Niedersachsen region, Germany chosen for the research.
Variable: kindergartens (shape files of kindergartens)

In previous homework I've used fertility rate as observed variable so now I'm going to use these 2 variables as dependent and independent

Region on the Germany map

First loading all points of interest:

```
# Germany: Niedersachsen district
map <- readOGR(".", "gis_osm_pois_a_free_1")
map <- spTransform(map, "+proj=longlat")
```

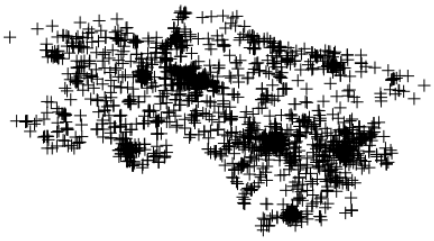
Selecting only kindergartens:

```
map2 <- map[map@data$fclass == "kindergartens",] # 2074 observations
```

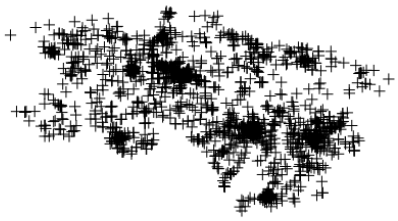
```r
# Generate a table of points representing kindergartens
map2@data$lon <- NA
map2@data$lat <- NA
for (ii in 1:nrow(map2)) {
  map2@data$lon[ii] <- map2@polygons[[ii]]@Polygons[[1]]@labpt[1]
  map2@data$lat[ii] <- map2@polygons[[ii]]@Polygons[[1]]@labpt[2]
}
map3 <- map2@data[,c("name","lon","lat")]
map3$name <- as.character(map3$name)

coordinates(map3) <- c("lon", "lat")
```

map with all shape points

selecting only kindergartens data

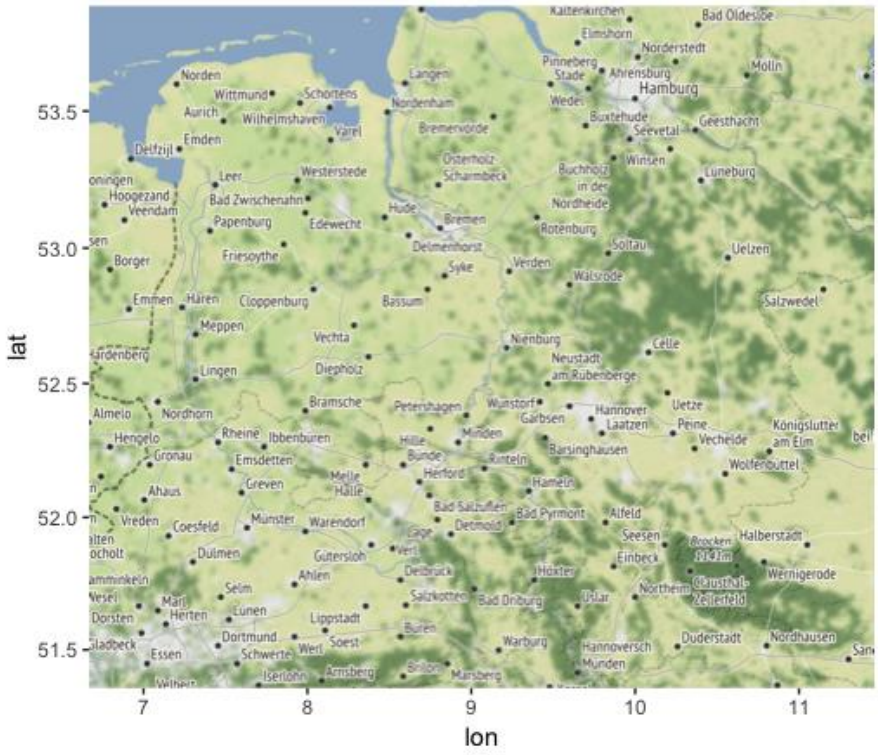


plotting all values including non-unique



after excluding non-unique values

Loading my region with bbox:



plotting all kindergartens on the map: