Behavioral Response Function for Cuvier's Beaked Whales on a Navy Training Range

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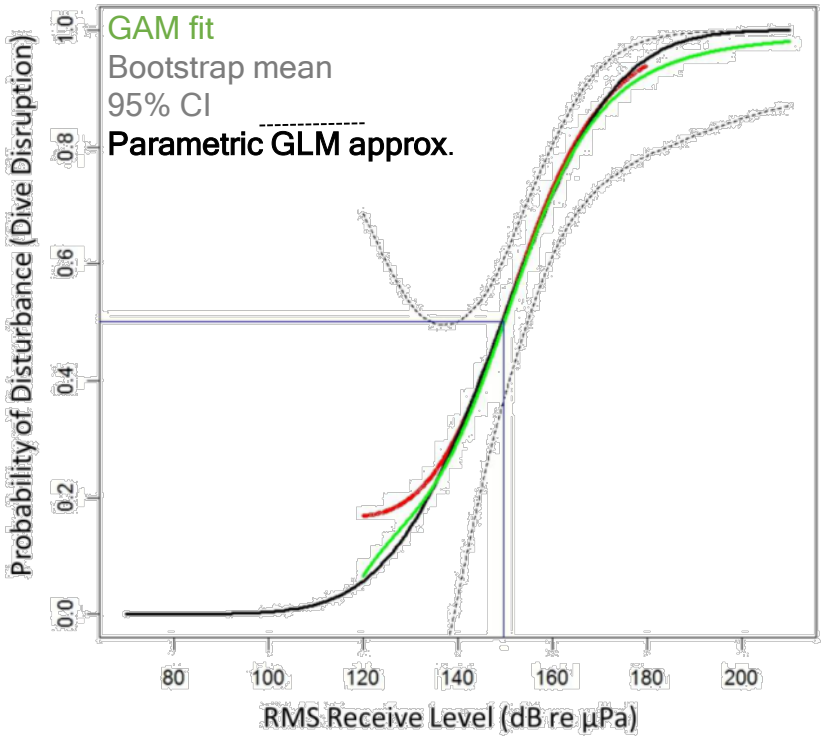
Behavioral Response Functions

