

## List of Delwaq related publications as of November 19, 2013.

### Model development

Year	Title	Author(s)	Source	URL
2013	Interactive Coupling of TELEMAC with the Open Source Water Quality Model DELWAQ.	M. Jeuken, J. Mooiman, Y. Audouin	R. Kopmann and A. Goll eds. Proceedings of the XXth TELEMAC-MASCARET User Conference, October 16-18, 2013, pp. 143-148, BAW, Karlsruhe, Germany, ISBN 978-3-939230-07-6	<a href="#">view</a>
2013	ECO: A Generic Eutrophication Model Including Comprehensive Sediment-Water Interaction.	Smits JGC, van Beek JKL	PLoS ONE 8(7): e68104. doi: 10.1371/journal.pone.0068104	<a href="#">view</a>
2012	Consistent and efficient particle tracking on curvilinear grids for environmental problems.	Leo Postma, Jan K.L. van Beek, Henk F.P. van den Boogaard and Guus S. Stelling	Int. J. Numer. Meth. Fluids (2012) DOI: 10.1002/fld.3705	-
2009	GEM: a generic ecological model for estuaries and coastal waters.	Blauw, A.N., Los, F.J., Bokhorst, M., Erfte-meijer, P.L.A.	Hydrobiologia 618: 175-198	-
2009	Eco-hydrodynamic modelling of primary production in coastal waters and lakes using BLOOM.	Los, F.J.	PhD Thesis Wageningen University, ISBN 978-90-8585-329-9	-
2009	A local theta scheme for advection problems with strongly varying meshes and velocity profiles.	Slingerland, v. P., M. Borsboom and C. Vuik	Tech. Rep. 08-17, Delft University	-
2007	Compatibility between finite volumes and finite elements using solutions of shallow water equations for substance transport.	L. Postma and J-M Hervouet	Int. J. Numer. Meth. Fluids 2007; 53:1495-1507	-
2007	Modelling of water quality and ecology is dealing with problems of scale.	L. Postma	La Houille Blanche 5-2007.	-
2007	Development of Delft3D-ECO. Calibration for a tropical stratified reservoir.	Smits, J.G.C.	Research report Z4524, Delft Hydraulics	<a href="#">view</a>
2003	Component Software Systems for Surface Water Simulation.	Postma, L.; Boderie, P.M.A.; Gils, J.A.G. van; Beek, J.K.L. van	P.M.A. Sloot et al. (Eds): ICCS 2003, LNCS 2657, pp 649-658, 2003; Springer-Verlag Berlin Heidelberg	-
2003	Sediment-water exchange of substances. Sediment diagenesis and quality modelling, phase 3.	Smits, J.G.C.	Research report Q2935.30, Delft Hydraulics	<a href="#">view</a>
2000	Towards an Open Delft3D Modelling System.	Postma, L; G.K. Verboom and A.E. Mynett	Hydroinformatics, Iowa. Proc. in CD-ROM, Iowa Inst. of Hydr. Res. (2000)	-
1998	The Sobek Processes Editor: a flexible tool for tailor-made water quality modelling.	Gils, J. van	Proceedings of the third international Conference on Hydroinformatics/Copenhagen/Denmark/ 24-26 August 1998, Vol 1, Babovic & Larsen (eds), pp. 591-595, Balkema, Rotterdam, ISBN 90 5410 983 1	-

