Preprocessing

This subsection discusses the methods used for implementing the preprocessing the data which are collected with the methods above.

```r
sf <- sf::read_sf(here::here("research_areas.shp"))
print(sf)
```

```
Simple feature collection with 12 features and 3 fields
Geometry type: POLYGON
Dimension:     XY
Bounding box:  xmin: 7.071625 ymin: 51.08151 xmax: 8.539877 ymax: 52.25983
Geodetic CRS:  WGS 84
# A tibble: 12 x 4
      id species name                                       geometry
   <dbl> <chr>   <chr>                                 <POLYGON [°]>
 1     1 oak     rinkerode            ((7.678922 51.85789, 7.675446 51.85752, 7.~
 2     2 oak     hamm                 ((7.858955 51.66699, 7.866444 51.66462, 7.~
 3     3 oak     muenster             ((7.618908 51.9154, 7.617384 51.9172, 7.61~
 4     4 pine    greffen              ((8.168691 51.98965, 8.167178 51.99075, 8.~
 5     5 pine    telgte               ((7.779728 52.00662, 7.781616 52.00662, 7.~
 6     6 pine    mesum                ((7.534424 52.25499, 7.53378 52.25983, 7.5~
 7     7 beech   bielefeld_brackwede  ((8.524749 51.9921, 8.528418 51.99079, 8.5~
 8     8 beech   wuelfenrath          ((7.071625 51.29256, 7.072311 51.29334, 7.~
 9     9 beech   billerbeck           ((7.324729 51.99783, 7.323548 51.99923, 7.~
10    10 spruce  marienheide          ((7.558102 51.08358, 7.558317 51.08527, 7.~
11    11 spruce  brilon               ((8.532195 51.41029, 8.535027 51.41064, 8.~
12    12 spruce  osterwald            ((8.369328 51.21693, 8.371238 51.21718, 8.~
```