

B.C. van Prooijen
Associate Professor
Coastal Engineering
Email: b.c.vanprooijen@tudelft.nl



Research profile

Bram van Prooijen is associate professor Estuarine Engineering at Delft University of Technology. His research is focuses on the impact of human interferences (storm surge barriers, dredging and nourishing, etc.) in estuarine systems, tidal basins and shallow seas. Fieldwork and analysis of data forms a substantial part of this research.

In 2004, he received his PhD for his research on shallow mixing layers. He continued his career as consultant at Svasek Hydraulics, where he developed and applied numerical models for quantifying the effects of interventions in coastal systems. The EIA of Maasvlakte2 was one of these projects, where he simulated the impact on fine sediments due to dredging. Since 2009, Bram continued his research career at Delft University. Various projects in the Wadden Sea, Eastern Scheldt, Western Scheldt and North Sea were carried out, most often in close collaboration with industry and governmental agencies. Examples are the SEAWAD project for the impact of a large scale nourishment near Ameland. At present, he leads the project SSB-Delta on the impact of storm surge barriers. As leader of the workpackage "storm impact and events" of the Delta Enigma project, he continues his fieldwork research in estuaries.

Bram serves as chair of the steering committee of the conference series IntercoH on cohesive sediments and is member of the Board of Directors of the Netherlands Center for Coastal Research (NCK). He chairs the Local Organizing committee for the International Conference on Coastal Engineering of 2030 (ICCE2030).

Research outputs

Emergent Sediment-Sharing Cells in a Barrier Island-Lagoon System

Pearson, S. G., van Weerdenburg, R., Shafiei, H., Reyns, J., Elias, E., Wang, Z. B., Lodder, Q. & van Prooijen, B., 2026, *Coastal Dynamics 2025*. Coelho, C., Hallin, C., Sancho, F. & Silva, P. A. (eds.). Springer, Vol. 1. p. 817-822 6 p. (Coastal Research Library; vol. 41).

Field measurements of hydrodynamics and sediment transport at intertidal areas in the Dutch Wadden Sea

van Weerdenburg, R., Veerman, T., Traas, M., Mol, J. W., van Maren, B., Beks, D., van der Vegt, M. & van Prooijen, B., 2026, In: *Earth System Science Data*. 18, 6, p. 4203-4217 15 p.

Field measurements of hydrodynamics and sediment transport at intertidal areas in the Dutch Wadden Sea

van Weerdenburg, R. J. A., Veerman, T., Traas, M., Mol, J.-W., van Maren, D. S., Beks, D., van der Vegt, M. & van Prooijen, B., 2026, Copernicus Publications, 23 p.

Luminescence as a tool to reconstruct sediment transport pathways in a tidal inlet

de Boer, A. M., Pearson, S., van der Spek, A., van Prooijen, B. & Wallinga, J., 2026, In: *Marine Geology*. 495, 12 p., 107749.

One-Year Long ADCP Data Reveal the Influence of Tides, Winds, and Coastal-Trapped Waves on the Deep Cross-Slope Transport in a Submarine Trench

Enge, A., Pietrzak, J. D., Mienis, F. & van Prooijen, B. C., 2026, In: *Journal of Geophysical Research: Oceans*. 131, 8, 21 p., e2026JC024009.

Resetting of quartz and feldspar luminescence signals under water

de Boer, A. M., PannoZZo, N., Pearson, S. G., Kooistra, T. J., van Prooijen, B. & Wallinga, J., 2026, In: *Scientific Reports*. 16, 1, 9 p., 13735.

Simulating Particle Erosion and Deposition in a Lagrangian Sand Transport Model

PannoZZo, N., Pearson, S. G., Meijer, M., de Wilde, T., Elias, E. & Van Prooijen, B. C., 2026, *Coastal Dynamics 2025: Volume 2*. Coelho, C., Hallin, C., Sancho, F. & Silva, P. A. (eds.). Springer Nature, Vol. 2. p. 593-599 7 p. (Coastal Research Library; vol. 42).

A novel approach for wave-turbulence decomposition

Lin, J., Zhu, C., Sun, J., Xie, W., van Prooijen, B., Guo, L., He, Q., Yang, Q. & Wang, Z. B., 2025, In: Coastal Engineering. 201, 13 p., 104807.

