

f082norde[001-002]: Norderneyer Seegat (Germany)

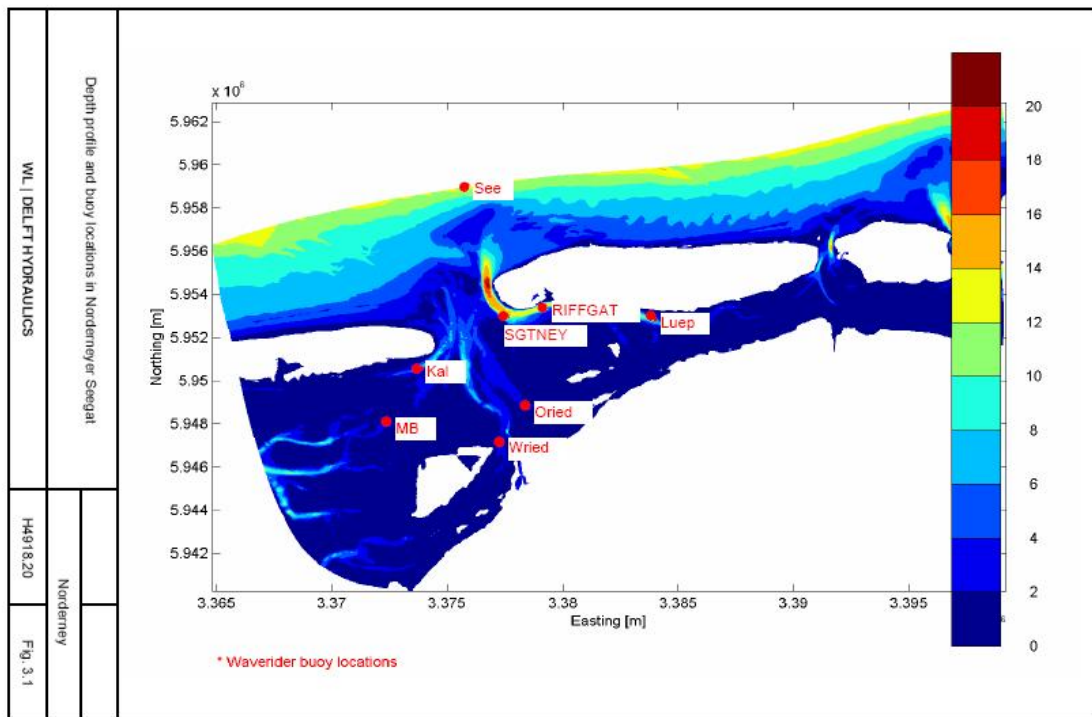
Purpose

The purpose of this test is to verify the wave model in a situation with a complex bathymetry.

Situation

The Norderneyer Seegat is a tidal inlet situated between the barrier islands of Norderney and Juist (East-Frisian Islands in the north of Germany). The region behind the inlet is an inter-tidal area with shoals and channels over a distance of 7.5 km to the main land. The bathymetry for the 20 km x 25 km area is shown in the figure below. The main channel (Norderneyer Riffgat, with a maximum depth of 16 m) penetrates deep around the head of Norderney to the east. Two smaller channels bifurcate from the Norderneyer Seegat to the south and southwest. North of the inlet lies a shoal on which most waves coming from the North Sea break. The wind generates a local wind sea in the inlet and behind the islands.

The geographical situation of the Norderneyer Seegat has been chosen, because wave observations are available. See also WL & Alkyon (2007b).



The table below gives some key characteristics.

Time	Code	WL [m MSL]	θ_w [N]	U10 [m/s]	Hm0 [m]	Tp [s]
05/02/1999, 03:40	f082norde001	3.4	290	19.0	6.0	14.3
03/12/1999, 18:30	f082norde002	3.2	290	25.7	5.9	13.3

References

WL & Alkyon (2007b). Storm hindcast for Wadden Sea, Hindcasts in inlet systems of Ameland and Norderney and Lunenburg Bay. WL | Delft Hydraulics Report H4918.20, September 2007.

Acknowledgements

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