

scrap_lbc_lille

R Markdown

```
#Load data

lille_20_m_16022021 <- read.csv(file = "lille_20km_maisons_16022021.csv")

#Calcul par commune

nb_biens_commune <- lille_20_m_16022021 %>%
  group_by(nom.commune) %>%
  summarise(mean(prix_m2),
            mean(surface_all),
            mean(prix),
            nombre = n()) %>%
  ungroup()

#Filtre communes + de 20 annonces

nb_biens_commune_clear <- nb_biens_commune %>%
  filter(nombre >19)

#Rename des colonnes et sélection

nb_biens_commune_clear_mut <- nb_biens_commune_clear %>%
  mutate(prix_m2 = `mean(prix_m2)`,
         surface = `mean(surface_all)`) %>%
  select(nom.commune, prix_m2, nombre, surface) %>%
  arrange(desc(prix_m2))

write.csv(nb_biens_commune_clear_mut, "prixm2_lille_20km_16022021.csv")

##Graphique prix

#Nuage de points (raw)

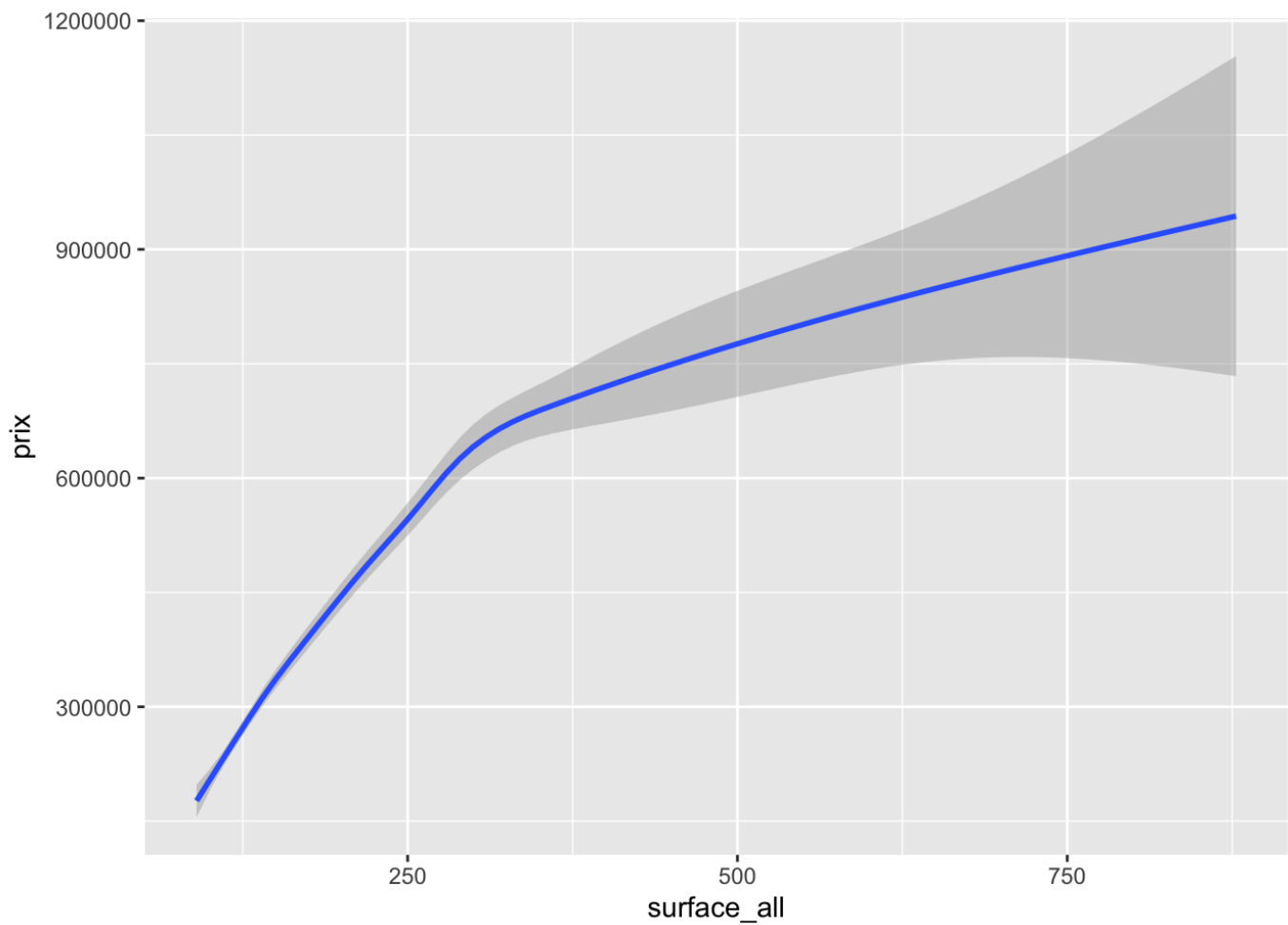
np1 <- ggplot(data = lille_20_m_16022021) +
  aes(x = surface_all, y = prix) +
  scale_x_continuous(trans = 'log2') +
  scale_y_continuous(trans = 'log2')+
  geom_point()

#Smooth (raw)

smooth1 <- ggplot(data = lille_20_m_16022021) +
  aes(x = surface_all, y = prix)+
  geom_smooth()

smooth1
```

