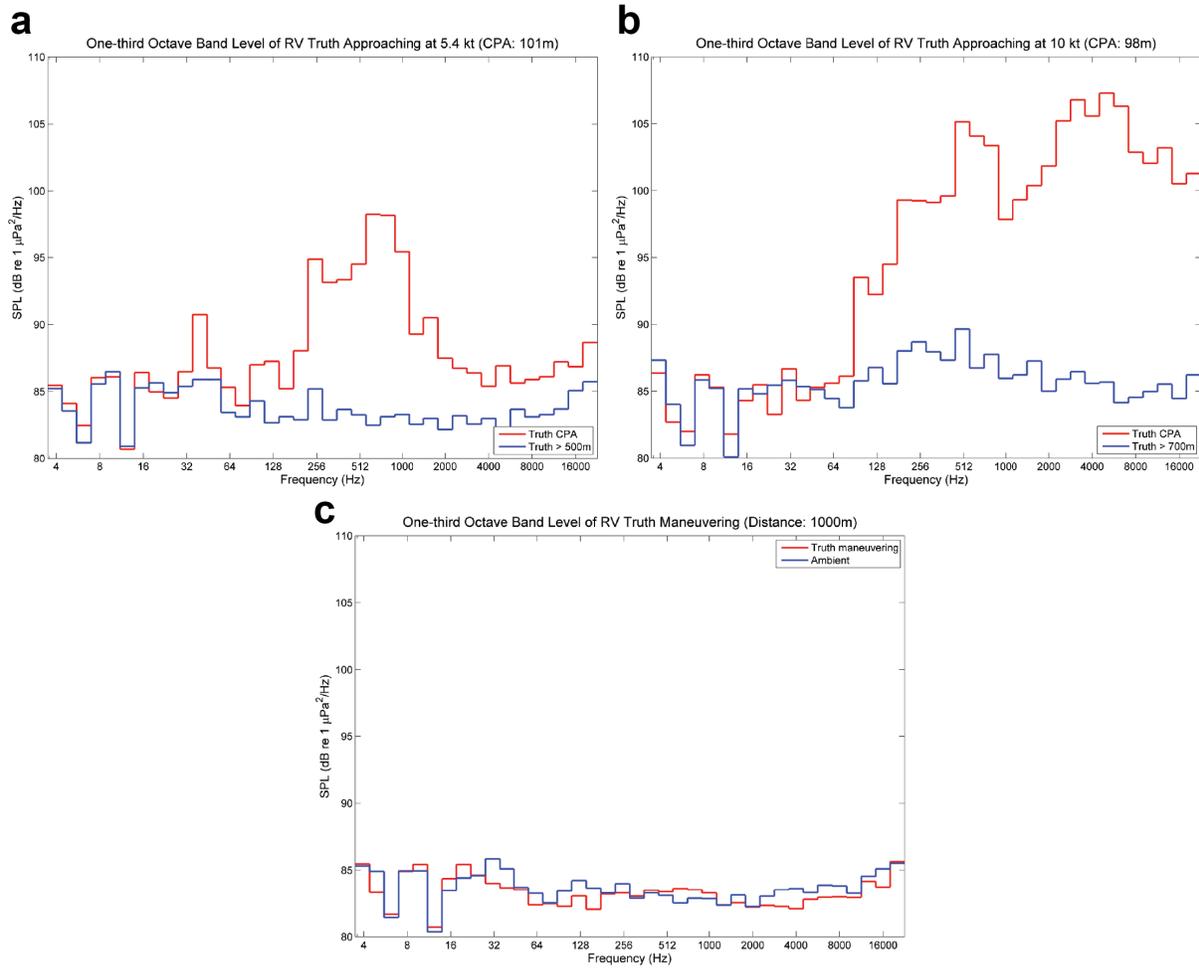


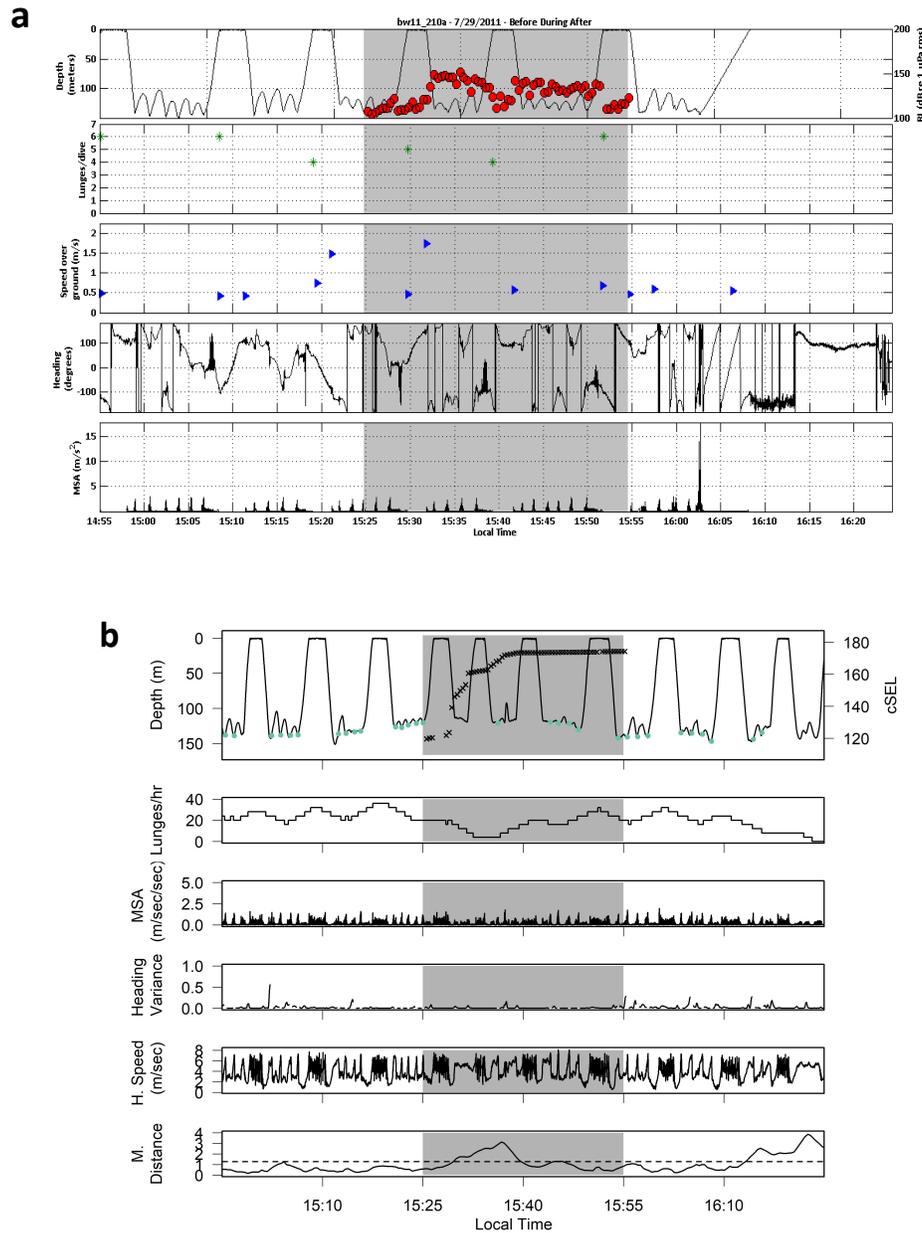
**Figure S1.** One-third-octave band levels for radiated noise from RHIB *Ziphid* during close approaches ( $\sim 100\text{m}$ ) to recording buoys at controlled speeds of 5 kt (panel a) and 10 kt (b) and from RHIB *Physalus* during close approaches ( $\sim 100\text{m}$ ) to recording buoys at controlled speeds of 5 kt (c) and 10 kt (d)



**Figure S2.** One-third-octave band levels for radiated noise from *R/V Truth* during close approaches ( $\sim 100\text{m}$ ) to recording buoys at controlled speeds of 5 kt (panel a) and 10 kt (b). Also shown are one-third-octave band levels for radiated noise from *R/V Truth* during maneuvering at a range to from the recording buoy ( $\sim 1000\text{m}$ ) typical of ranges to whales during CEEs (c).

