

Linkages to Seabed Variability- Uncertainty DRI Workshop
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Seafloor variability is a significant source of uncertainty in the shallow water acoustic detection problem ($\pm 5\text{dB}$)

What are the products that ocean acoustic teams would like to see out of bottom characterization and modeling efforts?

Hierarchy of possible products from more to less interactive

- 1) Direct linkage to quantitative modeling of acoustic bottom interactions
- 2) Monte carlo simulations (unconditional or conditional) of bottom and sub-bottom morphology & geoacoustic properties
- 3) Quantitative – statistical characterizations of bottom and sub-bottom morphology and geoacoustic properties
- 4) Bottom contribution to geoacoustic uncertainty PDF

Suggestion to do Figure of Merit will deliver a wave number spectrum

Regional wave characteristics:

Take our current knowledge and integrate it into the other projects.

Improve NAVO databases

Can seabed group make a prioritized list of the quantities that the seafloor folks wish to know about the bottom?

Work backward from the end signal.