

# DS 2024: Nudi Reactors Repository

Raw data, data analysis and manipulation

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## nudi-reactors: Directed Study Group Repository

Welcome to the **nudi-reactors** repository:

### Purpose

This repository will be used for storing and sharing data for our fall 2024 directed studies project at BMSC. our project looks into the effects of temperature on the chemosensory abilities of the nudibranch *Hermisenda crassicornis*. Throughout our study we use many different statistical analyses on R Studio, all of which will be found in this repository along with our graphs and tables. Information on our methods and results can be found in our paper *Temperature-induced shifts in chemosensory responses of Hermisenda crassicornis to predator and conspecific cues*

main analyses that were performed were: a gamma model comparing nudibranch speed to temperature and body size a binomial model that compares nudibranch movement based on the chemical cue to temperature treatment and again body size.

### Folders

*tables* - in this folder you will find the printed pngs of each table found in our paper as well as the data that was used to create them.

*raw\_data* - in this folder you will find the raw data we collected and uploaded into R.

*plots\_circle* - here you will find all the printed images of our angular direction graphs, these are not used in our paper but further description of them is found in `fionas_scripts > Fiona's_graphs`.

*luca\_scripts* - here you will find all the code and plots for the velocity model.

*Fiona\_scripts* - here you will find the code used for making the tables, the angular direction graphs, and the code used to make the “combinedraw” data we use in our models.

*clean\_data* - here you will find all the data we cleaned in R Studio

*bri\_code* - here you will find all the code used to make and graph the binomial model in our paper, as well as some code that shows more of the process we had to get to our angular direction graphs.