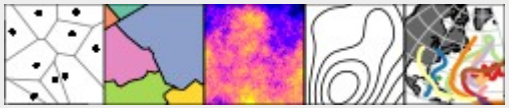


r-spatial.org

R consortium

GfK

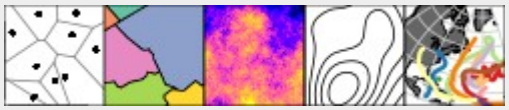
mapview

https://github.com/r-spatial/mapview

interactive viewing of spatial objects

Tim Appelhans, Florian Detsch, Chris Reudenbach, Stefan Wöllauer

tim-salabim @TimSalabim3 tim.appelhans@gmail.com

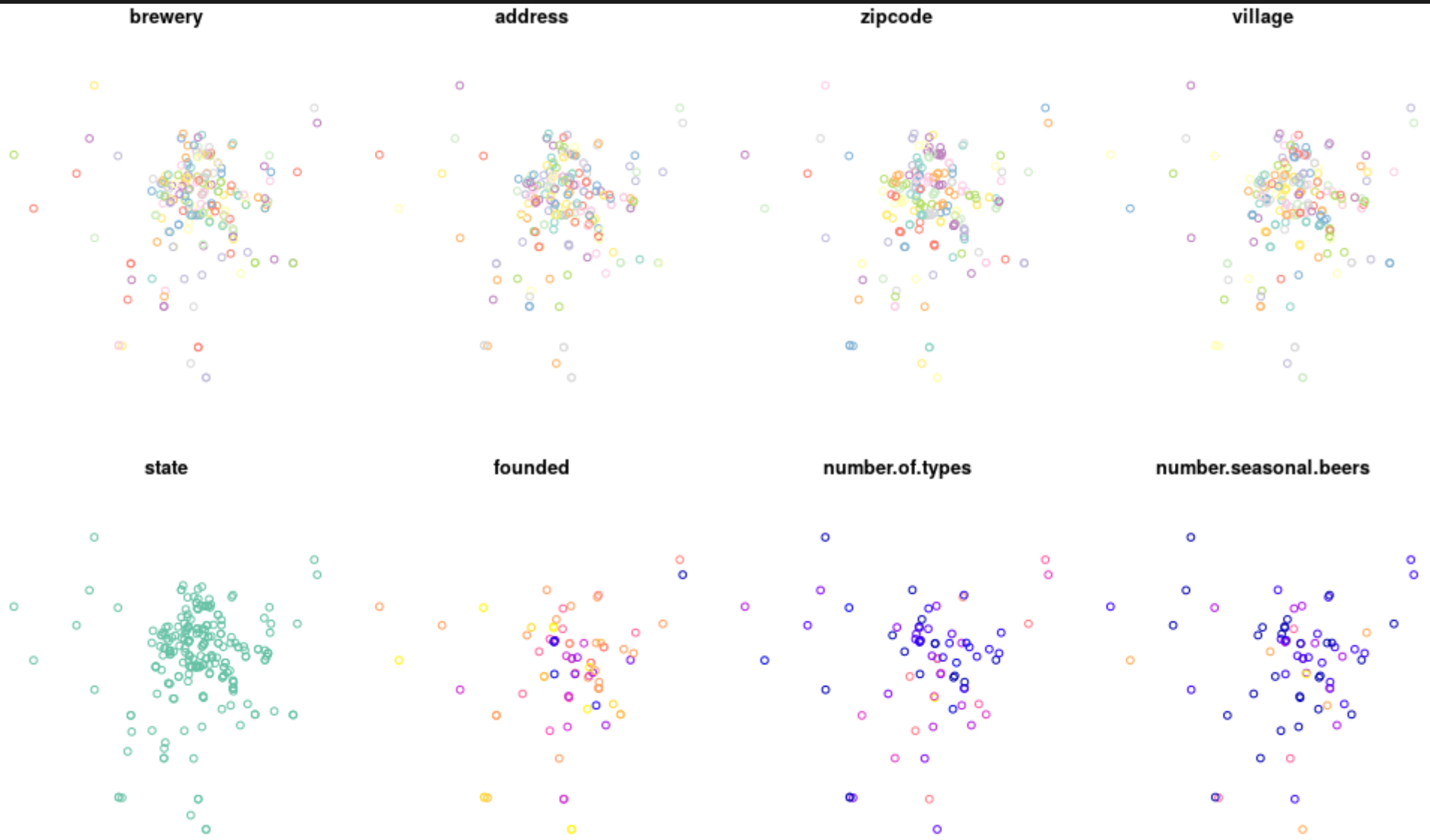


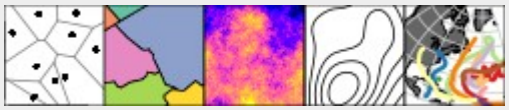
r-spatial.org

R consortium

GfK

plot(breweries)



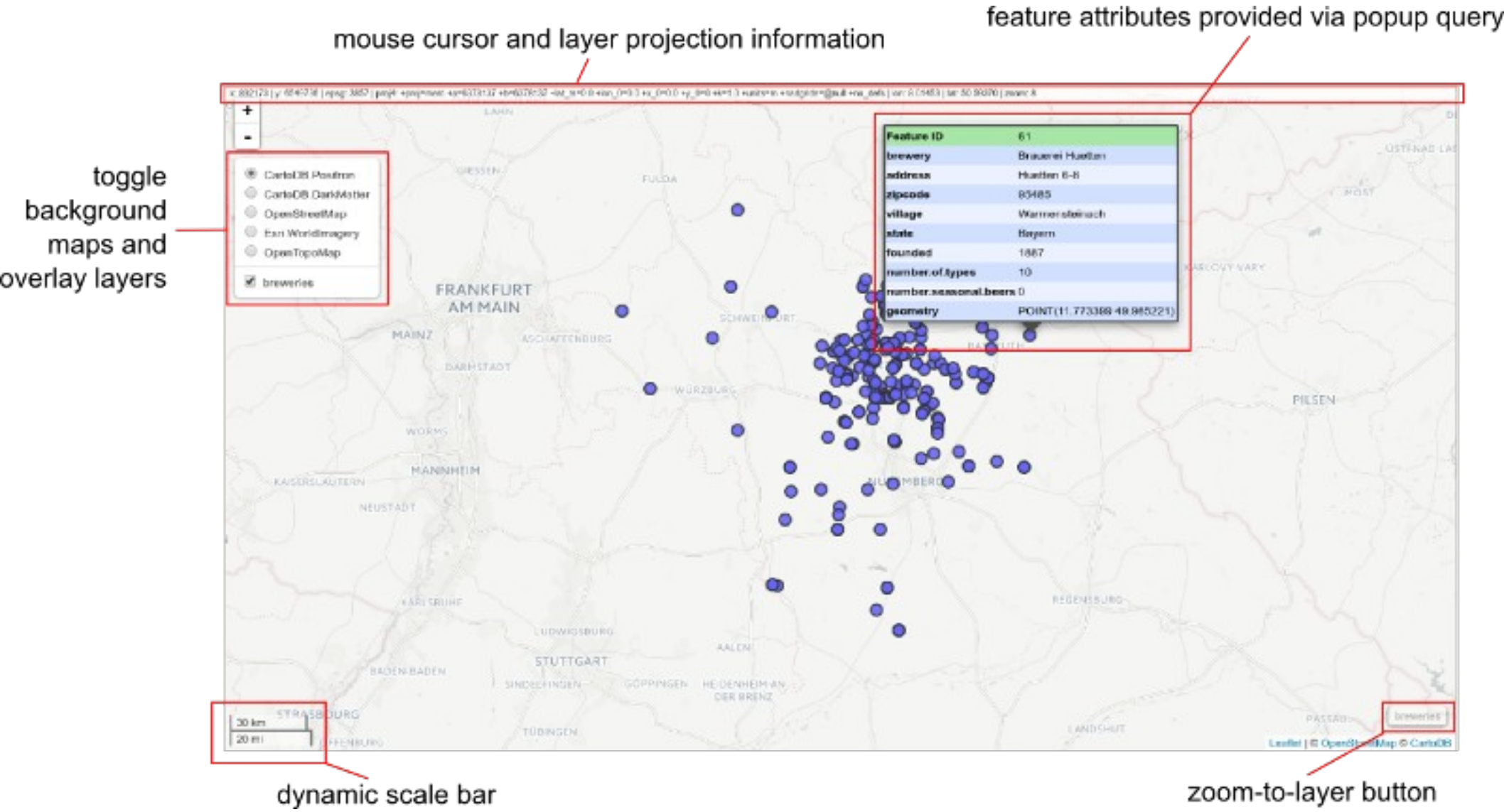


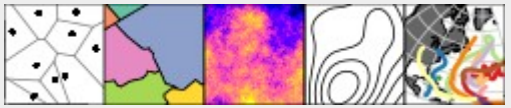
r-spatial.org

R consortium

GfK

mapview(breweries)





