

Table S1. Background information for each environmental variable used in the analyses, including data source, spatial and temporal resolution, link to the data source, and the hypothesized relationship to dolphin foraging activity.

Variable	Dataset	Data Provider	Spatial Resolution	Temporal Resolution	Link	Hypothesized Relationship to Foraging Buzzes
Slope (°)	Living Atlas	ESRI	1km	-	https://livingatlas.arcgis.com	positive (Hastie et al. 2004)
Depth (m)	Living Atlas	ESRI	1km	-	https://livingatlas.arcgis.com	positive (Hastie et al. 2004)
Distance to Shore (km)	Living Atlas	ESRI	1km	-	https://livingatlas.arcgis.com	positive (Moreno & Matthews 2018)
SST (°C)	OSTIA	UK Met Office	0.05°	1 day	https://podaac.jpl.nasa.gov/dataset/UKMO-L4HRfnd-GLOB-OSTIA	positive (Hayes et al. 2018)
Chlorophyll-a concentration (mg m ⁻³)	VIIRS	NOAA	4km	1 week	https://coastwatch.noaa.gov/cw/satellite-data-products/ocean-color/science-quality/viirs-snpp.html	negative (Torres et al. 2008)
Lunar Phase (% illumination)	Moon Phase and Libration	NASA	-	1 hour	https://svs.gsfc.nasa.gov	negative (Simonis et al. 2017)
Water Level (ft)	Tides and Currents	NOAA	-	1 hour	https://tidesandcurrents.noaa.gov	positive (Gregory & Rowden 2001)

Table S2. Correlation matrix for the continuous independent variables used in the seasonal data set.

	SST (°C)	Week	Slope (°)	Log-transformed Chlorophyll-a Concentration (mg m ⁻³)	Distance to Shore (km)	Depth (m)	Lunar Phase (% illumination)
SST (°C)	1	-	-	-	-	-	-
Week	0.46	1	-	-	-	-	-
Slope (°)	0.04	0.06	1	-	-	-	-
Log-transformed Chlorophyll-a Concentration (mg m ⁻³)	0.02	0.23	0.14	1	-	-	-
Distance to Shore (km)	-0.09	0.08	-0.27	-0.01	1	-	-
Depth (m)	-0.08	0.05	0.08	0.00	-0.05	1	-
Lunar Phase (% illumination)	-0.04	0.04	0.01	0.03	-0.02	0.03	1

Table S3. Correlation matrix for the continuous independent variables used in the diel data set.

	Water Level (ft)	Hour of the Day
Water Level (ft)	1	-
Hour of the Day	0.16	1

Table S4. The top five models for analyzing seasonal trends in foraging activity and their Akaike information criterion (AIC) scores. The most parsimonious model is highlighted in bold.

Number	Seasonal Models	AIC	ΔAIC
1	chlorophyll-a + sea surface temperature + slope + week	651.1	0.0
2	chlorophyll-a + sea surface temperature + location + week	652.5	1.4
3	chlorophyll-a + sea surface temperature + week + season + slope + lunar phase	654.0	2.9
4	chlorophyll-a + sea surface temperature + location + week + season	654.3	3.2
5	chlorophyll-a + sea surface temperature + location + week + slope	656.4	5.3

Table S5. The top two models for analyzing diel trends in foraging activity and their Akaike information criterion (AIC) scores. The most parsimonious model is highlighted in bold.

Number	Diel Models	AIC	ΔAIC
1	location + hour + water level + year + month	4535.6	0.0
2	location + hour + water level + month	4542.7	7.1

