

This folder contains R scripts and source data files for the ice volume and deep-sea temperature deconvolutions (Rohling et al., *Science Advances*, 2021) based on the Lisiecki and Raymo benthic isotope stack and Westerhold et al. benthic isotope mega-splice.

The routines were originally written (as used in the paper) in MathCad, and I have rewritten them while learning R during Australia's Covid lockdown in the third quarter of 2021. The scripts, there, are not as streamlined as an experienced coder might write them, but they work and closely approximate the results from my original (MathCad) scripts. Any hints and tips for better coding are appreciated (eelco.rohling@anu.edu.au).

The easiest way to access the reconstructions is to put all files in a single directory, and then set the working directory in the scripts to that directory on your computer (as is, they refer to my working directory).

You may also need to quickly install the various packages that I call in the "library calls" at the top of the scripts (these are identical in both scripts). Not all those packages may be needed, but some are used. I simply call all packages that I commonly use - it makes my coding life easy.

Once these things are set, you should need to do nothing else, just run the scripts. They should kick out a series of relevant plots within minutes.

Please let me know of any issues.

Cheers

Eelco Rohling