```
Verdun donnes.R × Verdun donees.R ×
    Source on Save Q ✓ ✓
                                                                                    Run > Source -
    1 file.choose()
    2 (s)
      load("D:/29.04_Bertrand/Rstudio_Verdun.RData")
    4 > library(sf)
    5 Linking to GEOS 3.13.1, GDAL 3.10.2, PROJ 9.5.1; sf_use_s2() is TRUE
   6 > library(units)
      udunits database from C:/Users/Nnest/AppData/Local/R/win-library/4.5/units/share/udunits/udunits2.xml
      > library(dplyr)
      Attachement du package : 'dplyr'
   10
       Les objets suivants sont masqués depuis 'package:stats':
  11
   12
13
        filter, lag
   14
      Les objets suivants sont masqués depuis 'package:base':
  16
17
        intersect, setdiff, setequal, union
  18
      > library(ggplot2)
  19 > bâtiments_historiques <- st_read(file.choose())</pre>
  20 Reading layer 'export_batiment' from data source 'C:\Users\Nnest\Downloads\export_batiment.geojson' using
  21 Simple feature collection with 706 features and 115 fields
  22 Geometry type: GEOMETRY
   23 Dimension:
                      XY
  24 Bounding box: xmin: -73.58297 ymin: 42.78681 xmax: 7.090156 ymax: 49.61693
  25 Geodetic CRS: WGS 84
  26 > arrêts_metro <- st_read(file.choose())</pre>
      Reading layer 'export_bus' from data source 'C:\Users\Nnest\Downloads\export_bus.geojson' using driver 'G
      Simple feature collection with 626 features and 36 fields
  28
  29 Geometry type: POINT
   30 Dimension:
                      XY
      Bounding box:
                     xmin: -73.59742 ymin: -35.01796 xmax: 138.8065 ymax: 49.54189
  32 Geodetic CRS: WGS 84
  33 > bâtiments_historiques <- st_transform(bâtiments_historiques, 2154)</pre>
  34
      > arrêts_metro <- st_transform(arrêts_metro, 2154)</pre>
      > distances <- st_distance(bâtiments_historiques, arrêts_metro)</p>
      > distance_min <- apply(distances, 1, min)</pre>
  36
      > bâtiments_historiques$distance_metro <- set_units(distance_min, "m")</pre>
  37
      > bâtiments$distance_bus <- as.numeric(distance_min)</pre>
   38
        hâtimente historiques /- hâtimente historiques %%
   40
```

```
mutate(accessibilité = ifelse(distance_metro < set_units(500, "m"), "Bien desservi", "Mal desserv
  40
 41
 42
        > library(units)
3 43
      > package(units)
3 44
      Erreur dans package(units): impossible de trouver la fonction "package"
  45
3 46
      > install.packages("units")
      Error in install.packages : Updating loaded packages
  48
3 49
      > install.packages("units")
      WARNING: Rtools is required to build R packages but is not currently installed. Please download and insta
3 50
  51
3 52
        https://cran.rstudio.com/bin/windows/Rtools/
  53
        Warning in install.packages :
        le package 'units' est en cours d'utilisation et ne sera pas installé
  54
      > library(units)
  55
      > bâtiments_historiques <- bâtiments_historiques %>%
  57 +
            mutate(accessibilité = ifelse(distance_metro < set_units(500, "m"), "Bien desservi", "Mal desservi"
  58 > bâtiments_historiques$distance_metro <- as.numeric(distance_min)</pre>
      > bâtiments_historiques <- bâtiments_historiques %>%
            mutate(accessibilité = ifelse(distance_metro < 500, "Bien desservi", "Mal desservi"))
  60
  61 > qqplot() +
  62 +
            geom_sf(data = bâtiments_historiques, aes(color = accessibilité)) +
  63 +
            theme_minimal()
  64 > library(sf)
  65 > library(ggplot2)
  66 > verdun <- st_read(file.choose())
  67
      Erreur: Cannot open "D:\29.04_Bertrand\Verdun.Rproj"; The source could be corrupt or not supported. See
  68
  69 > verdun <- st_read(file.choose())
3 70 Reading layer 'sections' from data source
71 `C:\Users\Nnest\Downloads\donnée sig\cadastre-200049187-sections-shp\sections.shp' using driver `ESRI Sha
  72
      Simple feature collection with 288 features and 6 fields
  73 Geometry type: MULTIPOLYGON
  74 Dimension:
                     XY
      Bounding box: xmin: 856838.7 ymin: 6892082 xmax: 884940.2 ymax: 6913872
  76 Projected CRS: RGF93 v1 / Lambert-93
  77 > commune <- st_read(file.choose())</pre>
```

Source on Save Q ✓ -

3 78

```
70 Reading layer `sections' from data source
71 `C:\Users\Nnest\Downloads\donnée sig\cadastre-200049187-sections-shp\sections.shp' using driver `ESRI Sha
     Simple feature collection with 288 features and 6 fields
  72
  73
     Geometry type: MULTIPOLYGON
  74
      Dimension:
                     XY
  75
     Bounding box: xmin: 856838.7 ymin: 6892082 xmax: 884940.2 ymax: 6913872
  76
     Projected CRS: RGF93 v1 / Lambert-93
  77
     > commune <- st_read(file.choose())