r-spatial.org

R consortium

GfK

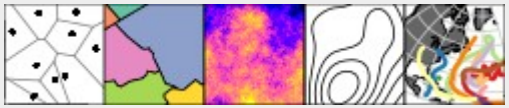
```
mapView(x, map = NULL,
  maxpixels = mapviewGetOption("mapview.maxpixels"),
  col.regions = mapviewGetOption("raster.palette")(256), at = NULL,
  na.color = mapviewGetOption("na.color"), use.layer.names = FALSE,
  values = NULL, map.types = mapviewGetOption("basemaps"),
  alpha.regions = 0.8, legend = mapviewGetOption("legend"),
  legend.opacity = 1, trim = TRUE,
  verbose = mapviewGetOption("verbose"), layer.name = NULL,
  homebutton = TRUE, native.crs = FALSE, method = c("bilinear",
  "ngb"), label = TRUE, query.type = c("mousemove", "click"),
  query.digits, query.position = "topright", query.prefix = "Layer",
  ...)


mapView(x, map = NULL, pane = "auto",
  canvas = useCanvas(x), zcol = NULL, burst = FALSE,
  color = mapviewGetOption("vector.palette"),
  col.regions = mapviewGetOption("vector.palette"), at = NULL,
  na.color = mapviewGetOption("na.color"), cex = 6,
  lwd = lineWidth(x), alpha = 0.9, alpha.regions = regionOpacity(x),
  na.alpha = regionOpacity(x), map.types = NULL,
  verbose = mapviewGetOption("verbose"), popup = popupTable(x),
  layer.name = NULL, label = makeLabels(x, zcol),
  legend = mapviewGetOption("legend"), legend.opacity = 1,
  homebutton = TRUE, native.crs = FALSE,
  highlight = mapviewHighlightOptions(x, alpha.regions, alpha, lwd),
  maxpoints = getMaxFeatures(x), ...)
```

Most important:

- **x:** the object to visualise
- **zcol:** attribute color mapping
- **col.regions:** fill color (points, polygons)
- **color:** stroke/line color
- **burst:** all attribute columns at once

Mapview will (at least try to) **automatically re-project** your data to fit on the map (web-mercator)



r-spatial.org

R consortium

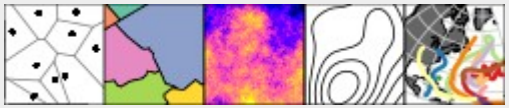
GfK

mapedit

interactive manipulation of spatial objects

Kenton Russell & Tim Appelhans

Many thanks to the R consortium for funding this initiative!



r-spatial.org

R consortium

GfK

Motivation

Which tool is best suited for the task at hand?

GIS system

https://upload.wikimedia.org/wikipedia/commons/thumb/3/33/Green_pickup_truck.png/640px-Green_pickup_truck.png

https://upload.wikimedia.org/wikipedia/commons/thumb/1/12/6-Pack-Chicken-Eggs.jpg/640px-6-Pack-Chicken-Eggs.jpg

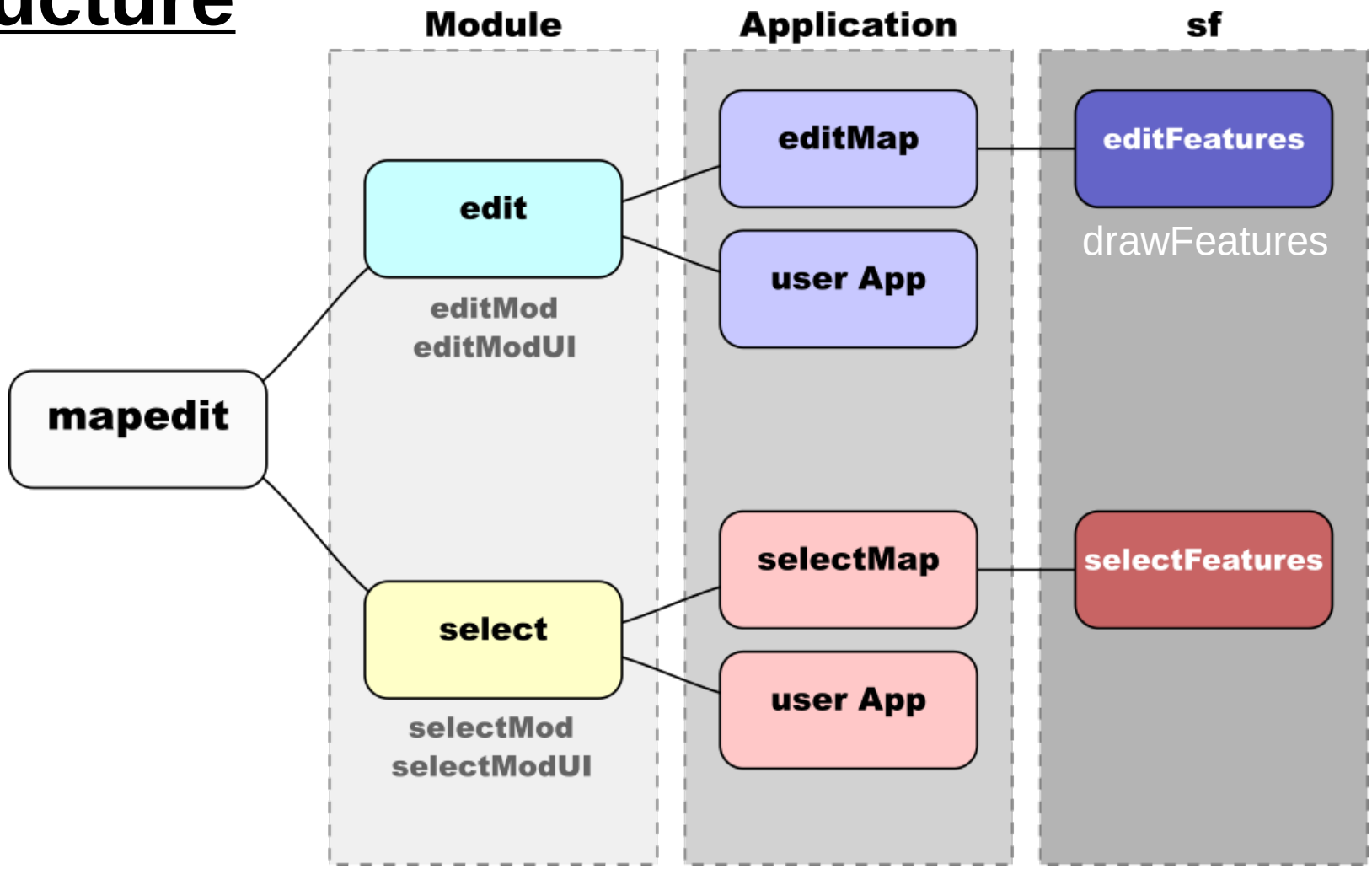
“Buy some eggs in the supermarket around the corner.”

