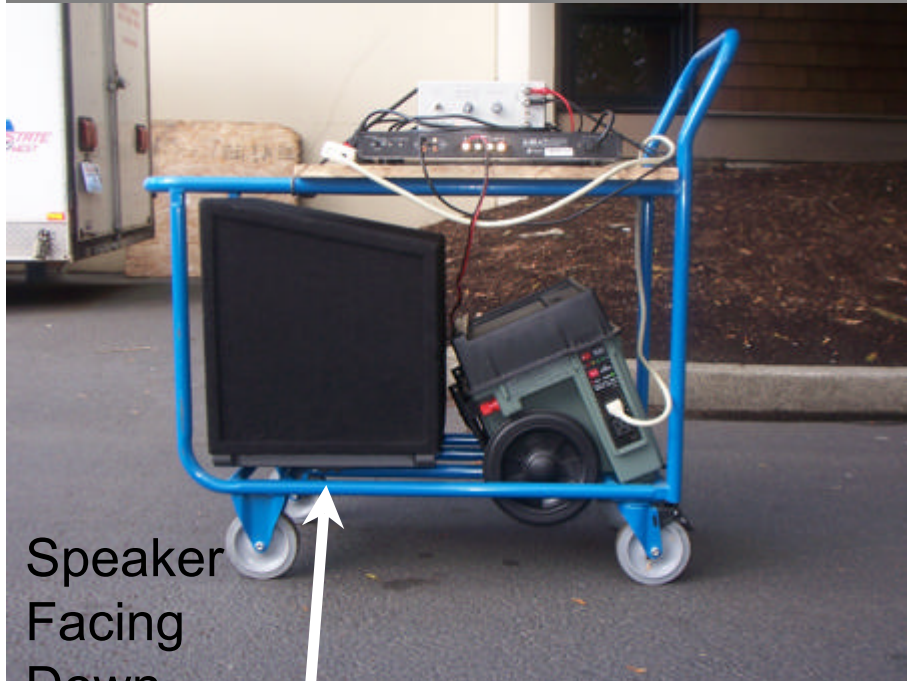


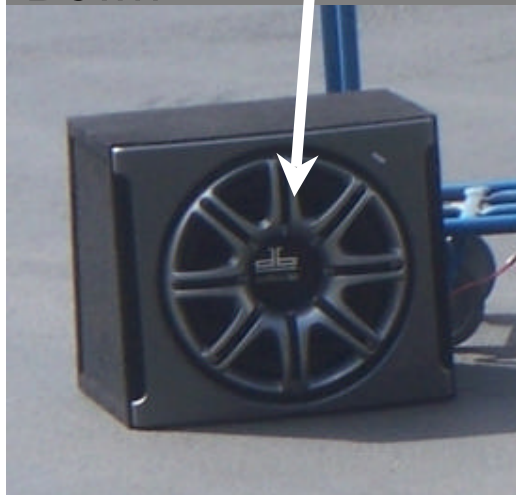
TIDY

- Deconvolution method to improve beamforming results
- Similar to CLEAN-SC, but broadband
- Designed for correlated sources
- Operates in the time domain using the cross correlation matrix
- Fast, robust
- Dramatic improvement in low frequency resolution
- Dramatic improvement in sidelobes at high frequency
- OptiNav exclusive

TIDY Resolution Test



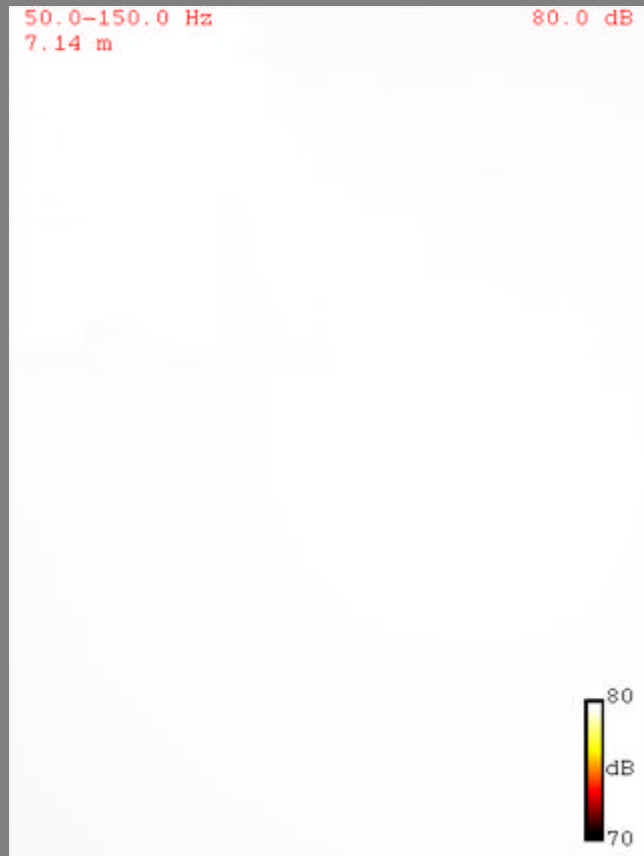
Speaker
Facing
Down



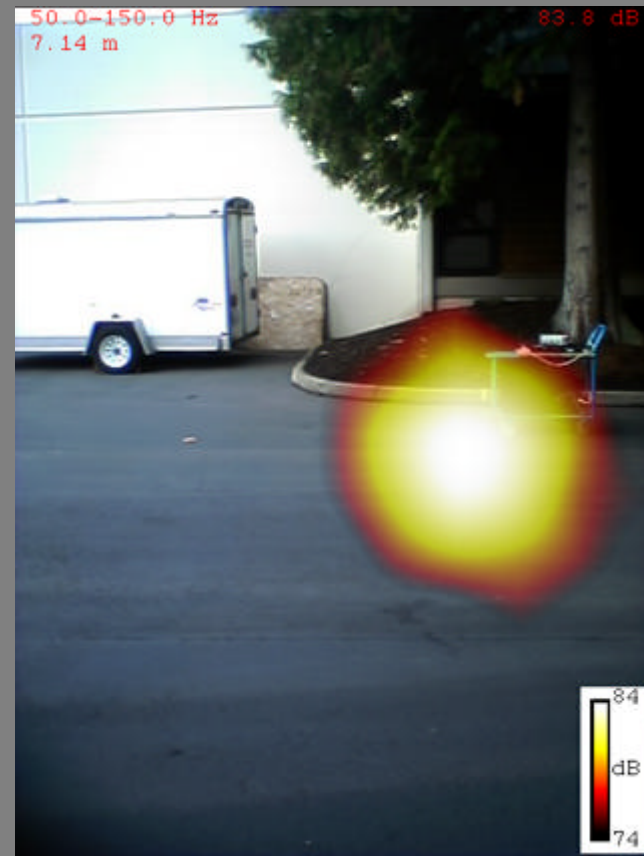
0.7 m aperture, 7 m distance

100 Hz

Conventional



TIDY



Rayleigh resolution = 41 m

500 Hz

Conventional



TIDY



Rayleigh resolution = 8.3 m

1000 Hz

Conventional



TIDY



Rayleigh resolution = 4.1 m

10,000 Hz

Conventional



TIDY



Rayleigh resolution = 0.41 m

TIDY Example



TIDY still has dynamic range: not just finding peaks

Conventional



TIDY

