**Geographical and seasonal occurrence of Bryde’s whale Biotwangs in the central and western North Pacific**

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**Supplementary Figure 1:** Example of a Biotwang recorded on a HARP deployed at Pagan Island. The HARP was located in deep water (830m) which attenuates the high frequency components of the call. Labeled are the visible sections that correspond to the lower-frequency call components described in Nieukirk et al. (2016). A short tone centered around 60 Hz (Part A); a low-frequency moan centered around 35 Hz (Part B); and metallic-sounding upsweeps between 700-800 Hz (Part E).

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**Supplementary Figure 2:** Receiver Operator Curves for the 4 sites with significant biotwang presence. The AUC-ROC and the threshold for each site are displayed, targeting a <3% FPR. (A) Pagan, (B) Saipan, (C) Tinian, (D) Wake