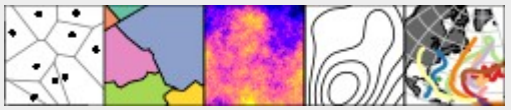
“Move a point from location A to location B.”

mapedit

http://www.publicdomainpictures.net/view-image.php?image=39736&picture=

Structure


Module
Application
sf
mapedit
edit
editMod
editModUI
select
selectMod
selectModUI
editMap
user App
selectMap
user App
editFeatures
drawFeatures
selectFeatures



r-spatial.org

R consortium

GfK

To do:

- edit attributes
- … you tell us (github issues)

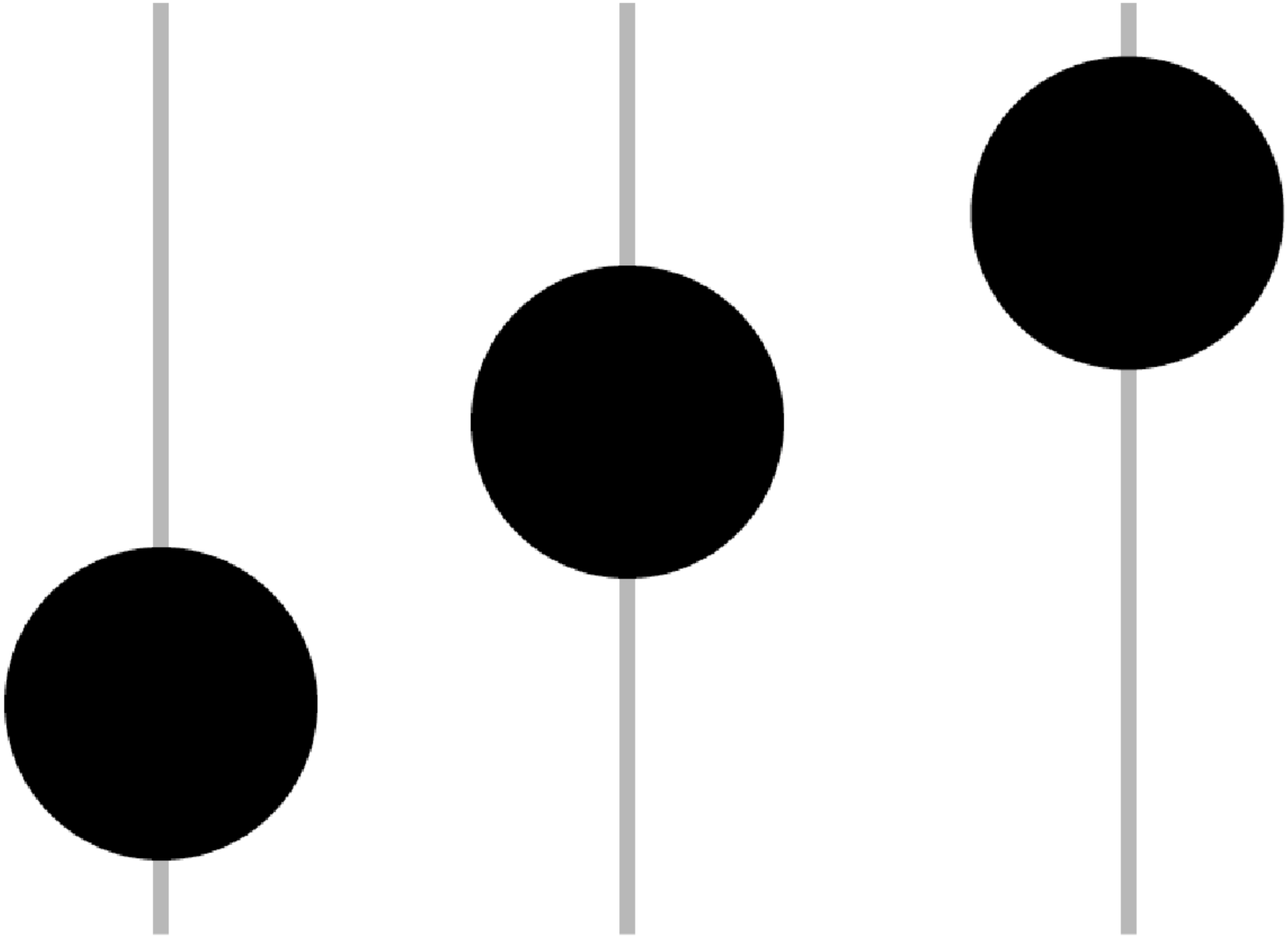
Github

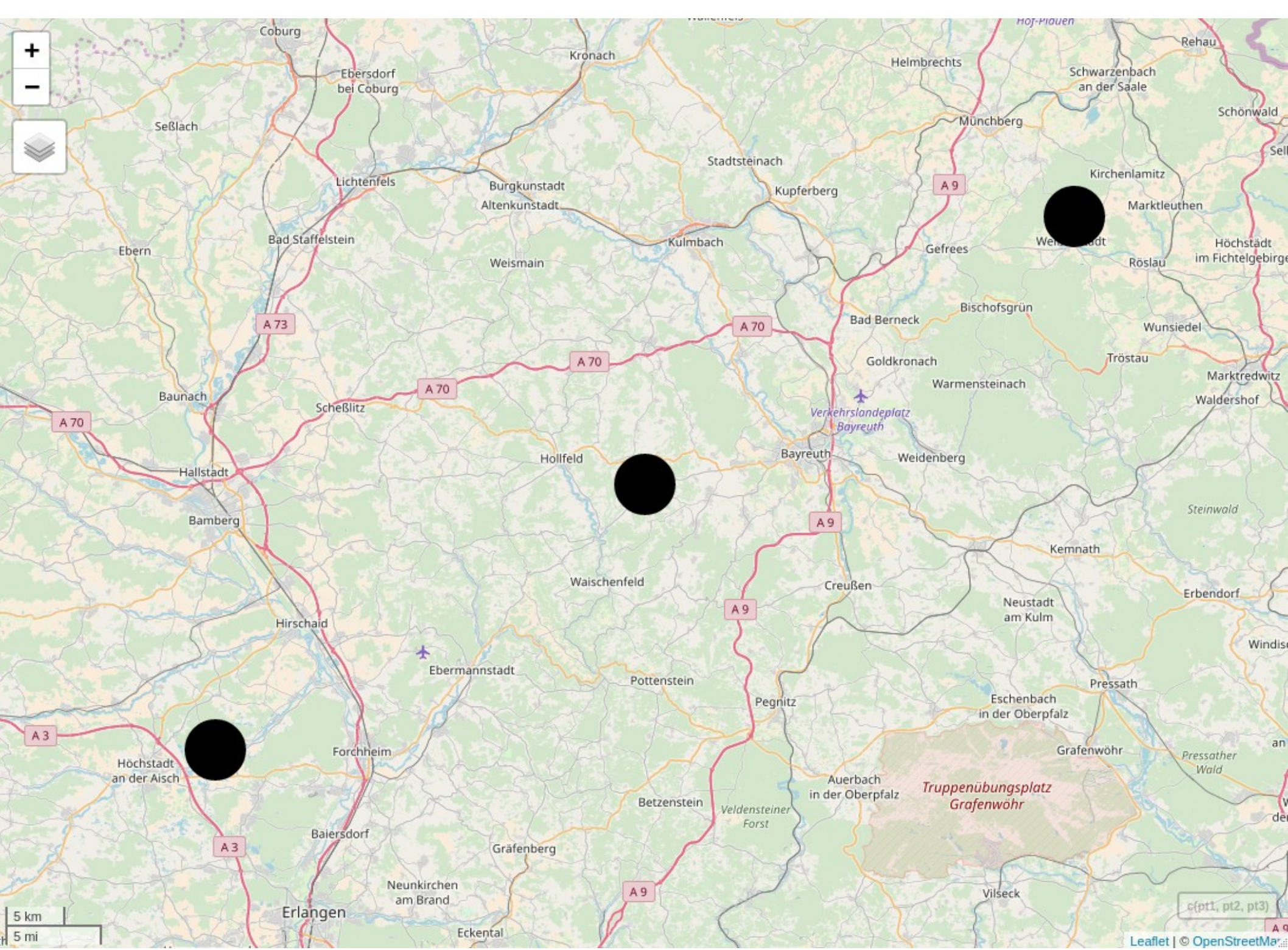
https://github.com/r-spatial/mapedit

Blog-posts

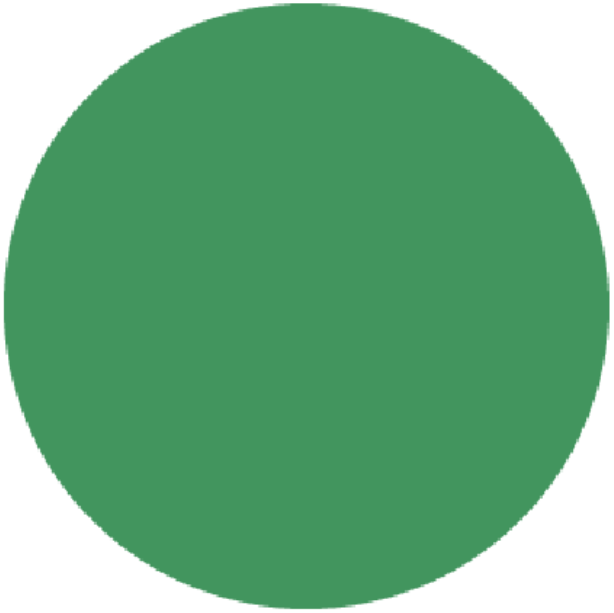
http://r-spatial.org/r/2017/01/30/mapedit_intro.html
http://r-spatial.org/r/2017/06/09/mapedit_0-2-0.html
http://r-spatial.org/r/2018/07/15/mapedit_newleaflet.html