Deepening and narrowing impacts on circulation, stratification, and sediment transport in the Changjiang Estuary

Lin, J., van Prooijen, B. C., Zhu, C., Guo, L., He, Q., Wang, Z. B. & Yang, Q., 2025, In: Frontiers in Marine Science. 12, 22 p., 1598417.

How Shells of Different Shapes Affect Current-Driven Sand Transport

Kooistra, T. J., Haarbosch, S. H., Bosma, J. W., Bouma, T. J., van Prooijen, B. C., Soetaert, K. & Pearson, S. G., 2025, In: JRG Oceans. 130, 11, 18 p., e2025JC023346.

The variability of wind-driven currents in the Norwegian Trench

Enge, A., Pietrzak, J. D. & van Prooijen, B. C., 2025, In: Frontiers in Marine Science. 12, 19 p., 1600994.

Conditional Effects of Tides and Waves on Sediment Supply to Salt Marshes

Sun, J., van Prooijen, B., Wang, X., Xie, W., Xu, F., He, Q. & Wang, Z., 2024, In: Journal of Geophysical Research: Earth Surface. 129, 10, 15 p., e2024JF007686.

Estimation of Mud and Sand Fractions and Total Concentration From Coupled Optical-Acoustic Sensors

Tran, D., Jacquet, M., Pearson, S., Van Prooijen, B. & Verney, R., 2024, In: Earth and Space Science. 11, 11, 14 p., e2024EA003694.

Response of estuarine morphology to storm surge barriers, closure dams and sea level rise

de Vet, P. L. M., van Prooijen, B. C., Herman, P. M. J., Bouma, T. J., van Maren, D. S., Walles, B., van der Werf, J. J., Ysebaert, T., van Zanten, E. & Wang, Z. B., 2024, In: Geomorphology. 467, 8 p., 109462.

Sediment fluxes within salt marsh tidal creek systems in the Yangtze Estuary

Sun, J., van Prooijen, B., Wang, X., Zhao, Z., He, Q. & Wang, Z., 2024, In: Geomorphology. 449, 11 p., 109031.

Sources of suspended sediments in salt marsh creeks: Field measurements in China and the Netherlands

Sun, J., van Prooijen, B., Wang, X., Hanssen, J., Xie, W., Lin, J., Xu, Y., He, Q. & Wang, Z., 2024, In: Geomorphology. 456, 11 p., 109206.

The shape of fringing tidal flats in engineered estuaries

Hanssen, J. L. J., van Prooijen, B. C. & van Maren, D. S., 2024, In: Frontiers in Marine Science. 11, 15 p., 1354716.

Vegetation traits and biogeomorphic complexity shape the resilience of salt marshes to sea-level rise

Cornacchia, L., Vijsel, R. C. V. D., Wal, D. V. D., Ysebaert, T., Sun, J., Prooijen, B. V., de Vet, P. L. M., Liu, Q.-X. & Koppel, J. V. D., 2024, In: Communications Earth & Environment. 5, 1, 13 p., 658.

Increased Utilization of Storm Surge Barriers: A Research Agenda on Estuary Impacts

Orton, P., Ralston, D., van Prooijen, B., Secor, D., Ganju, N., Chen, Z., Fernald, S., Brooks, B. & Marcell, K., 2023, In: Earth's Future. 11, 3, 10 p., e2022EF002991.

Winds of opportunity: The effects of wind on intertidal flat accretion

Colosimo, I., van Maren, D. S., de Vet, P. L. M., Winterwerp, J. C. & van Prooijen, B. C., 2023, In: Geomorphology. 439, 16 p., 108840.

An explanatory model for the burial of fines in the sandy seabed of the southern North Sea

Hendriks, E., van Prooijen, B. C., Cheng, C. H., Aarninkhof, S. G. J., Winterwerp, J. C. & Soetaert, K. E., 2022, In: Marine Geology. 454, 106953.

A novel approach to mapping ebb-tidal delta morphodynamics and stratigraphy

Pearson, S. G., Elias, E., van Prooijen, B., van der Vegt, H., van der Spek, A. J. F. & Wang, Z., 2022, In: *Geomorphology*. 405, 14 p., 108185.