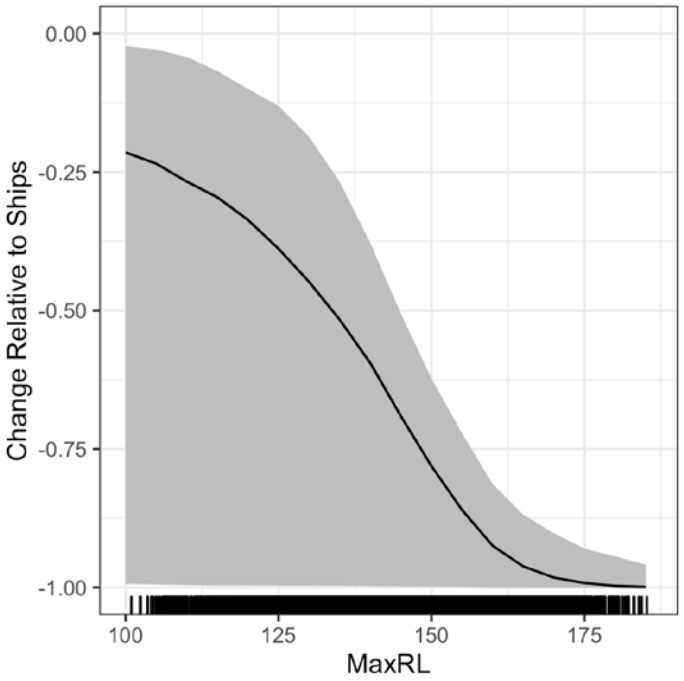


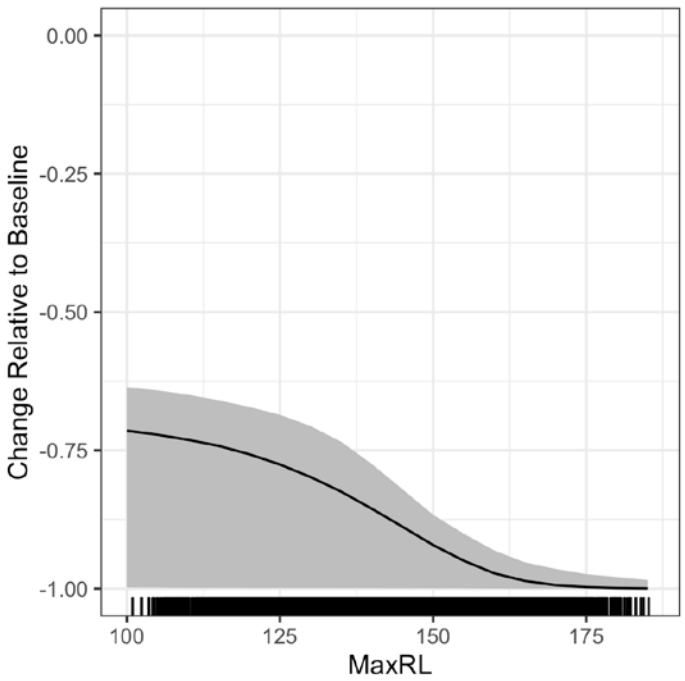
Moretti et al. 2014

Blainville's beaked whales

Data from the Atlantic Undersea Test and Evaluation Center, Bahamas

Behavioral Response Functions



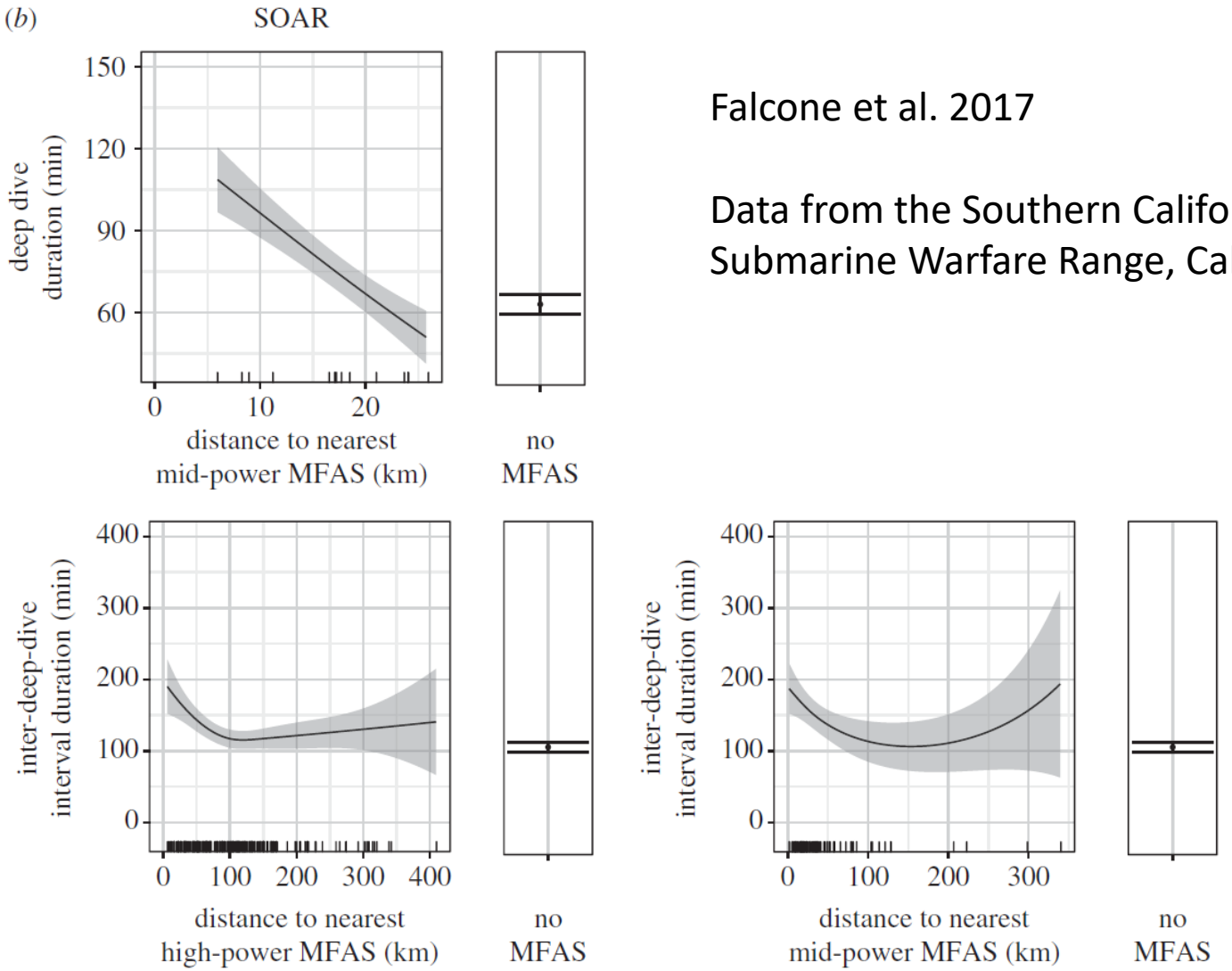


Blainville's beaked whales

Jacobson et al. Speedtalk XXXX

Data from the Pacific Missile Range Facility, Kauai, Hawaii