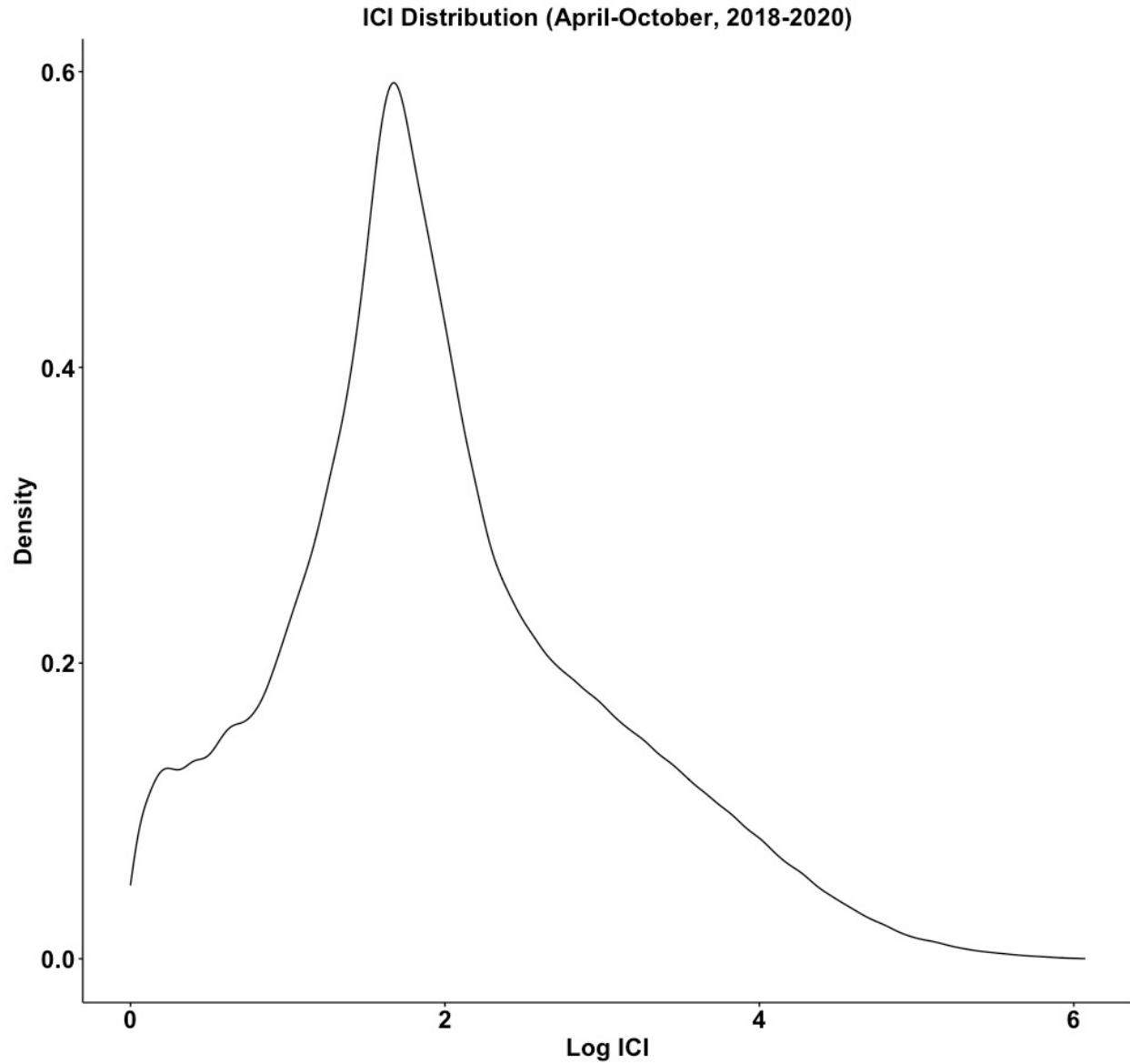


Figure S1. Frequency distribution of the log-transformed inter-click intervals (ICIs) across all recorders and deployments from April – October, 2018 – 2020.

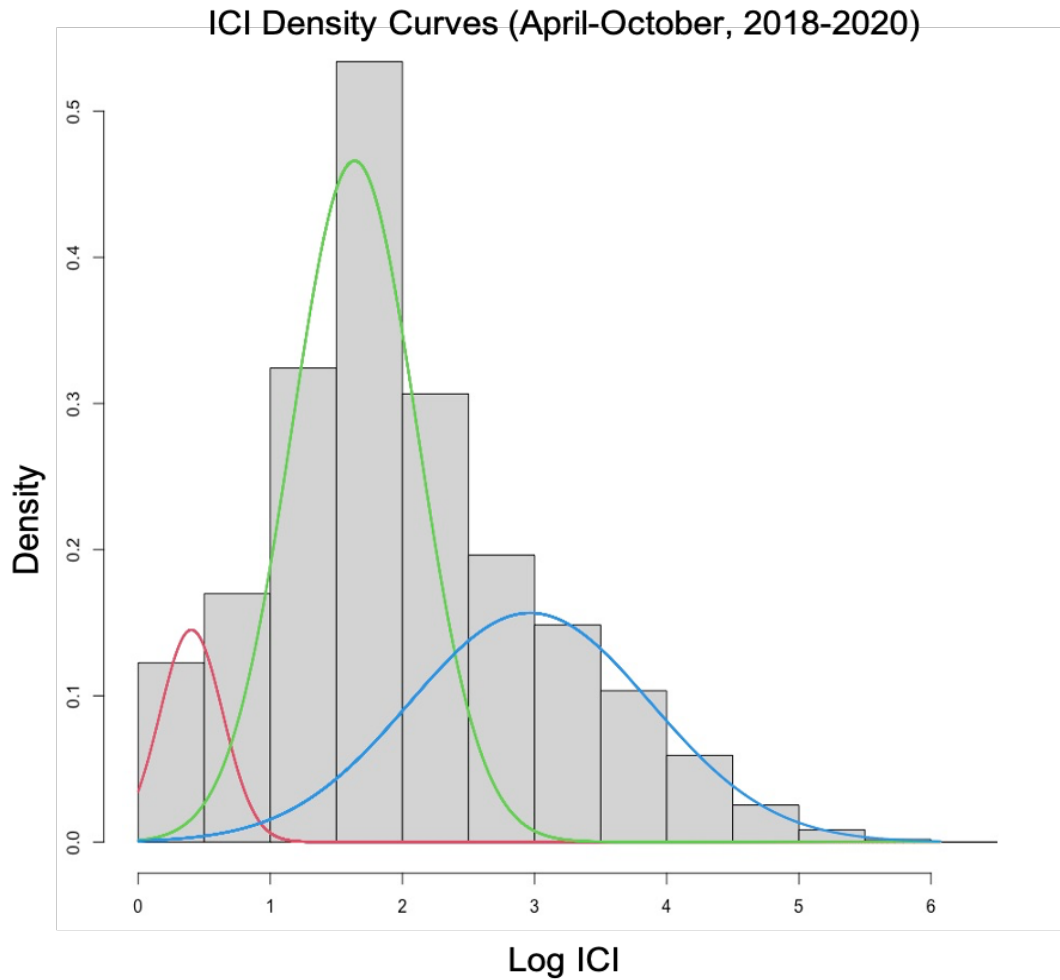


Figure S2. Frequency distribution overlaid by the output of the Gaussian mixture model. The mean values for the inter-click intervals (ICI) occur at 3 ms, 43 ms, and 926 ms, which correspond with foraging buzz ICIs (for clicks in foraging buzzes produced during attempted prey captures), regular ICIs (for clicks produced for navigation and searching for prey), and inter-train ICIs (for time between click trains), respectively.