Supporting Information Appendix S3

Table S3: An overview of all the default spatial inputs layers required by MadingleyR. These can be loaded into r as a list containing all raster layers and raster bricks using the madingley_inputs('spatial inputs') function after loaded the MadingleyR package (using library("MadingleyR")). Each layer can be modified to fit the needs of a specific case study. However, the names of the raster layers or raster bricks should be kept identical to the default spatial inputs. Additionally, the resolution and extent should be consistent across the spatial input layers.

Name	***Class***	***Dimension***	***Notes***
realm_classification	RasterLayer	180x360	0=not modelled, 1=marine, 2=terrestrial
land_mask	RasterLayer	180x360	0=marine, 1=land
available_water_capacity	RasterLayer	180x360	Available water capacity in mm
Ecto_max	RasterLayer	180x360	Spatial maximum ectotherm body mass in g
Endo_C_max	RasterLayer	180x360	Spatial maximum endotherm carnivore body mass in g
Endo_H_max	RasterLayer	180x360	Spatial maximum endotherm herbivore body mass in g
Endo_O_max	RasterLayer	180x360	Spatial maximum endotherm omnivore body mass in g
terrestrial_net_primary_productivity	RasterBrick	180x360x12	Monthly average terrestrial net primary productivity in gC/m^2/day
near-surface_temperature	RasterBrick	180x360x12	Monthly average near-surface temperature in degree Celsius
precipitation	RasterBrick	180x360x12	Monthly average precipitation in mm/month
ground_frost_frequency	RasterBrick	180x360x12	Monthly average ground frost frequency in days per month
diurnal_temperature_range	RasterBrick	180x360x12	Monthly average diurnal temperature range in degree Celsius