

Creating a global land mask raster

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Libraries

```
library(tidyverse)
library(terra)
library(sf)
library(rnaturalearth)
library(here)
```

First get the shapefile for the land from Natural Earth

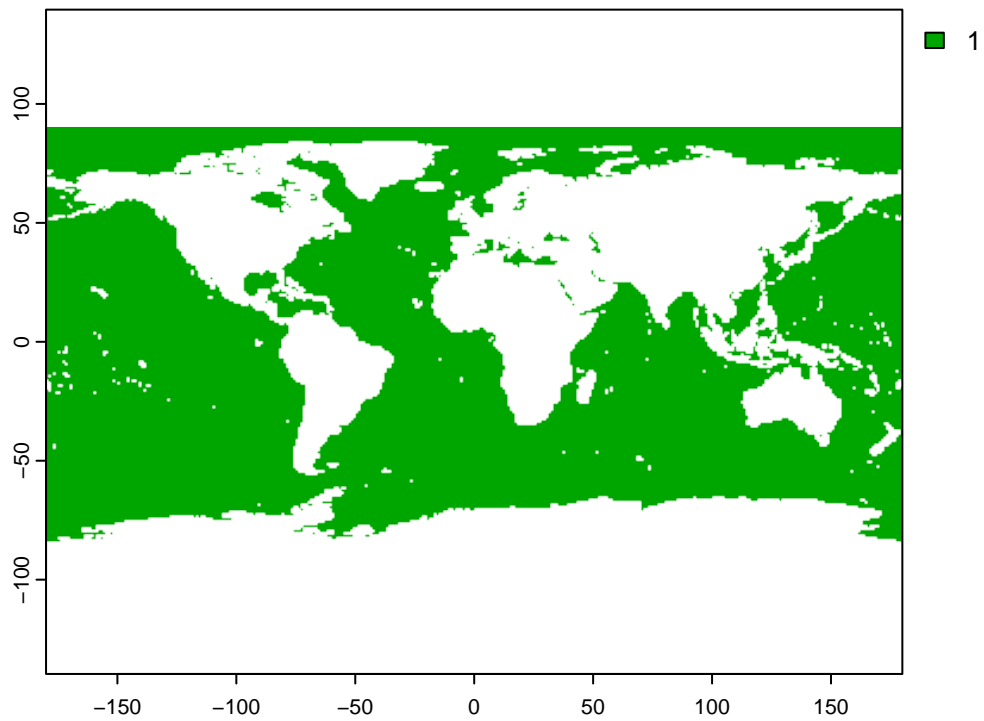
```
land_sf <- ne_countries(scale = "medium", returnclass = "sf")
```

Now get a blank raster in the projection and resolution you want (using the default wgs84 here but in 1 degree). The output raster can then be multiplied with your raster of interest to return all non-land cells. If you want to keep only land cells, replace `inverse = TRUE` with `inverse = FALSE` in the mask call.

```
base_r <- rast(res = 1)
values(base_r) <- 1

#this creates a raster with na values for the land (1 elsewhere)
land_mask <- mask(base_r, vect(land_sf), inverse=TRUE)

#retains 1 for land
plot(land_mask)
```



```
writeRaster(x = land_mask, filename = here("data/landmask.tif"), overwrite = TRUE)
```