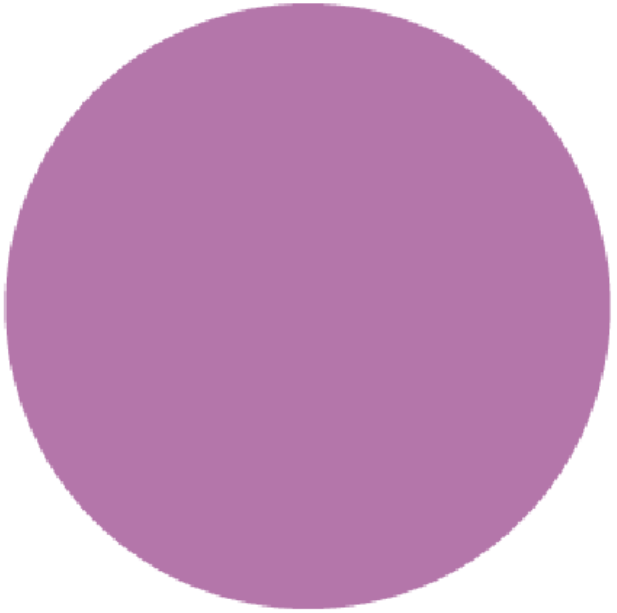
Which represents the larger value?



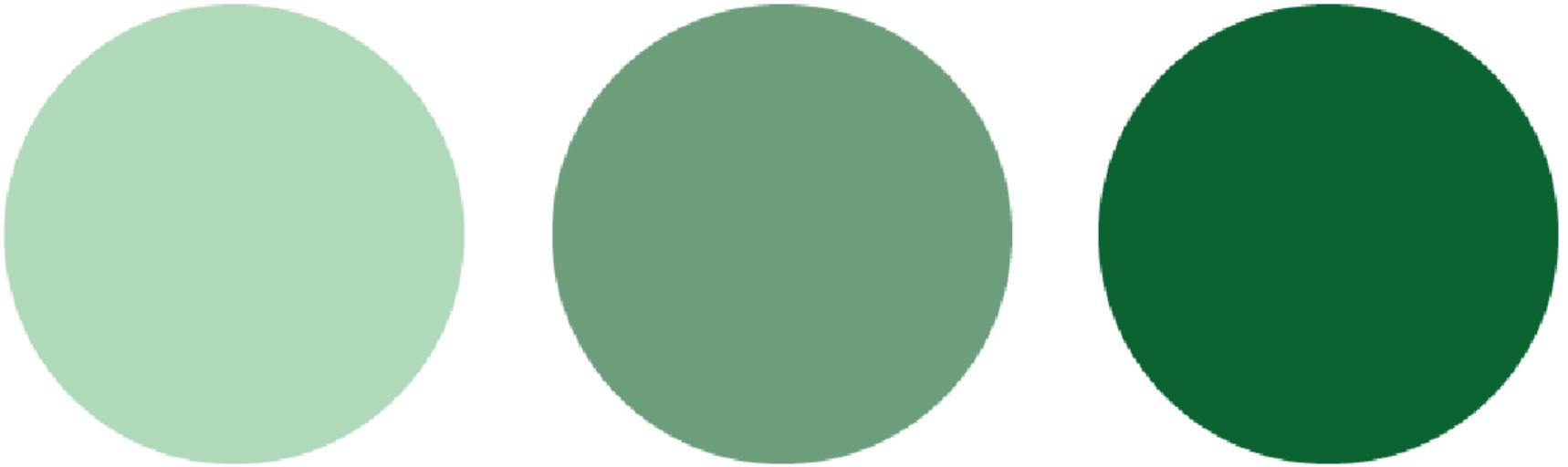

Coburg
Kronach
Ebersdorf bei Coburg
Helmbrechts
Schwarzenbach an der Saale
Rehau
Seßlach
Münchberg
Schönwald
Stadtsteinach
Lichtenfels
Burgkunstadt
Altenkunstadt
Kupferberg
A 9
Kirchenlamitz
Marktleuthen
Bad Staffelstein
Ebern
Kulmbach
Gefrees
Weismain
Röslau
Höchstädt im Fichtelgebirge
A 73
Bischofsgrün
Bad Berneck
A 70
Wunsiedel
Goldkronach
Tröstau
Baunach
Scheßlitz
Warmensteinach
Marktredwitz
Waldershof
Verkehrslandeplatz Bayreuth
Hallstadt
Hollfeld
Bayreuth
Weidenberg
Bamberg
Steinwald
Kemnath
Waischenfeld
Creußen
Erbendorf
Neustadt am Kulm
Hirschaid
Ebermannstadt
Pottenstein
Pressath
Pegnitz
Eschenbach in der Oberpfalz
A 3
Forchheim
Grafenwöhr
Höchstadt an der Aisch
Pressather Wald
Auerbach in der Oberpfalz
Truppenübungsplatz Grafenwöhr
Betzenstein
Veldensteiner Forst
Baiersdorf
Gräfenberg
Neunkirchen am Brand
Vilseck
Erlangen
Eckental
5 km
5 mi
Leaflet | © OpenStreetMap

Which represents the larger value?

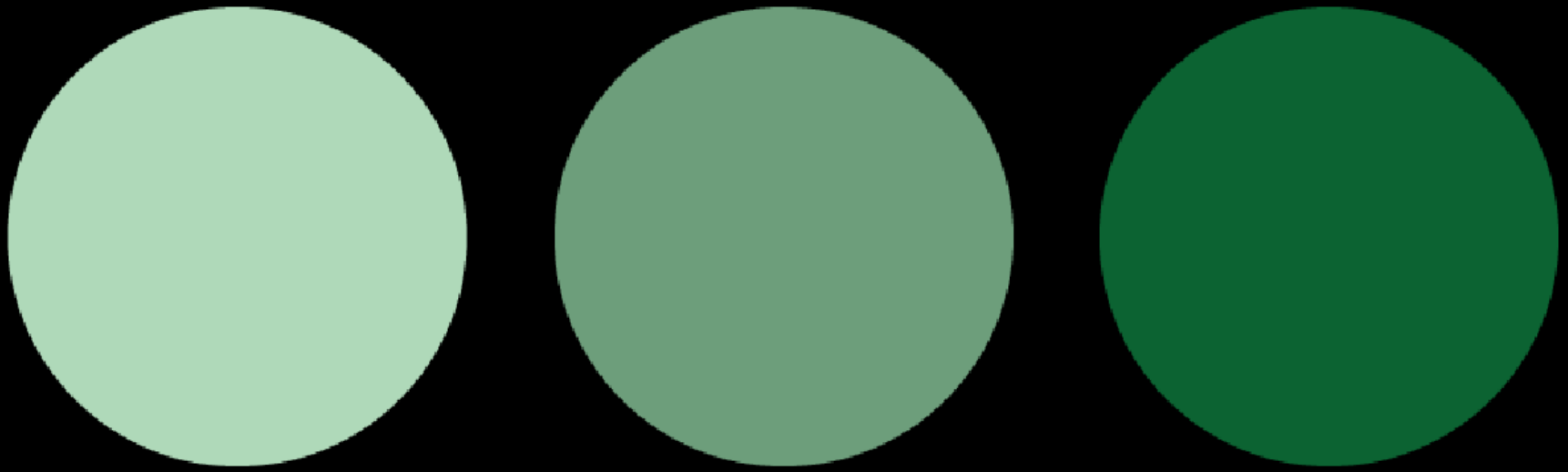




Which represents the larger value?

