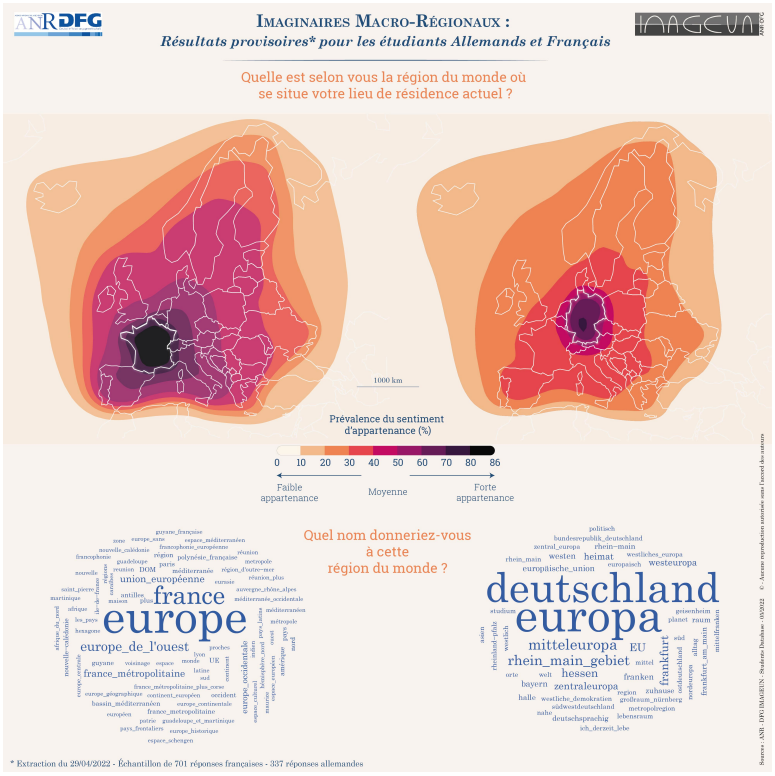
Gestion d'une base de données qualitative et géometrique



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Cover page
Beckwithia glacialis on Snøhetta.

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Preface

This is a Quarto book.

To learn more about Quarto books visit https://quarto.org/docs/books.

```
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```

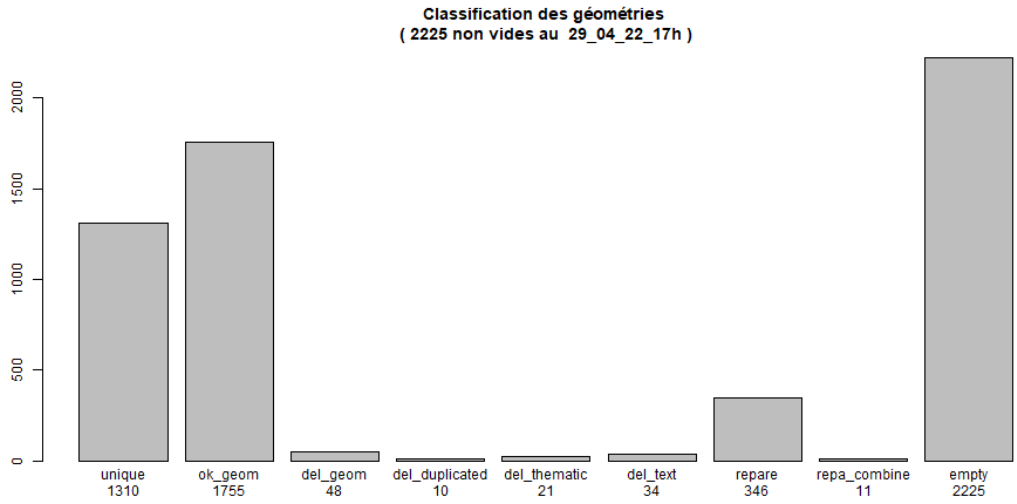


Figure 1.: Chart Bar des NAS

1. Summary

In summary, this book has no content whatsœver.