Coastal aeolian sediment transport in an active bed surface layer: Tracer study and conceptual model

Uphues, C. F. K., van IJendoorn, C. O., Hallin, C., Pearson, S. G., van Prooijen, B. C., Miot da Silva, G. & de Vries, S., 2022, In: *Earth Surface Processes and Landforms*. 47, 13, p. 3147-3162 16 p.

Wave attenuation potential, sediment properties and mangrove growth dynamics data over Guyana's intertidal mudflats: assessing the potential of mangrove restoration works

Best, U. S. N., van der Wegen, M., Dijkstra, J., Reynolds, J. A. H., van Prooijen, B. & Roelvink, D., 2022, In: *Earth System Science Data*. 14, 5, p. 2445–2462 18 p.

Where and why do creeks evolve on fringing and bare tidal flats?

Hanssen, J. L. J., van Prooijen, B. C., Volp, N. D., de Vet, P. L. M. & Herman, P. M. J., 2022, In: *Geomorphology*. 403, 13 p., 108182.

Characterizing the Composition of Sand and Mud Suspensions in Coastal and Estuarine Environments Using Combined Optical and Acoustic Measurements

Pearson, S. G., Verney, R., van Prooijen, B. C., Tran, D., Hendriks, E. C. M., Jacquet, M. & Wang, Z. B., 2021, In: *Journal of Geophysical Research: Oceans*. 126, 7, 23 p., e2021JC017354.

Field measurements and numerical modelling of wind-driven exchange flows in a tidal inlet system in the Dutch Wadden Sea

van Weerdenburg, R., Pearson, S., van Prooijen, B., Laan, S., Elias, E., Tonnon, P. K. & Wang, Z. B., 2021, In: *Ocean and Coastal Management*. 215, p. 1-12 12 p., 105941.

Lagrangian sediment transport modelling as a tool for investigating coastal connectivity

Pearson, S. G., Elias, E. P. L., van Ormondt, M., Roelvink, F. E., Lambregts, P. M., Wang, Z. & van Prooijen, B., 2021. 11 p.

Regime shifts in the Changjiang (Yangtze River) Estuary: The role of concentrated benthic suspensions

Lin, J., van Prooijen, B. C., Guo, L., Zhu, C., He, Q. & Wang, Z. B., 2021, In: *Marine Geology*. 433, 18 p., 106403.

The impact of wind-waves and sea level rise on the morphodynamics of a sandy estuarine shoal

Zheng, J., Elmilady, H., Röbbke, B. R., Taal, M., Wang, Z. B., van Prooijen, B. C., de Vet, P. L. M. & van der Wegen, M., 2021, In: *Earth Surface Processes and Landforms*. 46, 15, p. 3045-3062 18 p.

Tracking fluorescent and ferrimagnetic sediment tracers on an energetic ebb-tidal delta to monitor grain size-selective dispersal

Pearson, S. G., van Prooijen, B., Poleykett, J., Wright, M., Black, K. & Wang, Z. B., 2021, In: *Ocean & Coastal Management*. 212, 14 p., 105835.

Two-channel system dynamics of the outer weser estuary—a modeling study

Gundlach, J., Zorndt, A., van Prooijen, B. C. & Wang, Z. B., 2021, In: *Journal of Marine Science and Engineering*. 9, 4, 21 p., 448.

An integrated optic and acoustic (IOA) approach for measuring suspended sediment concentration in highly turbid environments

Lin, J., He, Q., Guo, L., van Prooijen, B. & Wang, Z., 2020, In: *Marine Geology*. 421, 15 p., 106062.

How human activities affect the fine sediment distribution in the Dutch Coastal Zone seabed

Hendriks, H. C. M., van Prooijen, B. C., Aarninkhof, S. G. J. & Winterwerp, J. C., 2020, In: *Geomorphology*. 367, 107314.

Measurements of hydrodynamics, sediment, morphology and benthos on Ameland ebb-tidal delta and lower shoreface
Van Prooijen, B. C., Tissier, M. F. S., De Wit, F. P., Pearson, S. G., Holzhauer, H., Gawehn, M., Antolínez, J. A. A., De Vet, P. L. M., Reniers, A. J. H. M., Wang, Z. B., Den Heijer, C., Wilmink, R. J. A. & More Authors, 2020, In: Earth System Science Data. 12, 4, p. 2775-2786 12 p., 2775.