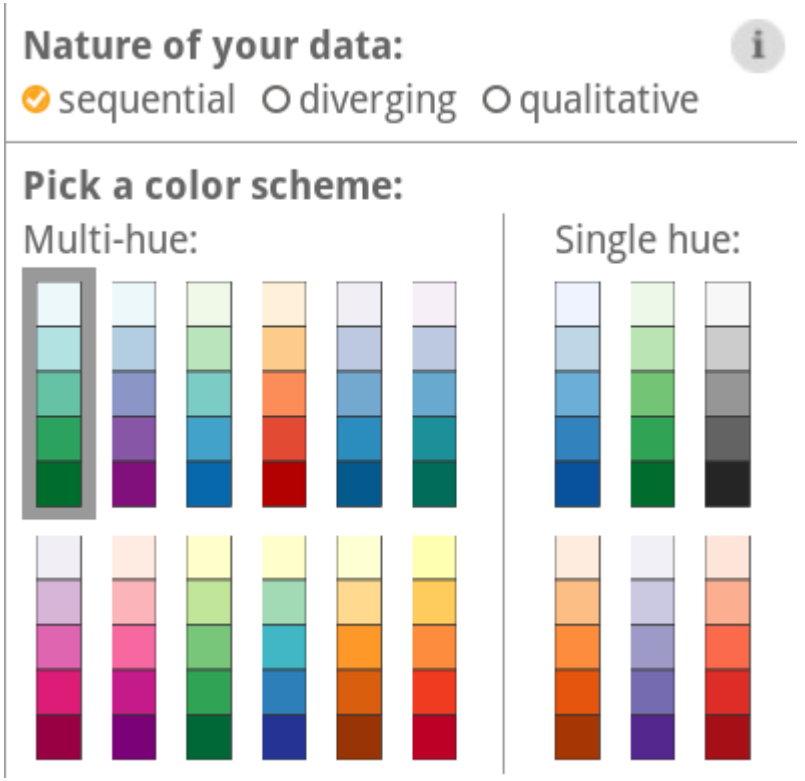


Which represents the larger value?



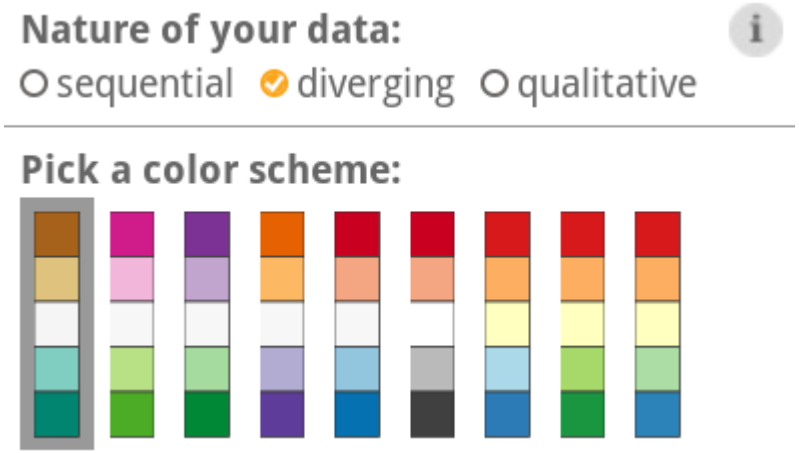
Sequential:

ordinal / differential / rational



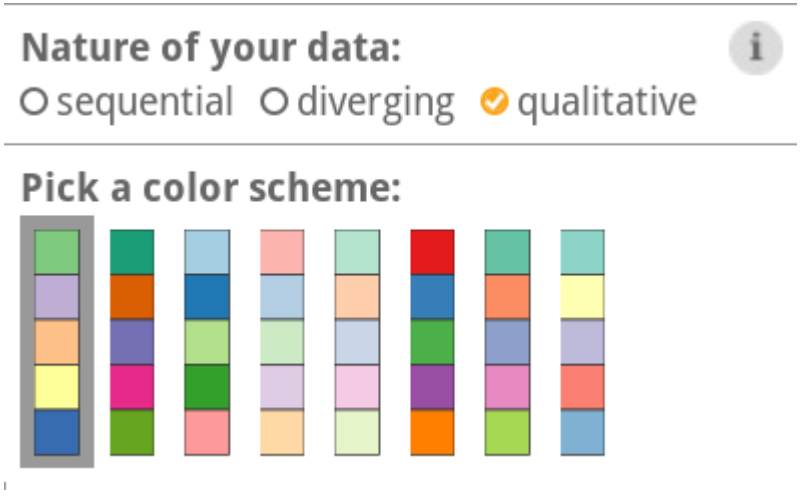
Diverging:

