Public Data Collection of the "Bangarang Project", the dissertation project of Eric Keen at Scripps Institution of Oceanography. These data are used in multiple chapters of that dissertation as well as their corresponding peer-reviewed publications. More information about this research can be found at its website: rvbangarang.org

Metadata were prepared by Eric Keen, ekeen@ucsd.edu

This data repository has two main folders:

- `data`: The raw, basic data used in analyses, along with R files used to format and prepare those data for analysis.
- `results`: The R files used to analyze the data, and the .csv's and .pdf's that store the results used to compile figures and tables for the dissertation chapters.

Most important files and folders:

data > `ff-master.csv` (Essential information about each whale focal follow)
data > `ff-dvm.csv` (Dive-respiration data for each whale focal follow)
data > `ff-vars.csv` (Prey- and oceanographic data for each whale focal follow)

data > `sits` > `siw14.csv` and `siw15.csv` (Whale sightings from transect surveys)

data > `echo` > `bsms-trn.csv` (Prey data for 1-km bins of systematic transect surveys)
data > `echo` > `env-trn.csv` (Oceanographic data for 1-km bins of systematic transect surveys)

data > `webs` (The folder, with subfolders, detailing the process of building "whale webs")

results > `agg` (Datasets formatted for modeling aggregative threshold foraging, and resulting spline functions and R files)

results > `bhv` (Datasets formatted for modeling feeding thresholds, and resulting spline functions and R files)

results > `condcurve` (Results of all "position curve" analyses. See publications)

results > `dvm` (Dive-respiration analyses)

results > `env` (Datasets formatted for modeling whale distribution and feeding with habitat variables)

results > `thresh` (Summary figures of threshold foraging behavior)

Note:
The source file paths within R scripts will have to be updated for other users' computer folder structures.

Note:
Details on R software versions and package dependencies:

- R routines were run in R 3.1.2
- Package: PBSMapping v 2.67.60, downloaded from public CRAN repository

- Package: "bangarang" (downloadable from github: https://github.com/ericmkeen/bangarang)
- Package: swfscMisc, v. 1.0.3
- Package: MASS v.7.3-35
- Package mgcv, v1.8-3

Note:

This collection should be "self-contained", i.e., it does not call or require any files that are not included here. In the event that a file appears to be missing, users are invited to contact the corresponding author. However, users should rest assured that the data needed to reproduce the *final* results of our paper are all provided here.

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