```
[1] 2
```

2. Introduction

R table

```
data <- data.frame(year =  c("1958", "1959", "1960"),
                   max = c(310, 275, 380))


# ojs_define(data)

data
```

```
  year max
1 1958 310
2 1959 275
3 1960 380
```

OJS line_chart from tutorial with `ojs_define()` and `R` table

```
tableR = data
tableOjs = transpose(tableR)

tableOjs

yearlyChart = Plot.plot({
  marks: [
    Plot.line(tableOjs,
      {x: "year", y: "max"},
      { stroke: "red" }
    ),
    Plot.ruleY([0])
  ],
  caption: html`<em>FIG.</em> This is a line chart stating at 0`
  }
)
```

Second bar chart

```

Plot.rectY(tableOjs, Plot.binX({y: "max"}, {x: "year"})).plot()
```

Third bar chart with table

```
Plot.plot({
  marks: [
    Plot.barY(tableOjs, {x: "year", y: "max", fill: "steelblue"}),
    Plot.ruleY([0])
  ],
  caption: html`Figure 1. This chart has a <i>fancy</i> caption.`
})
```

2.1. With Python

3. “Penguins”

A simple example based on Allison Horst’s Palmer Penguins dataset. Here we look at how penguin body mass varies across both sex and species (use the provided inputs to filter the dataset by bill length and island):

```
//| echo = false
data = FileAttachment("data/palmer-penguins.csv").csv({ typed: true })
```

```
//| echo = false
viewof bill_length_mm = Inputs.range(
  [32, 50],
  {value: 35, step: 1, label: "Bill length (min):"}
)
viewof islands = Inputs.checkbox(
  ["Torgersen", "Biscoe", "Dream"],
  { value: ["Torgersen", "Biscoe"],
    label: "Islands:"
  }
)
```

```
//| echo: false
filtered = data.filter(function(penguin) {
  return bill_length_mm < penguin.bill_length_mm &&
         islands.includes(penguin.island);
})
```

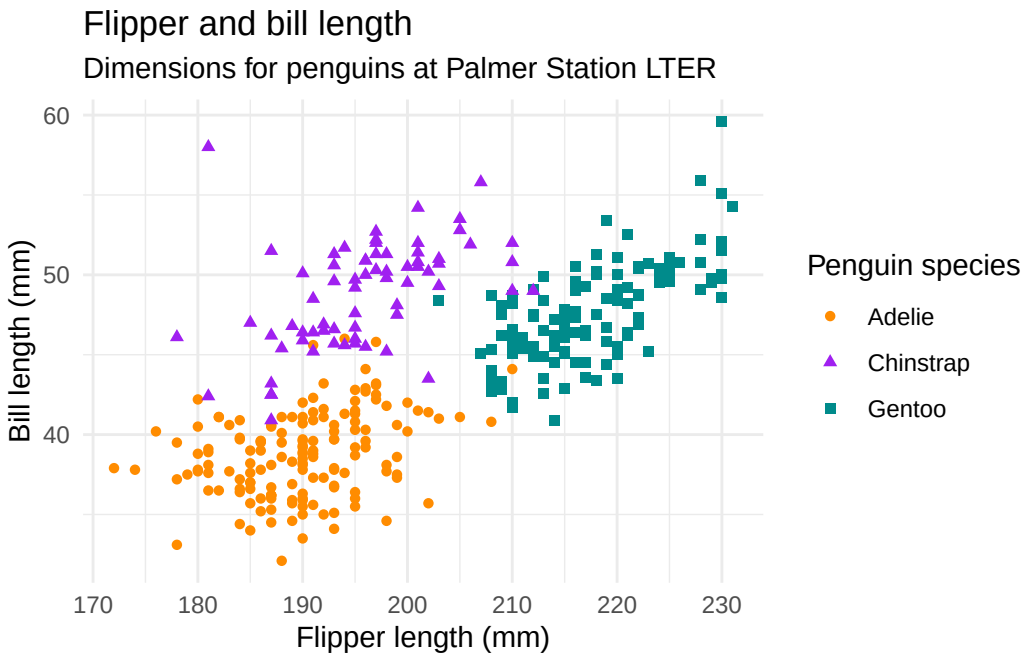
3.1. Plot

```
//| echo: false
//| output: true
//| label: fig-penguin-body-mass
//| fig-cap: "Penguin body mass by sex and species"
Plot.rectY(filtered,
```

```
    Plot.binX(
      {y: "count"},
      {x: "body_mass_g", fill: "species", thresholds: 20}
    ))
    .plot({
      facet: {
        data: filtered,
        x: "sex",
        y: "species",
        marginRight: 80
      },
      marks: [
        Plot.frame(),
      ]
    }
  )
```

3.2. Data

The `penguins` data from the **palmerpenguins** package contains size measurements for 344 penguins from three species observed on three islands in the Palmer Archipelago, Antarctica./ The plot below shows the relationship between flipper and bill lengths of these penguins.


Flipper and bill length
Dimensions for penguins at Palmer Station LTER
Bill length (mm)
60
50
40
170
180
190
200
210
220
230
Flipper length (mm)
Penguin species
Adelie
Chinstrap
Gentoo

References

4. Summary

In summary, this book has no content whatsœver.

