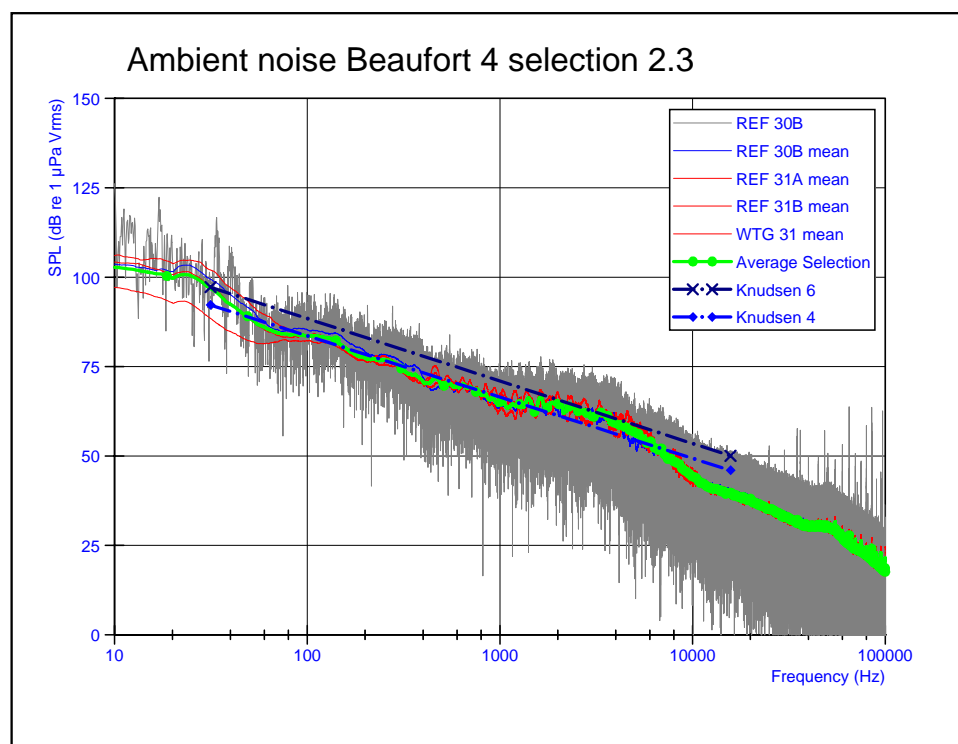


Curves and graphs part III (Graph 14/17)