Cuvier's beaked whales



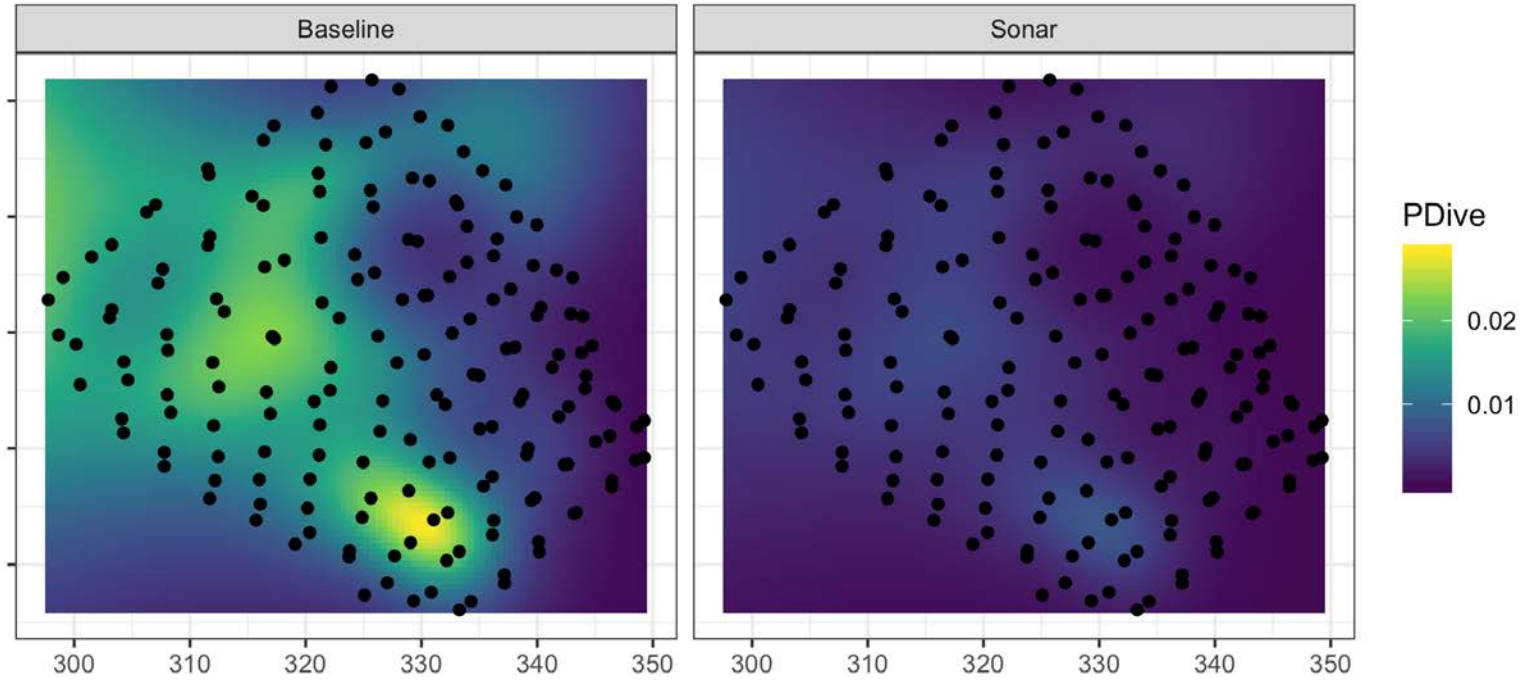
Falcone et al. 2017

Data from the Southern California Anti-Submarine Warfare Range, California

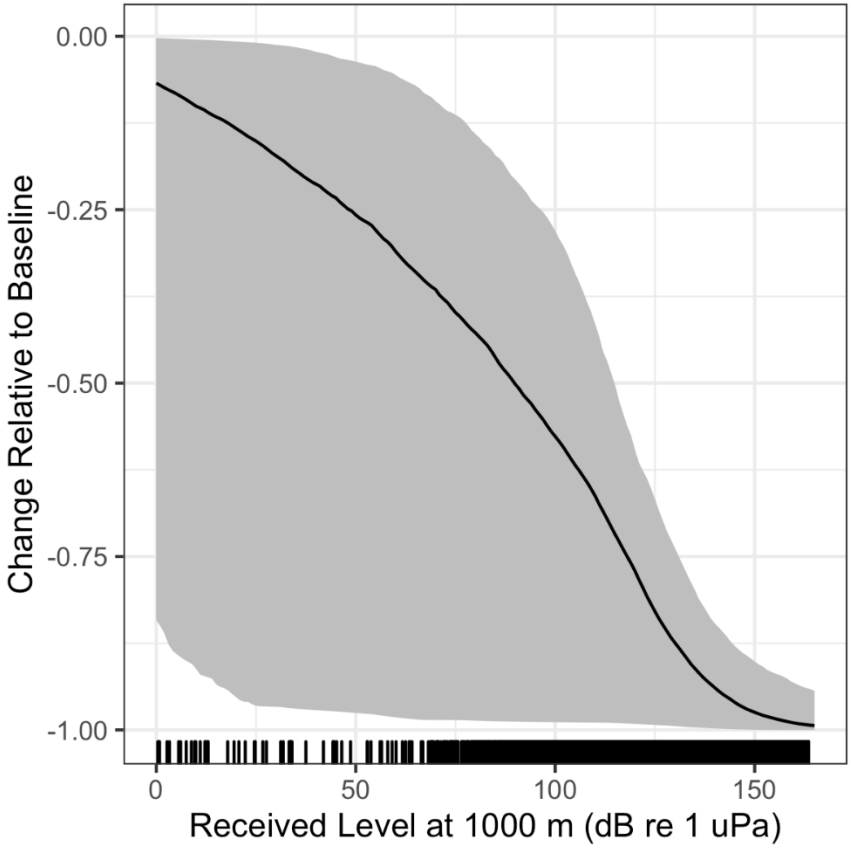
Methods

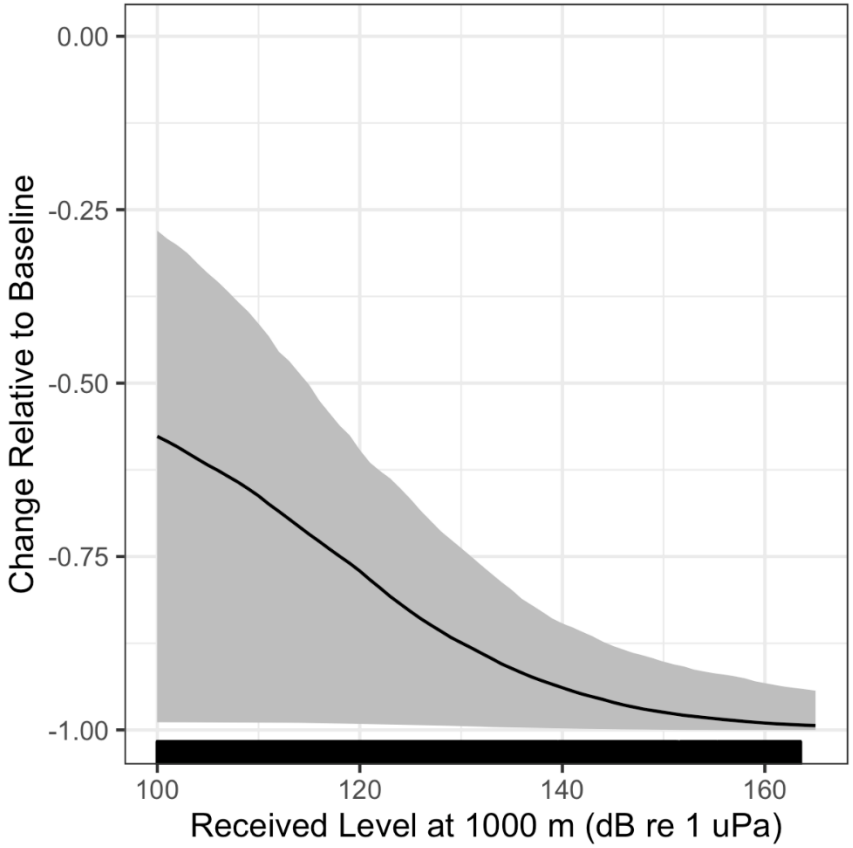
- Data from up to 168 hydrophones
- Data before and after 7 training events over XX years
- For each hydrophone and each 30 minute period:
  - Beaked whale foraging presence
  - Modeled sonar received levels
- GAM modelling approach to examine the effect of sonar on beaked whale foraging behavior

Preliminary Results



Preliminary Results





Next Steps

- Increase sample size
- Confirm baseline periods as baseline
- Examine the effect of sonar type