

1. Record Nr.	UNINA9910786705903321
Autore	Den Heijer Cornelis
Titolo	The role of bathymetry, wave obliquity and coastal curvature in dune erosion prediction [[electronic resource] /] / Cornelis Den Heijer
Pubbl/distr/stampa	Amsterdam, : IOS Press BV, 2013
ISBN	1-61499-246-0
Descrizione fisica	1 online resource (192 p.)
Collana	Deltares select series, , 1877-5608 ; ; v. 12
Disciplina	551.302
Soggetti	Beach erosion - Netherlands Sand dunes - Netherlands Coast changes - Netherlands
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Title Page; Abstract; Samenvatting; Contents; Introduction; Background; Dune erosion; Problem definition; Aim; Approach; Review of safety assessment components; Safety assessment; Strategy; Implementation; Inventory of relevant factors controlling dune erosion; Dune erosion models; DUROS/DUROS+/D++; DUROSTA; XBEACH; Applicability of models along the Dutch coast; Probabilistic methods; Monte Carlo; First Order Reliability Method (FORM); Bayesian Network; Limitations of dune erosion models; Primary variables; Cross-shore bathymetry; JARKUS profiles; Discussion; Wave obliquity; DUROSTA; XBEACH DiscussionConceptual wave obliquity model; Coastal curvature; DUROSTA; XBEACH; Discussion; Conceptual coastal curvature model; Probabilistic analysis; Present approach with FORM; Model setup; Resulting probability of exceedance; Resulting sensitivity; XBEACH; Conclusion; Present approach with Bayesian Network; Model setup; Prediction skill; Log-likelihood ratio; Results; Conclusions; Extended approach with wave obliquity and coastal curvature; FORM; Bayesian Network; Discussion; FORM vs. Bayesian Network approach; Generic value of the results; Case study of Dutch dune coast Reference approachMethods; Results; Discussion; Conclusions; Extended approach with wave obliquity and coastal curvature; Methods; Results; Discussion; Conclusions and recommendations; General; Conclusions; Recommendations; References; Appendix A. XBEACH

Sommario/riassunto

"Low lying coastal areas have always been attractive for people to live, but are also prone to flooding. In The Netherlands, half of the population lives in the coastal area below mean sea level where two-thirds of the economic value is located. Coastal dunes protect the hinterland from floodings as a primary sea defence along the major part of the Dutch coastline."--