```
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```

A. More results

Some results that wouldn't fit into the main thesi

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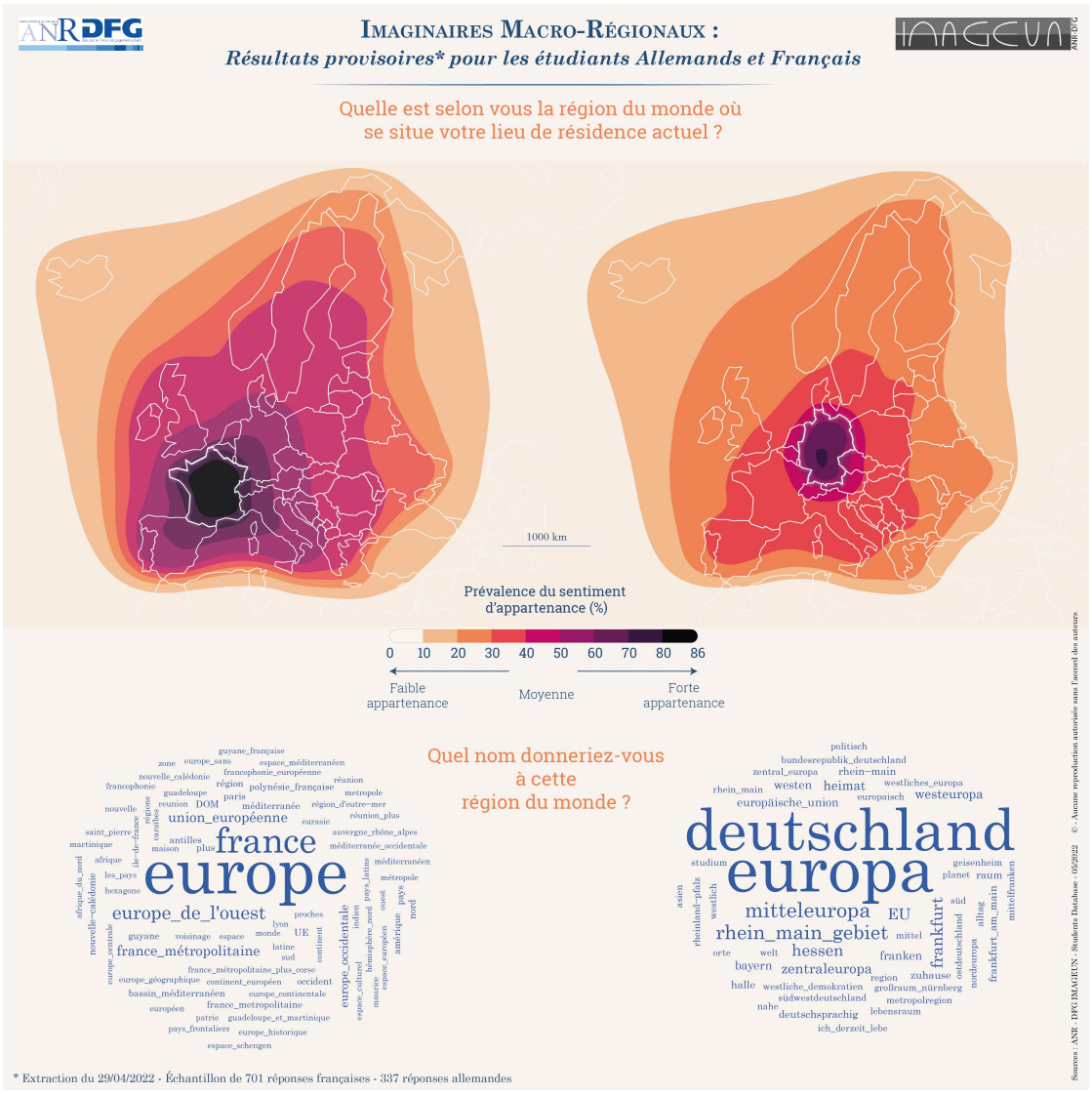

Figure A.1.: cover