Sediment Connectivity: A Framework for Analyzing Coastal Sediment Transport Pathways

Pearson, S. G., van Prooijen, B. C., Elias, E. P. L., Vitousek, S. & Wang, Z. B., 2020, In: Journal of Geophysical Research: Earth Surface. 125, 10, p. 1-25 25 p., e2020JF005595.

Sediment Disposals in Estuarine Channels Alter the Eco-Morphology of Intertidal Flats

de Vet, P. L. M., van Prooijen, B. C., Colosimo, I., Ysebaert, T., Herman, P. M. J. & Wang, Z. B., 2020, In: Journal of Geophysical Research: Earth Surface. 125, 2, p. 1-10 10 p., e2019JF005432.

The impact of wind on flow and sediment transport over intertidal flats

Colosimo, I., de Vet, P. L. M., van Maren, D. S., Reniers, A. J. H. M., Winterwerp, J. C. & van Prooijen, B. C., 2020, In: Journal of Marine Science and Engineering. 8, 11, p. 1-26 26 p., 910.

Variations in storm-induced bed level dynamics across intertidal flats

de Vet, P. L. M., van Prooijen, B. C., Colosimo, I., Steiner, N., Ysebaert, T., Herman, P. M. J. & Wang, Z. B., 2020, In: Scientific Reports. 10, 1, 15 p., 12877.

Progradation Speed of Tide-Dominated Tidal Flats Decreases Stronger Than Linearly With Decreasing Sediment Availability and Linearly With Sea Level Rise

Maan, C., van Prooijen, B. & Wang, Z., 16 Jan 2019, In: Geophysical Research Letters. 46, 1, p. 262-271 10 p.

Beneficial use of dredged sediment to enhance salt marsh development by applying a 'Mud Motor'

Baptist, M. J., Gerkema, T., van Prooijen, B. C., van Maren, D. S., Colosimo, I., Elschot, K., de Groot, A. V., Cleveringa, J., van Eekelen, E. M. M. & More Authors, 2019, In: Ecological Engineering. 127, p. 312-323 12 p.

Feedbacks between Fine-Grained Sediment Deposits and Bedforms in a Predominantly Sandy Seabed: Field Observations from the Southern North Sea

Hendriks, E., van Prooijen, B., Aarninkhof, S., Soetaert, K. & Winterwerp, H., 2019. 1 p.

Monitoring getijdenturbines Oosterscheldekering: Jaarrapportage 2018

Leopold, M. (Editor), Scholl, M. (Editor), Verbeek, M., Gatto, M., Guijt, K., van Prooijen, B., Labeur, R. J. & More Authors, 2019, 80 p.

Observations Of Suspended Particle Size Distribution On An Energetic Ebb-Tidal Delta

Pearson, S., van Prooijen, B., de Wit, F., Meijer-Holzhauer, H., de Looft, A. P. & Wang, Z., 2019, *Coastal Sediments 2019*. World Scientific Publishing, p. 1991-2003 13 p. 172

The heterogeneity of mudflat erodibility

Zhu, Q., van Prooijen, B. C., Maan, D. C., Wang, Z. B., Yao, P., Daggers, T. & Yang, S. L., 2019, In: Geomorphology. 345, 15 p., 106834.

Wave-Skewness And Current-Related Ebb-Tidal Sediment Transport: Observations And Modeling

Reniers, A., de Wit, F., Tissier, M., Pearson, S., Brakenhof, L. B., van der Vegt, M., Mol, J. & van Prooijen, B., 2019, *Coastal Sediments 2019*. World Scientific Publishing, p. 2018-2028 11 p. 174

Monitoring sediment transport patterns on an energetic ebb-tidal delta using dual-signature tracers

Pearson, S., van Prooijen, B., Poleykett, J., Wright, M., Black, K. & Wang, Z., 11 Dec 2018. 1 p.

Morphodynamic Feedback Loops Control Stable Fringing Flats

Maan, C., van Prooijen, B., Zhu, Q. & Wang, Z., 20 Nov 2018, In: Journal of Geophysical Research: Earth Surface. 123, 11, 20 p.