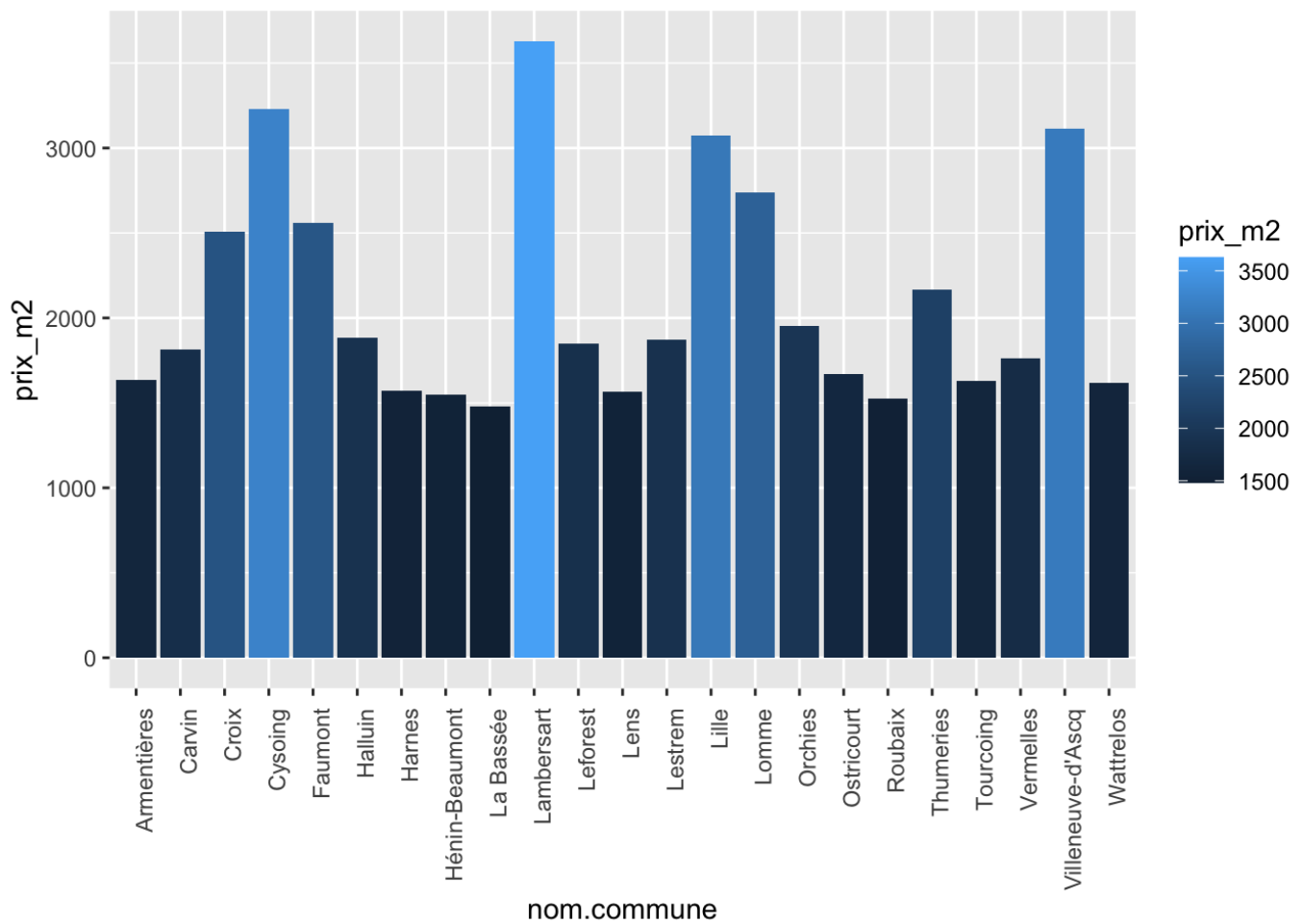
```
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```



```
#Par commune
```

```
prixm2_com <- ggplot(data = nb_biens_commune_clear_mut)+
  aes(x = nom.commune, y = prix_m2, fill = prix_m2) +
  theme(axis.text.x = element_text(angle = 90, hjust = 1)) +
  geom_col()
```

