README for animal_COC.tif

The file contains 3 layers of information, describing the carbon in potential vegetation that is suppressed by agricultural land producing animal feed and pastures, also known as the "carbon opportunity cost (COC)".

Raster values for each 5-arcminute raster grid cell pertain to the COC in units of metric tons of carbon per hectare (tonnes C ha^{-1}) taken over the entire grid cell.

The three layers—median, low, and high—pertain to COC values in scenarios used to calculate median, low, and high estimates of the global total COC respectively.

Layers

1. The median estimate distributes, then removes, human-edible animal feed over croplands presently used to provide such feed, and uses the median of all 6 potential vegetation maps and 7 present-day grassland vegetation maps to calculate the COC in each grid cell.

2. The low estimate distributes, then removes, human-edible animal feed over croplands consisting of the lowest carbon in potential vegetation, and uses the 5th percentile of the combination of 6 potential vegetation maps and 7 present-day grassland vegetation maps to calculate the COC in each grid cell.

3. The high estimate distributes, then removes, human-edible animal feed over croplands consisting of the highest carbon in potential vegetation, and uses the 5th percentile of the combination of 6 potential vegetation maps and 7 present-day grassland vegetation maps to calculate the COC in each grid cell.

This multi-band raster file can be loaded into R using the stack() function using the package "rgdal".