### Model applications

Year	Title	Author(s)	Source	URL
2013	Recruitment constraints in Singapore's fluted giant clam ( <i>Tridacna squamosa</i> ) population - A dispersal model approach.	Neo ML, Erftemeijer PLA, van Beek JKL, van Maren DS, Teo SL-M, et al.	PLoS ONE 8(3): e58819. doi:10.1371/journal.pone.0058819	<a href="#">view</a>
2012	Hydroinformatics in multi-colours-part green: Applications in aquatic ecosystem modelling.	Li, H., Mynett, A.E., Ye, Q.H.	Journal of Hydroinformatics 14 (4) , pp. 857-871	-
2011	Effect Chain Modelling to Support Ems-Dollard Management.	Claudette Spiteri , Bas van Maren , Thijs van Kessel and Jasper Dijkstra	Journal of Coastal Research, Number 10061:226-233. 2011	<a href="#">view</a>
2011	Improving the description of the suspended particulate matter concentrations in the southern North Sea through assimilating remotely sensed data.	El Serafy, G.Y., Eleveld, M.A., Blaas, M., van Kessel, T., Aguilar, S.G., van der Woerd, H.J.	Ocean Science Journal 46 (3) , pp. 179-204	-
2010	Water quality description and modelling for South of Kuwait: Az-Zour area	Al-Hulail, F.	ICCCE 2010 - 2010 International Conference on Chemistry and Chemical Engineering, Proceedings , art. no. 5560418 , pp. 346-349	-
2010	Predicting the consequences of nutrient reduction on the eutrophication status of the North Sea Journal of Marine Systems.	Lenhart, Hermann-J., David K. Mills, Hanneke Baretta-Bekker, Sonja M. van Leeuwen, Johan van der Molen, Job W. Baretta, Meinte Blaas, Xavier Desmit, Wilfried Kuehn, Genevieve Lacroix, Hans J. Los, Alain Menesguen, Ramiro Neves, Roger Proctor, Piet Ruardij, Morten D. Skogen, Alice Vanhoutte-Brunier, Monique.T. Villars and Sarah L. Wakelin.	Journal of Marine Systems 81: 148-170	-
2010	Enhancing Generic Ecological Model for Southern North 1 Sea algal dynamics 2 modelling with remote sensing images.	Li, Hong, Mijail Arias, Anouk Blauw, Hans Los, Arthur E. Mynett & Steef Peters	Ecological Modelling 221: 2435-2446	-
2010	Complexity, accuracy and practical applicability of different biogeochemical model versions.	Los, F. J., M. Blaas	Journal of Marine Systems 81: 44-74	-
2010	3D coupled modeling of hydrodynamics and water quality in the Berre Lagoon (France)	Martin, L., Gouze, E., Razafindrakoto, E., Hervouet, J.M., Durand, N., Pham, C.T.	Environmental Hydraulics - Proceedings of the 6th International Symposium on Environmental Hydraulics 1 , pp. 499-504	-
2010	Sensitivity analysis of the two dimensional application of the Generic Ecological Model (GEM) to algal bloom prediction in the North Sea.	Salacinskaa, K., G.Y. El Serafy, F.J. Los, A. Blauw	Ecological Modelling Vol. 221: 178190	-
2010	Modelling of the Nam Theun 2 Reservoir, Extension of the water quality model with iron.	Smits, J.G.C. and J.K.L. van Beek	Research report 1201456, Deltares	<a href="#">view</a>
2009	Modelling the dispersal of fish larvae in the southern North Sea to assess the effects of a coastal reclamation scheme.	Erftemeijer, Paul L.A., Jan K. L. van Beek, Loes J. Bolle, Mark Dickey-Collas and Hans J. Los	Marine Ecology Progress Series Vol. 390: 167-181	-
2009	Modelling of the Nam Theun 2 Reservoir, Water quality and greenhouse gases emissions.	Smits, J.G.C., P. Boderie and J.K.L. van Beek	Research report Q4692.20, Deltares	<a href="#">view</a>
2008	Eelgrass seed dispersal in the Dutch Wadden Sea: A Model approach.	Erftemeijer P.L.A, van Beek J.K.L., Ochieng C.A, Los H.J., Jager Z.	Marine Ecology Progress Series, Vol. 358: 115124	-

