuous Galerkin method for 1D river flows. River Flow 2020 (Delft, Netherlands, du 07/07/2020 au 10/07/2020). In: *River Flow 2020*, Taylor & Francis Group: London, 2020. 978-0-367-62773-7, p. 1-8. <http://hdl.handle.net/2078.1/231565>

Deleersnijder, Eric. Le temps caractéristique "volume/flux" n'est pas toujours pertinent..., 2020. 3 p. <http://hdl.handle.net/2078.1/229971>

Deleersnijder, Eric ; Dewals, Benjamin. Mathematical properties of the position-dependent, steady-state water age in a shallow reservoir, 2020. 18 p. <http://hdl.handle.net/2078.1/230041>

Pham Van, Chien ; de Brye, Benjamin ; de Brauwere, Anouk ; Hoitink, A.J.F. (Ton) ; Soares Frazao, Sandra ; Deleersnijder, Eric. Numerical Simulation of Water Renewal Timescales in the Mahakam Delta, Indonesia. In: Water, Vol. 12, no.4, p. 1017 (2020). doi:10.3390/w12041017. <http://hdl.handle.net/2078.1/229211>

Le, Hoang Anh ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Soares Frazao, Sandra ; Gratiot, Nicolas ; Ortleb, Sigrun. Numerical modelling of flow dynamics in the Tonle Sap by means of a discontinuous Galerkin finite-element model. River Flow 2020 (Delft, Netherlands, du 07/07/2020 au 10/07/2020). In: *River Flow 2020*, Taylor & Francis Group: London, 2020. 978-0-367-62773-7, p. 1-7. <http://hdl.handle.net/2078.1/231575>

Deleersnijder, Eric ; Vincent, David. On a simplified mechanical energy budget of Titan's subsurface ocean: a fluid-structure interaction problem, 2020. 9 p. <http://hdl.handle.net/2078.1/231552>



Deleersnijder, Eric. On diffusive timescales, 2020. 9 p. <http://hdl.handle.net/2078.1/231955>

Le, Hoang-Anh ; Gratiot, Nicolas ; Santini, William ; Ribolzi, Olivier ; Tran, Duc ; Meriaux, Xavier ; Deleersnijder, Eric ; Soares Frazao, Sandra. Suspended sediment properties in the Lower Mekong River, from fluvial to estuarine environments. In: Estuarine, Coastal and Shelf Science, Vol. 233, p. 106522 (2019). doi:10.1016/j.ecss.2019.106522. <http://hdl.handle.net/2078.1/223493>

Deleersnijder, Eric. The uneasy collaboration of Leonhard Euler (1707-1783) and Joseph Louis de Lagrange (1736-1813) in environmental fluid mechanics, 2020. 5 p. <http://hdl.handle.net/2078.1/229071>

Lucas, Lisa V. ; Deleersnijder, Eric. Timescale Methods for Simplifying, Understanding and Modeling Biophysical and Water Quality Processes in Coastal Aquatic Ecosystems: A Review. In: Water, Vol. 12, no.10, p. 2717 (2020). doi:10.3390/w12102717. <http://hdl.handle.net/2078.1/236002>

2019

Deleersnijder, Eric. A note on the estimation of orders of magnitude in marine sciences, 2019. 3 p. <http://hdl.handle.net/2078.1/221004>

Deleersnijder, Eric. A shortcoming of Fourier-Fick parameterisations in turbulent flows, 2019. 4 p. <http://hdl.handle.net/2078.1/222453>

Deleersnijder, Eric. Age stationnaire en eaux peu profondes: conditions aux limites sur une frontière entrante idéalisée, 2019. 6 p. <http://hdl.handle.net/2078.1/212700>

Kaestner Karl ; Hoitink Ton ; Torfs Paul ; Deleersnijder, Eric ; Nining Sari Ningsih. Bed slope effects on river tides. European Geosciences Union General Assembly 2019 (Vienna, Austria, du 07/04/2019 au 12/04/2019). In: *Geophysical Research Abstracts*, Vol. 21, p. EGU2019-14229 (2019). <http://hdl.handle.net/2078.1/214633>

Deleersnijder, Eric. Classical vs. holistic timescales: the Mururoa atoll lagoon case study, 2019. 12 p. <http://hdl.handle.net/2078.1/224391>

Deleersnijder, Eric. From Leibniz integral rule to Reynolds' transport theorem, 2019. 6 p. <http://hdl.handle.net/2078.1/221577>

Deleersnijder, Eric. Mass budget of a fluid mixture: a quick refresher, 2019. 4 p. <http://hdl.handle.net/2078.1/215443>

Vincent, David ; Lambrechts, Jonathan ; Karatekin, Ozgur ; Van Hoolst, Tim ; Tyler, Robert H. ; Dehant, Véronique ; Deleersnijder, Eric. Normal modes and resonance in Ontario Lacus, a hydrocarbon lake of Titan. In: *Ocean Dynamics*, Vol. 69, p. 1121-1132 (2019). doi:10.1007/s10236-019-01290-2. <http://hdl.handle.net/2078.1/218127>

Deleersnijder, Eric. On the mean age of the population of preys in a prey-predator model, 2019. 3 p. <http://hdl.handle.net/2078.1/217778>

Deleersnijder, Eric. On the timescales relevant to a linear transport-decay reservoir model, 2019. 15 p. <http://hdl.handle.net/2078.1/219115>

Deleersnijder, Eric. Pitfalls in calculating the age in a one-dimensional, semi-infinite domain, 2019. 12 p. <http://hdl.handle.net/2078.1/217811>

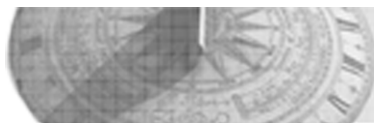
Kästner, K. ; Hoitink, A. J. F. ; Torfs, P. J. J. F. ; Deleersnijder, Eric ; Ningsih, N. S.. Propagation of tides along a river with a sloping bed. In: *Journal of Fluid Mechanics*, Vol. 872, no., p. 39-73 (2019). doi:10.1017/jfm.2019.331. <http://hdl.handle.net/2078.1/216506>

Deleersnijder, Eric ; Mouchet Anne. Relations between steady-state timescales in the World Ocean, 2019. 5 p. <http://hdl.handle.net/2078.1/196271>

Hanert, Emmanuel ; Vallaëys, Valentin. SLIM: A multi-scale model of the land-sea continuum. VLIZ Marine Science Day 2019 (Bredene (Belgium), 13/03/2019). <http://hdl.handle.net/2078.1/243281>

Cushman-Roisin, Benoît ; Deleersnijder, Eric. To-to-bottom Ekman Layer and its implications for shallow rotating flows. In: *Environmental Fluid Mechanics* (Dordrecht, 2001), Vol. 19, p. 1105-1119 (2019). doi:10.1007/s10652-018-9611-y. <https://hdl.handle.net/2078.1/218385>

Deleersnijder, Eric. Water renewal of a region of freshwater influence (ROFI): mathematical properties of some of the relevant diagnostic variables, 2019. 19 p. <http://hdl.handle.net/2078.1/220841>



2018

Hanert, Emmanuel ; Vallaey, Valentin ; Lane, W.D. ; Tyson, Rebecca ; Deleersnijder, Eric. A fractional-order diffusion model to predict transgenic pollen dispersal. International Conference on Fractional Differentiation and its Applications (Amman (Jordan), du 16/07/2018 au 18/07/2018). <http://hdl.handle.net/2078.1/209373>

Delandmeter, Philippe ; Lambrechts, Jonathan ; Legat, Vincent ; Vallaey, Valentin ; Naithani, Jaya ; Thiery, Wim ; Remacle, Jean-François ; Deleersnijder, Eric. A fully consistent and conservative vertically adaptive coordinate system for SLIM 3D v0.4 with an application to the thermocline oscillations of Lake Tanganyika. In: Geoscientific Model Development, Vol. 11, no.3, p. 1161-1179 (2018). doi:10.5194/gmd-11-1161-2018. <http://hdl.handle.net/2078.1/196612>

Le, Hoang Anh ; Vu Xuan Huyen Dang ; Lambrechts, Jonathan ; Sigrun Ortleb ; Vallaey, Valentin ; Vincent, David ; Nicolas Gratiot ; Soares Frazao, Sandra ; Deleersnijder, Eric. A new wetting – drying algorithm integrated in SLIM, with an application to the Tonle Sap lake, Mekong. European Geosciences Union General Assembly 2018 (Vienna, du 08/04/2018 au 13/04/2018). <http://hdl.handle.net/2078.1/196904>

Vallaey, Valentin ; Lambrechts, Jonathan ; Hanert, Emmanuel ; Deleersnijder, Eric. A numerical study of the estuarine plume in the Congo River. 17th International workshop on Multi-scale (Un)-structured mesh numerical Modeling for coastal, shelf and global ocean dynamics (Hamburg, Germany, du 11/09/2018 au 14/09/2018). <http://hdl.handle.net/2078.1/209389>

Vincent, David ; Karatekin, Özgür ; Lambrechts, Jonathan ; Lorenz, Ralph D. ; Dehant, Véronique ; Deleersnijder, Eric. A numerical study of tides in Titan's northern seas, Kraken and Ligeia Maria. In: Icarus, Vol. 310, p. 105-126 (2018). doi:10.1016/j.icarus.2017.12.018. <http://hdl.handle.net/2078.1/194261>

Deleersnijder, Eric. Age of river sediment: impact of the vertical structure of the model, 2018. 9 p. <http://hdl.handle.net/2078.1/201827>

Deleersnijder, Eric. Another approach as to how long diffusive processes can be ignored when tracking a water mass, 2018. 3 p. <http://hdl.handle.net/2078.1/196418>

Deleersnijder, Eric ; Mouchet, Anne ; Delhez Eric J.M.. Diagnostic timescales in fluid flows: from the Tower of Babel to partial differential problems, 2018. 26 p. <http://hdl.handle.net/2078.1/196273>

Vallaey, Valentin ; Kärnä, Tuomas ; Delandmeter, Philippe ; Lambrechts, Jonathan ; Baptista, António M. ; Deleersnijder, Eric ; Hanert, Emmanuel. Discontinuous Galerkin modeling of the Columbia River's coupled estuary-plume dynamics. In: Ocean Modelling, Vol. 124, p. 111-124 (2018). doi:10.1016/j.ocemod.2018.02.004. <http://hdl.handle.net/2078.1/195775>

Vallaey, Valentin ; Lambrechts, Jonathan ; Hanert, Emmanuel ; Deleersnijder, Eric. Discontinuous Galerkin modelling of the Congo River's coupled estuary-shelf dynamics. European Geosciences Union General Assembly 2018 (Vienna, Austria, du 08/04/2018 au 13/04/2018). <http://hdl.handle.net/2078.1/196941>

Deleersnijder, Eric. Enseignement: le niveau monte! (Martin Neuf; 102), 2018. 2 p. <http://hdl.handle.net/2078.1/209123>

Deleersnijder, Eric. Establishing the consistency of the asymptotic formula of Deleersnijder (2002) with the exact one-dimensional dam break flow solution of Ritter (1892), 2018. 4 p. <http://hdl.handle.net/2078.1/196717>

Mouchet, Anne ; Mikolajewicz, Uwe ; Deleersnijder, Eric. How well does radiocarbon record deep-ocean ventilation changes? A coupled climate model study of the last termination. EGU General Assembly 2018 (Vienna, du 08/04/2018 au 13/04/2018). <http://hdl.handle.net/2078.1/196907>

van Sebille, Erik ; Griffies, Stephen M. ; Abernathey, Ryan ; Adams, Thomas P. ; Berloff, Pavel ; Biastoch, Arne ; Blanke, Bruno ; Chassignet, Eric P. ; Cheng, Yu ; Cotter, Colin J. ; Deleersnijder, Eric ; Döös, Kristofer ; Drake, Henri F. ; Drijfhout, Sybren ; Gary, Stefan F. ; Heemink, Arnold W. ; Kjellsson, Joakim ; Koszalka, Inga Monika ; Lange, Michael ; Lique, Camille ; MacGilchrist, Graeme A. ; Marsh, Robert ; Mayorga Adame, C. Gabriela ; McAdam, Ronan ; Nencioli, Francesco ; Paris, Claire B. ; Piggott, Matthew D. ; Polton, Jeff A. ; Rühls, Siren ; Shah, Syed H.A.M. ; Thomas, Matthew D. ; Wang, Jinbo ; Wolfram, Phillip J. ; Zanna, Laure ; Zika, Jan D.. Lagrangian ocean analysis: Fundamentals and practices. In: Ocean Modelling, Vol. 121, p. 49-75 (2018). doi:10.1016/j.ocemod.2017.11.008. <http://hdl.handle.net/2078.1/191461>



Yang Yun ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Guan Weibing ; Wolanski Eric. Modelling fine-grained sediment transport in the Yangtze River Estuary and coastal zone. Aoshan Forum – Sediment Dynamics of Estuaries and Muddy Coasts (Pilot National Laboratory for Marine Science and Technology, Jimo, Qingdao, China, du 02/11/2018 au 03/11/2018). <http://hdl.handle.net/2078.1/204784>

Lê, Hoàng Anh ; Pham Van chien ; Dang Huyen Xuan Vu ; Lambrechts, Jonathan ; Ortleb, Sigrun ; Gratiot, Nicolas ; Soares Frazao, Sandra ; Deleersnijder, Eric. Numerical modelling of flow in the Tonle Sap by means of a discontinuous Galerkin finite-element model. International Symposium on Lowland Technology (ISLT 2018) (Hanoi, Vitenam, du 26/09/2018 au 28/09/2018). In: *International Symposium on Lowland technology (ISLT 2018)*, 2018. 978-604-82-2483-7. <http://hdl.handle.net/2078.1/203963>

MATA Pablo ; Delandmeter, Philippe ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Legat, Vincent. Numerical study of the hydrodynamics of a marine water body in Western Patagonia. ECCM-ECFD Conference 2018 (Glasgow, UK, du 11/06/2018 au 15/06/2018). <http://hdl.handle.net/2078.1/196270>

Deleersnijder, Eric. On the parameterisation of momentum diffusion in depth-integrated models, 2018. 3 p. <http://hdl.handle.net/2078.1/194336>

Le, Hoang Anh ; Gratiot, N. ; Santini, W. ; Ribolzi, O. ; Soares Frazao, Sandra ; Deleersnijder, Eric. Sediment properties in the fluvial and estuarine environments of the Mekong River. River Flow 2018 (Lyon-Villeurbanne, France, du 05/09/2018 au 08/09/2018). In: *E3S Web of Conferences*, Vol. 40, no.05063, p. 8. doi:10.1051/e3sconf/20184005063. <http://hdl.handle.net/2078.1/202638>

Deleersnijder, Eric. Some thoughts on wetting-drying algorithms for shallow-water models, 2018. 5 p. <http://hdl.handle.net/2078.1/194427>

Deleersnijder, Eric. Test cases for Lagrangian discretisations of diffusion terms revisited, 2018. 11 p. <http://hdl.handle.net/2078.1/194485>

Vincent, David ; Karatekin, Ozgur ; Lambrechts, Jonathan ; Dehant, Véronique ; Deleersnijder, Eric. Tides and eigenmodes of an idealized subsurface global ocean on Titan. European Geosciences Union General Assembly 2018 (Vienna, du 08/04/2018 au 13/04/2018). <http://hdl.handle.net/2078.1/196902>

Deleersnijder, Eric. Tracking a water mass: under which condition can diffusive processes be ignored?, 2018. 9 p. <http://hdl.handle.net/2078.1/194347>

Deleersnijder, Eric. Un algorithme pour la détermination de la note finale de LBIR1121 (Mécanique générale) ou le prix de la transparence absolue à l'ère du "décret paysage"..., 2018. 3 p. <http://hdl.handle.net/2078.1/209037>

Deleersnijder, Eric. Using the concept of partial age to diagnose sediment transport processes in a river, 2018. 10 p. <http://hdl.handle.net/2078.1/204911>

2017

Vallaëys, Valentin ; Tyson, Rebecca C. ; Lane, W. David ; Deleersnijder, Eric ; Hanert, Emmanuel. A Lévy-flight diffusion model to predict transgenic pollen dispersal. In: *Journal of the Royal Society Interface*, Vol. 14, no.126, p. 20160889 (2017). doi:10.1098/rsif.2016.0889. <http://hdl.handle.net/2078.1/181776>

Hanert, Emmanuel ; Vallaëys, Valentin ; Tyson, Rebecca ; Lane, David ; Deleersnijder, Eric. A fractional-order diffusion model to predict transgenic pollen dispersal. COST MC meeting and workshop on current progress in fractional-order systems and their utilization (San Sebastian, Spain, du 04/10/2017 au 06/10/2017). <http://hdl.handle.net/2078.1/190538>

