Signal-Wise: we get the signal right
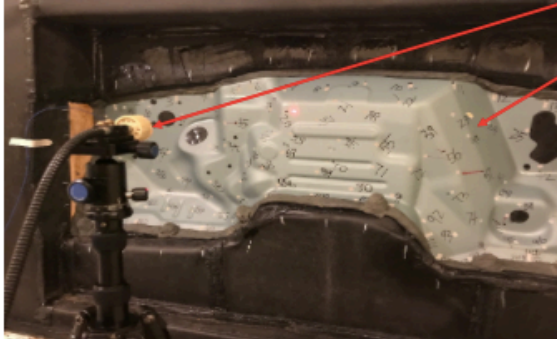
Sound Viewer

Operational Deflection Shape

Sound Viewer enables one to reconstruct ODS (Operational Deflection Shape) on the surface of an arbitrarily shape structure.[1]
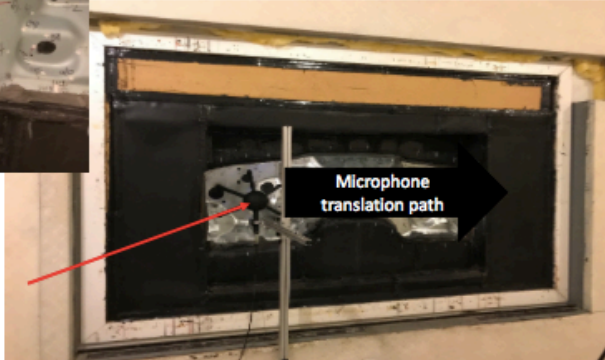

The front dash panel of a full-size truck.

Analyzing STL by using a laser vibrometer and Sound Viewer.
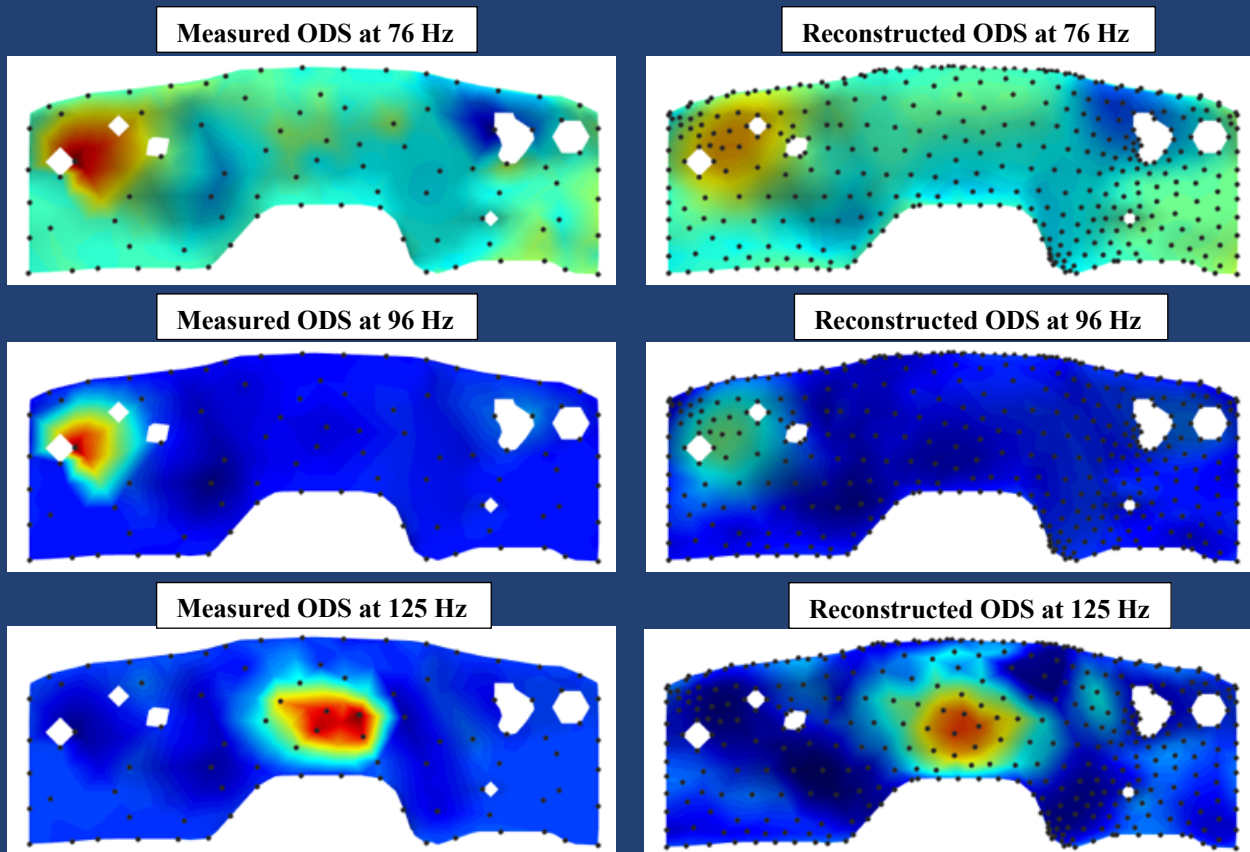
---

