

Depth Dependent Effect Study

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CIRS Phantom

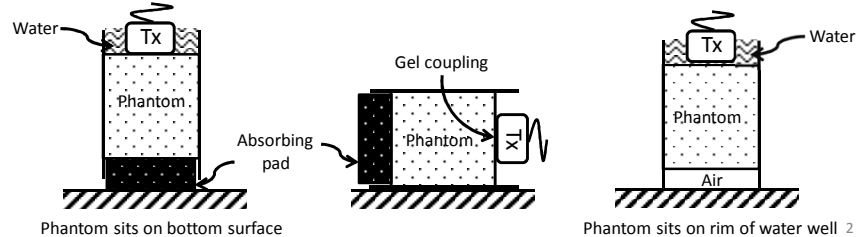
1. Phantom specification:

- Zerdine®, $\text{Ø} = 10 \text{ cm}$, height = 10 cm
- Two acoustic windows: A & B
- Poured from side with phantom laying horizontally

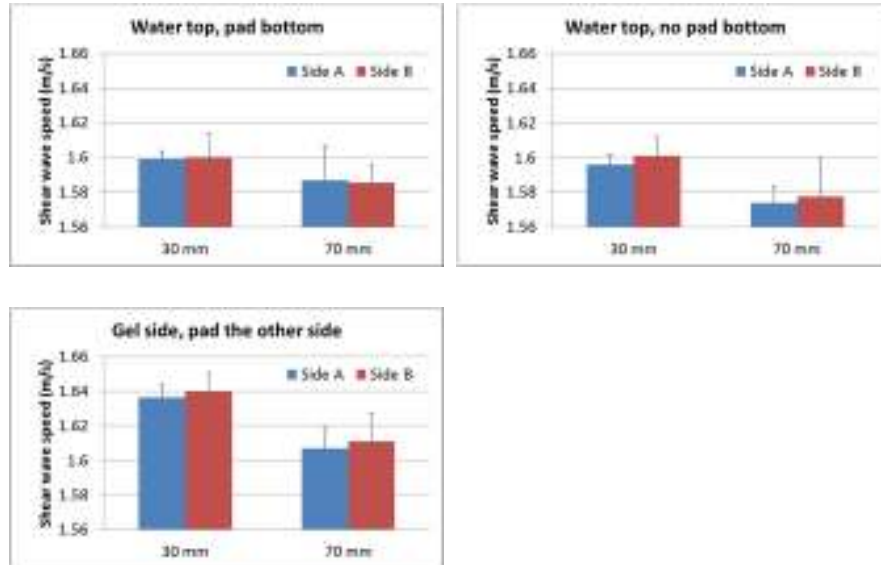
2. Verasonics with C4-2:

- 5-25 mm lateral range: stable results for larger range
- Two depths (3, 7cm) from each side: 3/7cm of side A = 7/3 cm of side B
- Ten readings at different spatial positions for each depth

3. Three setups, measurements on both side A&B for each setup:



Results



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Discussion

1. All experiments show consistent depth dependent trend from both sides, suggesting that effect is mainly due to SWE, not phantom.
2. Gravity, squeezing of phantom, and coupling method may have effects too.
3. Effects are consistent, but relatively small: may not worth more investigation, unless future visco-elastic phantom study shows a larger effect.

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