Deleersnijder, Eric ; Mouchet, Anne. A propos des conditions aux limites employées dans l'étude de ventilation de Bendtsen et al. (JMS, 2009), 2017. 12 p. <http://hdl.handle.net/2078.1/184722>

Deleersnijder, Eric. Analytical developments regarding plastic debris pollution of the marine environment, 2017. 10 p. <http://hdl.handle.net/2078.1/190114>

Deleersnijder, Eric. Conditions aux limites et stabilité de la solution d'un problème de transport advectif et diffusif en eaux peu profondes, 2017. 6 p. <http://hdl.handle.net/2078.1/183125>

Deleersnijder, Eric. Diagnosing steady-state flows in shallow reservoirs by means of the age: theory and idealised illustrations , 2017. 43 p. <http://hdl.handle.net/2078.1/187908>



Fiengo Perez, Fabricio ; Deleersnijder, Eric ; Lambrechts, Jonathan. Impact of hypothetical radioactive releases in the Belgian inland rivers-sea continuum. 4th International Conference on Radioecology and Environmental Radioactivity (ICRER2017) (Berlin, Germany, du 03/09/2017 au 08/09/2017). <http://hdl.handle.net/2078.1/187916>

Daoudi, S. ; Deleersnijder, Eric ; Elmahi, I. ; Yachouti, A.. Modelling and computation of residence time in coastal lagoons: The case of Nador lagoon (Morocco). 7th International Conference on Approximation Methods and Numerical Modelling in Environmental and Natural Resources (MAMERN VII-2017) (Oujda, Morocco, du 17/05/2017 au 20/05/2017). <http://hdl.handle.net/2078.1/185030>

Delandmeter, Philippe ; Lambrechts, Jonathan ; Vallaëys, Valentin ; Naithani, Jaya ; Remacle, Jean-François ; Legat, Vincent ; Deleersnijder, Eric. Modelling the oscillations of the thermocline in a lake by means of a fully consistent and conservative 3D finite-element model with a vertically adaptive mesh. European Geosciences Union General Assembly 2017 (Vienna (Austria), du 24/04/2017 au 28/04/2017). <http://hdl.handle.net/2078.1/183751>

Deleersnijder, Eric. Modèle SIR d'une épidémie, 2017. 8 p. <http://hdl.handle.net/2078.1/229056>

Deleersnijder, Eric ; Delhez, Eric ; Dupont-Gillain, Christine C. ; Hanert, Emmanuel ; Schyns, Michaël ; Wertz, Vincent. Nous voulons croire à la fin de la constante macabre dans nos universités. In: Le Soir. <http://hdl.handle.net/2078.1/184506>

Deleersnijder, Eric. Numerical approximation of the residence time in a coastal lagoon, 2017. 9 p. <http://hdl.handle.net/2078.1/186065>

Deleersnijder, Eric. On the impact of the atmosphere on the time-varying age of a passive tracer in the ocean, 2017. 4 p. <http://hdl.handle.net/2078.1/184324>

Deleersnijder, Eric. On the impermeability conditions of a motionless surface, 2017. 5 p. <http://hdl.handle.net/2078.1/189168>

Deleersnijder, Eric. Réflexions sur le taux de réussite en 1ère session pour le cours de Physique générale 1 (LBIR1121), 2017. 29 p. <http://hdl.handle.net/2078.1/183679>

Vincent, David ; Karatekin, Ozgür ; Dehant, Véronique ; Deleersnijder, Eric. Study of liquid exchanges between Titan's seas Kraken Mare and Ligeia Mare. European geoscience Union General Assembly (Vienna, Austria, du 23/04/2017 au 28/04/2017). <http://hdl.handle.net/2078.1/185118>

Delandmeter, Philippe ; Lambrechts, Jonathan ; Marmorino, George O. ; Legat, Vincent ; Wolanski, Eric ; Chen, W. ; Remacle, Jean-François ; Deleersnijder, Eric. Submesoscale tidal eddies in the wake of coral islands and reefs: satellite data and numerical modelling. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 67, no.7, p. 897-913 (2017). doi:10.1007/s10236-017-1066-z. <http://hdl.handle.net/2078.1/185556>

Cushman-Roisin, Benoît ; Deleersnijder, Eric. Subtleties in reducing 3D rotating dynamics to a 2D model. 4th International Symposium of Shallow Flows (Eindhoven, The Netherlands, du 26/06/2017 au 28/06/2017). <http://hdl.handle.net/2078.1/186012>

Wolanski, E. ; Andutta, F. ; Deleersnijder, Eric ; Li, Y. ; Thomas, C.J.. The Gulf of Carpentaria heated Torres Strait and the Northern Great Barrier Reef during the 2016 mass coral bleaching event. In: Estuarine, Coastal and Shelf Science, Vol. 194, p. 172-181 (2017). doi:10.1016/j.ecss.2017.06.018. <http://hdl.handle.net/2078.1/185674>

Deleersnijder, Eric ; Bouillon, Sylvain. The equation governing the evolution of the surface age distribution function of sea ice, 2017. 11 p. <http://hdl.handle.net/2078.1/183042>

Shah, S.H.A.M. ; Primeau, François ; Deleersnijder, Eric ; Heemink, Arnold. Tracing the ventilation pathways of the Deep North Pacific Ocean using Lagrangian particles and Eulerian tracers. In: Journal of Physical Oceanography, Vol. 47, p. 1261-1280 (2017). doi:10.1175/JPO-D-16-0098.1. <http://hdl.handle.net/2078.1/184905>

Deleersnijder, Eric. Tracking water masses when water parcels are motionless, 2017. 7 p. <http://hdl.handle.net/2078.1/191881>

Deleersnijder, Eric ; Burchard, Hans ; Delandmeter, Philippe ; Delhez, Eric ; Hanert, Emmanuel ; Mouchet, Anne ; Umlauf, Lars. Using the age to diagnose the evolution of turbulence kinetic energy and, possibly, other variables unrelated to the concentration of a constituent. 49th International Liège Colloquium on Ocean Dynamics & 8th Warnemuende Turbulence Days (Liège, Belgium, du 22/05/2017 au 26/05/2017). <http://hdl.handle.net/2078.1/185078>



Vallaëys, Valentin ; Deleersnijder, Eric ; Hanert, Emmanuel. A baroclinic model of the Columbia river-to-ocean continuum. 15th International workshop on Multi-scale (Un)-structured mesh numerical Modeling for coastal, shelf and global ocean dynamics (Toulouse, France, du 27/09/2016 au 30/09/2016). <http://hdl.handle.net/2078.1/209417>

Hanert, Emmanuel ; Vallaëys, Valentin ; Tyson, Rebecca ; Lane, David ; Deleersnijder, Eric. A fractional-order diffusion model to predict transgenic pollen dispersal. 10th European Conference on Mathematical and Theoretical Biology, (Nottingham, United Kingdom, du 11/07/2016 au 15/07/2016). <http://hdl.handle.net/2078.1/182129>

Deleersnijder, Eric. A quick refresher (for my personal use) on why the smallness of the aspect ratio leads to the hydrostatic approximation in geophysical and environmental fluid flow models, 2016. 6 p. <http://hdl.handle.net/2078.1/177081>

Blaise, Sébastien ; Lambrechts, Jonathan ; Deleersnijder, Eric. A stabilization for three-dimensional discontinuous Galerkin discretizations applied to nonhydrostatic atmospheric simulations. In: International Journal for Numerical Methods in Fluids, Vol. 81, p. 558-585 (2016). doi:10.1002/fld.4197. <http://hdl.handle.net/2078.1/155002>

Delandmeter, Philippe ; Lambrechts, Jonathan ; Remacle, Jean-François ; Legat, Vincent ; Deleersnijder, Eric. An adaptive vertical coordinate system for a coastal flows discontinuous Galerkin finite element model. Joint Numerical Sea Modelling Group Conference (JONSMOD 2016) (Oslo, du 10/05/2016 au 12/05/2016). <http://hdl.handle.net/2078.1/174400>

Andutta, Fernando P. ; Helfer, Fernanda ; de Miranda, Luiz Bruner ; Deleersnijder, Eric ; Thomas, Christopher ; Lemckert, Charles. An assessment of transport timescales and return coefficient in adjacent tropical estuaries. In: Continental Shelf Research, Vol. 124, p. 49-62 (2016). doi:10.1016/j.csr.2016.05.006. <http://hdl.handle.net/2078.1/174321>

Naithani, J. ; de Brye, B. ; Buyze, E. ; Vyverman, W. ; Legat, V. ; Deleersnijder, Eric. An ecological model for the Scheldt estuary and tidal rivers ecosystem: spatial and temporal variability of plankton. In: Hydrobiologia : the international journal on limnology and marine sciences, Vol. 775, p. 51-67 (2016). doi:10.1007/s10750-016-2710-1. <http://hdl.handle.net/2078.1/174177>

Delandmeter, Philippe ; Chen, W. ; Deleersnijder, Eric ; Lambrechts, Jonathan ; Legat, Vincent ; Remacle, Jean-François ; Wolanski, Eric ; Marmorino, George. Comparison of a satellite-derived high-resolution current map and numerical modelling of submesoscale eddies in a shallow-water domain. ECSA56 - Coastal Systems in Transition (Bremen, Germany, du 04/09/2016 au 07/09/2016). <http://hdl.handle.net/2078.1/176575>

Delandmeter, Philippe ; Chen W. ; Deleersnijder, Eric ; Lambrechts, Jonathan ; Legat, Vincent ; Remacle, Jean-François ; Marmorino, George ; Wolanski, Eric. Comparison of a satellite-derived high-resolution current map and numerical modelling of submesoscale eddies in a shallow-water domain. 48th International Liege Colloquium on Ocean Dynamics Submesoscale Processes: Mechanisms, Implications and new Frontiers (Liège, du 23/05/2016 au 27/05/2016). <http://hdl.handle.net/2078.1/174406>

Figueiredo, J. ; Thomas, C.J. ; Hanert, Emmanuel ; Deleersnijder, Eric ; Harii, S. ; Baird, A.H. ; Connolly, S.R.. Coral connectivity in the Great Barrier Reef : New insights into current and future dispersal patterns. 13th International Coral Reef Symposium (Honolulu, Hawaii, USA, du 20/06/2016 au 24/06/2016). <http://hdl.handle.net/2078.1/182131>

Deleersnijder, Eric. Ekman pumping over a sloping bottom: stating the obvious... or not?, 2016. 11 p. <http://hdl.handle.net/2078.1/176571>

Vallaëys, Valentin ; Kärnä, Tuomas ; Baptista, Antoniò M. ; Deleersnijder, Eric ; Hanert, Emmanuel. Finite-element baroclinic multiscale model of the Columbia River plume. Liege Colloquium, Submesoscale processes: mechanisms, implications and new frontiers (Université of Liège, Liège, Belgium, du 23/05/2016 au 27/05/2016). <http://hdl.handle.net/2078.1/174461>

Vincent, David ; Karatekin, Ozgür ; Dehant, Véronique ; Deleersnijder, Eric. Modelisation of tidal flows between Titan's seas Kraken Mare and Ligeia Mare. European geoscience Union - General Assembly 2016 (Vienne, du 17/04/2016 au 22/04/2016). <http://hdl.handle.net/2078.1/173566>

Pham Van, Chien ; Gourgue, Olivier ; Sassi, Maximiliano ; Hoitink, A.J.F. ; Deleersnijder, Eric ; Soares Frazao, Sandra. Modelling fine-grained sediment transport in the Mahakam land-sea continuum, Indonesia. In: Journal of Hydro-Environment Research, Vol. 13, p. 103-120 (2016). doi:10.1016/j.jher.2015.04.005. <http://hdl.handle.net/2078.1/162262>



Vincent, David ; Karatekin, Ozgür ; Vallaey, Valentin ; Hayes, Alexander ; Mastrogioseppe, Marco ; Notarnicola, Claudia ; Dehant, Véronique ; Deleersnijder, Eric. Numerical study of tides in Ontario Lacus, a hydrocarbon lake on the surface of the Saturnian moon Titan. In: *Ocean Dynamics*, Vol. 66, no. 4, p. 461-482 (April 2016). doi:10.1007/s10236-016-0926-2. <http://hdl.handle.net/2078.1/172944>

Deleersnijder, Eric. On some properties of steady-state partial water ages in the World Ocean, 2016. 16 p. <http://hdl.handle.net/2078.1/176922>

Mouchet, Anne ; Cornaton, Fabien ; Deleersnijder, Eric ; Delhez, Eric M.. Partial ages: diagnosing transport processes by means of multiple clocks. In: *Ocean Dynamics : theoretical, computational oceanography and monitoring*, Vol. 66, no.3, p. 367-386 (2016). doi:10.1007/s10236-016-0922-6. <http://hdl.handle.net/2078.1/172364>

Deleersnijder, Eric. SLIM: a numerical model for the land-sea continuum and beyond, 2016. 20 p. <http://hdl.handle.net/2078.1/173312>

Pham Van, Chien ; de Brye, Benjamin ; Deleersnijder, Eric ; Hoitink, A. J. F. ; Sassi, Maximiliano ; Spinewine, Benoit ; Hidayat, Hidayat ; Soares Frazao, Sandra. Simulations of the flow in the Mahakam river-lake-delta system, Indonesia. In: *Environmental Fluid Mechanics* (Dordrecht, 2001), Vol. 16, no.3, p. 603-633 (2016). doi:10.1007/s10652-016-9445-4. <http://hdl.handle.net/2078.1/173899>

Deleersnijder, Eric. Some aspects of one-, two- and three-dimensional Lagrangian modelling in the aquatic environment, 2016. 12 p. <http://hdl.handle.net/2078.1/186425>

Deleersnijder, Eric. Some thoughts on diagnoses for eddies in the Great Barrier Reef (Australia), 2016. 26 p. <http://hdl.handle.net/2078.1/169841>

Delandmeter, Philippe ; Lewis, Stephen ; Lambrechts, Jonathan ; Legat, Vincent ; Deleersnijder, Eric ; Wolanski, Eric. The transport and fate of riverine fine sediment exported to a semi-open system. 48th International Liege Colloquium on Ocean Dynamics Submesoscale Processes: Mechanisms, Implications and new Frontiers (Liège, du 23/05/2016 au 27/05/2016). <http://hdl.handle.net/2078.1/174403>

Le Bars, Yoann ; Vallaey, Valentin ; Deleersnijder, Eric ; Hanert, Emmanuel ; Carrere, Loren ; Channelière, Claire. Unstructured-mesh modeling of the Congo river-to-sea continuum. In: *Ocean Dynamics : theoretical, computational oceanography and monitoring*, Vol. 66, no.4, p. 589-603 (2016). doi:10.1007/s10236-016-0939-x. <http://hdl.handle.net/2078.1/172916>

2015

Delandmeter, Philippe ; Lambrechts, Jonathan ; Lewis, Stephen ; Legat, Vincent ; Deleersnijder, Eric ; Wolanski, Eric. 3D modelling of the transport and fate of riverine fine sediment exported to a semi-enclosed system. European Geosciences Union General Assembly 2015 (EGU 2015) (Vienne (Autriche), du 12/04/2015 au 17/04/2015). <http://hdl.handle.net/2078.1/158220>

Deleersnijder, Eric. A depth-integrated diffusion problem in a depth-varying, unbounded domain for assessing Lagrangian schemes, 2015. 7 p. <http://hdl.handle.net/2078.1/160980>

Blaise, Sébastien ; Deleersnijder, Eric ; Lambrechts, Jonathan. A three-dimensional discontinuous Galerkin dynamical core for nonhydrostatic atmospheric simulations on the sphere. The 18th International Conference on Finite Elements in Flow Problems (Taipei, du 16/03/2015 au 18/01/2015). <http://hdl.handle.net/2078.1/155237>

Mouchet, Anne ; Deleersnijder, Eric ; Delhez, Eric ; Beckers, Jean-Marie. Benthic-Planktonic age biases: theoretical and modeling studies. Towards improved integration of models and proxy data -- Methods, current practice and perspectives (NIOZ, Texel, Netherlands, du 22/06/2015 au 26/06/2015). <http://hdl.handle.net/2078.1/163338>

Deleersnijder, Eric. Can CART's classical age distribution function be derived from partial age distribution functions?, 2015. 17 p. <http://hdl.handle.net/2078.1/162261>

Plisnier, Pierre-Denis ; Poncelet, Nadia ; Cocquyt, Christine ; De Boeck, Hilde ; Bompangue, Didier ; Naithani, Jaya ; Jacobs, Jan ; Piarroux, Renaud ; Moore, Sandy ; Giraudoux, Patrick ; Batumbo, Doudou ; Mushagalusa, Déo ; Makasa, Lawrence ; Deleersnijder, Eric ; Tomazic, Igor ; Cornet, Yves. Cholera outbreaks at Lake Tanganyika induced by climate change?, 2015. 119 p. <http://hdl.handle.net/2078.1/168735>



Deleersnijder, Eric. Classical and partial age distribution functions in a two-compartment model, 2015. 8 p. <http://hdl.handle.net/2078.1/165115>

