

# EXPANSION SLOEHAVENS

## HYDRODYNAMIC AND MORPHOLOGIC MODELLING

The expansion and modification of the Sloehavens at Vlissingen-oost (part of Zeeland Seaports) may affect siltation in the port. Svašek Hydraulics was asked to investigate possible consequences for dredging activities and the environment. For this purpose, the planned harbour modifications were modelled to determine the effects on hydrodynamics and siltation.

Svašek has incorporated the proposed changes of the harbour shape and depth into its existing Western Scheldt estuary model. This procedure proved relatively simple given the unstructured grid used in FINEL2D.

The model simulation has been able to simulate the vortex in the harbour entrance, which transports much silt into the harbour. The siltation patterns that followed from the model simulation were consistent with earlier studies and showed a reasonable match with the actually observed distribution of deposited silt.

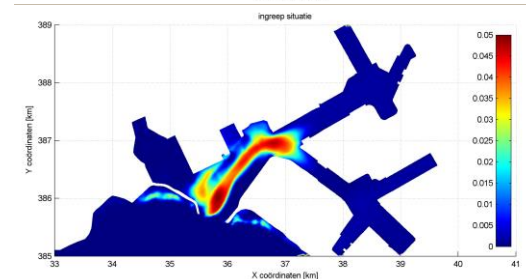
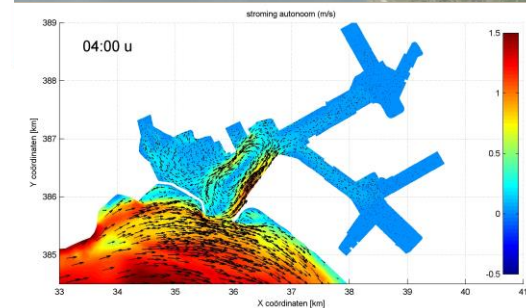
The model results with the modified harbour configuration showed that minor effects on hydrodynamics and the distribution of deposited silt are to be expected.

CLIENT  
Zeeland Seaports

LOCATION  
Sloehavens (port), Vlissingen, the Netherlands

DATE  
2009

SERVICES  
Silt modelling



**SVASEK**  
**HYDRAULICS**  
COASTAL, HARBOUR AND RIVER CONSULTANTS

Svašek Hydraulics  
Kratonkade 23  
3024 ES Rotterdam  
The Netherlands

Phone: +31 10 467 13 61  
Internet: [www.svasek.com](http://www.svasek.com)  
E-mail: [info@svasek.com](mailto:info@svasek.com)