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2008	Prognosis of WFD chemical status in the coastal waters of The Netherlands Part 1: Update and validation of the Screamtox model.	Van Gils, J.	Report Z4441 by Deltares, Prepared for: RWS Waterdienst, Delft, The Netherlands, October 2008	<a href="#">view</a>
2008	A 3-dimensional primary production model (BLOOM/GEM) and its applications to the (southern) North Sea (coupled physical-chemical-ecological model)	Los, F.J., Villars, M.T., Van der Tol, M.W.M.	Journal of Marine Systems, 74:	-
2007	Development of a Pearl River Delta Water Quality Model	Van Gils, Jos, Klaas-Jan van Heeringen, Dirk Schwanenberg, Erik de Goede, Firmijn Zijl, Daniel Twigt, Joost Icke, Reinaldo Penailillo, Karen Meijer, Simon Groot, Leo Postma.	Report Z3133 by Delft Hydraulics, Prepared for: EPD Hong Kong SAR, December 2007	<a href="#">view</a>
2007	Application of a validated primary production model (BLOOM) as a screening tool for marine, coastal and transitional waters	Los, F.J., Wijsman, J.W.M. 2007	Journal of Marine Systems, 64:201-215	-
2007	Impact of climatic fluctuations on Characeae biomass in a shallow, restored lake in The Netherlands	Rip, Winnie J., Maarten Ouboter, Hans J. Los	Hydrobiologia, Vol. 584: 415-424	-
2006	Modelling algal blooms in the Dutch coastal waters by integrated numerical and fuzzy cellular automata approaches.	Chen, Q., Mynett, A.E.	Ecological Modelling 199 (1) , pp. 73-81	-
2005	An algal biomass prediction model.	Los, F.J.	In: Louks, D.P. and Van Beek, E. (Eds.) Water Resources Systems Planning and Management - an introduction to methods, models and applications. UNESCO.	-
2005	Methodologies to assess the effects of human interventions and pollution control measures in the Hong Kong coastal waters	F.J. Los, J.A.G. van Gils, A.N. Blauw, D.K. Vatvani, A.J. Nolte & L. Postma	In Environmental Hydraulics and Sustainable Water Management - Lee & Lam (eds) 2005 Taylor & Francis Group, London, ISBN 04 1536 546 5	-
2001	Modelling underwater light climate in relation to sedimentation, resuspension, water quality and autotrophic growth	Van Duin, E.H.S., Blom, G., Los, F.J., Maone, R., Zimmerman, R., Cerco, C.F., Dorth, M. Best, E.P.H.	Hydrobiologia, 444: 25-42	-
1998	3-Dimensional Water Quality and Hydrodynamic Modelling in Hong Kong III - Stratification and Water Quality	Postma, L; G.S. Stelling and J. Boon	2nd Int. Symp. Env. Hydr, Balkema, Rotterdam.1998	-
1998	RESTWAQ 2, part II : comparison of remote sensing data, model results and in-situ data for the southern Friesian lakes (1998)	Vos, R., A. Dekker, S. Peters, G. van Rossum and L. Hooijkaas	Tech. Rep. 98-08b, BCRS. I.s.m. WL, IvM-VU, NIOZ, KNMI, K&M en Waterschap Friesland. - ISBN 90-5411-255-7	-
1998	RESTWAQ 2, part I: integrated monitoring of total suspended matter in the Dutch coastal zone	Vos, R., M. Villars, J. Roozekrans, S. Peters and W. van Raaphorst	Tech. Rep. 98-08, BCRS. I.s.m. WL, IvM, NIOZ, KNMI, K&M en waterschap Friesland. ISBN 90-5411-245-X	-
1998	Patterns and trends in nutrients and phytoplankton in Dutch coastal waters: comparison of time-series analysis, ecological model simulation, and mesocosm experiments	Vries, I. de, R. Duin, J. Peeters, F. Los, M. Bokhorst and R. Laane	ICES Journal of Marine Science 55: 620635	-
1997	Water Quality Modelling of the Western Scheldt Estuary	M.R.L. Ouboter, G.T.M. van Eck, J.A.G. van Gils, J.P. Sweerts and M.T. Villars	Hydrobiologia, 366, Issue 1, Jan 1997, 129-142	-

