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### DISCRIMINATING TWO SPECIES OF ODONTOCETES IN MIXED GROUP THROUGH WHISTLES

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Cetaceans have evolved in aquatic habitat and developed acoustical signals to communicate, navigate and find food. When in mixed groups, these animals might have developed mechanisms to favor the communication without competition for acoustic space by establishing an acoustic niche. Considering the communicative function of whistles, here we used such sounds to discriminate two species of odontocetes (*Tursiops truncatus* and *Grampus griseus*). The species were visually confirmed (30°43' S, 48°39' W) during recording with a three-element towed array hydrophone (sampling frequency of 96kHz/24bits) on the western South Atlantic Ocean, at the Brazilian shelf break. A total of 76 whistles were analyzed and the following acoustical parameters were extracted using Raven Pro 1.5: minimum frequency, maximum frequency, center frequency, delta frequency (maximum – minimum frequencies), beginning frequency, ending frequency and whistle duration. Then, a discriminant function analysis was performed with the software JMP 13 resulting in 12.5% of misclassification (Wilks'  $\lambda=0.4$ ;  $F=15.65$ ;  $p<0.0001$ ). The discrimination result suggests that there is a species-specific configuration in the whistles. These findings contribute on the knowledge of the dynamics of species vocalizations in the acoustic space.

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