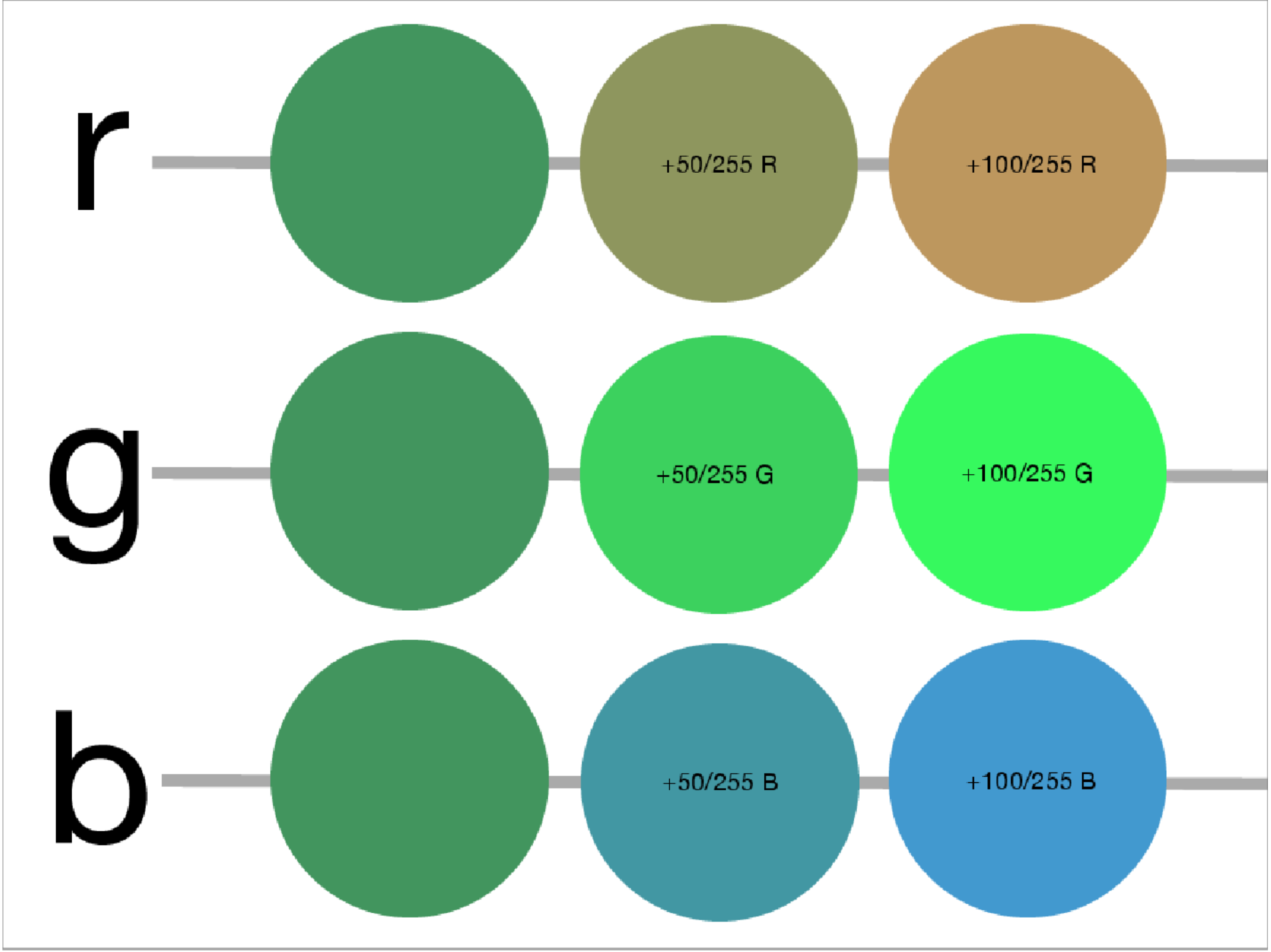
ordinal / differential / rational

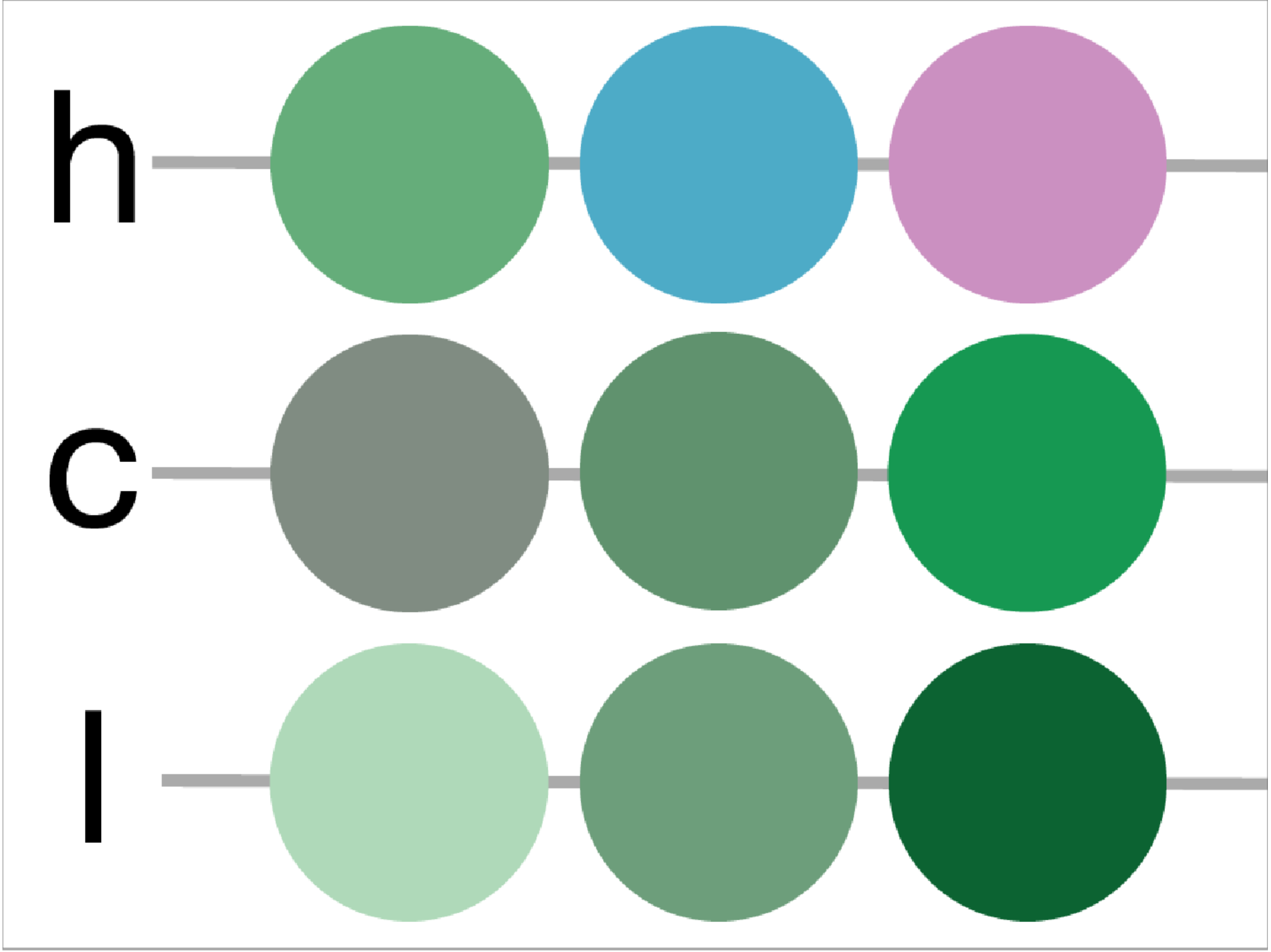


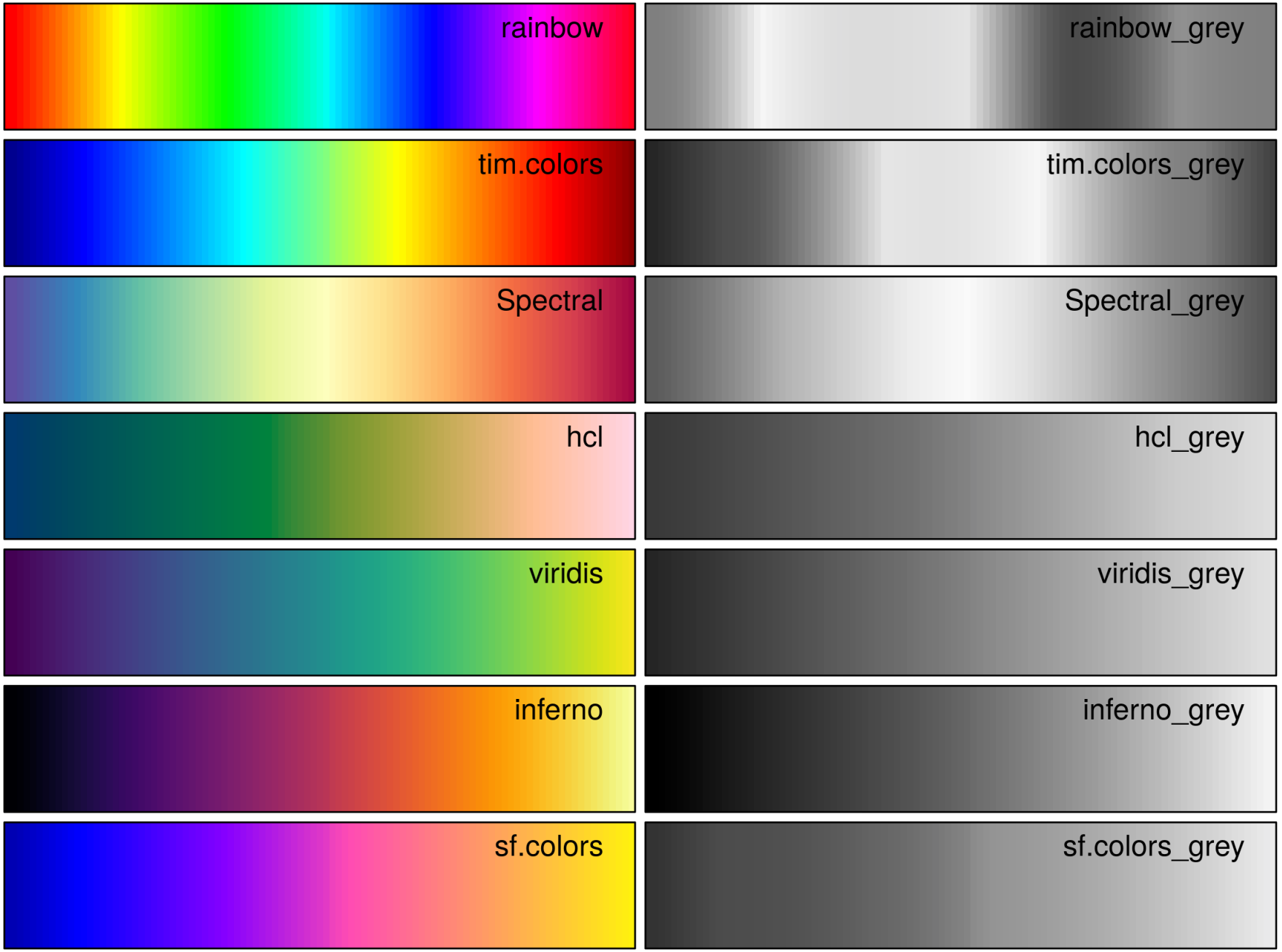
Qualitative:

