## Course 7 - background information

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#### Presentations

- Present one or more maps (ideally created in R)
- ► Give some background information
- Presentations should take 20 minutes

#### Two possible dates:

- ► Wednesday November 18 2015
- Wednesday November 25 2015

## Organisation

- ▶ No course next week: Wednesday November 18 2015
- ▶ Please send me a first map as soon as possible
- Or send me your problems (e.g. Code which is producing errors)

## New Dataset - Refugee Routes

```
url <- "https://raw.githubusercontent.com/Japhilko/
GeoData/master/2015/data/RefugeePlaces.csv"

dat <- read.csv(url)</pre>
```

# Overview of Refugee Data

Place	Country	lat	lon
Wiener Westbahnhof	Austria	48.19612	16.33974
Passau	Germany	48.57401	13.46064
Kos	NA	-25.92851	19.12950
Parndorf	Austria	47.99740	16.86083
Gevgelija	Mazedonia	41.14146	22.50493
Lampedusa	Italy	35.50353	12.60669

## Updated Dataset - Camp Sites

```
url2 <- "https://raw.githubusercontent.com/Japhilko/
GeoData/master/2015/data/CampSites_Germany.csv"

dat2 <- read.csv(url2)</pre>
```

# Overview of Camp Site Data

	Χ	lat	lon	bla	name
2	2	47.9	8.8	Baden-Württemberg	Radler-Zeltplatz
6	6	47.7	7.7	Baden-Württemberg	Kandern
9	9	47.6	8.6	Baden-Württemberg	Schwimmbad
16	16	48.3	8.6	Baden-Württemberg	Camping
39	39	48.5	7.9	Baden-Württemberg	Europa Camping
25	25	47.9	9.4	Baden-Württemberg	Campingplatz Buhhof
16.1	16	48.3	8.6	Baden-Württemberg	Camping

### New Dataset - Nursery

```
url3 <- "https://raw.githubusercontent.com/Japhilko/
GeoData/master/2015/data/DatNursery.csv"

dat3 <- read.csv(url3)</pre>
```

## Get Polygons for federal states

```
library(raster)

## Loading required package: sp

DEU1 <- getData('GADM', country='DEU', level=1)</pre>
```

#### Problems with Umlauts

[1] Baden-Württemberg

#### dat3\$Namen

##

```
##
       Brandenburg
                                Bremen
                                                        Hambi
    [7] Hessen
##
                                Mecklenburg-Vorpommern
                                                        Niede
   [10] Nordrhein-Westfalen
                                Rheinland-Pfalz
                                                        Saar
   [13] Sachsen
                                Sachsen-Anhalt
                                                        Schle
## [16] Thüringen
## 16 Levels: Baden-WA4rttemberg Bayern Berlin Brandenburg
```

Bayern

Berl:

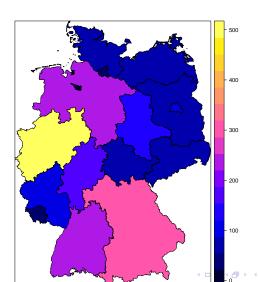
## Combine Polygons with data

```
dat3$Namen <- as.character(dat3$Namen)
dat3$Namen[1]<-"Baden-Württemberg"
dat3$Namen[16]<-"Thüringen"
ind <- match(DEU1@data$NAME_1,dat3$Namen)
DEU1@data$In_tsd_07 <- dat3$In_tsd_07</pre>
```

```
## Loading required package: sp
```

# Produce a map

```
library(sp)
spplot(DEU1,"In_tsd_07")
```



## Use a Shiny-App - Eurostat data

## An interesting E-Book

R-graphics by Paul Murrell