

A unified model of species immigration, extinction and abundance on islands

Appendix S1: Software package in C++

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This appendix includes the following files licensed under an MIT license. Full license information is available in the files themselves. Please refer to the paper when using the software and e-mail any enquiries to james@rosindell.org

Dynamics_BI_1.cpp

Edit, compile and run this code for simulations with basic immigration.

Dynamics_CI_1.cpp

Edit, compile and run this code for simulations with clustered immigration.

Dynamics_PI_1.cpp

Edit, compile and run this code for simulations with protracted immigration.

metacommunity_DLS3.txt

metacommunity_LS4.txt

These files give the metacommunity species abundances. You can change these for your own files or add your own files (editing the code appropriately). The code will not run unless these files or replacements are available in the same folder as the executable file.

RandomWrap.cpp

This is needed to compile the code – it includes a basic random number generator. It is recommended you read the comments and follow the instructions to upgrade the random number generator to a better one. Unfortunately the generator we use was not written by us so we cannot provide a copy under an MIT open source license.