Vallaey, Valentin ; Kärnä, Tuomas ; Baptista, Antoniò M. ; Deleersnijder, Eric ; Hanert, Emmanuel. Coastal ocean modelling with SLIM: Application to the Columbia River ROFI. 14th International workshop on Multiscale (Un-)structured mesh numerical Modeling for coastal, shelf and global ocean dynamics (IMUM 2015) (Portland, Oregon (USA), du 28/09/2015 au 30/09/2015). <http://hdl.handle.net/2078.1/171371>

Thomas, Christopher ; Bridge, Tom C.L. ; Figueiredo, Joana ; Deleersnijder, Eric ; Hanert, Emmanuel. Connectivity between submerged and near-sea-surface coral reefs: can submerged reef populations act as refuges?. In: Diversity and Distributions : a journal of conservation biogeography, Vol. 21, no.10, p. 1254-1266 (2015). doi:10.1111/ddi.12360. <http://hdl.handle.net/2078.1/165151>

Delandmeter, Philippe ; Lambrechts, Jonathan ; Remacle, Jean-François ; Legat, Vincent ; Wolanski, Eric ; Deleersnijder, Eric. Influence of the vertical discretisation of SLIM 3D on a river plume modelling. IMUM 2015 - 14th International workshop on Multi-scale (Un-)structured mesh numerical Modeling for coastal, shelf, and global ocean dynamics. (Portland, Oregon, USA, du 28/09/2015 au 30/09/2015). <http://hdl.handle.net/2078.1/172598>

Vincent, David ; Karatekin, Ozgür ; Dehant, Véronique ; Deleersnijder, Eric. Numerical simulations of tides in Ontario Lacus. General assembly 2015 of European geoscience union(EGU) (Vienne, du 13/04/2015 au 17/04/2015). <http://hdl.handle.net/2078.1/158392>

Deleersnijder, Eric. On the pressure gradient error in the sigma-coordinate system, 2015. 5 p. <http://hdl.handle.net/2078.1/155107>

Deleersnijder, Eric. Reduced complexity modelling, 2015. 33 p. <http://hdl.handle.net/2078.1/188746>

Deleersnijder, Eric. Residence time in a coastal lagoon, 2015. 7 p. <http://hdl.handle.net/2078.1/161171>

Deleersnijder, Eric. SLIM: a numerical model for the land-sea continuum and beyond, 2015. 23 p. <http://hdl.handle.net/2078.1/156664>

Blaise, Sébastien ; Lambrechts, Jonathan ; Deleersnijder, Eric. Stereographic projection for three-dimensional global discontinuous Galerkin atmospheric modeling. In: Journal of Advances in Modeling Earth Systems, Vol. 07 (2015), no. 3 (2015). doi:10.1002/2015MS000428. <http://hdl.handle.net/2078.1/162970>

Delandmeter, Philippe ; Lewis, Stephen E. ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Legat, Vincent ; Wolanski, Eric. The transport and fate of riverine fine sediment exported to a semi-open system. In: Estuarine, Coastal and Shelf Science, Vol. 167, p. 336-346 (2015). doi:10.1016/j.ecss.2015.10.011. <http://hdl.handle.net/2078.1/168611>

Le Bars, Yoann ; Vallaey, Valentin ; Deleersnijder, Eric ; Hanert, Emmanuel. Unstructured-mesh Modelling of the Hydrodynamics of the Congo River Estuary and Adjacent Coastal Zone. Marine Environmental Monitoring, Modelling and Prediction (Liège, Belgique, du 04/05/2015 au 08/05/2015). <http://hdl.handle.net/2078.1/158783>

Pham Van, Chien ; Deleersnijder, Eric ; Soares Frazao, Sandra ; Hoitink, Ton ; Sassi, Maximiliano ; Gourgue, Olivier. Unstructured-mesh simulation of flow and sediment fluxes in the Mahakam land-sea continuum, Indonesia. The 47th International Liege Colloquium -- Marine Environmental Monitoring, Modelling and Prediction (Liege, belgium, du 04/05/2015 au 08/05/2015). <http://hdl.handle.net/2078.1/158731>

2014

Le Bars, Yoann ; Vallaey, Valentin ; Deleersnijder, Eric ; Hanert, Emmanuel. 2D and 3D modelling of the Congo River and Region Of Freshwater. 13th International workshop on Multiscale unstructured mesh numerical Modeling for coastal, shelf, and global ocean dynamics (Lisbon, Portugal, du 25/08/2014 au 27/08/2014). <http://hdl.handle.net/2078.1/156075>

Le Bars, Yoann ; Vallaey, Valentin ; Deleersnijder, Eric ; Hanert, Emmanuel. 2D and 3D modelling of the Congo River and Region Of Freshwater Influence (ROFI) with SLIM. IMUM 2014 (Lisbonne, Portugal, du 25/08/2014 au 27/08/2014). <http://hdl.handle.net/2078.1/158781>

Delandmeter, Philippe ; Wolanski, Eric ; Lambrechts, Jonathan ; Legat, Vincent ; Lewis, Stephen ; Deleersnijder, Eric. A 3D baroclinic model of the Burdekin River Plume. 13th International Workshop on Multiscale (Un-)structured mesh numerical ocean modeling (IMUM 2014) (Lisbonne (Portugal), du 25/08/2014 au 27/08/2014). <http://hdl.handle.net/2078.1/158221>



Delandmeter, Philippe ; Lambrechts, Jonathan ; Wolanski, Eric ; Legat, Vincent ; Deleersnijder, Eric. A 3D baroclinic model of the Burdekin River Plume. Joint Numerical Sea Modelling Group Conference (JONSMOD 2014) (Bruxelles (Belgique), du 12/05/2014 au 14/05/2014). <http://hdl.handle.net/2078.1/158223>

Vallaëys, Valentin ; Tyson, Rebecca ; Deleersnijder, Eric ; Hanert, Emmanuel. A fractional-order diffusion model to predict transgenic pollen dispersal. 9th European Conference on Mathematical and Theoretical Biology (Gothenburg, Sweden, du 16/06/2014 au 19/06/2014). <http://hdl.handle.net/2078.1/156103>

Thomas, Christopher ; Deleersnijder, Eric ; Hanert, Emmanuel. Biophysical modelling to study multi-scale connectivity of corals in the Great Barrier Reef. JONSMOD conference (Brussels, Belgium, du 12/05/2014 au 14/05/2014). <http://hdl.handle.net/2078.1/156208>

Andutta, Fernando ; Ridd, Peter ; Deleersnijder, Eric ; Prandle, David. Contaminant exchange rates in estuaries – New formulae accounting for advection and dispersion. In: Progress in Oceanography, Vol. 120, p. 139-153 (2014). doi:10.1016/j.pocean.2013.08.009. <http://hdl.handle.net/2078.1/136352>

Deleersnijder, Eric. Developing the concept of partial age, a generalisation of the notion of age, 2014. 37 p. <http://hdl.handle.net/2078.1/155519>

Deleersnijder, Eric. Exact tracer age from two passive tracer concentrations and ventilation timescales: analytical solutions from a highly-idealised water-column model, 2014. 15 p. <http://hdl.handle.net/2078.1/155258>

Mouchet, Anne ; Beckers, Jean-Marie ; Deleersnijder, Eric ; Delhez, Eric. Factors influencing radiocarbon-based estimates of ocean ventilation: theory and models. Third PMIP3 Workshop (Namur, Belgium, du 25/05/2014 au 30/05/2014). <http://hdl.handle.net/2078.1/168612>

Pham Van, Chien ; Deleersnijder, Eric ; Bousmar, Didier ; Soares Frazao, Sandra. Flow in compound open-channels: investigation of small-scale eddy viscosity variability using a Smagorinsky turbulence closure model. River Flow 2014 (Lausanne, Switzerland, du 03/09/2014 au 05/09/2014). In: *Flow in compound open-channels: Investigation of small-scale eddy viscosity variability using a Smagorinsky turbulence closure model*, 2014. 978-1-138-02674-2. <http://hdl.handle.net/2078.1/150926>

Deleersnijder, Eric. Impact of the piston velocity on the steady-state distribution of a radioactive tracer in the leaky funnel idealisation of the World Ocean, 2014. 8 p. <http://hdl.handle.net/2078.1/155242>

Debrauwere, Anouk ; Gourgue, Olivier ; de Brye, Benjamin ; Servais, Pierre ; Ouattara, Nouho Koffi ; Deleersnijder, Eric. Integrated modelling of faecal contamination in a densely populated river-sea continuum (Scheldt River and Estuary). In: Science of the Total Environment, Vol. 468-469, p. 31-45 (2014). doi:10.1016/j.scitotenv.2013.08.019. <http://hdl.handle.net/2078.1/133362>

Elskens, Marc ; Gourgue, Olivier ; Baeyens, Willy ; Chou, Lei ; Deleersnijder, Eric ; Leermakers, Martine ; Debrauwere, Anouk. Modelling metal speciation in the Scheldt Estuary: combining a flexible-resolution transport model with empirical functions. In: Science of the Total Environment, Vol. 476-477, p. 346-358 (2014). doi:10.1016/j.scitotenv.2013.12.047. <http://hdl.handle.net/2078.1/135887>

Thomas, Christopher ; Lambrechts, Jonathan ; Wolanski, Eric ; Traag, Vincent A. ; Blondel, Vincent ; Deleersnijder, Eric ; Hanert, Emmanuel. Numerical modelling and graph theory tools to study ecological connectivity in the Great Barrier Reef. In: Ecological Modelling, Vol. 272, p. 160-174 (2014). doi:10.1016/j.ecolmodel.2013.10.002. <http://hdl.handle.net/2078.1/134702>

Thomas, Christopher ; Deleersnijder, Eric ; Hanert, Emmanuel. Numerical modelling and network science tools to study ecological connectivity in the Great Barrier Reef. 8th European Conference on Ecological Modelling (Marrakesh, Morocco, du 27/10/2014 au 30/10/2014). <http://hdl.handle.net/2078.1/156066>

Deleersnijder, Eric. On the structure of a compartment model for tracer transport, 2014. 7 p. <http://hdl.handle.net/2078.1/155581>

Vallaëys, Valentin ; Le Bars, Yoann ; Deleersnijder, Eric ; Hanert, Emmanuel. Preliminary results of an unstructured mesh model of the Congo River, estuary and ROFI. JONSMOD conference (Brussels, Belgium, du 12/05/2014 au 14/05/2014). <http://hdl.handle.net/2078.1/156207>

Mouchet, Anne ; Deleersnijder, Eric ; Delhez, Eric ; BECKERS, Jean-Marie. Processes affecting radiocarbon estimates of ocean ventilation: theory and models. Marine Radiocarbon and the INTIMATE timescale II (London, 07/05/2014). <http://hdl.handle.net/2078.1/168613>



Delhez, Eric J. M. ; de Brye, Benjamin ; Debrauwere, Anouk ; Deleersnijder, Eric. Residence time vs. influence time. In: Journal of Marine Systems, Vol. 132, p. 185-195 (2014). doi:10.1016/j.jmarsys.2013.12.005. <http://hdl.handle.net/2078.1/137963>

Vallaëys, Valentin ; Le Bars, Yoann ; Deleersnijder, Eric ; Hanert, Emmanuel. Setting up and validating a 2D model of the Congo River estuary and the adjacent coastal zone. 13th International workshop on Multiscale unstructured mesh numerical Modeling for coastal, shelf, and global ocean dynamics (Lisbon, Portugal, du 25/08/2014 au 27/08/2014). <http://hdl.handle.net/2078.1/156078>

Pham Van, Chien ; Deleersnijder, Eric ; Bousmar, Didier ; Soares Frazao, Sandra. Simulation of flow in compound open-channel using a discontinuous Galerkin finite-element method with Smagorinsky turbulence closure. In: Journal of Hydro-Environment Research, Vol. 8, no. 4, p. 396-409. doi:10.1016/j.jher.2014.04.002. <http://hdl.handle.net/2078.1/145569>

Pham Van, Chien ; Gourgue, Olivier ; Sassi, Maximiliano ; Hoitink, Ton ; Deleersnijder, Eric ; Soares Frazao, Sandra. Simulations of suspended sediment transport in the river-delta-coastal continuum, East Kalimantan, Indonesia. Joint Numerical Sea Modelling Group Conference - JONSMOD 2014. <http://hdl.handle.net/2078.1/145565>

Deleersnijder, Eric. Solutions of a tracer transport problem with a variable vertical eddy diffusivity, 2014. 10 p. <http://hdl.handle.net/2078.1/155333>

Deleersnijder, Eric. Sur la condition d'imperméabilité de la surface de la mer, 2014. 4 p. <http://hdl.handle.net/2078.1/155238>

Deleersnijder, Eric ; Mouchet, Anne ; Debrauwere, Anouk ; Delhez, Eric J. M. ; Hanert, Emmanuel. The concept of partial age, a generalisation of the notion of age: theory, idealised illustrations and realistic applications. JONSMOD 2014 (Brussels, du 12/05/2014 au 14/05/2014). <http://hdl.handle.net/2078.1/153807>

2013

Kärnä, Tuomas ; Legat, Vincent ; Deleersnijder, Eric. A baroclinic discontinuous Galerkin finite element model for coastal flows. In: Ocean Modelling, Vol. 61, no. 61, p. 1-20 (2013). doi:10.1016/j.ocemod.2012.09.009. <http://hdl.handle.net/2078/117617>

Gourgue, Olivier ; Baeyens, Willy ; Chen, Margaret ; Debrauwere, Anouk ; de Brye, Benjamin ; Deleersnijder, Eric ; Elskens, Marc ; Legat, Vincent. A depth-averaged sediment transport model for environmental studies in the Scheldt Estuary and tidal river network. European Geosciences Union General Assembly (Vienna, Austria, du 07/04/2013 au 12/04/2013). <http://hdl.handle.net/2078/127009>

Gourgue, Olivier ; Baeyens, Willy ; Chen, Margaret ; Debrauwere, Anouk ; de Brye, Benjamin ; Deleersnijder, Eric ; Elskens, Marc ; Legat, Vincent. A depth-averaged two-dimensional sediment transport model for environmental studies in the Scheldt Estuary and tidal river network. In: Journal of Marine Systems, Vol. 128, p. 27-39 (2013). doi:10.1016/j.jmarsys.2013.03.014. <http://hdl.handle.net/2078.1/127007>

Gourgue, Olivier ; Debrauwere, Anouk ; Deleersnijder, Eric ; Elskens, Marc. A first attempt to predict trace metal concentrations in the Scheldt Estuary with a two-dimensional depth-averaged sediment model. 5th International Workshop on Modeling the Ocean (Bergen, Norway, du 16/06/2013 au 20/06/2013). <http://hdl.handle.net/2078/127008>

Shah, Syed Hyder Ali Muttaqi ; Heemink, Arnold Willem ; Gräwe, Ulf ; Deleersnijder, Eric. Adaptive time stepping algorithm for Lagrangian transport models: Theory and idealised test cases. In: Ocean Modelling, Vol. 68, p. 9-21 (2013). doi:10.1016/j.ocemod.2013.04.001. <http://hdl.handle.net/2078.1/129251>

Deleersnijder, Eric. Age inequalities under Robin boundary conditions at the atmosphere-ocean interface, 2013. 9 p. <http://hdl.handle.net/2078.1/155262>

Deleersnijder, Eric. Definition of timescales and related variables for passive and radioactive tracers in the World Ocean and its leaky funnel idealisation, 2013. 7 p. <http://hdl.handle.net/2078.1/155231>

Deleersnijder, Eric. Discrétisation temporelle semi-analytique de la force de Coriolis, 2013. 8 p. <http://hdl.handle.net/2078.1/155604>

Deleersnijder, Eric. On some aspects of internal waves, 2013. 5 p. <http://hdl.handle.net/2078.1/155295>



Deleersnijder, Eric. On the dependency of the water age on the piston velocity, 2013. 3 p. <http://hdl.handle.net/2078.1/155263>

Deleersnijder, Eric. On the length and time scales for the adjustment of the riverine suspended sediment concentration toward its equilibrium value, 2013. 4 p. <http://hdl.handle.net/2078.1/155228>

de Brye, Benjamin ; de Brauwere, Anouk ; Gourgue, Olivier ; Delhez, Eric J.M. ; Deleersnijder, Eric. Reprint of water renewal timescales in the Scheldt Estuary. In: Journal of Marine Systems, Vol. 128, p. 3-16 (2013). doi:10.1016/j.jmarsys.2012.03.002. <http://hdl.handle.net/2078.1/163860>

Delandmeter, Philippe ; Lambrechts, Jonathan ; Remacle, Jean-François ; Deleersnijder, Eric ; Legat, Vincent. SLIM, A Baroclinic Discontinuous Galerkin Finite Element Model for Marine Flows. Mathematical and Computational Issues in the Geosciences (SIAM GS13) (Padoue (Italie), du 17/06/2013 au 20/06/2013). <http://hdl.handle.net/2078.1/158224>