Investigation of flocculation dynamics under changing hydrodynamic forcing on an intertidal mudflat

Guo, C., He, Q., van Prooijen, B. C., Guo, L., Manning, A. J. & Bass, S., 1 Jan 2018, In: Marine Geology. 395, p. 120-132 13 p.

The Importance of Combined Tidal and Meteorological Forces for the Flow and Sediment Transport on Intertidal Shoals

de Vet, P. L. M., van Prooijen, B. C., Schrijvershof, R. A., van der Werf, J. J., Ysebaert, T., Schrijver, M. C. & Wang, Z. B., 2018, In: Journal of Geophysical Research: Earth Surface. 123, 10, p. 2464-2480 17 p.

Bed-level changes on intertidal wetland in response to waves and tides: A case study from the Yangtze River Delta

Zhu, Q., van Prooijen, B., Wang, Z. & Yang, S., 1 Mar 2017, In: Marine Geology. 385, p. 160-172 13 p.

The differences in morphological development between the intertidal flats of the Eastern and Western Scheldt

de Vet, P. L. M., van Prooijen, B. C. & Wang, Z. B., Jan 2017, In: Geomorphology. 281, p. 31-42 12 p.

Equilibria and Evolution of Estuarine Fringing Intertidal Mudflats

van Prooijen, B., Grasso, F., le Hir, P., de Vet, P. L. M., Wang, Z., Walles, B. & Ysebaert, T., 2017, p. 122-123.

Net sediment transport in tidal basins: quantifying the tidal barotropic mechanisms in a unified framework

Gatto, M., van Prooijen, B. & Wang, Z., 2017, In: Ocean Dynamics: theoretical, computational oceanography and monitoring. 22 p.

Response of SPM concentrations to storms in the North Sea: Investigating the water-bed exchange of fine sediments

Hendriks, E., van Prooijen, B., Winterwerp, H., Aarninkhof, S., van der Hout, C. & Witbaard, R., 2017, p. 71-72.

The Importance of Wind-induced Sediment Fluxes on Tidal Flats

Colosimo, I., van Prooijen, B., van Maren, B., Winterwerp, H. & Reniers, A., 2017, p. 53-54.

The Inhomogeneous Impact of Low-water Storms on Intertidal Flats

de Vet, P. L. M., van Prooijen, B. C., Walles, B., Ysebaert, T., Schrijver, M. & Wang, Z. B., 2017, p. 279.

A subgrid based approach for morphodynamic modelling

Volp, N. D., van Prooijen, B. C., Pietrzak, J. D. & Stelling, G. S., 1 Jul 2016, In: Advances in Water Resources. 93, p. 105-117 13 p.

Bed shear stress estimation on an open intertidal flat using in situ measurements

Zhu, Q., van Prooijen, B., Wang, Z., Ma, Y. X. & Yang, S., 2016, In: Estuarine, Coastal and Shelf Science. 182, Part A, p. 190-201 12 p.

Physical Processes Driving the Morphological Evolution of the Roggenplaat Tidal Flat

de Vet, P. L. M., van Prooijen, B. C., Schrijvershof, R., van der Werf, J., Schrijver, M. & Wang, Z. B., 2016. 2 p.

Sediments and Subgrid: A Great Combination

Volp, N., van Prooijen, B., Pietrzak, J. & Stelling, G., 2016. 2 p.

Simultaneous measurements of tidal straining and advection at two parallel transects far downstream in the Rhine ROFI

Rijnsburger, S., van der Hout, C., van Tongeren, O., de Boer, G., van Prooijen, B., Borst, W. & Pietrzak, J., 2016, In: Ocean Dynamics: theoretical, computational oceanography and monitoring. 66, 5, p. 1-18 18 p.

The Eastern Scheldt Survey: A concise overview of the estuary pre- and post barrier - Part 1: MEMO

Brand, N., Kothuis, B. L. M. & van Prooijen, B. C., 2016, Urban Integrity-Naarden/ B Business Energy-Amsterdam. 43 p.

The Eastern Scheldt Survey: A concise overview of the estuary pre- and post barrier - Part 2: SURVEY

Brand, N., Kothuis, B. L. M. & van Prooijen, B. C., 2016, Urban Integrity-Naarden/ B Business Energy-Amsterdam. 43 p.

