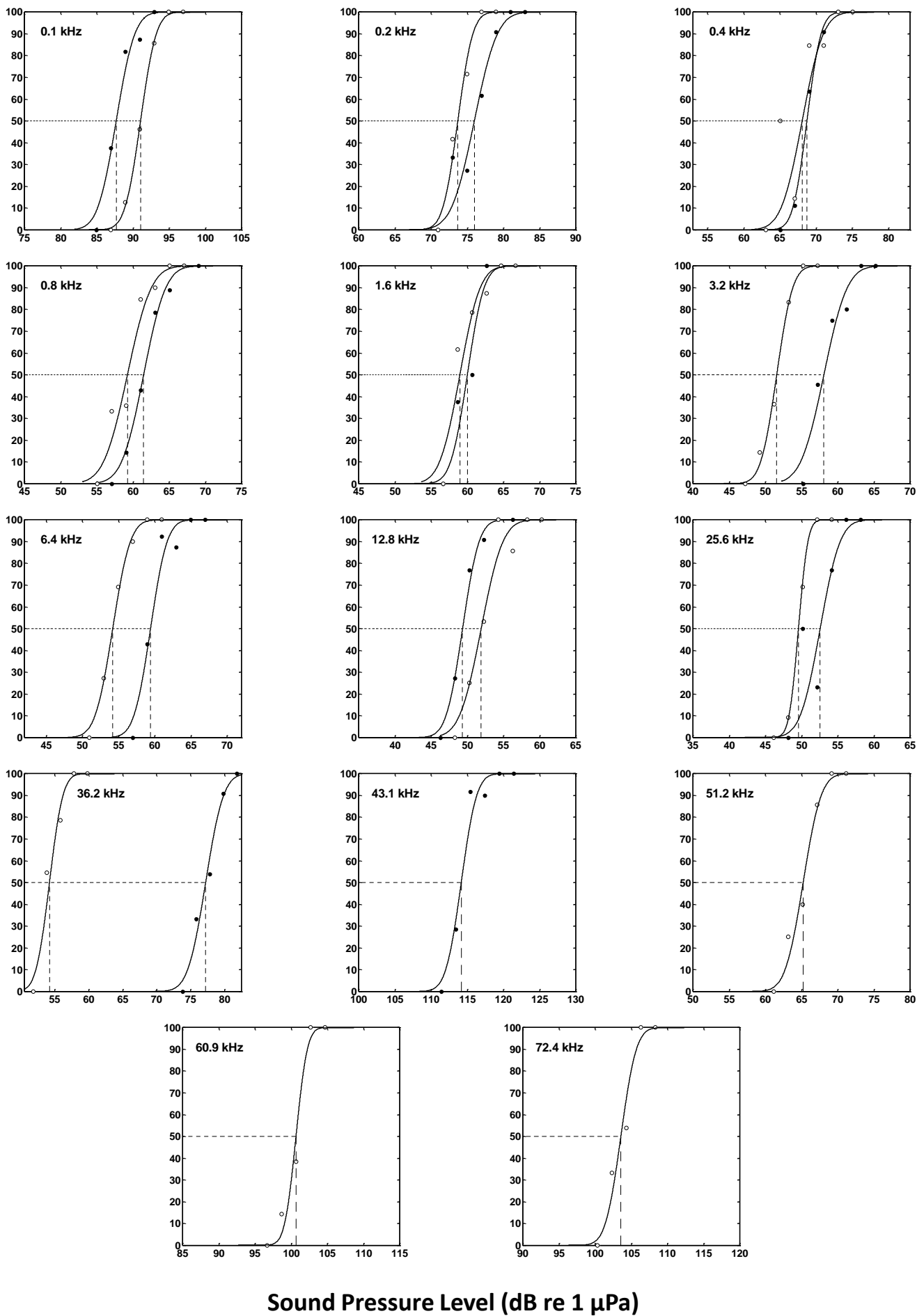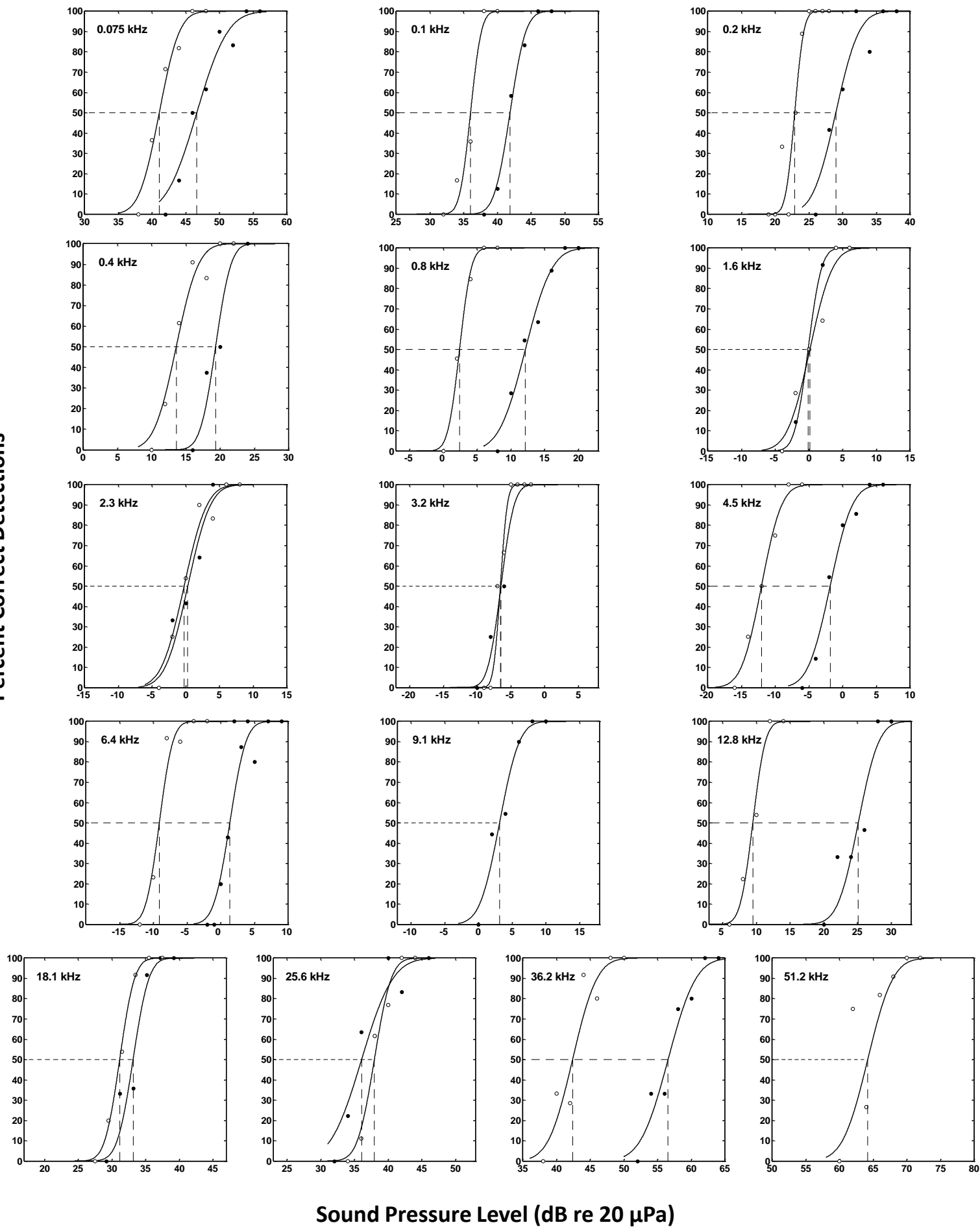**Percent Correct Detections**

Sound Pressure Level (dB re 1 µPa)

Fig. S1. Psychometric functions obtained at each frequency under water for two ringed seals: Natchek (filled circles) and Nayak (open circles). Percent correct detection on signal-present trials (y‑axis) is shown as a function of sound pressure level in dB re. 1 µPa (x-axis). Probit analysis was used to fit these psychometric functions to the proportion of correct detections at each stimulus level presented during MCS testing. Thresholds were measured using an inverse prediction (not shown), and are indicated on each plot by the dashed line at the level corresponding to 50% correct detection.

Percent Correct Detections

Sound Pressure Level (dB re 20 μPa)

Fig. S2. Psychometric functions obtained at each frequency in air for two ringed seals: Natchek (filled circles) and Nayak (open circles). Percent correct detection on signal-present trials (y-axis) is shown as a function of sound pressure level in dB re. 20 µPa (x-axis). Probit analysis was used to fit these psychometric functions to the proportion of correct detections at each stimulus level presented during MCS testing. Thresholds were measured using an inverse prediction (not shown), and are indicated on each plot by the dashed line at the level corresponding to 50% correct detection.