Deleersnijder, Eric. Test cases for isopycnal (and diapycnal) diffusion in the ocean, 2013. 18 p. <http://hdl.handle.net/2078.1/155331>

Deleersnijder, Eric ; Delhez, Eric J.M. ; de Brauwere, Anouk ; Mouchet, Anne. The Constituent-oriented Age and Residence time Theory (CART): a holistic approach to the understanding of the results of complex geophysical and environmental fluid flow models, 2013. 44 p. <http://hdl.handle.net/2078.1/196275>

Deleersnijder, Eric. The U-shaped pipe: a new tool in CART's hardware shop for dealing with semi-enclosed domains?, 2013. 16 p. <http://hdl.handle.net/2078.1/153823>

Wolanski, Eric ; Lambrechts, Jonathan ; Thomas, Christopher ; Deleersnijder, Eric. The net water circulation through Torres Strait. In: Continental Shelf Research, Vol. 64, p. 66-74 (2013). doi:10.1016/j.csr.2013.05.013. <http://hdl.handle.net/2078.1/130742>

2012

de Brye, Benjamin ; Debrauwere, Anouk ; Gourgue, Olivier ; Delhez, Eric J. M. ; Deleersnijder, Eric. A generic approach to the concepts of water renewal timescales. Joint Numerical Sea Modelling Group (JONSMOD) (Brest, France, du 21/05/2012 au 23/05/2012). <http://hdl.handle.net/2078.1/120353>

Kärnä, Tuomas ; Legat, Vincent ; Deleersnijder, Eric ; Burchard, Hans. Coupling of a discontinuous Galerkin finite element marine model with a finite difference turbulence closure model. In: Ocean Modelling, Vol. 47, p. 55-64. doi:10.1016/j.ocemod.2012.01.001. <http://hdl.handle.net/2078.1/109346>

Sassi, M.G. ; Hoitink, A.J.F. ; de Brye, Benjamin ; Deleersnijder, Eric. Downstream hydraulic geometry of a tidally influenced river delta. In: Journal of Geophysical Research, Vol. 117, p. F04022 (2012). doi:10.1029/2012JF002448. <http://hdl.handle.net/2078/116856>

Deleersnijder, Eric. Homogenisation of a passive tracer concentration in an isolated domain, 2012. 7 p. <http://hdl.handle.net/2078.1/155297>

Pham Van, Chien ; de Brye, Benjamin ; Soares Frazao, Sandra ; Deleersnijder, Eric ; Hoitink, Ton ; Sassi, Maximiliano ; Hidayat, Hidayat. MODELLING OF SALINITY DISTRIBUTION AND WATER AGE IN THE MAHAKAM DELTA, INDONESIA. 4th International Conference on Estuaries and Coasts - ICEC 2012 (Hanoi, Vietnam). In: *Proceedings of the fourth international conference on Estuaries and Coasts*, 2012. <http://hdl.handle.net/2078.1/145556>

Gourgue, Olivier ; Debrauwere, Anouk ; de Brye, Benjamin ; Deleersnijder, Eric. Modelling the fate and transport of suspended sediments and contaminants in the Scheldt River and Estuary with the finite element model SLIM. Joint Numerical Sea Modelling Group (JONSMOD) (Brest, France, du 10/05/2012 au 12/05/2012). <http://hdl.handle.net/2078.1/120346>

Gourgue, Olivier ; Debrauwere, Anouk ; de Brye, Benjamin ; Deleersnijder, Eric. Modelling the fate and transport of suspended sediments and contaminants in the Scheldt River and Estuary with the finite element model SLIM. 11th International Workshop on Multi-scale (Un)-structured mesh numerical Modelling for coastal, shelf and global ocean dynamics (Delft, the Netherlands, du 28/08/2012 au 30/08/2012). <http://hdl.handle.net/2078/122911>

Pham Van, Chien ; de Brye, Benjamin ; Soares Frazao, Sandra ; Deleersnijder, Eric. PRELIMINARY RESULTS OF A NUMERICAL MODEL OF SUSPENDED SEDIMENT IN THE MAHAKAM DELTA, INDONESIA. 4th International



Conference of the application of physical modelling to port and coastal protection - Coastlab12012. In: *Book of proceedings*, 2012. 978 90 382 2008 6. <http://hdl.handle.net/2078.1/145561>

Deleersnijder, Eric ; Debrauwere, Anouk ; Gourgue, Olivier. Progress in the development and use of a finite element hydrospheric model. International Workshop on Multi-scale (Un)-structured mesh numerical Modelling for coastal, shelf and global ocean dynamics (Delft, The Netherlands, du 28/08/2012 au 30/08/2012). <http://hdl.handle.net/2078.1/120339>

Deleersnijder, Eric ; Debrauwere, Anouk ; Gourgue, Olivier. Progress in the development and use of a finite element hydrospheric model. Joint Numerical Sea Modelling Group (JONSMOD) (Brest, France, du 10/05/2012 au 12/05/2012). <http://hdl.handle.net/2078.1/120343>

Delhez, Eric J. M. ; Deleersnijder, Eric. Residence and exposure times : when diffusion does not matter. In: *Ocean Dynamics*, Vol. 62, no.10-12, p. 1399-1407 (2012). doi:10.1007/s10236-012-0568-y. <http://hdl.handle.net/2078/118068>

De Maet, Thomas ; Hanert, Emmanuel ; Deleersnijder, Eric ; Fichet, Thierry ; Legat, Vincent ; Remacle, Jean-François ; Soares Frazao, Sandra ; Vanclooster, Marnik ; Lambrechts, Jonathan ; König Beatty, S. ; Bouillon, Sylvain ; de Brye, Benjamin ; Gourgue, Olivier ; Kärnä, Tuomas ; Lietaer, Olivier ; Pestiaux, Alice ; Slaoui, Karim ; Thomas, Christopher. SLIM: a multi-scale model of the land-sea continuum. EGU General Assembly 2012 (Vienna (Austria), du 22.04.2012 au 27.04.2012). In: *Geophysical Research Abstracts*, Vol. 14 (2012). <http://hdl.handle.net/2078.1/111792>

Hanert, Emmanuel ; Thomas, Christopher ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Wolanski, Eric. Studying coral reefs connectivity using SLIM and tools from graph theory. 11th International Workshop on Unstructured Mesh Numerical Modelling of Coastal, Shelf and Ocean Flows (Delft, The Netherlands, du 27/08/2012 au 31/08/2012). <http://hdl.handle.net/2078.1/120549>

Thomas, Christopher ; Krings, Gautier ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Hanert, Emmanuel ; Wolanski, Eric. Studying physical connectivity of reefs using a numerical ocean model. 12th International Coral Reef Symposium (Cairns, Australia, du 09/07/2012 au 13/07/2012). <http://hdl.handle.net/2078.1/120548>

Naithani, Jaya ; Plisnier, Pierre-Denis ; Deleersnijder, Eric. Tanganyika Lake, modeling the eco-hydrodynamics. In: Bengtsson Lars, Herschy Reginald W., Fairbridge Rhodes W. (Eds.), *Encyclopedia of Lakes and Reservoirs: Geography, Geology, Hydrology and Paleolimnology* (Encyclopedia of Earth Sciences Serie; 5), Springer: New-York, 2012. 978-1-4020-5616-1. <http://hdl.handle.net/2078.1/112720>

Mouchet, Anne ; Deleersnijder, Eric ; Primeau, François. The leaky funnel model revisited. In: *Tellus A*, Vol. 64, p. 1931 (2012). <http://hdl.handle.net/2078/114636>

de Brye, Benjamin ; Debrauwere, Anouk ; Gourgue, Olivier ; Delhez, Eric J. M. ; Deleersnijder, Eric. Water renewal timescales in the Scheldt Estuary. In: *Journal of Marine Systems*, Vol. 94, p. 74-86 (2012). doi:10.1016/j.jmarsys.2011.10.013. <http://hdl.handle.net/2078.1/106880>

Gräwe, Ulf ; Deleersnijder, Eric ; Shah, S.H.A.M. ; Heemink, Arnold. Why the Euler scheme in particle tracking is not enough: the shallow-sea pycnocline test case. In: *Ocean Dynamics : theoretical, computational oceanography and monitoring*, Vol. 62, p. 501-514. doi:10.1007/s10236-012-0523-y. <http://hdl.handle.net/2078.1/109750>

2011

Gourgue, Olivier ; Debrauwere, Anouk ; de Brye, Benjamin ; Deleersnijder, Eric ; Legat, Vincent. A depth-averaged fine sediment transport model for environmental studies in the Scheldt Estuary (Northwestern Europe). 3rd International Workshop on Modeling the Ocean (Qingdao, China, du 06/06/2011 au 09/06/2011). <http://hdl.handle.net/2078.1/104792>

Kärnä, Tuomas ; de Brye, Benjamin ; Gourgue, Olivier ; Lambrechts, Jonathan ; Comblen, Richard ; Legat, Vincent ; Deleersnijder, Eric. A fully implicit wetting-drying method for DG-FEM shallow water models, with an application to the Scheldt Estuary. In: *Computer Methods in Applied Mechanics and Engineering*, Vol. 200, p. 509-524. doi:10.1016/j.cma.2010.07.001. <http://hdl.handle.net/2078.1/77608>

Deleersnijder, Eric ; de Brye, Benjamin ; Debrauwere, Anouk ; Gourgue, Olivier ; Delhez, Eric J. M.. A generic approach to the concept of water renewal: theory, idealised examples and realistic application to Lake Tanganyika and the Scheldt Estuary. International Liège Colloquium (Liège, Belgium). <http://hdl.handle.net/2078/120388>



Deleersnijder, Eric. An analytical solution of a two-dimensional tracer transport problem in a domain with variable depth, 2011. 3 p. <http://hdl.handle.net/2078.1/160975>

Deleersnijder, Eric. An unexpected property of tracer transport in a channel flow, 2011. 2 p. <http://hdl.handle.net/2078.1/155261>

Deleersnijder, Eric. Approximate age of a passive tracer from two slowly-decaying tracer concentrations, 2011. 2 p. <http://hdl.handle.net/2078.1/155257>

Shah, S.H.A.M. ; Heemink, Arnold W. ; Deleersnijder, Eric. Assessing Lagrangian schemes for simulating diffusion on non-flat isopycnal surfaces. In: Ocean Modelling, Vol. 39, p. 351-361. doi:10.1016/j.ocemod.2011.05.008. <http://hdl.handle.net/2078.1/82833>

Delhez, Eric J. M. ; Debrauwere, Anouk ; Deleersnijder, Eric. CART: the Constituent-oriented Age and Residence time Theory. International workshop/school on Tracer and Timescale Methods for Understanding Complex Geophysical and Environmental Processes (Louvain-la-Neuve, Belgium). <http://hdl.handle.net/2078.1/120366>

Plisnier, PIERRE-DENIS ; Deleersnijder, Eric ; Naithani, Jaya ; Hanert, Emmanuel. CHOLTIC - Epidémies de choléra au lac Tanganyika induites par les changements climatiques?. In: Science connection, Vol. 35, p. 38-42. <http://hdl.handle.net/2078.1/120220>

Deleersnijder, Eric. Definition of timescales and related variables for the World Ocean and its leaky funnel idealisation, 2011. 6 p. <http://hdl.handle.net/2078.1/155230>

Deleersnijder, Eric. Exact age from two passive tracer concentrations, 2011. 6 p. <http://hdl.handle.net/2078.1/155255>

Deleersnijder, Eric. Fractional vs. classical (harmonic) diffusion, 2011. 5 p. <http://hdl.handle.net/2078.1/155499>

Gourgue, Olivier ; Deleersnijder, Eric ; Legat, Vincent ; Marchal, Emmanuel ; White, Laurent. Free and forced thermocline oscillations in Lake Tanganyika. In: P. Alpert and T. Sholokhman Cambridge University Press, *The Factor Separation Method in the Atmosphere: Applications and Future Prospects*, 2011. 978-0-521-19173-9. doi:10.1017/CBO9780511921414.011. <http://hdl.handle.net/2078.1/73914>

Hanert, Emmanuel ; Schumacher, Eva ; Deleersnijder, Eric. Front dynamics in fractional-order epidemic models. In: Journal of Theoretical Biology, Vol. 279, no. 1, p. 9-16. doi:10.1016/j.jtbi.2011.03.012. <http://hdl.handle.net/2078.1/70889>

Debrauwere, Anouk ; de Brye, Benjamin ; Servais, Pierre ; Passerat, Julien ; Deleersnijder, Eric. Modelling Escherichia coli concentrations in the tidal Scheldt river and estuary. In: Water Research, Vol. 45, p. 2724-2738. doi:10.1016/j.watres.2011.02.003. <http://hdl.handle.net/2078.1/73878>

Pham Van, Chien ; Spinewine, Benoît ; de Brye, Benjamin ; Soares Frazao, Sandra ; Deleersnijder, Eric ; Sassi, M.G. ; Hidayat, Hidayat ; Hoitink, A.J.F. (Ton). Multiscale modeling of a tidal estuary with a finite-element shallow-water model: application to salinity intrusion into the Mahakam delta (Indonesia). River, Coastal and Estuarine Morphodynamics: RCEM2011 (Beijing, China, du 06/09/2011 au 08/09/2011). In: , 2011. <http://hdl.handle.net/2078.1/92264>

Cornaton, F.J. ; Park, Y.-J. ; Deleersnijder, Eric. On the biases affecting water ages inferred from isotopic data. In: Journal of Hydrology, Vol. 410, no. 3-4, p. 217-225 (2011). doi:10.1016/j.jhydrol.2011.09.024. <http://hdl.handle.net/2078.1/91904>

Naithani, Jaya ; Plisnier, PIERRE-DENIS ; Deleersnijder, Eric. Possible effects of global climate change on the ecosystem of Lake Tanganyika. In: Hydrobiologia : the international journal on limnology and marine sciences, Vol. 671, no. n.a., p. 147-163 (n.a.). doi:10.1007/s10750-011-0713-5. <http://hdl.handle.net/2078.1/77209>

de Brye, Benjamin ; Kärnä, Tuomas ; Deleersnijder, Eric. Preliminary results of a finite-element, multi-scale model of the Mahakam Delta (Indonesia). In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 61. doi:10.1007/s10236-011-0410-y. <http://hdl.handle.net/2078.1/82781>

Debrauwere, Anouk ; de Brye, Benjamin ; Blaise, Sébastien ; Deleersnijder, Eric. Residence time, exposure time and connectivity in the Scheldt Estuary. In: Journal of Marine Systems, Vol. 84, no. 3-4, p. 85-95 (2011). doi:10.1016/j.jmarsys.2010.10.001. <http://hdl.handle.net/2078.1/73833>



Deleersnijder, Eric. Test cases for Lagrangian transport models in stratified flows, 2011. 11 p. <http://hdl.handle.net/2078.1/194410>

Deleersnijder, Eric. Test cases for advection-diffusion equations with a first-order decay term, 2011. 23 p. <http://hdl.handle.net/2078.1/155372>

Lietaer, Olivier ; Deleersnijder, Eric ; Fichet, Thierry ; Vancoppenolle, Martin ; Comblen, Richard ; Bouillon, Sylvain ; Legat, Vincent. The vertical age profile in sea ice: Theory and numerical results. In: Ocean Modelling, Vol. 40, no. 3-4, p. 211-226 (2011). doi:10.1016/j.ocemod.2011.09.002. <http://hdl.handle.net/2078.1/90369>

Sassi, Maximiliano ; Hoitink, A.J.F. ; de Brye, Benjamin ; Vermeulen, Bart ; Deleersnijder, Eric. Tidal impact on the division of river discharge over distributory channels in the Mahakam Delta. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 61, p. 2211-2228. doi:10.1007/s10236-011-0473-9. <http://hdl.handle.net/2078.1/95724>

Deleersnijder, Eric. Toward a generic method to estimate the water renewal rate of a semi-enclosed domain, 2011. 46 p. <http://hdl.handle.net/2078.1/155414>

Deleersnijder, Eric ; Debrauwere, Anouk ; Gourgue, Olivier. Towards a Multi-Scale/Physics Numerical Model of the Hydrosphere. 10th International Workshop on Multi-scale (Un)-structured mesh numerical Modelling for coastal, shelf and global ocean dynamics (Bremerhaven, Germany, du 22/08/2011 au 25/08/2011). <http://hdl.handle.net/2078.1/120361>

Sassi, M.G. ; Hoitink, A.J.F. (Ton) ; de Brye, Benjamin ; Deleersnijder, Eric. Towards an extension of the hydraulic geometry concept to include tidally influenced delta channel networks. River, Coastal and Estuarine Morphodynamics: RCEM2011 (Beijing, China, du 06/09/2011 au 08/09/2011). <http://hdl.handle.net/2078.1/92263>