**Behavioral State: Deep-Feeding**  
**Exposure Type: MFAS**  
**Subject ID: bw11\_210b**  
**CEE Date: 29 July 2011**  
**CEE Number: 2011\_01**

**Time of CEE: 15:25 – 15:55**  
**Location: Point Arguelo**  
**Other animals in CEE? Yes - bw11\_210a**  
**Source-receiver range: 800 m**  
**Max RL: SPLmax: 165; cSEL: 171**

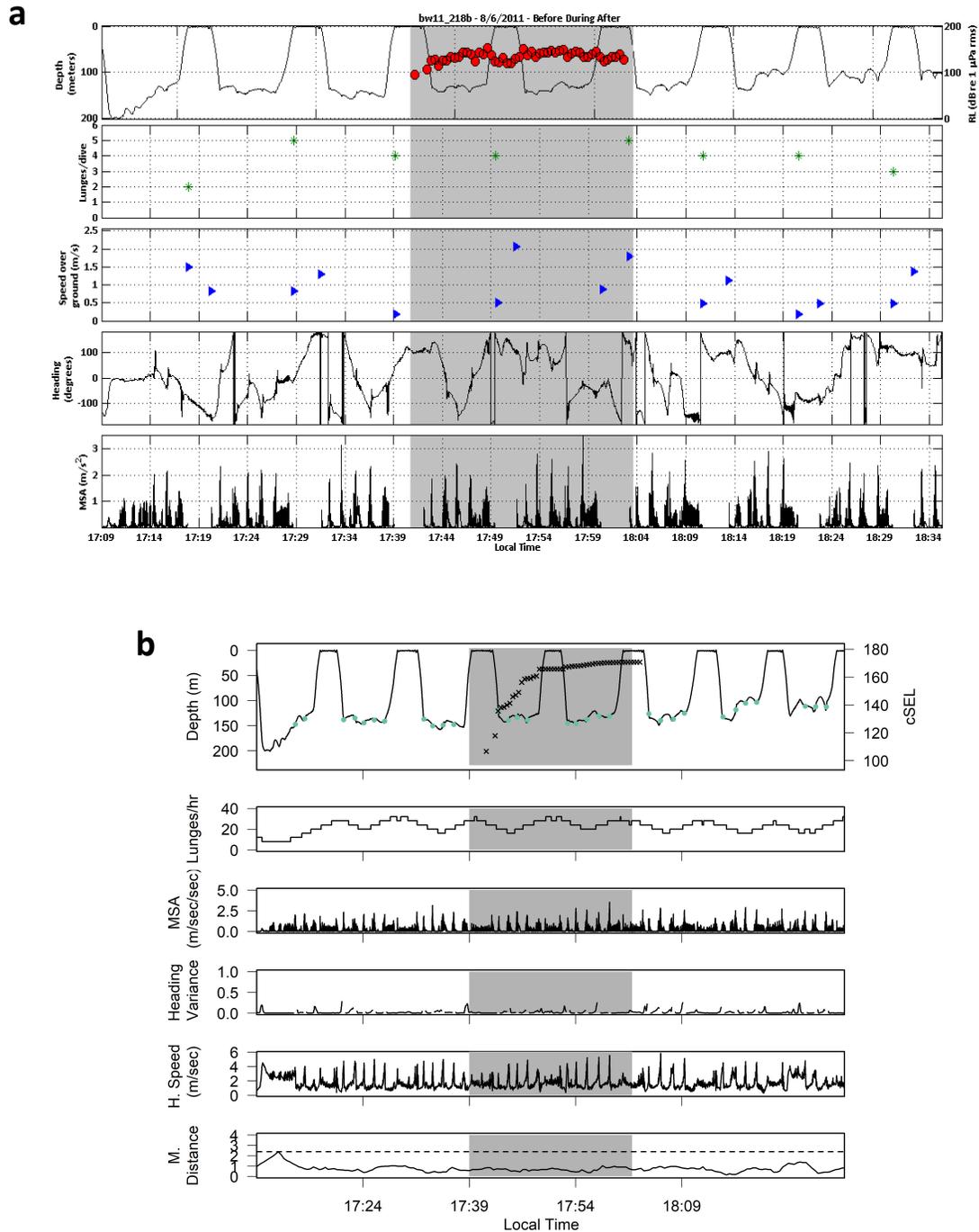


**Figure S3. Expert scoring data plots (a)<sup>1</sup> and Mahalanobis distance plots (b) for bw11\_210b.**

<sup>1</sup> NOTE: This is the exact data plot used during expert scoring. After their analysis it was identified that the dive axis is off by an order of