

Supplementary Material 2

1 VOCAL ACTIVITY OF SUBGROUPS

This supplementary material shows an example of vocal activity of false killer whale subgroups (Figure S2.1). The cross-correlogram shows changes in Time-Difference-Of-Arrival (TDOA) of a given signal emitted from one or multiple sources through time. TDOAs for each subgroup are connected into a track, and two tracks are shown in Figure S2.1. Each track contains vocal and silent periods. Track 1 contains two vocal periods and one silent period- a period where silence between two consecutive TDOAs is longer than 21 s.

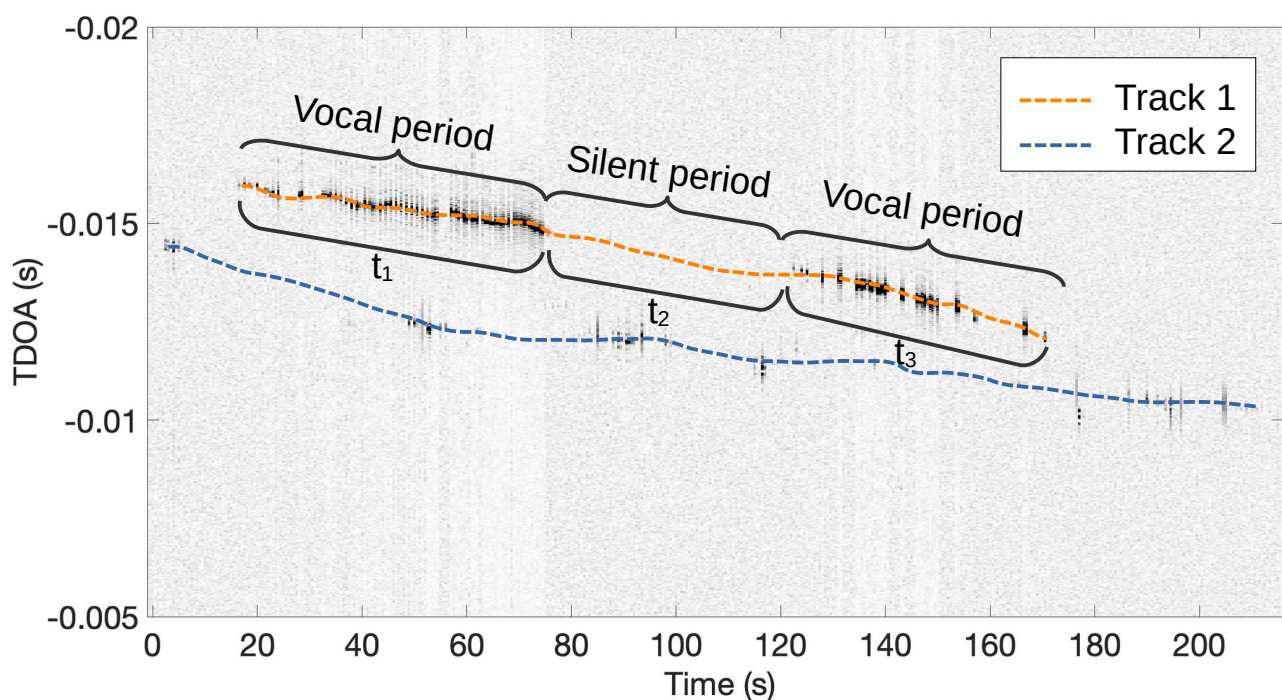


Figure S2.1. Cross-correlogram showing two tracks (subgroups) of false killer whales. Corresponding vocal and silent periods are labeled for Track 1, as well as their durations (t_1 , t_2 , t_3).

Moreover, vocal and silent states are defined. Vocal state is a sum of all vocal periods in a given track divided by the track duration, and silent state is a sum of all silent periods in a given track divided by the track duration. For Track 1 in Figure S2.1 the vocal and silent states are:

$$\text{vocal state} = \frac{t_1 + t_3}{t_1 + t_2 + t_3}$$

$$\text{silent state} = \frac{t_2}{t_1 + t_2 + t_3}$$