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1997	Use of NOAA/AVHRR satellite remote sensing data for modelling of suspended sediment transport in the North Sea : approach in the PROMISE project	Vos, R. and H. Gerritsen	Tech. Rep. Z2025, WL j Delft Hydraulics, Delft, The Netherlands. I.o.v. CEC - DGXII - MAST-3	-
1996	Control of macroalgae blooms in the Lagoon of Venice	Runca, E; A. Bernstein; L. Postma and G. Di Silvio	Ocean & Coastal Management, vol 30, No 2-3, p. 235-257, 1996	-
1995	Water quality management of semi-enclosed bays in Greece	Gils, J. van, Ziogou, E. and Ganoulis, J.	proceedings of the Water Pollution III conference	-
1995	Los, Hans and Herman Gerritsen	Validation of water quality and ecological models.	IAHR Specialist Forum on Software Validation, London, September	-
1995	The oxygen dynamics of the Oyster Ground, North Sea. Impact of eutrophication and environmental conditions	Peeters, J., F. Los, R. Jansen, H. Haas, L. Peperzak and I. de Vries	OPHELIA 42: 257288	-
1995	Restwaq : applications of remote sensing to water quality modelling : data assessment and development of methodology	Vos, R.	Tech. Rep. T1083/T1479, WL j Delft Hydraulics Delft, The Netherlands. I.o.v. Rijkswaterstaat, Meetkundige Dienst	-
1995	RESTWAQ : data assessment, data-model integration and application to the Southern North Sea	Vos, R. and M. Schuttelaar	Tech. Rep. 95-19, BCRS. ISBN 90-5411-168-2	-
1994	Mathematical modelling as a tool for management in eutrophication control of shallow lakes	Molen, D. van der, F.Los, L. van Ballegooijen and M. van der Vat	Hydrobiologica 275/276: 479-492	-
1993	Modelling of water sediment quality in the Scheldt Estuary	Gils, J.A.G. van, Ouboter, M.R.L., and Rooij, N.M. de	Netherlands journal of Aquatic Ecology, 27(2-4) 257-265	-
1993	Water quality management of Gdansk Bay	Gils, J.A.G. van, Robakiewicz, W., Robakiewicz, M. and Bielecka-Kieloch, M.	proceedings of the Water Pollution 1993 conference	-
1993	Application of SWITCH, a model for sediment-water exchange of nutrients, to Lake Veluwe in the Netherlands	Smits, J. and D. Van der Molen	Hydrobiologia 253: 281300	-
1992	Modelling cause-effect relationships in eutrophication of marine systems.	DeGrootd, E.G., Los, F.J., Nauta, T.A., Markus A.A. and Vries, I. de	In Colombo et al. (eds), Olsen & Olsen.	-
1991	Hydrodynamic and dispersion modelling of Swansea Bay	Bent, E., L. Postma, A. Roelfzema and R. Stive	Environmental Hydraulics 1: 865870	-
1991	Axios river basin water quality management	Gils, J.A.G. van and Argiropoulos, D.	Water Resources Management 5: 271-280	-
1991	Mathematical Simulation of algae blooms by the model BLOOM II	Version 2, T68, WL — Delft Hydraulics Report	Los, F.J.	-
1988	An integrated water quantity and quality model as a tool for water management. application to the province of Friesland, the Netherlands.	Brinkman, J.J. , S. Groot, F.J. Los and P. Griffioen	Verh. Internat. Verein. Limnol. 23: 1488-1494	-
1988	Phytoplankton modelling by means of optimization; a 10-year experience with Bloom II	Los, F. and J. Brinkman	Verh. Int. Ver. Limnol 23: 790795	-
1987	Water Quality modelling of the Southern North Sea: a useful tool for research and management	Pagee, J.A. van, P.C.G. Glas, C.F. Hopstaken and L. Postma	International Conference on Environmental protection of the North Sea, London, 1987	-

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1987	Mathematical modelling as a tool for assessment of North Sea pollution	Pagee, J.A. v., Glas, P.C.G., Markus, A.A. and Postma, L.	in: Pollution of the North Sea an assessment (Salamons et al Eds.), 1987	-
1987	Long term and seasonal water quality modelling of the North Sea and its coastal waters	Postma L., J.M. de Kok, A.A.Markus and J.A. van Pagee	ICES paper CM: C 39, 1987	-
1987	Transport Atlas of the Southern North Sea	Ruijter, W.P.M. de; J.M. de Kok and L. Postma	book published by Rijkswaterstaat and DELFT HYDRAULICS, 1987	-
1984	Modelling eutrophication in shallow Dutch lakes.	Los, F.J., Smits, J.G.C. and Rooij, N.M. de	Verh. Internat. Verein. Limnol. 22: 917-923	-
1983	A two-dimensional water quality model application for Hong Kong Coastal Waters	Postma, L.	Water Sciences Technology, Vol. 16 p 643-652, 1983	-
1982	An Algal Bloom model as a tool to simulate management measures.	Los, F.J.	In: Barica, J. and Mur, L.R. (eds.), 'Hypertrophic Ecosystems', Junk, Dr. W. BV Publishers, The Hague-Boston-London.	-
1982	Mathematical Simulation of Algae Blooms by the Model BLOOM II.	Los, F.J.	WL — Delft Hydraulics, R1310-7	-
1980	Application of an Algal Bloom Model (BLOOM II) to combat eutrophication	Los, F.J.	Hydrobiological Bulletin, 14 (1/2): 116-224	-