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Field Measurements of Ship-induced Waves along the lower Weser

Client:

Federal Waterways Engineering and Research Institute (BAW), Hamburg

Period:

06/2005 – 04/2006

Project Description:

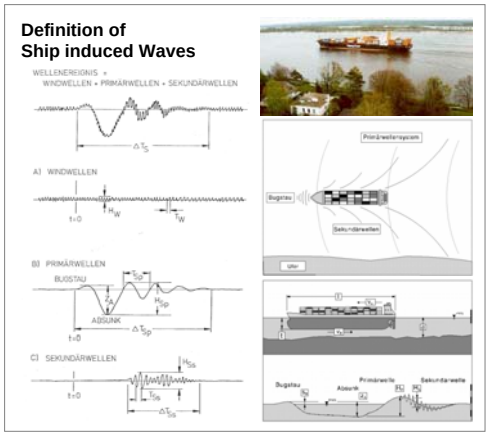
Waves induced by moving vessels can significantly affect the hydraulic loads on shorelines and structures at the waterside. The dimensions of ship waves is mainly dependent from the ship type, the ship velocity and the draught.

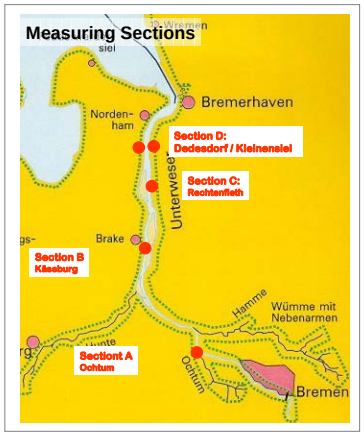
Measurement Requirements

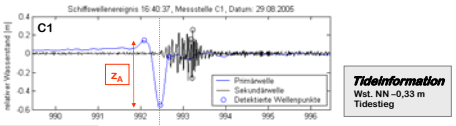
- Independent Measuring Systems
- Sampling Rate: 20 Hz
- Measuring Period: 6 weeks
- Data Transfer with *WLAN*
- Data Storage with chronological Synchronism

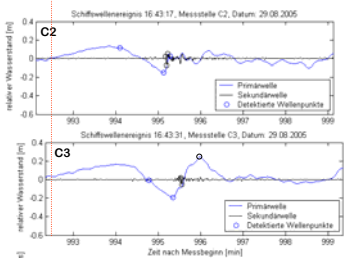
Performances:

- Planning and installation of instruments measuring waves, currents and lock gate movements
- Operation of 4 measuring sections
- Documentation and data analysis
- Analysis of results
- Expert report









	Messstation C1								Messstation C2								Messstation C3							
	Za	Hp	Hs	T Hp	T Su	T St	T Hs		Za	Hp	Hs	T Hp	T Su	T St	T Hs		Za	Hp	Hs	T Hp	T Su	T St	T Hs	
Zeit	m	m	m	s	s	s	s	Zeit	m	m	m	s	s	s	s	Zeit	m	m	m	s	s	s	s	
16:40:37	**0.69**	0.52	0.52		22.1	12.9	2.4	16:43:17	0.26	0.17	0.12	43.2	61.3	9.3	3.3	16:43:31	0.2	0.5	0.1		33.7	35.0	2.1	

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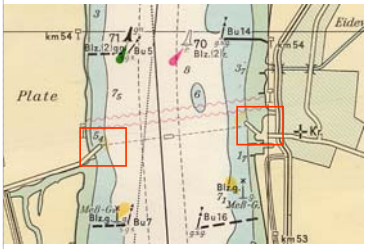
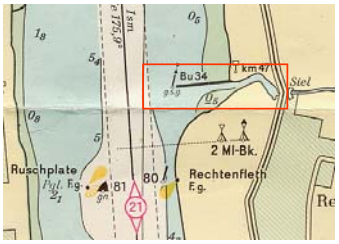
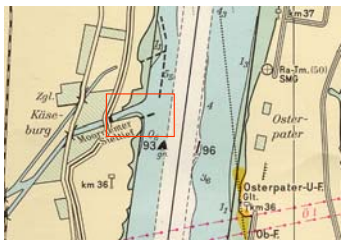
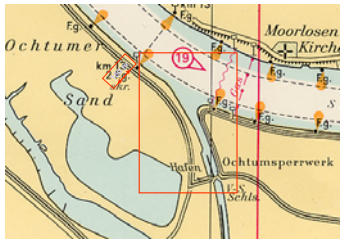
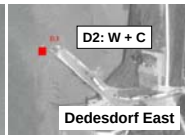
Measuring Sections, Locations and Instrumentation

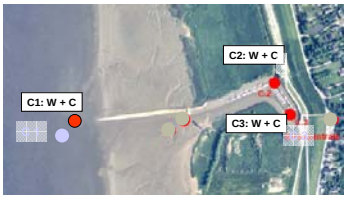


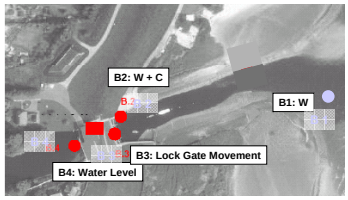


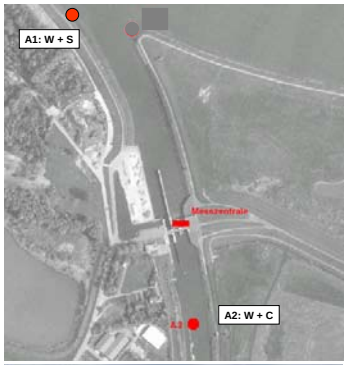


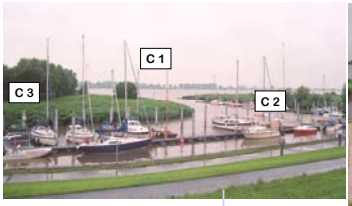


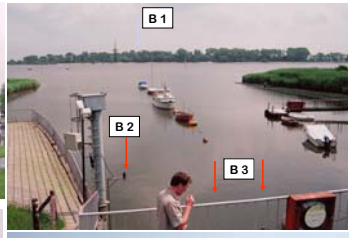


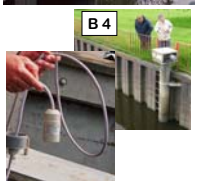












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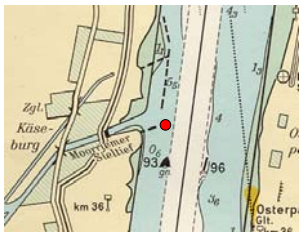
Development of Ship-induced Waves

Time of Event
01.07.2005 12:26



Measuring Section Käseburg