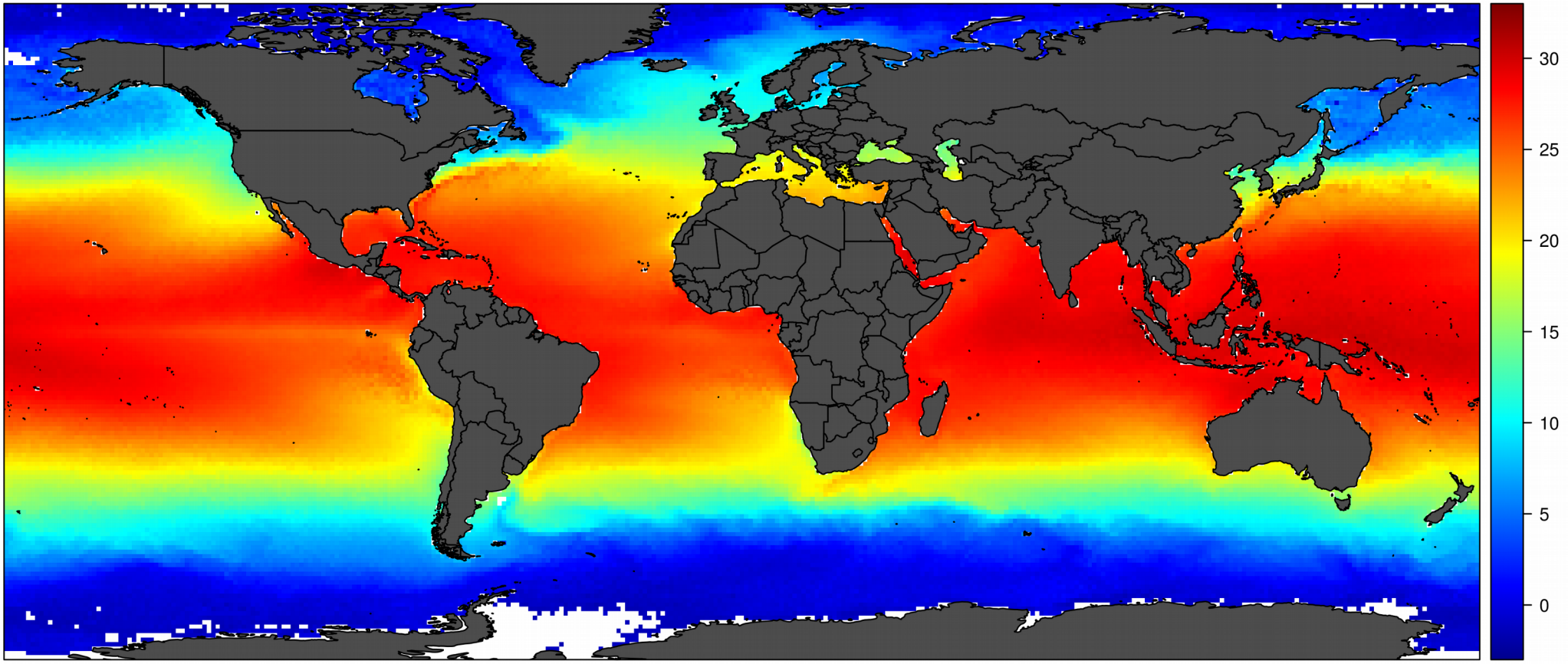
nominal

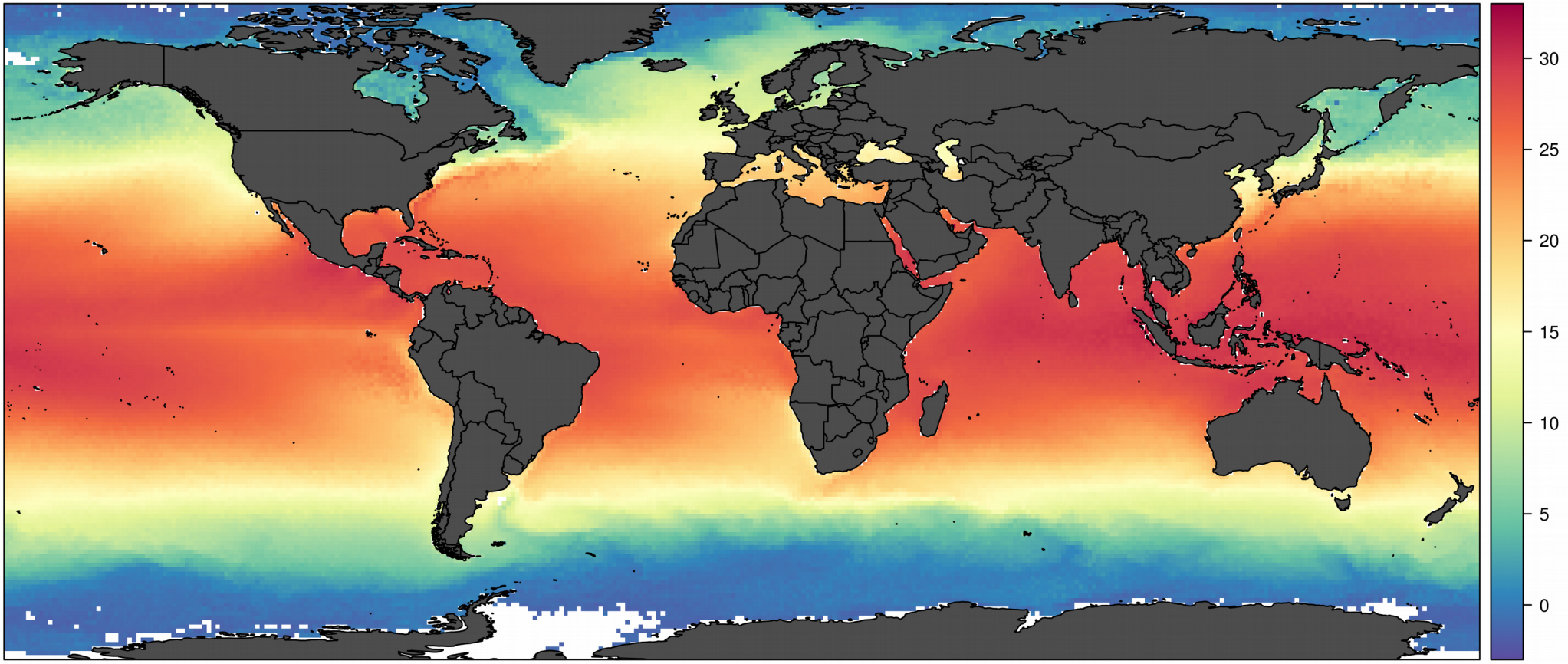


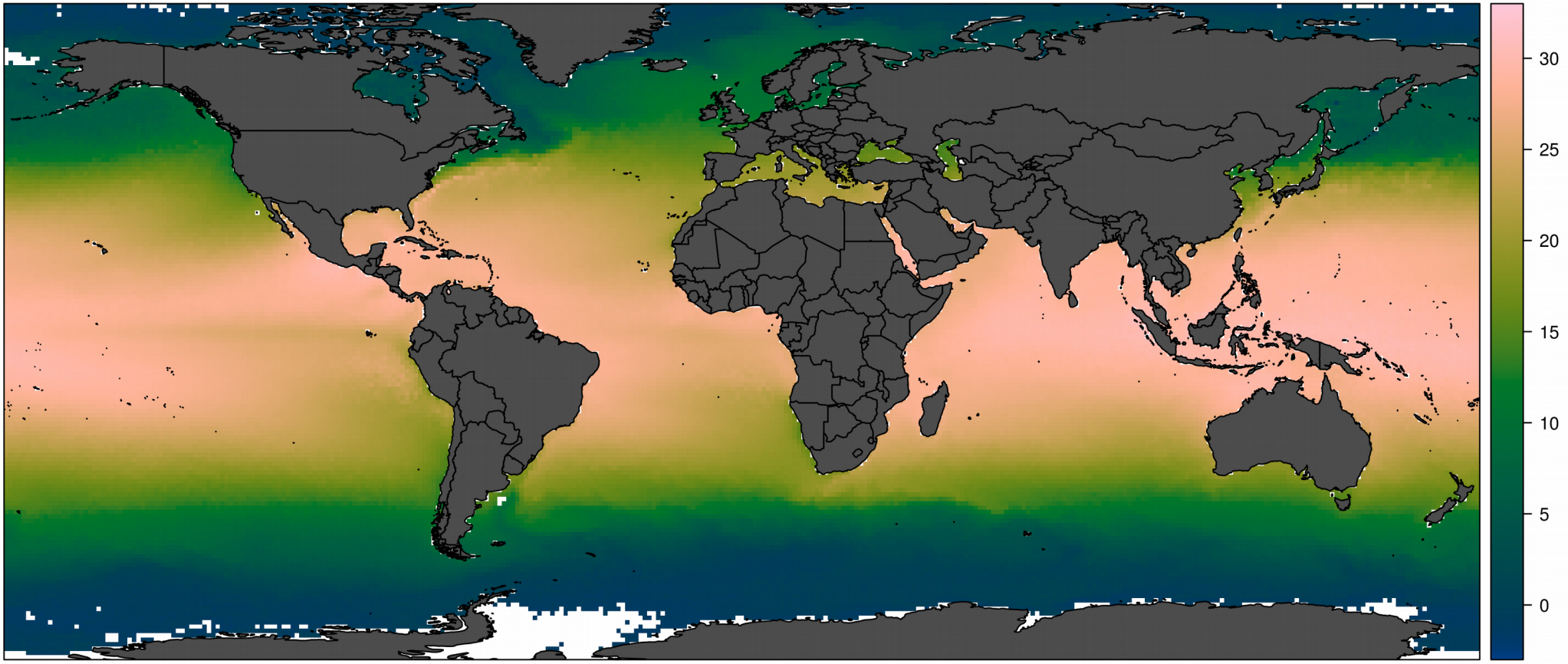

r
+50/255 R
+100/255 R
g
+50/255 G
+100/255 G
b
+50/255 B
+100/255 B

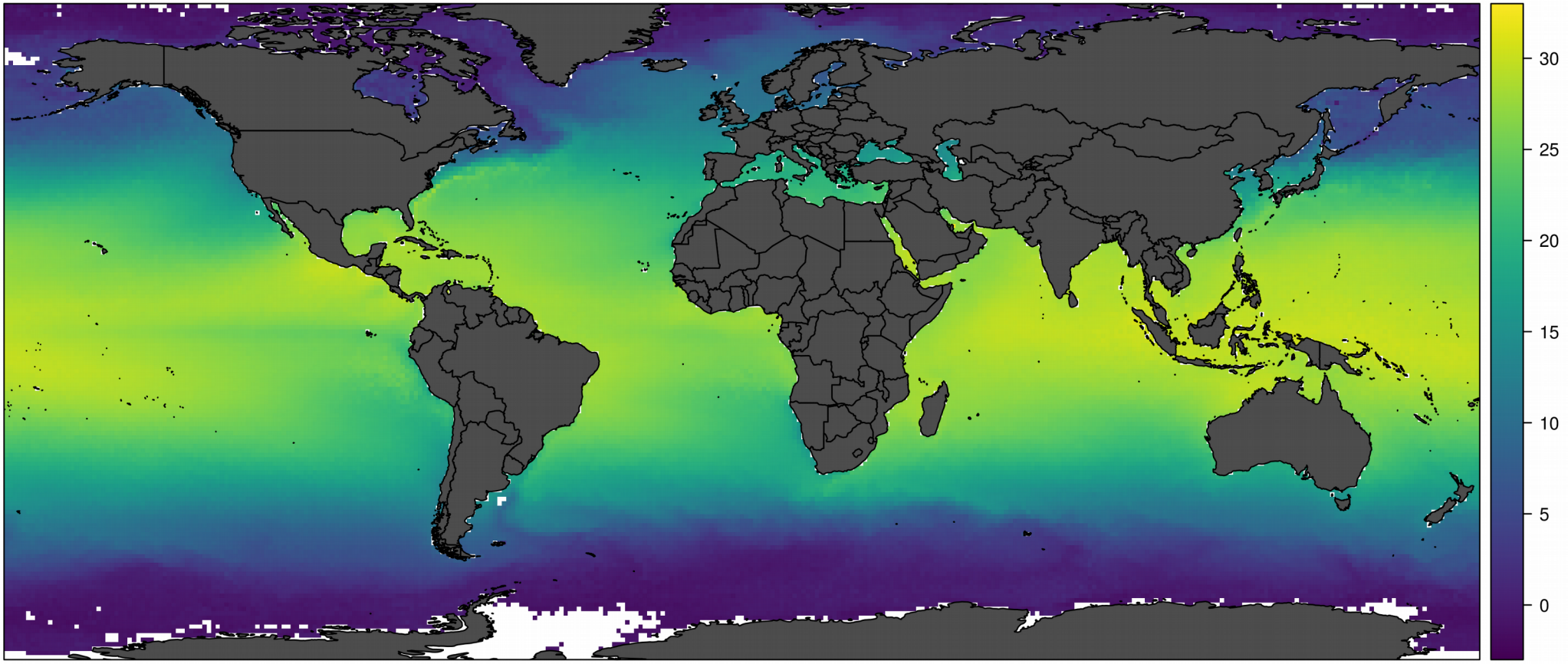

h
c
l

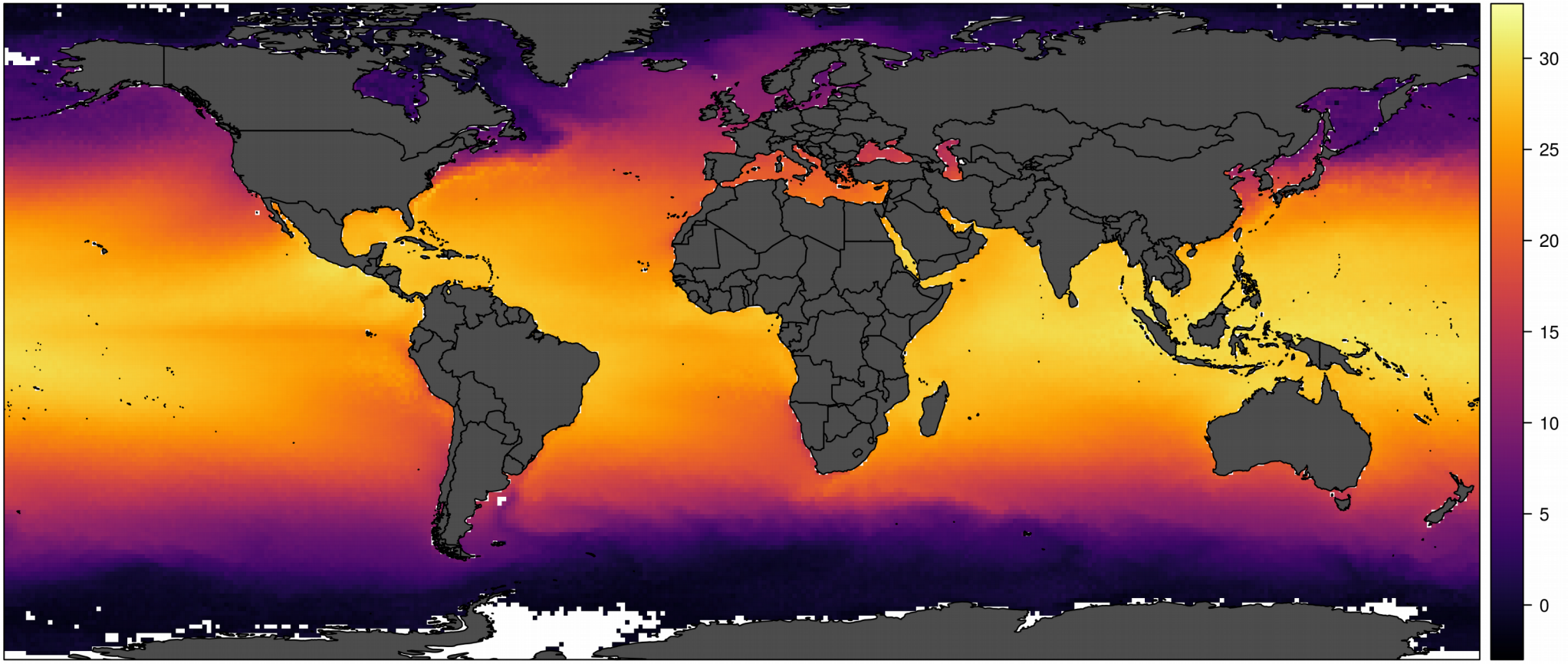

rainbow
rainbow_grey
tim.colors
tim.colors_grey
Spectral
Spectral_grey
hcl
hcl_grey
viridis
viridis_grey
inferno
inferno_grey
sf.colors
sf.colors_grey


30
25
20
15
10
5
0


30
25
20
15
10
5
0


30
25
20
15
10
5
0


30
25
20
15
10
5
0


30
25
20
15
10
5
0