magnitude and this was a deep diving whale with maximum dive depths to 130m (as opposed to 13m). This was discussed *post hoc* with all members of both scoring groups, all of whom agreed this would have no bearing on the changes identified or scores assigned.

**Behavioral State: Deep-Feeding**  
**Exposure Type: PRN**  
**Subject ID: bw11\_218b**  
**CEE Date: 06 August 2011**  
**CEE Number: 2011\_06**

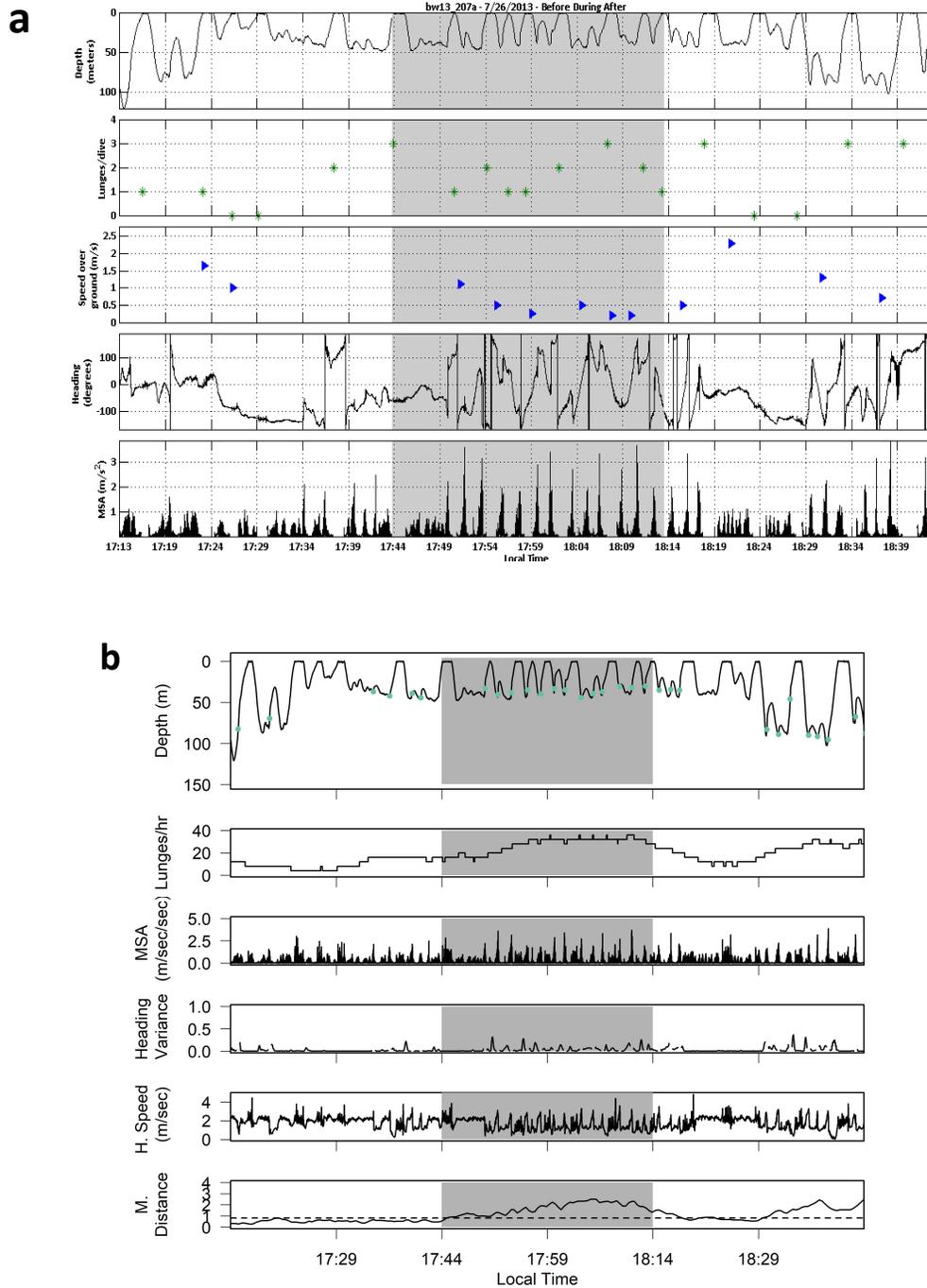
**Time of CEE: 17:39 – 18:02**  
**Location: San Pedro Basin**  
**Other animals in CEE? Yes - bw11\_218a**  
**Source-receiver range: 1200 m**  
**Max RL: SPLmax: 161; cSEL: 168**