Deleersnijder, Eric. Tracing riverine water in the sea: theoretical considerations and an inverted leakyfunnel illustration admitting an analytical solution, 2011. 10 p. <http://hdl.handle.net/2078.1/155229>

2010

Blaise, Sébastien ; Comblen, Richard ; Legat, Vincent ; Remacle, Jean-François ; Deleersnijder, Eric ; Lambrechts, Jonathan. A discontinuous finite element baroclinic marine model on unstructured prismatic meshes : Part I: space discretization. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, no. 6, p. 1371-1393 (2010). <http://hdl.handle.net/2078.1/71284>

Comblen, Richard ; Blaise, Sébastien ; Legat, Vincent ; Remacle, Jean-François ; Deleersnijder, Eric ; Lambrechts, Jonathan. A discontinuous finite element baroclinic marine model on unstructured prismatic meshes : Part II: implicit/explicit time discretization. In: Dynamics of Atmospheres and Oceans, Vol. 60, p. 1395-1414 (2010). <http://hdl.handle.net/2078.1/71293>

Gourgue, Olivier ; Lambrechts, Jonathan ; Deleersnijder, Eric ; Legat, Vincent ; Wolanski, Eric. A fine sediment module for the two-dimensional component of SLIM. 9th International workshop on Multiscale (Un)-structured mesh numerical Modeling for coastal, shelf, and global ocean dynamics (Cambridge, MA, USA, du 17/08/2010 au 20/08/2010). <http://hdl.handle.net/2078.1/104791>

de Brye, Benjamin ; Debrauwere, Anouk ; Gourgue, Olivier ; Kärrä, Tuomas ; Lambrechts, Jonathan ; Comblen, Richard ; Deleersnijder, Eric. A finite-element, multi-scale model of the Scheldt tributaries, river, estuary and ROFI. In: Coastal Engineering, Vol. 57, no. 9, p. 850-863 (2010). doi:10.1016/j.coastaleng.2010.04.001. <http://hdl.handle.net/2078.1/33679>

Kärrä, Tuomas ; de Brye, Benjamin ; Debrauwere, Anouk ; Gourgue, Olivier ; Lambrechts, Jonathan ; Comblen, Richard ; Deleersnijder, Eric. A finite-element, unstructured-mesh model for simulating the fate of anthropogenic contaminants in the land-sea continuum. Joint Symposium of Young Scientists in Ehime University and National Institute of Environmental Studies (Japan). <http://hdl.handle.net/2078.1/120390>

Sorjamaa, Antti ; Lendasse, Amaury ; Cornet, Yves ; Deleersnijder, Eric. An improved methodology for filling missing values in spatiotemporal climate data set. In: Computational Geosciences : modeling, simulation and data analysis, Vol. 14, no. 1, p. 55-64 (2010). doi:10.1007/s10596-009-9132-3. <http://hdl.handle.net/2078.1/34271>

Debrauwere, Anouk ; Deleersnijder, Eric. Assessing the parameterisation of the settling flux in a depth-integrated model of the fate of decaying and sinking particles, with application to fecal bacteria in the Scheldt



Estuary. In: *Environmental Fluid Mechanics* (Dordrecht, 2001), Vol. 10, no. 1-2, p. 157-175 (2010). doi:10.1007/s10652-009-9151-6. <http://hdl.handle.net/2078.1/34198>

Blaise, Sébastien ; de Brye, Benjamin ; Debrauwere, Anouk ; Deleersnijder, Eric ; Delhez, Eric J. M. ; Comblen, Richard. Capturing the residence time boundary layer - Application to the Scheldt Estuary. In: *Ocean Dynamics : theoretical, computational oceanography and monitoring*, Vol. 60, no. 3, p. 535-554 (2010). doi:10.1007/s10236-010-0272-8. <http://hdl.handle.net/2078.1/33725>

Goosse, Hugues ; Fichefet, Thierry ; Barriat, Pierre-Yves ; Deleersnijder, Eric ; Loutre, Marie-France. Description of the Earth system model of intermediate complexity LOVECLIM, version 1.2.. In: *Geoscientific Model Development*, Vol. 3, no. 1, p. 603-633 (2010). doi:10.5194/gmd-3-603-2010. <http://hdl.handle.net/2078.1/71043>

Deleersnijder, Eric ; Bard, Edouard ; Crucifix, Michel ; Fichefet, Thierry ; Hanert, Emmanuel. Le réchauffement climatique est réel et l'Homme en est le principal responsable. In: *Le Soir*, p. 15 (6 janvier 2010). <http://hdl.handle.net/2078.1/70814>

Modave, Axel ; Deleersnijder, Eric ; Delhez, Eric J. M.. On the parameters of absorbing layers for shallow water models. In: *Ocean Dynamics : theoretical, computational oceanography and monitoring*, Vol. 60, no. 1, p. 65-79 (2010). doi:10.1007/s10236-009-0243-0. <http://hdl.handle.net/2078.1/34216>

Delhez, Eric J. M. ; Deleersnijder, Eric. Residence time and exposure time of sinking phytoplankton in the euphotic layer. In: *Journal of Theoretical Biology*, Vol. 262, no. 3, p. 505-516 (2010). doi:10.1016/j.jtbi.2009.10.004. <http://hdl.handle.net/2078.1/34149>

Lietaer, Olivier ; Deleersnijder, Eric ; Fichefet, Thierry ; Vancoppenolle, Martin ; Comblen, Richard ; Bouillon, Sylvain ; Legat, Vincent. SLIM: A finite-element, unstructured-mesh model for simulating thermodynamic and dynamic sea-ice processes. : Application: the theory of the sea-ice age. Belgian IPY Symposium. The Contribution of Belgian Research to the Achievements of the International Polar Year 2007-2009, Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, pp. 24-26 (Brussels, 26/05/2010). <http://hdl.handle.net/2078.1/71117>

Kärnä, Tuomas ; Deleersnijder, Eric ; Debrauwere, Anouk. Simple test cases for validating a finite element unstructured grid fecal bacteria transport model. In: *Applied Mathematical Modelling*, Vol. 34, no. 10, p. 3055-3070 (2010). doi:10.1016/j.apm.2010.01.012. <http://hdl.handle.net/2078.1/33794>

Deleersnijder, Eric ; Debrauwere, Anouk ; Gourgue, Olivier. Toward multi-scale modelling of the whole hydrosphere: concepts, applications and diagnoses. Joint Numerical Sea Modelling Group (JONSMOD) (Delft, The Netherlands, du 10/05/2010 au 12/05/2010). <http://hdl.handle.net/2078.1/120389>

de Brye, Benjamin ; Debrauwere, Anouk ; Deleersnijder, Eric. Towards a complete study of water renewal timescales of the Scheldt Estuary. Joint Numerical Modelling Group (Jonsmod) Conference (Delft, The Netherlands, du 10/05/2010 au 12/05/2010). <http://hdl.handle.net/2078/104840>

Deleersnijder, Eric ; Cornaton, Fabien ; Haine, Thomas W. N. ; Vanclooster, Marnik ; Waugh, Darryn W.. Tracer and timescale methods for understanding complex geophysical and environmental fluid flows. In: *Environmental Fluid Mechanics* (Dordrecht, 2001), Vol. 10, no. 1-2, p. 1-5 (2010). doi:10.1007/s10652-009-9164-1. <http://hdl.handle.net/2078.1/34195>

2009

Comblen, Richard ; Legrand, Sébastien ; Deleersnijder, Eric ; Legat, Vincent. A finite element method for solving the shallow water equations on the sphere. In: *Ocean Modelling*, Vol. 28, no. 1-3, p. 12-23 (2009). doi:10.1016/j.ocemod.2008.05.004. <http://hdl.handle.net/2078.1/35630>

Gourgue, Olivier ; Comblen, Richard ; Lambrechts, Jonathan ; Kärnä, Tuomas ; Legat, Vincent ; Deleersnijder, Eric. A flux-limiting wetting-drying method for finite-element shallow-water models, with application to the Scheldt Estuary. In: *Advances in Water Resources*, Vol. 32, no. 12, p. 1726-1739 (2009). doi:10.1016/j.advwatres.2009.09.005. <http://hdl.handle.net/2078.1/35114>

Gourgue, Olivier ; de Brye, Benjamin ; Debrauwere, Anouk ; Kärnä, Tuomas ; Deleersnijder, Eric. A multi-scale finite-element model for the transport of sediments in the Scheldt Estuary. Coastal and Estuarine Research Federation 20th Biennial Conference (Portland, OR, USA, du 01/11/2009 au 05/11/2009). <http://hdl.handle.net/2078.1/104790>



de Brye, Benjamin ; Debrauwere, Anouk ; Gourgue, Olivier ; Kärnä, Tuomas ; Deleersnijder, Eric. A multi-scale, finite-element model of the macrotidal Scheldt Estuary. 8th International Workshop on Unstructured Mesh Numerical Modelling of Coastal, Shelf and Ocean Flows (Louvain-la-Neuve, Belgium, du 16/09/2009 au 18/09/2009). <http://hdl.handle.net/2078.1/104842>

Blaise, Sébastien ; Comblen, Richard ; Lambrechts, Jonathan ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. Design and preliminary validation of a three-dimensional, baroclinic, unstructured-mesh, finite-element ocean model. 8th World Congress on Computational Mechanics and 5th European Congress on Computational Methods in Applied Science and Engineering (Venise, du 30/06/2008 au 05/07/2008). <http://hdl.handle.net/2078.1/136528>

Debrauwere, Anouk ; De Ridder, Fjo ; Gourgue, Olivier ; Lambrechts, Jonathan ; Comblen, Richard ; Pintelon, Rik ; Passerat, Julien ; Servais, Pierre ; Elskens, Marc ; Baeyens, Willy ; Kaernae, Tuomas ; de Brye, Benjamin ; Deleersnijder, Eric. Design of a sampling strategy to optimally calibrate a reactive transport model: Exploring the potential for *Escherichia coli* in the Scheldt Estuary. In: Environmental Modelling & Software, Vol. 24, no. 8, p. 969-981 (2009). doi:10.1016/j.envsoft.2009.02.004. <http://hdl.handle.net/2078.1/35621>

Blaise, Sébastien ; Comblen, Richard ; Legat, Vincent ; Remacle, Jean-François ; Deleersnijder, Eric ; Lambrechts, Jonathan. Development and validation of a discontinuous Galerkin baroclinic ocean model. 8th International Workshop on Unstructured Mesh Numerical Modelling of Coastal, Shelf and Ocean Flows (Louvain-la-Neuve, du 16/09/2009 au 18/09/2009). <http://hdl.handle.net/2078.1/136663>

Deleersnijder, Eric. Du calcul de l'âge de la glace de mer, 2009. 32 p. <http://hdl.handle.net/2078.1/155302>

Deleersnijder, Eric. Du calcul de l'âge des sédiments, 2009. 7 p. <http://hdl.handle.net/2078.1/188240>

Deleersnijder, Eric. Freshwater age as a diagnostic of the Rhine/Meuse ROFI dynamics: an idealised study, 2009. 4 p. <http://hdl.handle.net/2078.1/155541>

Deleersnijder, Eric. Growth versus spreading in biological systems: from harmful algal blooms to epidemics, 2009. 36 p. <http://hdl.handle.net/2078.1/155631>

Plisnier, P. -D. ; Mgana, H. ; Kimirei, I. ; Chande, A. ; Makasa, L. ; Chimanga, J. ; Zulu, F. ; Cocquyt, C. ; Horion, S. ; Bergamino, N. ; Naithani, Jaya ; Deleersnijder, Eric ; Andre, Laurence ; Descy, Jacques ; Cornet, Yvan. Limnological variability and pelagic fish abundance (*Stolothrissa tanganicae* and *Lates stappersii*) in Lake Tanganyika. In: Hydrobiologia : the international journal on limnology and marine sciences, Vol. 625, p. 117-134 (2009). doi:10.1007/s10750-009-9701-4. <http://hdl.handle.net/2078.1/36137>

Deleersnijder, Eric. On some properties of ocean ventilation timescales, 2009. 16 p. <http://hdl.handle.net/2078.1/153824>

Primeau, F. ; Deleersnijder, Eric. On the time to tracer equilibrium in the global ocean. In: Ocean Science, Vol. 5, no. 1, p. 13-28 (2009). doi:10.5194/os-5-13-2009. <http://hdl.handle.net/2078.1/35633>

Griffies, S.M. ; Deleersnijder, Eric ; Hanert, Emmanuel. Problems and prospects in large-scale ocean circulation models. In: J. Hall, D.E. Harrison and D. Stammer, *OceanObs'09: Sustained Ocean Observations and Information for Society*, ESA Publication WPP-306, 2009, 1-23. <http://hdl.handle.net/2078.1/71541>

Deleersnijder, Eric. Quelques réflexions sur les conditions aux limites en mer ouverte, 2009. 22 p. <http://hdl.handle.net/2078.1/155621>

Deleersnijder, Eric. Simplification of a one-dimensional "heat equation" model to a zero-dimensional "box model", 2009. 6 p. <http://hdl.handle.net/2078.1/155584>

Deleersnijder, Eric. The unreasonable effectiveness of dimension reduction in complex geophysical flow modelling, 2009. 25 p. <http://hdl.handle.net/2078.1/154174>

2008

Gourgue, Olivier ; Comblen, Richard ; Lambrechts, Jonathan ; Legat, Vincent ; Deleersnijder, Eric. A finite element wetting-drying method, with application to the Scheldt Estuary. European Geosciences Union General Assembly (Vienna, Austria, du 13/04/2008 au 18/04/2008). <http://hdl.handle.net/2078/122916>



Lambrechts, Jonathan ; Hanert, Emmanuel ; Deleersnijder, Eric ; Bernard, Paul-Emile ; Legat, Vincent ; Remacle, Jean-François ; Wolanski, Eric. A multi-scale model of the hydrodynamics of the whole Great Barrier Reef. In: Estuarine, Coastal and Shelf Science, Vol. 79, no. 1, p. 143-151 (2008). doi:10.1016/j.ecss.2008.03.016. <http://hdl.handle.net/2078.1/36453>

White, Laurent ; Deleersnijder, Eric ; Legat, Vincent. A three-dimensional unstructured mesh finite element shallow-water model, with application to the flows around an island and in a wind-driven, elongated basin. In: Ocean Modelling, Vol. 22, no. 1-2, p. 26-47 (2008). doi:10.1016/j.ocemod.2008.01.001. <http://hdl.handle.net/2078.1/36581>

Delhez, Eric J. M. ; Deleersnijder, Eric. Age and the time lag method. In: Continental Shelf Research, Vol. 28, no. 8, p. 1057-1067 (2008). doi:10.1016/j.csr.2008.02.003. <http://hdl.handle.net/2078.1/36609>

Deleersnijder, Eric. Can we use CART to evaluate the age of energy-containing eddies in a turbulent flow?, 2008. 5 p. <http://hdl.handle.net/2078.1/155240>

Blaise, Sébastien ; Comblen, Richard ; Lambrechts, Jonathan ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. Design and preliminary validation of a three-dimensional, baroclinic, unstructured-mesh, finite-element ocean model. EGU General Assembly 2008 (Vienne, du 13/04/2008 au 18/04/2008). <http://hdl.handle.net/2078.1/136526>

Orre, Steinar ; Gao, Yongqi ; Drange, Helge ; Deleersnijder, Eric. Diagnosing Ocean Tracer Transport from Sellafield and Dounreay by Equivalent Diffusion and Age. In: Advances in Atmospheric Sciences, Vol. 25, no. 5, p. 805-814 (2008). doi:10.1007/s00376-008-0805-y. <http://hdl.handle.net/2078.1/36318>

Bernard, Paul-Emile ; Deleersnijder, Eric ; Legat, Vincent ; Remacle, Jean-François. Dispersion analysis of discontinuous Galerkin schemes applied to Poincaré, Kelvin and Rossby waves. In: Journal of Scientific Computing, Vol. 34, no. 1, p. 26-47 (2008). doi:10.1007/s10915-007-9156-6. <http://hdl.handle.net/2078.1/36918>

de Brye, Benjamin ; Deleersnijder, Eric ; Gourgue, Olivier ; Debrauwere, Anouk. Finite element modelling of the Scheldt estuary and the adjacent Belgian/Dutch coastal zone. European Geosciences Union (EGU) (Vienna, Austria, du 13/04/2008 au 18/04/2008). <http://hdl.handle.net/2078.1/104846>

Lambrechts, Jonathan ; Deleersnijder, Eric ; Legat, Vincent ; Hanert, Emmanuel ; Wolanski, Eric. Finite-element model of the Great Barrier Reef circulation. EGU General Assembly 2008 (Vienna, Austria, du April 13 au April 18). <http://hdl.handle.net/2078.1/72334>

Blaise, Sébastien ; Deleersnijder, Eric. Improving the parameterisation of horizontal density gradient in one-dimensional water column models for estuarine circulation. In: Ocean Science, Vol. 4, no. 4, p. 239-246 (2008). doi:10.5194/os-4-239-2008. <http://hdl.handle.net/2078.1/35805>