Do intertidal flats ever reach equilibrium?

Maan, D., van Prooijen, B., Wang, Z. & de Vriend, H., 2015, In: Journal of Geophysical Research: Earth Surface. 120, 11, p. 2406-2436 31 p.

Human impacts on morphodynamic thresholds in estuarine systems

Wang, Z., van Maren, D., Ding, P., Yang, S., van Prooijen, B., Winterwerp, J., de Vet, P., de Vriend, H., Stive, M. & He, Q., 2015, In: Continental Shelf Research. 111 B, December, p. 174-183 10 p.

The ecosystem engineer crassostrea gigas affects tidal flat morphology beyond the boundary of their reef structures

Walles, B., Salvador de Paiva, J., van Prooijen, B., Ysebaert, T. & Smaal, A., 2015, In: Estuaries and Coasts. 38, 3, p. 941-950 10 p.

A 1D model for tides waves and fine sediment in short tidal basins; Application to the Wadden Sea

van Prooijen, B. & Wang, Z., 2013, *The 11th international conference on cohesive sediment transport*. He, Q. (ed.). s.l.: Springer, p. 1233-1248 16 p. (Ocean Dynamics: theoretical, computational oceanography and monitoring; vol. 63).

A finite volume approach for shallow water flow accounting for high-resolution bathymetry and roughness data

Volp, N., van Prooijen, B. & Stelling, G., 2013, In: Water Resources Research. 49, 7, p. 4126-4135 10 p.

Evolution of the Yangtze tidal flats; A one-dimensional approach

Maan, D. & van Prooijen, B., 2013, p. 48-48. 1 p.

Movement of tidal watersheds in the Wadden Sea and its consequences on the morphological development

Wang, Z., Vroom, J., van Prooijen, B., Labeur, R. & Stive, M., 2013, In: International Journal of Sediment Research. 28, 2, p. 162-171 10 p.

Observations and modeling of steep-beach grain-size variability

Reniers, A., Gallagher, E., MacMahan, J., Brown, J., van Rooijen, A., van Thiel de Vries, J. & van Prooijen, B., 2013, In: Journal Of Geophysical Research-Oceans. 118, 2, p. 577-591 15 p.

Temporal bed level variations in the Yangtze tidal flats

Yan, H. & van Prooijen, B., 2013, p. 120-120. 1 p.

Turbulence in the wake of a roughness patch

Voermans, J., Breugem, W., Uijttewaal, W. & van Prooijen, B., 2013

A conceptual framework for shear flow-induced erosion of soft cohesive sediment beds

Winterwerp, J., van Kesteren, W., van Prooijen, B. & Jacobs, W., 2012, In: Journal of Geophysical Research. 117, c10020, p. 1-17 17 p.

Simulating the large-scale spatial sand-mud distribution in a schematized process-based tidal inlet system model

Scheel, F., van Ledden, M., van Prooijen, B. & Stive, M., 2012, *Jubilee conference proceedings, NCK-days 2012 : Crossing borders in coastal research*. Kranenburg, W., Horstman, E. & Wijnberg, K. (eds.). s.l.: University of Twente, p. 191-196 6 p.

A process-based model for erosion of macoma balthica-affected mud beds

van Prooijen, B., Montserrat, F. & Herman, P., 2011, In: Continental Shelf Research. 31, 6, p. 527-538 12 p.

Development of tidal watersheds in the Wadden Sea

Wang, Z., Vroom, J., van Prooijen, B., Labeur, R., Stive, M. & Hansen, M., 2011, *Proceedings of the 7th IAHR symposium of river, coastal and estuarine morphodynamics*. Shao, X., Wang, Z. & Wang, G. (eds.). Beijing: Tsinghua University Press, p. 493-505 13 p.

A stochastic formulation for erosion of cohesive sediments

van Prooijen, B. & Winterwerp, J., 2010, In: *Journal Of Geophysical Research-Oceans*. 115, C01005, p. 1-15 15 p.

How biofilms influence seabed morphology

van Damme, M., Simons, R., Stive, M. & van Prooijen, B., 2010, *Environmental Hydraulics (2)*. Christodoulou, G. & Stamou, A. (eds.). London: Taylor & Francis, p. 741-746 6 p.