[1] Provided that the 3D model of the structure is available. This 3D model can be generated by CAD or using a 3D scanner, which are not included in the Sound Viewer package.

Signal-Wise: we get the signal right
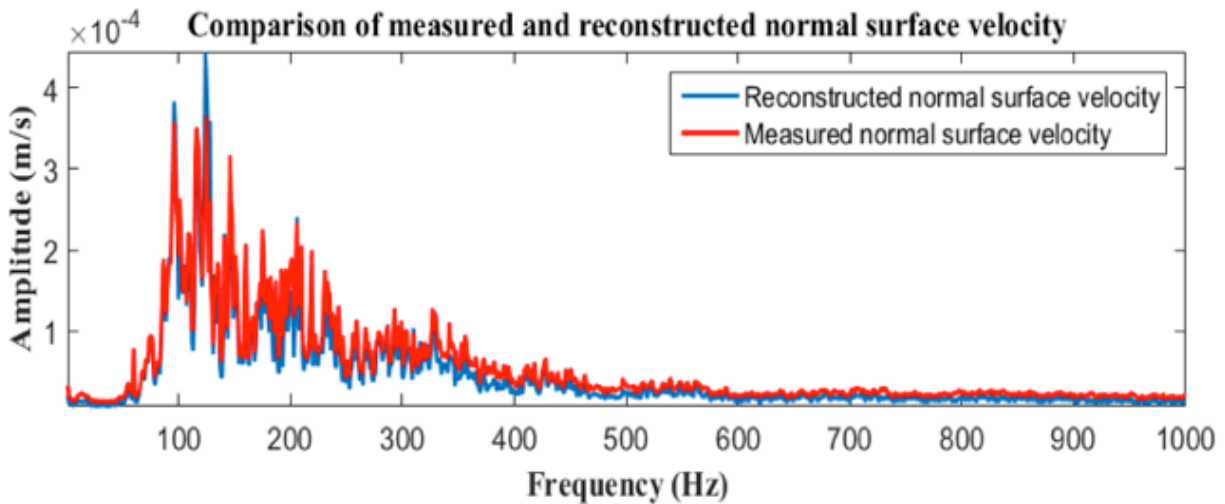
Validation of the reconstructed and spatially-averaged normal surface velocity spectra of the front dash panel of a full-size truck.

Measured ODS at 76 Hz	Reconstructed ODS at 76 Hz
Measured ODS at 96 Hz	Reconstructed ODS at 96 Hz
Measured ODS at 125 Hz	Reconstructed ODS at 125 Hz

Validation of the reconstructed ODS (Operational Deflection Shape) on the surface of the front dash panel of a full-size truck at different frequencies.