

DOSITS Webinar Outline: Pile driving as a sound source
Dr. James Miller and Dr. Kathleen Vigness-Raposa
Wednesday, May 22, 2019, 12:00pm EDT

Miller (5-10 minutes): Near-field characteristics/considerations

1. Pile driving structure, components (pile, hammer)
2. Near field sound structure including Mach cone
3. Effect of the seabed
4. Pile driving models
5. Raked piles (piles that are driven at an angle)

Vigness Raposa (5-10 minutes): Far-field characteristics/considerations

1. Impulse vs. non-impulse (draft criteria)
2. Kurtosis defined
3. Time spread of the signal as a function of range
4. Far field measurements at Block Island
5. Other published sound measurements

DOSITS Links:

Animals > Potential Effects > Anthropogenic Sound Sources > Pile Driving
<https://dosits.org/animals/effects-of-sound/anthropogenic-sources/pile-driving/>

Decision Makers > Structured Tutorials > Anthropogenic Sound Sources
<https://dosits.org/decision-makers/tutorials/sound-source/>

Science of Sound > Introduction to Signal Levels
<https://dosits.org/science/advanced-topics/introduction-to-signal-levels/>

Science of Sound > Propagation from a Sound Source Array in the Near field and Far Field
<https://dosits.org/science/advanced-topics/near-far-field-propagation/>

Audio Gallery > Pile Driving
<https://dosits.org/galleries/audio-gallery/anthropogenic-sounds/pile-driving/>

Audio Gallery > Bubble Curtain
<https://dosits.org/galleries/audio-gallery/anthropogenic-sounds/bubble-curtain/>