  78 Reading layer 'sections' from data source
  79 `C:\Users\Nnest\Downloads\donnée sig\cadastre-200049187-sections-shp\sections.shp' using driver `ESRI Shaj
     Simple feature collection with 288 features and 6 fields
  80
  81
     Geometry type: MULTIPOLYGON
  82
     Dimension:
                     XY
  83 Bounding box: xmin: 856838.7 ymin: 6892082 xmax: 884940.2 ymax: 6913872
  84
     Projected CRS: RGF93 v1 / Lambert-93
  85
     > commune_proj <- st_transform(commune, 2154)
  86
     >
  87 > ggplot() +
  88 +
            geom_sf(data = commune_proj, fill = "grey90", color = "black") +
  89 +
            geom_sf(data = bâtiments_proj, aes(color = accessibilité), size = 2) +
            geom_sf(data = arrêts_proj, shape = 3, color = "blue", size = 1) +
  90 +
            scale_color_manual(values = c("Bien desservi" = "green", "Mal desservi" = "red")) +
  91 +
  92 +
            theme_minimal() +
            labs(title = "Accessibilité aux bâtiments historiques à Verdun",
  93 +
  94 +
                 subtitle = "Vert = bien desservi / Rouge = mal desservi",
  95 +
                 color = "Accessibilité")
  96 Erreur : objet 'bâtiments_proj' introuvable
  97
     > ggplot() +
  98
  99
                  geom_sf(data = bâtiments_historiques, aes(color = accessibilité)) +
 100
                  theme_minimal()
 101
      Erreur dans +geom_sf(data = bâtiments_historiques, aes(color = accessibilité)) :
 102
        argument incorrect pour un opérateur unitaire
 103
 104 > ggplot() +
 105 +
            geom_sf(data = bâtiments, aes(color = accessible)) +
 106 +
            geom_sf(data = bus_arrets, color = "blue", size = 1) +
            scale_color_manual(values = c("Bien desservi" = "green", "Mal desservi" = "red")) +
 107 +
 108
```

```
labs(title = "Accessibilité des bâtiments historiques aux arrêts de bus") +
  108 +
  109 +
            theme_minimal()
  110 Error in 'geom_sf()':
  111 ! Problem while computing aesthetics.
  112 i Error occurred in the 1st layer.
  113 Caused by error:
114 ! objet 'accessible' introuvable
  115 Run 'rlang::last_trace()' to see where the error occurred.
  116
  117 > ggplot() +
  118 +
            geom_sf(data = bâtiments, aes(color = accessible)) +
  119 +
            geom_sf(data = bus_arrets, color = "blue", size = 1) +
            scale_color_manual(values = c("Bien desservi" = "green", "Mal desservi" = "red")) +
  120 +
            labs(title = "Accessibilité des bâtiments historiques aux arrêts de bus") +
  121 +
  122 +
            theme_minimal()
  123 Error in 'geom_sf()':
  124 ! Problem while computing aesthetics.
  125 i Error occurred in the 1st layer.
  126 Caused by error:
2 127 ! objet 'accessible' introuvable
  128 Run 'rlang::last_trace()' to see where the error occurred.
  129
  130 > ggplot() +
  131 +
            geom_sf(data = commune_proj, fill = "grey90", color = "black") +
  132 +
            geom_sf(data = bâtiments, aes(color = accessibilité), size = 2) +
  133 +
            geom_sf(data = arrêts, shape = 3, color = "blue", size = 1) +
  134 +
            scale_color_manual(values = c("Bien desservi" = "green", "Mal desservi" = "red")) +
  135 +
            theme_minimal() +
            labs(title = "Accessibilité aux bâtiments historiques à Verdun",
  136 +
                 subtitle = "Vert = bien desservi / Rouge = mal desservi",
  137 +
  138 +
                 color = "Accessibilité")
2 139 Erreur : objet 'arrêts' introuvable
  140
  141 > ggplot() +
            geom_sf(data = commune_proj, fill = "grey90", color = "black") +
  142 +
  143 +
            geom_sf(data = bâtiments, aes(color = accessibilité), size = 2) +
  144 +
            geom_sf(data = bus_arrêts, shape = 3, color = "blue", size = 1) +
            scale_color_manual(values = c("Bien desservi" = "green", "Mal desservi" = "red")) +
  145 +
  146
```

```
color = "Accessibilité")
 149 +
🖸 150 Erreur : objet 'bus_arrêts' introuvable
 151
 152 > ggplot() +
 153 +
            geom_sf(data = commune_proj, fill = "grey90", color = "black") +
            geom_sf(data = bâtiments, aes(color = accessibilité), size = 2) +
 154 +
 155 +
            geom_sf(data = bus_arrets, shape = 3, color = "blue", size = 1) +
            scale_color_manual(values = c("Bien desservi" = "green", "Mal desservi" = "red")) +
 156 +
            theme_minimal() +
 157 +
 158 +
            labs(title = "Accessibilité aux bâtiments historiques à Verdun",
 159 +
                 subtitle = "Vert = bien desservi / Rouge = mal desservi",
 160 +
                 color = "Accessibilité")
 161 Error in 'geom_sf()':
 162 ! Problem while computing aesthetics.