Modelling the seasonal dynamics of SPM with a simple algorithm for the buffering of fines in a sandy seabed

van Kessel, T., Winterwerp, J., van Prooijen, B., van Ledden, M. & Borst, W., 2010, In: *Continental Shelf Research*. 2010, p. 1-11 11 p.

Innovative highlights in the environmental impact assessment Maasvlakte 2

van Ledden, M., Bolle, L., Boon, J., van Prooijen, B., de Ronde, J. & Herman, P., 2009, *Proceedings of the 31st International conference : Coastal Engineering 2008*. McKee Smith, J. (ed.). Singapore: World Scientific Publishing, p. 4436-4448 13 p.

Modeling the erosion of *Macoma balthica* affected mud beds

van Prooijen, B. & Monserrat, F., 2009, *River, Coastal and Estuarine Morphodynamics*. Sanchez - Arcilla, A., Vionnet, C., Garcia, M., Latrubesse, E. & Perillo, G. (eds.). London: Taylor & Francis, p. 541-547 7 p.

The relevance of a back-scatter model for depth-averaged flow simulation

van Prooijen, B. & Uijttewaals, W., 2009, In: *Flow, Turbulence and Combustion*. 82, p. 73-91 19 p.

Energy content of Large-scale turbulence in wide open channel flows

Uijttewaals, W., van Balen, W. & van Prooijen, B., 2007, *Progress in Turbulence II, Bad Zwischenahn, Germany*. Oberlack, M., Khujadze, G., Gunther, S., Weller, T., Frewer, M., Peinke, J. & Barth, S. (eds.). Springer, p. 297-300 4 p.

Horizontal Mixing in Shallow Flows

van Prooijen, B. & Uijttewaals, W., 2005, *Water quality hazards and dispersion of pollutants*. Czernuszenko, W. & Rowinski, P. M. (eds.). New York: Springer, p. 55-68 250 p.

Momentum exchange in straight uniform compound channel flow

van Prooijen, B., Battjes, J. & Uijttewaals, W., 2005, In: *Journal of Hydraulic Engineering (Reston)*. 131, 3, p. 175-183 9 p.

(Virtueel boek) Water quality hazard and dispersion of pollutants

van Mazijk, A., Veling, E., van Prooijen, B. & Uijttewaals, W., 2005, New York: Springer.

Application of large eddy simulation to shallow flows

Uijttewaals, W. & van Prooijen, B., 2004, *Advances in Hydro-Science and -Engineering*. Altinakar, M., Wang, S., Holz, K. & Kawahara, M. (eds.). Oxford, Mississippi: National Center for Computational Hydrosience and Engineering, p. 1-10 10 p.

Perturbing the inflow condition in shallow mixing layer experiments

van Prooijen, B., de Nijs, M. & Uijttewaals, W., 2004, *Proceedings of the international symposium on shallow flows*. Jirka, G. & Uijttewaals, W. (eds.). Leiden: CRC Press / Balkema - Taylor & Francis Group, p. 95-101 7 p.

Shallow Mixing Layers

van Prooijen, B., 2004, Enschede: Ipskamp. 125 p.

Transverse momentum exchange in compound channel flows

van Prooijen, B., 2003, *John F. Kennedy Student Paper Competition, XXX IAHR Congress, August 2003, AUTH, Thessaloniki, Greece*. Ganoulis, J. & Prinos, P. (eds.). Reston, USA: COPRI, p. 65-73 9 p.

A linear approach for the evolution of coherent structures in shallow mixing layers

van Prooijen, B. & Uijttewaals, W., 2002, In: *Physics of Fluids*. 14, 12, p. 4105-4114 10 p.

On the initiation of large scale turbulence structures in the numerical simulation of shallow mixing layers

van Prooijen, B. & Uijttewaals, W., 2002, *Proceedings of the international conference on fluvial hydraulics: River Flow 2002*. Bousmar, D. & Zech, Y. (eds.). Lisse: CRC Press / Balkema - Taylor & Francis Group, p. 57-64 8 p.

Development of large turbulence structures in shallow mixing layers

van Prooijen, B. & Uijttewaals, W., 2001, *Proceedings of the 3rd international Symposium on Environmental Hydraulics (op CD)*. Boyer, D. & Rankin, R. (eds.). Tempe, Arizona, USA: Arizona State University, p. 1-6 6 p.