**Figure S4. Expert scoring data plots (a) and Mahalanobis distance plots (b) for bw11\_218b.**

**Behavioral State: Shallow-Feeding**  
**Exposure Type: Control**  
**Subject ID: bw13\_207a**  
**CEE Date: 30 July 2013**  
**CEE Number: 2013\_06**

**Time of CEE: 17:44 – 18:14**  
**Location: San Pedro Channel**  
**Other animals in CEE? No**  
**Source-receiver range: 500 m**  
**Max RL: SPLmax: n/a, CSEL: n/a**



**Figure S5. Expert scoring data plots (a) and Mahalanobis distance plots (b) for bw13\_207a.**

**Table S1. Expert scoring and Mahalanobis distance results for bw11\_210b, bw11\_218b, and bw13\_207a.**

Subject	Change-Point Detection Method	Change Detected?	Change Point Onset Time	Exposure RL at Change Point or Max (if no change)		Expert Scored Severity	Expert Scoring Confidence
				cSEL	SPL		
bw11_210b	<i>Expert Scoring Group I</i>	Yes	15:29	119	117	[7] Avoidance of sound source [6] Moderate cessation of feeding	High
	<i>Expert Scoring Group II</i>	Yes	15:26-15:28	119	117	[7] Avoidance of sound source [5] Minor cessation of feeding [4] Change in dive profile [4] Increase in speed [3] Orienting response	High
	<b>Expert Scoring Adjudicated FINAL</b>	<b>YES</b>	<b>15:28</b>	<b>119</b>	<b>117</b>	<b>[7] Avoidance of sound source</b> [6] Moderate cessation of feeding	<b>HIGH</b>
	<b>Mahalanobis Distance</b>	<b>YES</b>	<b>15:29</b>	<b>119</b>	<b>117</b>	-	-
bw11_218b	<i>Expert Scoring Group I</i>	No	None	168	161	None	High
	<i>Expert Scoring Group II</i>	No	None	168	161	None	High
	<b>Expert Scoring Adjudicated FINAL</b>	<b>NO</b>	<b>NONE</b>	<b>168</b>	<b>161</b>	<b>NONE</b>	<b>HIGH</b>
	<b>Mahalanobis Distance</b>	<b>NO</b>	<b>NONE</b>	<b>168</b>	<b>161</b>	-	-
bw13_207a	<i>Expert Scoring Group I</i>	No	None	n/a	n/a	None: Change in movement identified to begin before CEE	Moderate
	<i>Expert Scoring Group II</i>	No	None	n/a	n/a	None: Noted change before CEE and onset of foraging	Moderate
	<b>Expert Scoring Adjudicated FINAL</b>	<b>NO</b>	<b>NONE</b>	<b>n/a</b>	<b>n/a</b>	<b>NONE</b>	<b>MODERATE</b>
	<b>Mahalanobis Distance</b>	<b>YES</b>	<b>17:44</b>	<b>n/a</b>	<b>n/a</b>	-	-