This repository contains two spreadsheets for an example analysis. It also contains three directories. The first of these directories contains all necessary header files. The second contains a preliminary analysis of a time-series dataset (e.g., data-visualization). The third directory contains basic multitaper power-spectral and harmonic analyses. All code is readily functioning, and the user is required only to run the example code to ensure it works, and then to modify analysis parameters. All details are included in "Marshall\_Francois\_Algorithms\_2022.pdf"