This file is the documentation for the following paper

Title: Local-manifold-distance-based regression: An estimation method for quantifying dynamic biological interactions with empirical time series

* ‘data’ directory includes dataset for the analysis and the result.
* ‘fig’ directory includes figure files appeared in the main text.
* ‘output’ directory includes simulation results appeared in the main text.
* ‘R’ directory includes R source codes for the analysis and visualization.
* ‘andsr’ directory is an R package for this paper, which includes R and cpp source codes.

Installation of andsr

R codes of this manuscript depends on the specific R package ‘andsr’. andsr contains cpp and header files, thus it must be compiled for your environment before usage.

Installation procedure:

If you use macOS or linux environments, start a terminal app and execute the following command

cd “path of your current workspace, which includes ‘andsr’”

R CMD INSTALL andsr

Or if you use Windows PC, run the following command in R console

setwd(“path of your current workspace, which includes ‘andsr”)

devtools∷check()

install.packages(“andsr”, repos = NULL, type = “source”)

Description of andsr

andsr contains simple R help documentation for each function. Please refer to them and R souce code in ‘R’ directory for usage of each function. For example

?andsr∷find\_best\_dim

help(andsr∷find\_best\_dim)