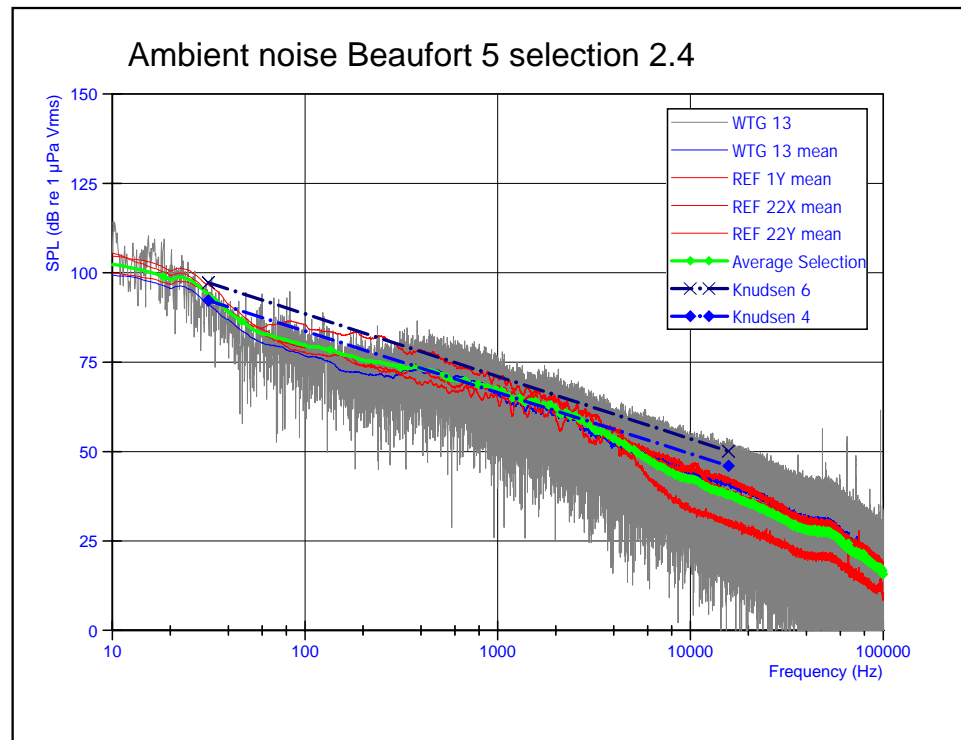
Ambient noise data selection 2.3



Graph 14 Selection of ambient noise signatures as a function of wind speed Beaufort 4 condition. The graph represents the data selection 2.3 involving 4 measurement locations (REF 30B, 31AB, and WTG 31) and data were measured 15 October 2005 between 18:05 and 19:20. The grey curve is the raw FFT result of a single measurement in location REF 30B presenting 5128205 samples and a frequency resolution (ΔF) of 0.1 Hz with the blue curve as mean result (symmetrical smooth 200 points). The red curves are the other mean results in the given locations. The green curve represents the average of all smoothed curves. The Knudsen 4 & 6 lines are the ambient noise spectral levels for sea state 4 and 6 conditions (Knudsen et al. 1948).

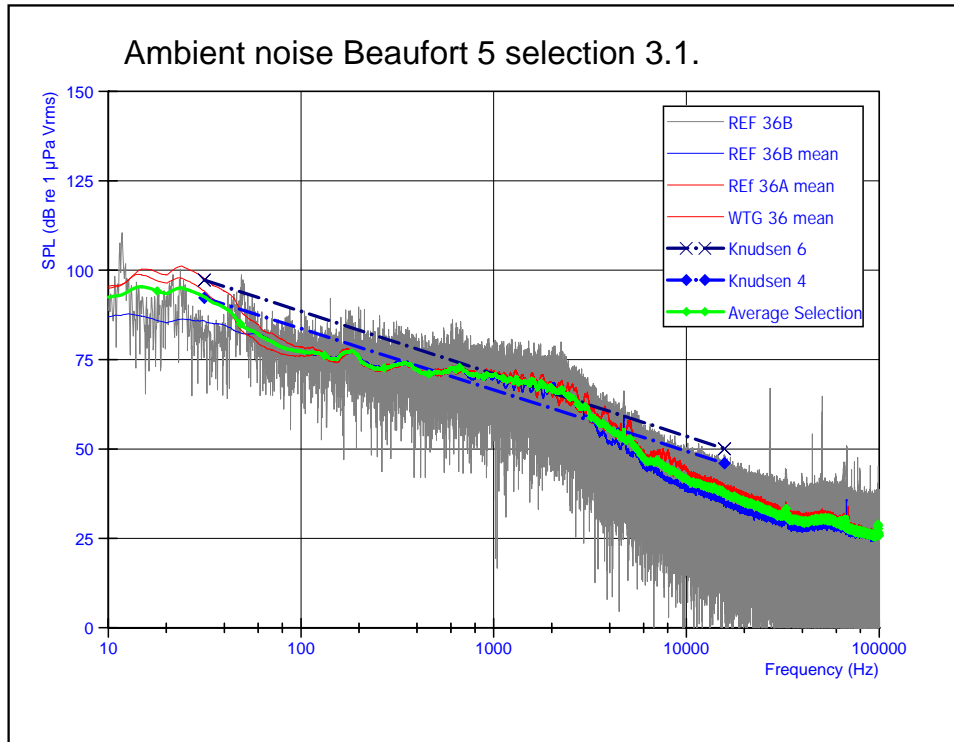
The measured results are not compensated for the responses of hydrophone TC 4032 and pre-amplifier A1101. At 100 kHz 3.7 dB has to be added to the outcome (TC 4032 -6 dB, A1101 +2.3 dB). At 10 Hz the level has to be increased with 3.4 dB (See also Graph 3 Response of the A1101 amplifier).

Ambient noise data selection 2.4



Graph 15 Selection of ambient noise signatures as a function of wind speed Beaufort 5 condition measured on 16 October 2005 between 10:41 and 15:34. The graph represents the ambient noise spectra of dataset 2.4 involving 4 measurement locations (WTG 13, REF 22 XY and REF 1Y). The grey curve is the raw FFT result of a single measurement in location WTG 13 presenting 5128205 samples and a frequency resolution (dF) of 0.1 Hz with the blue curve as mean result (symmetrical smooth 200 points). The red curves are the other mean results in the given locations. The graph illustrates increased levels < 20 Hz and around 1 kHz. The green curve represents the average of all smoothed curves. The Knudsen 4 & 6 lines are the ambient noise spectral levels for sea state 4 and 6 conditions (Knudsen et al. 1948). The measured results are not compensated for the responses of hydrophone TC 4032 and pre-amplifier A1101. At 100 kHz 3.7 dB has to be added to the outcome (TC 4032 -6 dB, A1101 +2.3 dB). At 10 Hz the level has to be increased with 3.4 dB (See also Graph 3 Response of the A1101 amplifier).