Deleersnijder, Eric ; Lermusiaux, Pierre F. J.. Multi-scale modeling: nested-grid and unstructured-mesh approaches. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 58, no. 5-6, p. 335-336 (2008). doi:10.1007/s10236-008-0170-5. <http://hdl.handle.net/2078.1/36196>

Deleersnijder, Eric ; Hanert, Emmanuel ; Burchard, Hans ; Dijkstra, Henk A.. On the mathematical stability of stratified flow models with local turbulence closure schemes. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 58, no. 3-4, p. 237-246 (2008). doi:10.1007/s10236-008-0145-6. <http://hdl.handle.net/2078.1/36255>

Deleersnijder, Eric. On the modelling of the transport processes impacting fecal bacteria concentration in the aquatic environment, 2008. 18 p. <http://hdl.handle.net/2078.1/155383>

Gourgue, Olivier ; Deleersnijder, Eric ; de Brye, Benjamin ; Debrauwere, Anouk ; Servais, Pierre ; Passerat, Julien. Preliminary results of a finite element model of the ecohydrodynamics of the Scheldt Estuary and the adjacent Belgian/Dutch coastal zone. 8th World Congress on Computational Mechanics and 5th European Congress on Computational Methods in Applied Sciences and Engineering (Venice, Italy, du 30/06/2008 au 05/07/2008). <http://hdl.handle.net/2078.1/104788>

Mouchet, Anne ; Deleersnijder, Eric. The leaky funnel model, a metaphor of the ventilation of the World Ocean as simulated in an OGCM. In: Tellus. Series A: Dynamic Meteorology and Oceanography, Vol. 60, no. 4, p. 761-774 (2008). doi:10.1111/j.1600-0870.2008.00322.x. <http://hdl.handle.net/2078.1/36474>



Lambrechts, Jonathan ; Deleersnijder, Eric ; Legat, Vincent ; Remacle, Jean-François ; Comblen, Richard ; Gourgue, Olivier ; Blaise, Sébastien ; White, Laurent. Toward a Multi-Purpose, Unstructured Mesh, Finite Element, Marine Model Slim. 13th SIAM Conference on Parallel Processing for Scientific Computing (Atlanta, du 12/03/2008 au 14/03/2008). <http://hdl.handle.net/2078.1/136525>

White, Laurent ; Legat, Vincent ; Deleersnijder, Eric. Tracer conservation for three-dimensional, finite-element, free-surface, ocean Modeling on moving prismatic meshes. In: Monthly Weather Review, Vol. 136, no. 2, p. 420-442 (2008). doi:10.1175/2007MWR2137.1. <http://hdl.handle.net/2078.1/36754>

Deleersnijder, Eric. Tracers in a river: simple one-dimensional analytical expressions, 2008. 8 p. <http://hdl.handle.net/2078.1/155260>

2007

Blaise, Sébastien ; Deleersnijder, Eric. A Finite Element Model Study of the Importance of the Advection of Turbulence Closure Variables. 39th International Liège Colloquium on Ocean Dynamics and 3rd Warnemünde Turbulence Days (Liège, du 07/05/2007 au 11/05/2007). <http://hdl.handle.net/2078.1/136650>

Gourgue, Olivier ; Deleersnijder, Eric ; Legat, Vincent ; Marchal, Emmanuel ; Naithani, Jaya ; Plisnier, PIERRE-DENIS ; White, Laurent. A finite-element reduced-gravity model of Lake Tanganyika. European Geosciences Union General Assembly (Vienna, Austria, du 15/04/2007 au 20/04/2007). <http://hdl.handle.net/2078.1/104784>

Naithani, Jaya ; Plisnier, Pierre-Denis ; Deleersnijder, Eric. A simple model of the eco-hydrodynamics of the epilimnion of Lake Tanganyika. In: Freshwater Biology, Vol. 52, no. 11, p. 2087-2100 (2007). doi:10.1111/j.1365-2427.2007.01831.x. <http://hdl.handle.net/2078.1/37290>

Deleersnijder, Eric. Analytical solutions to assess Lagrangian models of advective and diffusive transport processes, 2007. 24 p. <http://hdl.handle.net/2078.1/155421>

Hanert, Emmanuel ; Deleersnijder, Eric ; Blaise, Sébastien ; Remacle, Jean-François. Capturing the bottom boundary layer in finite element ocean models. In: Ocean Modelling, Vol. 17, no. 2, p. 153-162 (2007). doi:10.1016/j.ocemod.2006.11.006. <http://hdl.handle.net/2078.1/37633>

Hanert, Emmanuel ; Deleersnijder, Eric ; Blaise, Sébastien ; Remacle, Jean-François. Capturing the bottom boundary layer in finite element ocean models. EGU General Assembly 2007 (Vienna, Austria, du April 16 au April 20). <http://hdl.handle.net/2078.1/72332>

White, Laurent ; Deleersnijder, Eric. Diagnoses of vertical transport in a three-dimensional finite element model of the tidal circulation around an island. In: Estuarine, Coastal and Shelf Science, Vol. 74, no. 4, p. 655-669 (2007). doi:10.1016/j.ecss.2006.07.014. <http://hdl.handle.net/2078.1/37340>

Gourgue, Olivier ; Deleersnijder, Eric ; Legat, Vincent ; White, Laurent. Finite element hydrodynamic modelling in Lake Tanganyika. 30th Congress of the International Association of Theoretical and Applied Limnology (Montreal, Canada, du 12/08/2007 au 18/08/2007). <http://hdl.handle.net/2078.1/104786>

Blaise, Sébastien ; Deleersnijder, Eric ; Remacle, Jean-François ; White, Laurent. Finite-Element Tridimensional Modeling of the Circulation in the Mururoa Atoll Lagoon. 9th US National Congress on Computational Mechanics (San Francisco, du 22/07/2007 au 26/07/2007). <http://hdl.handle.net/2078.1/136523>

Bernard, Paul-Emile ; Chevaugnon, Nicolas ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. High-order h-adaptive discontinuous Galerkin methods for ocean modelling. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 57, no. 2, p. 109-121 (2007). doi:10.1007/s10236-006-0093-y. <http://hdl.handle.net/2078.1/37675>

Bernard, Paul-Emile ; Chevaugnon, Nicolas ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. High-order h-adaptive discontinuous Galerkin methods for ocean modelling (vol 57, pg 579, 2007). In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 57, no. 6, p. 579-580 (2007). doi:10.1007/s10236-007-0127-0. <http://hdl.handle.net/2078.1/37186>

Blaise, Sébastien ; Deleersnijder, Eric ; White, Laurent ; Remacle, Jean-François. Influence of the turbulence closure scheme on the finite-element simulation of the upwelling in the wake of a shallow-water island. In: Continental Shelf Research, Vol. 27, no. 18, p. 2329-2345 (2007). doi:10.1016/j.csr.2007.06.003. <http://hdl.handle.net/2078.1/37230>



Spivakovskaya, Darya ; Heemink, Arnold W. ; Deleersnijder, Eric. Lagrangian modelling of multi-dimensional advection-diffusion with space-varying diffusivities: theory and idealized test cases. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 57, no. 3, p. 189-203 (2007). doi:10.1007/s10236-007-0102-9. <http://hdl.handle.net/2078.1/37525>

Delhez, Eric J. M. ; Deleersnijder, Eric. Overshootings and spurious oscillations caused by biharmonic mixing. In: Ocean Modelling, Vol. 17, no. 3, p. 183-198 (2007). doi:10.1016/j.ocemod.2007.01.002. <http://hdl.handle.net/2078.1/37571>

Gourgue, Olivier ; Deleersnijder, Eric ; White, Laurent. Renewal of epilimnion water in Lake Tanganyika. European Geosciences Union General Assembly (Vienna, Austria, du 15/04/2007 au 20/04/2007). <http://hdl.handle.net/2078/122914>

Naithani, Jaya ; Darchambeau, François ; Deleersnijder, Eric ; Descy, Jean-Pierre ; Wolanski, Eric. Study of the nutrient and plankton dynamics in Lake Tanganyika using a reduced-gravity model. In: Ecological Modelling, Vol. 200, no. 1-2, p. 225-233 (2007). doi:10.1016/j.ecolmodel.2006.07.035. <http://hdl.handle.net/2078.1/38040>

Spivakovskaya, D. ; Heemink, A. W. ; Deleersnijder, Eric. The backward (I)over-captio method for the Lagrangian simulation of transport processes with large space variations of the diffusivity. In: Ocean Science, Vol. 3, no. 4, p. 525-535 (2007). doi:10.5194/os-3-525-2007. <http://hdl.handle.net/2078.1/36827>

Blaise, Sébastien ; White, Laurent ; Comblen, Richard ; Legat, Vincent ; Deleersnijder, Eric. Three-dimensional finite element modeling of the flow around a shallow-water island: impact of the turbulence closure scheme on vertical transport. European Geosciences Union General Assembly 2007 (Vienne, du 15/04/2007 au 20/04/2007). <http://hdl.handle.net/2078.1/136649>

Gourgue, Olivier ; Deleersnijder, Eric ; Legat, Vincent ; Naithani, Jaya ; Plisnier, Pierre-Denis ; White, Laurent. Throughout a finite element reduced-gravity model of Lake Tanganyika: thermocline oscillations and renewal of epilimnion water. 5th International Workshop On Unstructured Grid Numerical Modelling of Coastal, Shelf & Ocean Flows (Miami, FL, USA, du 13/11/2006 au 16/11/2006). <http://hdl.handle.net/2078.1/120574>

Deleersnijder, Eric ; Delhez, Eric J. M.. Timescale- and tracer-based methods for understanding the results of complex marine models. In: Estuarine, Coastal and Shelf Science, Vol. 74, no. 4, p. V-VII (2007). doi:10.1016/j.ecss.2007.05.007. <http://hdl.handle.net/2078.1/37338>

Gourgue, Olivier ; Deleersnijder, Eric ; White, Laurent. Toward a generic method for studying water renewal, with application to the epilimnion of Lake Tanganyika. In: Estuarine, Coastal and Shelf Science, Vol. 74, no. 4, p. 628-640 (2007). doi:10.1016/j.ecss.2007.05.009. <http://hdl.handle.net/2078.1/37339>

Bernard, Paul-Emile ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. Towards an ocean model using the discontinuous Galerkin method. 9th US National Congress on Computational Mechanics (San Francisco, USA, du 23/07/2007 au 26/07/2007). <http://hdl.handle.net/2078/122672>

Legrand, Sebastien ; Deleersnijder, Eric ; Delhez, Eric J. M. ; Legat, Vincent. Unstructured, anisotropic mesh generation for the Northwestern European continental shelf, the continental slope and the neighbouring ocean. In: Continental Shelf Research, Vol. 27, no. 9, p. 1344-1356 (2007). doi:10.1016/j.csr.2007.01.009. <http://hdl.handle.net/2078.1/37519>

2006

White, Laurent ; Legat, Vincent ; Deleersnijder, Eric ; Le Roux, Daniel. A one-dimensional benchmark for the propagation of Poincare waves. In: Ocean Modelling, Vol. 15, no. 1-2, p. 101-123 (2006). doi:10.1016/j.ocemod.2005.11.001. <http://hdl.handle.net/2078.1/59939>

Hanert, Emmanuel ; Deleersnijder, Eric ; Legat, Vincent. An adaptive finite element water column model using the Mellor-Yamada level 2.5 turbulence closure scheme. In: Ocean Modelling, Vol. 12, no. 1-2, p. 205-223 (2006). doi:10.1016/j.ocemod.2005.05.003. <http://hdl.handle.net/2078.1/38687>

Hanert, Emmanuel ; Deleersnijder, Eric ; Legat, Vincent. An adaptive finite element water column model using the Mellor-Yamada level 2.5 turbulence closure scheme (vol 12, pg 205, 2006). In: Ocean Modelling, Vol. 15, no. 1-2, p. 137-137 (2006). doi:10.1016/j.ocemod.2006.07.001. <http://hdl.handle.net/2078.1/38243>



White, Laurent ; Blaise, Sébastien ; Combien, Richard ; Legat, Vincent ; Deleersnijder, Eric. Application of a Three-Dimensional Finite Element Marine Model to the Flow Around a Shallow-Water Island. 5th International Workshop On Unstructured Grid Numerical Modeling of Coastal, Shelf and Ocean Flows (Miami, du 13/11/2006 au 06/01/2014). <http://hdl.handle.net/2078.1/136648>

Deleersnijder, Eric. Assessing Salomon's age for an idealised one-dimensional flow with a point-source, 2006. 6 p. <http://hdl.handle.net/2078.1/155540>

White, Laurent ; Beckers, JM. ; Deleersnijder, Eric ; Legat, Vincent. Comparison of free-surface and rigid-lid finite element models of barotropic instabilities. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 56, no. 2, p. 86-103 (2006). doi:10.1007/s10236-006-0059-0. <http://hdl.handle.net/2078.1/38467>

Bernard, Paul-Emile ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. Dispersion analysis of Discontinuous Galerkin Schemes Applied to Poincaré, Kelvin and Rossby waves. 7th World Congress on Computational Mechanics (Los Angeles, USA, du 16/07/2006 au 22/07/2006). <http://hdl.handle.net/2078/122665>

Deleersnijder, Eric. Définition d'une matrice de connectivité pour la Grande Barrière de Corail, 2006. 12 p. <http://hdl.handle.net/2078.1/155290>

Deleersnijder, Eric. Eléments d'un modèle latitude-profondeur très simple — Application à l'injection de "CO₂ idéalisée" dans l'océan, 2006. 8 p. <http://hdl.handle.net/2078.1/155304>

Legrand, Sebastien ; Deleersnijder, Eric ; Hanert, Emmanuel ; Legat, Vincent ; Wolanski, E.. High-re solution, unstructured meshes for hydrodynamic models of the Great Barrier Reef, Australia. In: Estuarine, Coastal and Shelf Science, Vol. 68, no. 1-2, p. 36-46 (2006). doi:10.1016/j.ecss.2005.08.017. <http://hdl.handle.net/2078.1/38396>

Blaise, Sébastien ; White, Laurent ; Remacle, Jean-François ; Deleersnijder, Eric. Influence of the turbulence closure scheme on the finite-element simulation of the tidal flow around a shallow-water island.. 5th International Workshop On Unstructured Grid Numerical Modeling of Coastal, Shelf and Ocean Flows. (Miami, du 13/11/2006 au 15/11/2006). <http://hdl.handle.net/2078.1/136522>

Deleersnijder, Eric ; Beckers, Jean-Marie ; Delhez, Eric J. M.. On the behaviour of the residence time at the bottom of the mixed layer. In: Environmental Fluid Mechanics (Dordrecht, 2001), Vol. 6, no. 6, p. 541-547 (2006). doi:10.1007/s10652-006-9003-6. <http://hdl.handle.net/2078.1/38125>

Deleersnijder, Eric. Quelques réflexions sur la modélisation de la couche limite de fond, 2006. 15 p. <http://hdl.handle.net/2078.1/155624>

Andrefouet, S. ; Ouillon, S. ; Brinkman, R. ; Falter, J. ; Douillet, P. ; Wolk, Frank ; Smith, R. ; Garen, P. ; Martinez, E. ; Laurent, V. ; Lo, C. ; Remoissenet, G. ; Scourzic, B. ; Gilbert, A. ; Deleersnijder, Eric ; Steinberg, C. ; Choukroun, S. ; Buestel, D.. Review of solutions for 3D hydrodynamic modeling applied to aquaculture in South Pacific atoll lagoons. In: Marine Pollution Bulletin, Vol. 52, no. 10, p. 1138-1155 (2006). doi:10.1016/j.marpolbul.2006.07.014. <http://hdl.handle.net/2078.1/38188>

Deleersnijder, Eric ; Delhez Eric J.M.. The Constituent-oriented Age and Residence time Theory (CART) - A holistic approach to the understanding of the results of complex marine results, 2006. 28 p. <http://hdl.handle.net/2078.1/196274>

Delhez, Eric J. M. ; Deleersnijder, Eric. The boundary layer of the residence time field. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 56, no. 2, p. 139-150 (2006). doi:10.1007/s10236-006-0067-0. <http://hdl.handle.net/2078.1/38468>

Deleersnijder, Eric ; Beckers, Jean-Marie ; Delhez, Eric J. M.. The residence time of settling particles in the surface mixed layer. In: Environmental Fluid Mechanics (Dordrecht, 2001), Vol. 6, no. 1, p. 25-42 (2006). doi:10.1007/s10652-005-3941-2. <http://hdl.handle.net/2078.1/38696>