 163 i Error occurred in the 2nd layer.
 164 Caused by error:
165 ! objet 'accessibilité' introuvable
      Run 'rlang::last_trace()' to see where the error occurred.
 166
 167
 168 > gaplot() +
 169 +
            geom_sf(data = bâtiments_historiques, aes(color = accessibilité), size = 1) +
            scale_color_manual(values = c("Bonne" = "green", "Moyenne" = "orange", "Faible" = "red")) +
 170 +
            labs (
 171 +
 172 +
                title = "Accessibilité des bâtiments historiques à Saint-Fons",
subtitle = "Classification selon les critères d'accessibilité",
C 174 +
                color = "Niveau d'accessibilité"
 175 +
            ) +
            theme_minimal() +
 176 +
 177 +
            theme(
 178 +
                plot.title = element_text(face = "bold", size = 16),
 179 +
                plot.subtitle = element_text(size = 12),
                legend.position = "right"
 180 +
 181 +
 182 Messages d'avis :
        1: No shared levels found between `names(values)` of the manual scale and the data's colour values.
183
      2: No shared levels found between 'names(values)' of the manual scale and the data's colour values.
C 184
      > library(sf)
3 185
186
         fond do carto <= st road(file choose()) # ou she</pre>
187
```

```
T. NO SHAFCU TOVOTO FOUND DECINCOL HAMES (VATACO) OF CHE MANAGE SCATE AND CHE GACA S COTOUR VATACO.
COT IN
       2: No shared levels found between 'names(values)' of the manual scale and the data's colour values.
184
       > library(sf)
185
186
3 187
         > fond_de_carte <- st_read(file.choose()) # ou .shp</pre>
       Reading layer 'sections' from data source
188
189
         'C:\Users\Nnest\Downloads\donnée sig\cadastre-200049187-sections-shp\sections.shp' using driver `ESRI S
       Simple feature collection with 288 features and 6 fields
3 190
       Geometry type: MULTIPOLYGON
C 191
       Dimension:
  192
                       XY
193
       Bounding box: xmin: 856838.7 ymin: 6892082 xmax: 884940.2 ymax: 6913872
194
       Projected CRS: RGF93 v1 / Lambert-93
(3 195 > ggplot() +
             geom_sf(data = fond_de_carte, fill = "grey95", color = "grey70") +
  196 +
  197 +
             geom_sf(data = bâtiments_historiques, aes(color = accessibilité), size = 1) +
             scale_color_manual(values = c("bonne" = "green", "moyenne" = "orange", "faible" = "red")) +
  198 +
  199 +
             theme_minimal()
200 Messages d'avis :
201
         1: No shared levels found between 'names(values)' of the manual scale and the data's colour values.
       2: No shared levels found between 'names(values)' of the manual scale and the data's colour values.
202
  203
       > ggplot() +
  204
                geom_sf(data = bâtiments_historiques, aes(color = accessibilité), size = 1) +
               scale_color_manual(values = c("Bonne" = "green", "Moyenne" = "orange", "Faible" = "red")) +
  205
  206
                labs (
  207
                      title = "Accessibilité des bâtiments historiques à Verdun",
           +
208
                      subtitle = "Classification selon les critères d'accessibilité",
209
                      color = "Niveau d'accessibilité"
           +
  210
                 ) +
  211
               theme_minimal() +
         +
  212
               theme(
  213
                      plot.title = element_text(face = "bold", size = 16),
           +
  214
                      plot.subtitle = element_text(size = 12).
  215
                      legend.position = "right"
  216
  217
       Messages d'avis :
218 1: No shared levels found between `names(values)` of the manual scale and the data's colour values.
219 2: No shared levels found between `names(values)` of the manual scale and the data's colour values.
       > git remote add origin <a href="https://github.com/D-Nnesta/DANSOKO.N_GIROUX.A.git">https://github.com/D-Nnesta/DANSOKO.N_GIROUX.A.git</a>
220
       Erreur : symbole inattendu dans "git remote"
C 221
```