Measurement and analysis methods of large scale horizontal coherent structures in a wide shallow channel

van Prooijen, B., Booij, R. & Uijttewaals, W., 2000, *Proceedings of the international conference on application of laser techniques to fluid mechanics*. Lissabon, Portugal: s.n., p. 1-8 8 p.

Datasets/Software**KUSTGENESE2.0/SEAWAD Bed Sediment Composition and Benthos (Boxcores)**

van Prooijen, B. C. (Creator), Wilmink, R. (Creator) & Mol, J. W. (Creator), TU Delft - 4TU.ResearchData, Dec 2020
DOI: 10.4121/UUID:100C6EEC-8118-470C-96C8-2B876E0BD520

KUSTGENESE2.0/SEAWAD Frame-Mounted High Resolution Velocity Profiler

van Prooijen, B. C. (Creator), Wilmink, R. (Creator), Mol, J. W. (Creator), Boersma, J. (Creator) & den Heijer, K. (Creator), TU Delft - 4TU.ResearchData, 20 Jan 2020
DOI: 10.4121/UUID:E97A4B3D-A42A-426E-95B3-0EBB819317C5

KUSTGENESE2.0/SEAWAD Frame-Mounted Velocity Profiler

van Prooijen, B. C. (Creator), Wilmink, R. (Creator) & Mol, J. W. (Creator), TU Delft - 4TU.ResearchData, 20 Jan 2020
DOI: 10.4121/UUID:8152E7C2-255A-4EA6-B518-ABB6E85B9F14

KUSTGENESE2.0/SEAWAD Local morphology (Ripple Profiler)

van Prooijen, B. C. (Creator), Brakenhoff, L. B. (Creator), den Heijer, K. (Creator), Wilmink, R. (Creator) & Mol, J. W. (Creator), TU Delft - 4TU.ResearchData, 20 Jan 2020
DOI: 10.4121/UUID:86C7FB7C-5FD4-42EE-8EC4-9472B0DFE13D

KUSTGENESE2.0/SEAWAD Multiprobe Suspended Sediment Concentration and Chlorophyll

van Prooijen, B. C. (Creator), Wilmink, R. (Creator) & Mol, J. W. (Creator), TU Delft - 4TU.ResearchData, 17 Feb 2020
DOI: 10.4121/UUID:79A2325B-0443-471F-A09C-5E425E8BC2FD

KUSTGENESE2.0/SEAWAD Suspended Sediment Composition (LISST)

van Prooijen, B. C. (Creator), Wilmink, R. (Creator) & Mol, J. W. (Creator), TU Delft - 4TU.ResearchData, 20 Jan 2020
DOI: 10.4121/UUID:EC5B9E7D-A78F-4692-8CF9-C03D76C36727

KUSTGENESE2.0/SEAWAD Velocitymeter and Turbidity sensor

van Prooijen, B. C. (Creator), Wilmink, R. (Creator), Mol, J. W. (Creator), Boersma, J. (Contributor), de Vet, P. L. M. (Contributor), de Wit, F. (Contributor) & den Heijer, K. (Contributor), TU Delft - 4TU.ResearchData, 20 Jan 2020
DOI: 10.4121/UUID:45A08B10-D3FB-4E69-BAAE-57605C60E8C1

KUSTGENESE2.0/SEAWAD Water Pressure Sensor

van Prooijen, B. C. (Creator), Wilmink, R. (Creator), Mol, J. W. (Creator), Boersma, J. (Contributor), de Wit, F. (Contributor), den Heijer, K. (Contributor) & Kok, F. (Contributor), TU Delft - 4TU.ResearchData, 20 Jan 2020
DOI: 10.4121/UUID:4F366F02-F4B3-4CE2-9DE2-755185DA6116

Progradation speed of tidal flats versus sediment availability and sea level rise

van Prooijen, B. C. (Creator), Wang, Z. B. (Creator) & Maan, C. (Creator), TU Delft - 4TU.ResearchData, 25 Apr 2019

DOI: 10.4121/UUID:363C9A68-8B9C-4DB2-A115-57A2321D376D