Lambrechts, Jonathan ; Bernard, Paul-Emile ; Deleersnijder, Eric ; Hanert, Emmanuel ; Legat, Vincent ; Legrand, Sébastien ; Remacle, Jean-François ; Wolanski, Eric. Towards a high-resolution Model of the eco-hydrodynamics of the whole Great Barrier Reef (Australia). International Society for Reef Studies European Meeting (Bremen, Germany, du 19 September 2006 au 20 September 2006). <http://hdl.handle.net/2078.1/72342>

2005



Hanert, Emmanuel ; Le Roux, DY ; Legat, Vincent ; Deleersnijder, Eric. An efficient Eulerian finite element method for the shallow water equations. In: Ocean Modelling, Vol. 10, no. 1-2, p. 115-136 (2005). doi:10.1016/j.ocemod.2004.06.006. <http://hdl.handle.net/2078.1/39384>

Burchard, Hans ; Deleersnijder, Eric ; Meister, Andreas. Application of modified Patankar schemes to stiff biogeochemical models for the water column. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 55, no.3-4, p. 326-337 (2005). doi:10.1007/s10236-005-0001-x. <http://hdl.handle.net/2078.1/173772>

Deleersnijder, Eric. Conservation properties of non-viscous/diffusive Boussinesq fluid flows, 2005. 4 p. <http://hdl.handle.net/2078.1/155266>

Deleersnijder, Eric. Constructing an eco-hydrodynamic model of the upper layer of Lake Tanganyika, 2005. 17 p. <http://hdl.handle.net/2078.1/155506>

Bernard, Paul-Emile ; Chevaugeron, Nicolas ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. High-order h-adaptive Discontinuous Galerkin Methods for Ocean Modeling. International Conference on Adaptive Modeling and Simulation (Barcelona, Spain, du 08/09/2005 au 10/09/2005). In: *Proceedings of the 2th International Conference on Adaptive Modeling and Simulation*, CIMNE: Barcelona, Spain, 2005. 84-95999-81-1, p. 50-61. <http://hdl.handle.net/2078/122642>

Bernard, Paul-Emile ; Chevaugeron, Nicolas ; Legat, Vincent ; Deleersnijder, Eric ; Remacle, Jean-François. High-order h-adaptive Discontinuous Galerkin methods for ocean modeling. 4th international workshop on unstructured mesh numerical modeling of coastal, shelf and ocean flows (Bremenhaven, Germany, du 10/10/2005 au 12/10/2005). <http://hdl.handle.net/2078/122660>

Deleersnijder, Eric. La "Shore Proximity Function" (SPF) et sa possible utilisation pour générer des maillages non structurés dans la Grande Barrière de Corail, 2005. 19 p. <http://hdl.handle.net/2078.1/155293>

Deleersnijder, Eric ; Burchard, H. ; Dijkstra, Henk ; Hanert, Emmanuel. On the mathematical stability of stratified flow models including a sophisticated turbulence closure. EGU General Assembly (Vienne, du 24 avril 2005 au 29 avril 2005). <http://hdl.handle.net/2078.1/72361>

Deleersnijder, Eric. On the properties of some time steppings for solving the linearised, one-dimensional, shallow water equations, 2005. 8 p. <http://hdl.handle.net/2078.1/155268>

Burchard, Hans ; Deleersnijder, Eric ; Stoyan, Gisbert. Some numerical aspects of turbulence-closure models. In: H.Z. Baumert, J. Simpson and J. Suendermann (Eds.), *Marine Turbulence: Theories, Observations and Models - Results of the CARTUM Project*, Cambridge University Press, 2005, p. 197-206. <http://hdl.handle.net/2078.1/129618>

Pietrzak, J. ; Deleersnijder, Eric ; Schroter, J. Special Issue: The second international workshop on unstructured mesh numerical modelling of coastal, shelf and ocean flows Delft, The Netherlands, September 23-September 25, 2003. In: Ocean Modelling, Vol. 10, no. 1-2, p. 1-3 (2005). doi:10.1016/j.ocemod.2004.09.004. <http://hdl.handle.net/2078.1/39382>

Deleersnijder, Eric. Sur les conditions aux limites en mer ouverte du temps de résidence, 2005. 24 p. <http://hdl.handle.net/2078.1/155644>

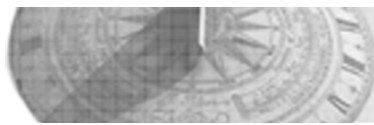
Deleersnijder, Eric ; Delhez, E.J.M.. The Constituent-oriented Age and residence time Theory (CART) and some of its applications to marine systems, 2005. <http://hdl.handle.net/2078.1/196326>

Legrand, Sébastien ; Lambrechts, Jonathan ; Hanert, Emmanuel ; Deleersnijder, Eric ; Legat, Vincent ; Wolanski, Eric. Towards a high-resolution, unstructured-mesh model of the Great Barrier Reef. EGU General Assembly (Vienne, du 24 avril 2005 au 29 avril 2005). <http://hdl.handle.net/2078.1/72751>

Hanert, Emmanuel ; Bernard, Paul-Emile ; Deleersnijder, Eric ; Fichefet, Thierry. Towards the Second-generation Louvain-la-Neuve Ice-ocean Model (SLIM). EGU General Assembly (Vienne, du 24 avril 2005 au 29 avril 2005). <http://hdl.handle.net/2078.1/72748>

Hanert, Emmanuel ; Bernard, Paul-Emile ; Deleersnijder, Eric ; Fichefet, Thierry ; Legat, Vincent ; Remacle, Jean-François ; White, Laurent ; Legrand, Sébastien ; Lietaer, Olivier. Towards the second-generation Louvain-la-Neuve, ice-ocean model (SLIM) (Abstract). Geodesy and Geophysics for the Third Millennium in Belgium (Brussel, 13 octobre 2005). <http://hdl.handle.net/2078.1/72752>

2004



Hanert, Emmanuel ; Le Roux, DY ; Legat, Vincent ; Deleersnijder, Eric. Advection schemes for unstructured grid ocean modelling. In: Ocean Modelling, Vol. 7, no. 1-2, p. 39-58 (2004). doi:10.1016/S1463-5003(03)00029-5. <http://hdl.handle.net/2078.1/40161>

Naithani, Jaya ; Deleersnijder, Eric. Are there internal Kelvin waves in Lake Tanganyika?. In: Geophysical Research Letters, Vol. 31, no. 6 (2004). doi:10.1029/2003GL019156. <http://hdl.handle.net/2078.1/40297>

Wolanski, E. ; Colin, P. ; Naithani, Jaya ; Deleersnijder, Eric ; Golbuu, Y. Large amplitude, leaky, island-generated, internal waves around Palau, Micronesia. In: Estuarine, Coastal and Shelf Science, Vol. 60, no. 4, p. 705-716 (2004). doi:10.1016/j.ecss.2004.03.009. <http://hdl.handle.net/2078.1/40030>

Naithani, Jaya ; Deleersnijder, Eric ; Plisnier, Pierre-Denis ; Legrand, Sébastien. Preliminary results of a reduced-gravity model of the wind-induced oscillations of the thermocline in Lake Tanganyika. In: G. Demarée, M. De Dapper and J. Alexandre, *Proceedings of the Second International Conference on Tropical Climatology, Meteorology and Hydrology*, 2004. 90-75652-36-4. <http://hdl.handle.net/2078.1/289919>

Delhez, Eric J. M. ; Heemink, Arnold W. ; Deleersnijder, Eric. Residence time in a semi-enclosed domain from the solution of an adjoint problem. In: Estuarine, Coastal and Shelf Science, Vol. 61, no. 4, p. 691-702 (2004). doi:10.1016/j.ecss.2004.07.013. <http://hdl.handle.net/2078.1/39684>

Deleersnijder, Eric ; Delhez, Eric J. M.. Symmetry and asymmetry of water ages in a one-dimensional flow. 34th International Liege Colloquium on Ocean Dynamics (Liege(Belgium), May 06-10, 2002). In: *Journal of Marine Systems*, Vol. 48, no. 1-4, p. 61-66 (2004). doi:10.1016/j.jmarsys.2003.07.002. <http://hdl.handle.net/2078.1/61255>

Delhez, Eric ; Lacroix, Geneviève ; Deleersnijder, Eric. The age as a diagnostic of the dynamics of marine ecosystem models. In: Ocean Dynamics : theoretical, computational oceanography and monitoring, Vol. 54, no. 2, p. 221-231 (2004). doi:10.1007/s10236-003-0075-2. <http://hdl.handle.net/2078.1/173771>

Delhez, Eric J. M. ; Deleersnijder, Eric ; Rixen, M.. Tracer Methods in Geophysical Fluid Dynamics. In: *Journal of Marine Systems*, Vol. 48, no. 1-4, p. 1-2 (2004). doi:10.1016/j.jmarsys.2004.01.001. <http://hdl.handle.net/2078.1/84450>

2003

Hanert, Emmanuel ; Le Roux, D.Y. ; Legat, Vincent ; Deleersnijder, Eric. A comparison of 4 advection schemes for use in unstructured grid ocean modelling. 6th National Congress on Theoretical and Applied Mechanics (Ghent, Belgium, du 26 May 2003 au 27 May 2003). <http://hdl.handle.net/2078.1/72756>

Hanert, Emmanuel ; Legat, Vincent ; Deleersnijder, Eric. A comparison of three finite elements to solve the linear shallow water equations. In: Ocean Modelling, Vol. 5, no. 1, p. 17-35 (2003). doi:10.1016/S1463-5003(02)00012-4. <http://hdl.handle.net/2078.1/40862>

Burchard, H ; Deleersnijder, Eric ; Meister, A. A high-order conservative Patankar-type discretisation for stiff systems of production-destruction equations. In: Applied Numerical Mathematics, Vol. 47, no. 1, p. 1-30 (2003). doi:10.1016/S0168-9274(03)00101-6. <http://hdl.handle.net/2078.1/40803>

Delhez, Eric J. M. ; Deleersnijder, Eric ; Mouchet, A. ; Beckers, JM.. A note on the age of radioactive tracers. In: *Journal of Marine Systems*, Vol. 38, no. 3-4, p. 277-286 (2003). doi:10.1016/S0924-7963(02)00245-2. <http://hdl.handle.net/2078.1/41280>

Naithani, Jaya ; Deleersnijder, Eric ; Plisnier, PD. Analysis of wind-induced thermocline oscillations of Lake Tanganyika. In: Environmental Fluid Mechanics (Dordrecht, 2001), Vol. 3, no. 1, p. 23-39 (2003). doi:10.1023/A:1021116727232. <http://hdl.handle.net/2078.1/41449>

Deleersnijder, Eric. Comments on "Water renewal time for classification of atoll lagoons in the Tuamotu Archipelago (French Polynesia)" by Andrefouet et al. [Coral Reefs (2001) 20 : 399-408]. In: Coral Reefs, Vol. 22, no. 3, p. 307-308 (2003). doi:10.1007/s00338-003-0319-0. <http://hdl.handle.net/2078.1/40742>

Wolanski, E. ; Richmond, RH ; Davis, G ; Deleersnijder, Eric ; Leben, RR. Eddies around Guam, an island in the Mariana Islands group. In: Continental Shelf Research, Vol. 23, no. 10, p. 991-1003 (2003). doi:10.1016/S0278-4343(03)00087-6. <http://hdl.handle.net/2078.1/40897>



van Ypersele de Strihou, Jean-Pascal ; Fichet, Thierry ; Campin, Jean- Michel ; Deleersnijder, Eric ; de Montety, Anne ; Goosse, Hugues. Modelling the climate and its evolution at the global and regional scales : final report for the special project from the member state Belgium, 2003. 120 p. <http://hdl.handle.net/2078.1/161725>

Deleersnijder, Eric ; Burchard, H. Reply to Mellor's comments on "Stability of algebraic non-equilibrium second-order closure models" (Ocean Modelling 3 (2001) 33-50). In: Ocean Modelling, Vol. 5, no. 3, p. 291-293 (2003). doi:10.1016/S1463-5003(02)00059-8. <http://hdl.handle.net/2078.1/40864>

Deleersnijder, Eric. Residence time of settling material in the surface mixed layer, 2003. 3 p. <http://hdl.handle.net/2078.1/155303>

Deleersnijder, Eric. Some aspects of turbulence closure schemes for marine models, 2003. 43 p. <http://hdl.handle.net/2078.1/210198>

2002

Spagnol, S ; Wolanski, E. ; Deleersnijder, Eric ; Brinkman, R. ; McAllister, F ; Cushman-Roisin, B ; Hanert, Emmanuel. An error frequently made in the evaluation of advective transport in two-dimensional Lagrangian models of advection-diffusion in coral reef waters. In: Marine Ecology - Progress Series Online, Vol. 235, p. 299-302 (2002). doi:10.3354/meps235299. <http://hdl.handle.net/2078.1/41796>

Deleersnijder, Eric. Conservation de l'énergie dans un système linéaire, 2002. 5 p. <http://hdl.handle.net/2078.1/186651>

Brinkman, R. ; Wolanski, E. ; Deleersnijder, Eric ; McAllister, F ; Skirving, W. Oceanic inflow from the Coral Sea into the Great Barrier Reef. In: Estuarine, Coastal and Shelf Science, Vol. 54, no. 4, p. 655-668 (2002). doi:10.1006/ecss.2001.0850. <http://hdl.handle.net/2078.1/41806>

Naithani, Jaya ; Deleersnijder, Eric ; Plisnier, PD. Origin of intraseasonal variability in Lake Tanganyika. In: Geophysical Research Letters, Vol. 29, no. 23 (2002). doi:10.1029/2002GL015843. <http://hdl.handle.net/2078.1/41452>

Deleersnijder, Eric. Quand Joseph Fourier (1768-1830) et Erwin Schrödinger (1887-1961) ne sont pas sur la même longueur d'onde..., 2002. 2 p. <http://hdl.handle.net/2078.1/189166>

Deleersnijder, Eric. Quelques réflexions sur l'âge d'un constituant actif, 2002. 9 p. <http://hdl.handle.net/2078.1/155634>

Delhez, Eric J. M. ; Deleersnijder, Eric. The concept of age in marine modelling II. Concentration distribution function in the English Channel and the North Sea. In: Journal of Marine Systems, Vol. 31, no. 4, p. 279-297 (2002). doi:10.1016/S0924-7963(01)00066-5. <http://hdl.handle.net/2078.1/42068>

Mathieu, PP ; Deleersnijder, Eric ; Cushman-Roisin, B ; Beckers, JM. ; Bolding, K. The role of topography in small well-mixed bays, with application to the lagoon of Mururoa. In: Continental Shelf Research, Vol. 22, no. 9, p. 1379-1395 (2002). doi:10.1016/S0278-4343(02)00002-X. <http://hdl.handle.net/2078.1/41875>

Deleersnijder, Eric ; Mouchet, A. ; Delhez, Eric J. M. ; Beckers, JM.. Transient behaviour of water ages in the World Ocean. In: Mathematical and Computer Modelling, Vol. 36, no. 1-2, p. 121-127 (2002). doi:10.1016/S0895-7177(02)00108-5. <http://hdl.handle.net/2078.1/41674>

2001

Deleersnijder, Eric. Enforcing the continuity equation in numerical models of geophysical fluid flows. In: Applied Mathematics Letters, Vol. 14, no. 7, p. 867-873 (2001). doi:10.1016/S0893-9659(01)00057-X. <http://hdl.handle.net/2078.1/42536>

Beckers, JM. ; Delhez, E ; Deleersnijder, Eric. Some properties of generalized age-distribution equations in fluid dynamics. In: SIAM Journal on Applied Mathematics, Vol. 61, no. 5, p. 1526-1544 (2001). doi:10.1137/S0036139999363810. <http://hdl.handle.net/2078.1/42797>

Burchard, Hans ; Deleersnijder, Eric. Stability of algebraic non-equilibrium second-order closure models. In: Ocean Modelling, Vol. 3, no. 1-2, p. 33-50. doi:10.1016/S1463-5003(00)00016-0. <http://hdl.handle.net/2078.1/173769>



Deleersnijder, Eric ; Campin, Jean- Michel ; Delhez, Eric J. M.. The concept of age in marine modelling I. Theory and preliminary model results. In: Journal of Marine Systems, Vol. 28, no. 3-4, p. 229-267 (2001). doi:10.1016/S0924-7963(01)00026-4. <http://hdl.handle.net/2078.1/42631>

2000

Legrand, Sébastien ; Legat, Vincent ; Deleersnijder, Eric. Delaunay mesh generation for an unstructured-grid ocean general circulation model. In: Ocean Modelling, Vol. 2, no. 1-2, p. 17-28. doi:10.1016/S1463-5003(00)00005-6. <http://hdl.handle.net/2078.1/173767>

Beckers, Jean-Marie ; Burchard, Hans ; Deleersnijder, Eric ; Mathieu, Pierre-Philippe. Numerical discretization of rotated diffusion operators in ocean models. In: Monthly Weather Review, Vol. 128, p. 2711-2733. <http://hdl.handle.net/2078.1/173766>