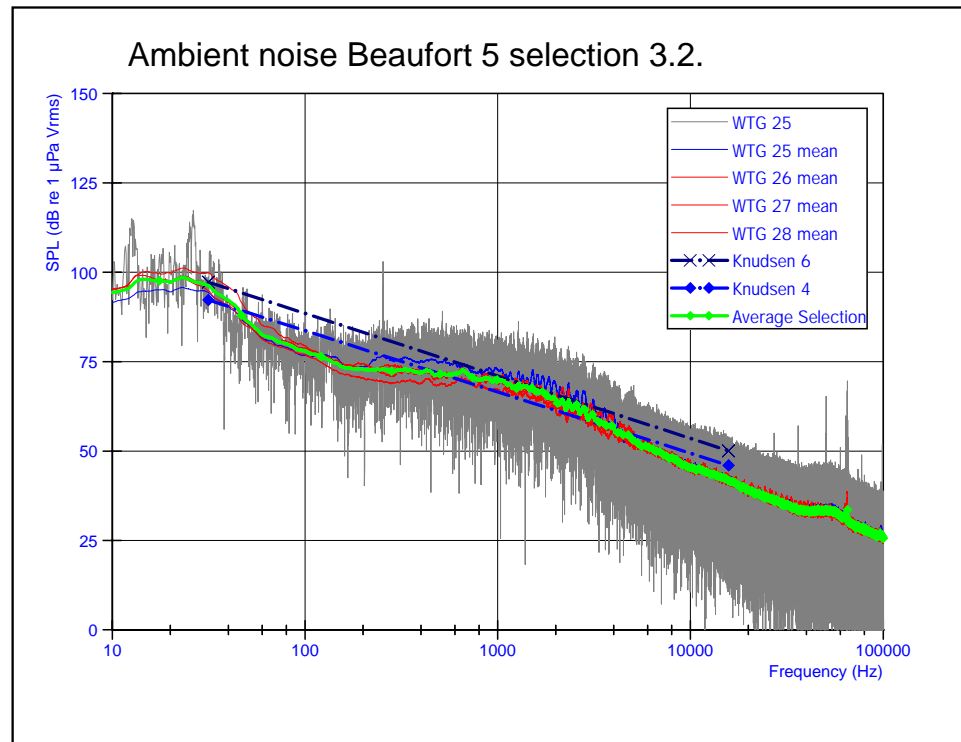
Ambient noise data selection 3.1



Graph 16 Selection of ambient noise signatures as a function of wind speed Beaufort 5 condition measured on 15 March 2006 between 12:36 and 12:53. The graph represents the ambient noise spectra of dataset 3.1 involving 3 measurement locations (REF 36 AB and WTG 36). The grey curve is the raw FFT result of a single measurement in location REF 36B presenting 5128205 samples and a frequency resolution (dF) of 0.1 Hz with the blue curve as mean result (symmetrical smooth 200 points). The red curves are the other mean results in the given locations. At location REF 36A pump cavitation noise was detected. The graph illustrates that the average result exceeds the Knudsen sea state 4 reference < 20 Hz and in the range of 0.6-2 kHz.

The green curve represents the average of all smoothed curves. The Knudsen 4 & 6 lines are the ambient noise spectral levels for sea state 4 and 6 conditions (Knudsen et al. 1948). The measured results are not compensated for the responses of hydrophone TC 4032 and pre-amplifier A1101. At 100 kHz 3.7 dB has to be added to the outcome (TC 4032 -6 dB, A1101 +2.3 dB). At 10 Hz the level has to be increased with 3.4 dB (See also Graph 3 Response of the A1101 pre-amplifier).

Ambient noise data selection 3.2



Graph 17 Selection of ambient noise signatures as a function of wind speed Beaufort 5 condition measured on 15 March 2006 between 15:05 and 16:16. The graph represents the ambient noise spectra of dataset 3.2 involving 4 measurement locations (WTG 25, 26, 27 and 28). The grey curve is the raw FFT result of a single measurement in location WTG 25 presenting 5128205 samples and a frequency resolution (dF) of 0.1 Hz with the blue curve as mean result (symmetrical smooth 200 points). The red curves are the other mean results in the given locations. The graph illustrates that the average result exceeds the Knudsen sea state 4 reference < 20 Hz and in the range of 0.4-4 kHz.

The green curve represents the average of all smoothed curves. The Knudsen 4 & 6 lines are the ambient noise spectral levels for sea state 4 and 6 conditions (Knudsen et al. 1948). The measured results are not compensated for the responses of hydrophone TC 4032 and pre-amplifier A1101. At 100 kHz 3.7 dB has to be added to the outcome (TC 4032 -6 dB, A1101 +2.3 dB). At 10 Hz the level has to be increased with 3.4 dB (See also Graph 3 Response of the A1101 amplifier).