

```

1  if(require(mapproj)) { # mapproj is used for projection="polyconic"
2    # color US county map by 2009 unemployment rate
3    # match counties to map using FIPS county codes
4    # Based on J's solution to the "Choropleth Challenge"
5    # http://blog.revolutionanalytics.com/2009/11/choropleth-challenge-result.html
6
7    # load data
8    # unemp includes data for some counties not on the "lower 48 states" county
9    # map, such as those in Alaska, Hawaii, Puerto Rico, and some tiny Virginia
10   # cities
11
12   data(county.fips)
13   MAP_ZIP <- read.csv("C:/Users/wallace4/Desktop/FIPS_COUNT.csv")
14
15
16   region2 =
17   c("kentucky,trigg","kentucky,lyon","Kentucky,christian","kentucky,muhlenberg","kentucky,
18   caldwell","kentucky,Hopkins","kentucky,crittenden","kentucky,todd")
19
20   # define color buckets
21   colors = c("#F1EEF6", "#D4B9DA", "#C994C7", "#DF65B0", "#DD1C77", "#980043")
22   MAP_ZIP$colorBuckets <- as.numeric(cut(MAP_ZIP$Count, c(0, 20, 50, 70, 200, 1000,
23   8000)))
24   leg.txt <- c("0-20", "21-50", "51-70", "71-200", "201-1000", ">1000")
25
26   # align data with map definitions by (partial) matching state,county
27   # names, which include multiple polygons for some counties
28   cnty.fips <- county.fips$fips[match(map("county", region2, plot=FALSE)$names,
29   county.fips$polynome)]
30   colorsmatched <- MAP_ZIP$colorBuckets [match(cnty.fips, MAP_ZIP$fips, nomatch = 1)]
31
32   # draw map
33
34   map("county", region2, col = colors[colorsmatched], fill = TRUE, resolution = 0,
35   lty = 0, projection = "polyconic")
36   map("county", region2, col = "white", fill = FALSE, add = TRUE, lty = 1, lwd = 0.5,
37   projection="polyconic", myborder = 1, boundary = FALSE)
38   map.text("county", region2, cex = .55, fill = FALSE, add = TRUE, col = "black",
39   projection = "polyconic")
40
41   # map.scale(5,65,.65)
42   title("Clients by County, 2009")
43   legend("topright", leg.txt, horiz = TRUE, fill = colors)
44
45   # Choropleth Challenge example, based on J's solution, see:
46   # http://blog.revolutionanalytics.com/2009/11/choropleth-challenge-result.html
47   # To see the faint county boundaries, use RGui menu: File/SaveAs/PDF
48 }

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