1999

Mathieu, PP ; Deleersnijder, Eric. Accuracy and stability of the discretised isopycnal-mixing equation. In: Applied Mathematics Letters, Vol. 12, no. 4, p. 81-88 (1999). doi:10.1016/S0893-9659(99)00039-7. <http://hdl.handle.net/2078.1/44565>

Deleersnijder, Eric. L'équation de la chaleur et l'enseignement des méthodes de simulation numérique de la physique. In: Physicalia Magazine, Vol. 21, p. 31-56 (1999). <http://hdl.handle.net/2078.1/129530>

Goosse, Hugues ; Deleersnijder, Eric ; Fichefet, Thierry ; England, MH. Sensitivity of a global coupled ocean-sea ice model to the parameterization of vertical mixing. In: Journal of Geophysical Research, Vol. 104, no. C6, p. 13681-13695 (1999). doi:10.1029/1999JC900099. <http://hdl.handle.net/2078.1/44387>

Delhez, Eric ; Campin, Jean-Michel ; Hirst, Anthony C. ; Deleersnijder, Eric. Toward a general theory of the age in ocean modelling. In: Ocean Modelling, Vol. 1, no. 1, p. 17-27. doi:10.1016/S1463-5003(99)00003-7. <http://hdl.handle.net/2078.1/173768>

Deleersnijder, Eric ; Goosse, Hugues. Un modèle simple pour comprendre pourquoi la couche de glace à la surface d'un plan d'eau tend à rester relativement mince. In: Physicalia Magazine, Vol. 21, no.2, p. 141-156 (1999). <http://hdl.handle.net/2078.1/129617>

1998

Tartinville, B ; Deleersnijder, Eric ; Lazure, P ; Proctor, R. ; Ruddick, KG. ; Uittenbogaard, RE. A coastal ocean model intercomparison study for a three-dimensional idealised test case. In: Applied Mathematical Modelling, Vol. 22, no. 3, p. 165-182 (1998). doi:10.1016/S0307-904X(98)00015-8. <http://hdl.handle.net/2078.1/45223>

Deleersnijder, Eric ; Wang, J. ; Mooers, CNK. A two-compartment model for understanding the simulated three-dimensional circulation in Prince William Sound, Alaska. 8th Biennial JONSMOD Workshop (UNIV OSLO, OSLO (Norway), Aug 12-15, 1996). In: *Continental Shelf Research*, Vol. 18, no. 2-4, p. 279-287 (1998). doi:10.1016/S0278-4343(97)00064-2. <http://hdl.handle.net/2078.1/62474>

Beckers, JM. ; Burchard, H ; Campin, JM. ; Deleersnijder, Eric ; Mathieu, PP. Another reason why simple discretizations of rotated diffusion operators cause problems in ocean models: Comments on "Isoneutral diffusion in a z-coordinate ocean model". In: Journal of Physical Oceanography, Vol. 28, no. 7, p. 1552-1559 (1998). doi:10.1175/1520-0485(1998)028<1552:ARWSDO>2.0.CO;2. <http://hdl.handle.net/2078.1/44887>

Wolanski, E. ; Deleersnijder, Eric. Island-generated internal waves at Scott reef, Western Australia. In: Continental Shelf Research, Vol. 18, no. 13, p. 1649-1666 (1998). doi:10.1016/S0278-4343(98)00069-7. <http://hdl.handle.net/2078.1/44930>

Deleersnijder, Eric. Some mathematical problems in marine modelling. In: Cioranescu, D. (ed.) ; Lions, J. L. (ed.), *Nonlinear Partial Differential Equations and their Applications* (Collège de France Seminars), Longman, 1998, p. 101-116. 978-0-5823-6926-9. <http://hdl.handle.net/2078.1/129503>

Mathieu, PP ; Deleersnijder, Eric. What is wrong with isopycnal diffusion in world ocean models?. In: Applied Mathematical Modelling, Vol. 22, no. 4-5, p. 367-378 (1998). doi:10.1016/S0307-904X(98)10008-2. <http://hdl.handle.net/2078.1/45183>



1997

Deleersnijder, Eric ; Tartinville, B ; Rancher, J. A simple model of the tracer flux from the Mururoa lagoon to the Pacific. In: Applied Mathematics Letters, Vol. 10, no. 5, p. 13-17 (1997). doi:10.1016/S0893-9659(97)00076-1. <http://hdl.handle.net/2078.1/45988>

Goosse, Hugues ; Campin, Jean- Michel ; Fichefet, Thierry ; Deleersnijder, Eric. Impact of sea-ice formation on the properties of Antarctic Bottom Water. In: Annals of Glaciology, Vol. 25, p. 276-281 (1997). <http://hdl.handle.net/2078.1/129426>

Goosse, Hugues ; Campin, JM. ; Fichefet, Thierry ; Deleersnijder, Eric. Sensitivity of a global ice-ocean model to the Bering Strait throughflow. In: Climate Dynamics : observational, theoretical and computational research on the climate system, Vol. 13, no. 5, p. 349-358 (1997). doi:10.1007/s003820050170. <http://hdl.handle.net/2078.1/62727>

Deleersnijder, Eric ; Beckers, Jean-Marie ; Campin, Jean-Michel ; El Mohajir, Mohamed ; Luyten, Patrick. Some Mathematical problems associated with the development and use of marine models. In: J.I. Diaz, *The Mathematics of Models for Climatology and Environment* (NATO SAI Series; I 48), 1997, p. 39-86. 000-0-000-000. <http://hdl.handle.net/2078.1/196423>

Tartinville, B ; Deleersnijder, Eric ; Rancher, J. The water residence time in the Mururoa atoll lagoon: Sensitivity analysis of a three-dimensional model. In: Coral Reefs, Vol. 16, no. 3, p. 193-203 (1997). doi:10.1007/s003380050074. <http://hdl.handle.net/2078.1/46118>

1996

Deleersnijder, Eric. On model validation, sensitivity and intercomparison. Progress in Belgian Oceanographic Research (Brussels). <http://hdl.handle.net/2078.1/155075>

Deleersnijder, Eric. On the numerical treatment of a lateral boundary layer in a shallow sea model. In: Journal of Marine Systems, Vol. 8, no. 1-2, p. 107-117 (1996). doi:10.1016/0924-7963(95)00043-7. <http://hdl.handle.net/2078.1/47156>

Luyten, P.J. ; Deleersnijder, Eric ; Ozer, J. ; Ruddick, KG.. Presentation of a family of turbulence closure models for stratified shallow water flows and preliminary application to the Rhine outflow region. In: Continental Shelf Research, Vol. 16, no. 1, p. 101-130 (1996). doi:10.1016/0278-4343(95)93591-V. <http://hdl.handle.net/2078.1/47467>

Deleersnijder, Eric ; Beckers, J.-M. ; Fichefet, Thierry. Some mathematical problems associated with the development and use of marine models. In: J.I. Diaz (Ed.), *The Mathematics of Models for Climatology and Environment* (NATO ASI Series; 148), Springer-Verlag: Berlin, 1996, p. 39-86. <http://hdl.handle.net/2078.1/129496>

Wolanski, E. ; Asaeda, T ; Tanaka, A ; Deleersnijder, Eric. Three-dimensional island wakes in the field, laboratory experiments and numerical models. In: Continental Shelf Research, Vol. 16, no. 11, p. 1437-1452 (1996). doi:10.1016/0278-4343(95)00087-9. <http://hdl.handle.net/2078.1/47077>

1995

Deleersnijder, Eric ; Ozer, José ; Tartinville, Benoît. A methodology for model inter comparison: preliminary results. In: Ocean modelling (newsletter), Vol. 107, no., p. 6-9. <http://hdl.handle.net/2078.1/196422>

Ruddick, KG. ; Deleersnijder, Eric ; Luyten, P.J. ; Ozer, J.. Haline Stratification in the Rhine-meuse Fresh-water Plume - a 3-dimensional Model Sensitivity Analysis. In: Continental Shelf Research, Vol. 15, no. 13, p. 1597-1630 (1995). doi:10.1016/0278-4343(95)00034-X. <http://hdl.handle.net/2078.1/47923>

Deleersnijder, Eric ; Campin, JM.. On the Computation of the Barotropic Mode of a Free-surface World Ocean Model. In: Annales Geophysicae : atmospheres, hydrospheres and space sciences, Vol. 13, no. 6, p. 675-688 (1995). <http://hdl.handle.net/2078.1/47974>

Deleersnijder, Eric. The Sea-surface Pressure Formulation of Rigid Lid Models - Implications for Altimetric Data Assimilation Studies - Comment. In: Journal of Marine Systems, Vol. 6, no. 1-2, p. 121-123 (1995). doi:10.1016/0924-7963(94)00012-Z. <http://hdl.handle.net/2078.1/48326>

1994



Ruddick, KG. ; Deleersnijder, Eric ; Demulder, T. ; Luyten, P.J.. A Model Study of the Rhine Discharge Front and Downwelling Circulation. In: Tellus. Series A: Dynamic Meteorology and Oceanography, Vol. 46, no. 2, p. 149-159 (1994). doi:10.1034/j.1600-0870.1994.t01-1-00005.x. <http://hdl.handle.net/2078.1/48738>

Deleersnijder, Eric. An Analysis of the Vertical Velocity-field Computed By a 3-dimensional Model in the Region of the Bering Strait. In: Tellus. Series A: Dynamic Meteorology and Oceanography, Vol. 46, no. 2, p. 134-148 (1994). doi:10.1034/j.1600-0870.1994.t01-1-00004.x. <http://hdl.handle.net/2078.1/48737>

Deleersnijder, Eric. An Ill-designed Algorithm for Solving a Multidimensional Nonlinear Diffusion Equation in a Domain Limited By a Moving Boundary. In: Mathematical and Computer Modelling, Vol. 19, no. 10, p. 75-81 (1994). doi:10.1016/0895-7177(94)90107-4. <http://hdl.handle.net/2078.1/48887>

Deleersnijder, Eric ; Luyten, Patrick. On the Practical Advantages of the Quasi-equilibrium Version of the Mellor and Yamada Level-2.5 Turbulence Closure Applied To Marine Modeling. In: Applied Mathematical Modelling, Vol. 18, no. 5, p. 281-287 (1994). doi:10.1016/0307-904X(94)90336-0. <http://hdl.handle.net/2078.1/49027>

Deleersnijder, Eric. The Assimilation of Altimetric Data Into the Barotropic Mode of a Rigid Lid Ocean Model. In: Mathematical and Computer Modelling, Vol. 20, no. 1, p. 85-94 (1994). doi:10.1016/0895-7177(94)90220-8. <http://hdl.handle.net/2078.1/48802>

1993

Deleersnijder, Eric ; van Ypersele de Strihou, Jean-Pascal ; Campin, Jean- Michel. An Orthogonal Curvilinear System for a World Ocean Model. In: Ocean Modelling, , no.100, p. 7-10 & 18-20 (10/1993). <http://hdl.handle.net/2078.1/161619>

Deleersnijder, Eric ; Beckers, Jean-Marie. Applying the "meridional streamfunction" visualization technique to open ocean domains. In: Ocean Modelling (newsletter), Vol. 101, no., p. 6-8. <http://hdl.handle.net/2078.1/196420>

Deleersnijder, Eric. Du calcul de la position de la surface de l'océan dans un modèle de circulation générale, 1993. 31 p. <http://hdl.handle.net/2078.1/214938>

van Ypersele de Strihou, Jean-Pascal ; Berger, A. ; Campin, Jean- Michel ; Deleersnijder, Eric. Modelling of the climatic system and its response to human activities. Colloquium Global Change. In: *Global Change Colloquium Proceedings*, vol.2, Belgian Science Office: Bruxelles, 1993, p. 7-29. <http://hdl.handle.net/2078.1/161681>

Deleersnijder, Eric. Numerical Mass Conservation in a Free-surface Sigma-coordinate Marine Model With Mode Splitting. In: Journal of Marine Systems, Vol. 4, no. 5, p. 365-370 (1993). doi:10.1016/0924-7963(93)90021-D. <http://hdl.handle.net/2078.1/49106>

Deleersnijder, Eric. On a peculiarity of the B-grid. In: Ocean Modelling - Newsletter, Vol. 97, p. 2-2 (1993). <http://hdl.handle.net/2078.1/222479>

Deleersnijder, Eric ; Roland, Marie. Preliminary Tests of a Hybrid Numerical-asymptotic Method for Solving Nonlinear Advection-diffusion Equations in a Domain Limited By a Self-adjusting Boundary. In: Mathematical and Computer Modelling, Vol. 17, no. 12, p. 35-47 (1993). doi:10.1016/0895-7177(93)90026-U. <http://hdl.handle.net/2078.1/49555>

Beckers, JM. ; Deleersnijder, Eric. Stability of a Fbtcs Scheme Applied To the Propagation of Shallow-water Inertia-gravity Waves On Various Space Grids. In: Journal of Computational Physics, Vol. 108, no. 1, p. 95-104 (1993). doi:10.1006/jcph.1993.1166. <http://hdl.handle.net/2078.1/49543>

Deleersnijder, Eric. Vertical modes in level models. In: Ocean Modelling - Newsletter, Vol. 96, no., p. 4-5 (1993). <http://hdl.handle.net/2078.1/222481>

1992

Deleersnijder, Eric ; Norro, Alain ; Wolanski, E.. A 3-dimensional Model of the Water Circulation Around An Island in Shallow-water. In: Continental Shelf Research, Vol. 12, no. 7-8, p. 891-906 (1992). doi:10.1016/0278-4343(92)90050-T. <http://hdl.handle.net/2078.1/50314>

Deleersnijder, Eric. A Variational Inverse Method for the Reconstruction of General-circulation Fields in the Northern Bering Sea - Comment. In: Journal of Geophysical Research, Vol. 97, no. C6, p. 9755-9757 (1992). doi:10.1029/92JC00868. <http://hdl.handle.net/2078.1/50369>



Deleersnijder, Eric ; Ruddick, Kevin G.. A generalized vertical coordinate for 3D marine models. In: Bulletin de la société royale des Sciences de Liège, Vol. 61, p. 489-502 (1992). <http://hdl.handle.net/2078.1/196504>

Deleersnijder, Eric. A note on the stability functions of the Mellor-Yamada level 2 1/1 turbulence closure. In: Bulletin de la Société Royale des Sciences de Liège, Vol. 61, no., p. 397-404 (1992). <http://hdl.handle.net/2078.1/196503>

Deleersnijder, Eric. Modélisation hydrodynamique tridimensionnelle de la circulation générale estivale de la région du détroit de Bering, prom. : Nihoul, Jacques ; Deville, Michel, 1992. <https://hdl.handle.net/2078.1/205120>

Deleersnijder, Eric ; Beckers, JM.. On the Use of the Sigma-coordinate System in Regions of Large Bathymetric Variations. In: Journal of Marine Systems, Vol. 3, no. 4-5, p. 381-390 (1992). doi:10.1016/0924-7963(92)90011-V. <http://hdl.handle.net/2078.1/49872>

Deleersnijder, Eric. Propagation of internal modes in three-dimensional ocean level models, 1992. 7 p. <http://hdl.handle.net/2078.1/214937>

Deleersnijder, Eric. Revisiting Nihoul Model for Oil-slicks Transport and Spreading On the Sea. In: Ecological Modelling, Vol. 64, no. 1, p. 71-75 (1992). doi:10.1016/0304-3800(92)90051-F. <http://hdl.handle.net/2078.1/50184>

1989

Walsh, J.J. ; McRoy, C.P. ; Coachman, L.K. ; Goering, J.J. ; Nihoul, J.J. ; Whittedge, T.E. ; Blackburn, T.H. ; Parker, P.L. ; Wirick, C.D. ; Shuert, P.G. ; Grebmeier, J.M. ; Springer, A.M. ; Tripp, R.D. ; Hansell, D.A. ; Djenidi, S. ; Deleersnijder, Eric ; Henriksen, K. ; Lund, B.A. ; Andersen, P. ; Müller-Karger, F.E. ; Dean, K.. Carbon and nitrogen cycling within the Bering/Chukchi Seas: Source regions for organic matter effecting AOU demands of the Arctic Ocean. In: Progress in Oceanography, Vol. 22, no.4, p. 277-359 (1989). doi:10.1016/0079-6611(89)90006-2. <http://hdl.handle.net/2078.1/184913>

Nihoul, Jacques C.J. ; Deleersnijder, Eric ; Djenidi, Salim. Modelling the general circulation of shelf seas by 3Dk-ε models. In: Earth - Science Reviews, Vol. 26, no.1-3, p. 163-189 (1989). doi:10.1016/0012-8252(89)90021-4. <http://hdl.handle.net/2078.1/185035>

Deleersnijder, Eric. Upwelling and upsloping in three-dimensional marine models. In: Applied Mathematical Modelling, Vol. 13, no.8, p. 462-467 (1989). doi:10.1016/0307-904X(89)90094-2. <http://hdl.handle.net/2078.1/185034>