```
prixm2_com
```



```
#reorder graph
```

```
data_ordered <- read_csv(file = "prixm2_lille_20km_16022021.csv")
```

```
## Warning: Missing column names filled in: 'X1' [1]
```

```
##
```

```
## — Column specification —————
```

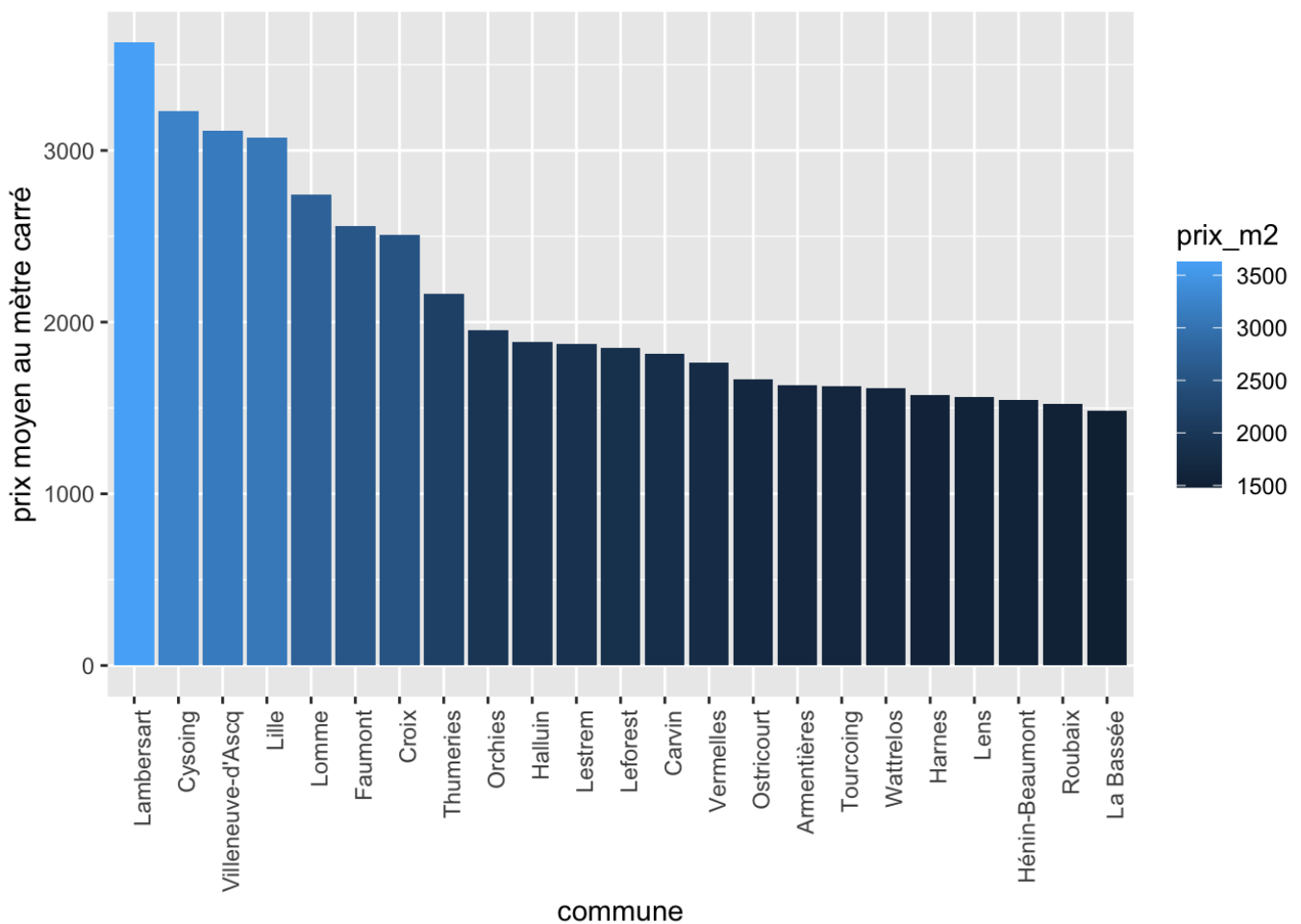
```
## cols(
##   X1 = col_double(),
##   nom.commune = col_character(),
##   prix_m2 = col_double(),
##   nombre = col_double(),
##   surface = col_double()
## )
```

```
head(data_ordered)
```

```
## # A tibble: 6 x 5
##       X1 nom.commune      prix_m2 nombre surface
##   <dbl> <chr>          <dbl>   <dbl>   <dbl>
## 1     1 1 Lambersart      3628.    22    139.
## 2     2 2 Cysoing        3229.    22    163.
## 3     3 3 Villeneuve-d'Ascq 3115.    37    164.
## 4     4 4 Lille          3076.    66    172.
## 5     5 5 Lomme          2740.    21    148.
## 6     6 6 Faumont         2557.    21    162.
```

```
prixm2_com2 <- ggplot(data = data_ordered)+
  aes(x = reorder(nom.commune, - prix_m2), y = prix_m2, fill = prix_m2) +
  theme(axis.text.x = element_text(angle = 90, hjust = 1)) +
  geom_col()+
  xlab("commune")+
  ylab("prix moyen au mètre carré")
```

```
prixm2_com2
```



##Locations

```
nordloc <- read.csv(file = "nord_locations_16022021.csv")

nordloccom <- nordloc %>%
  group_by(commune) %>%
  summarise(mean(prix_m2),
            mean(surface_all),
            mean(prix),
            nombre = n()) %>%
  ungroup() %>%
  filter(nombre>10) %>%
  filter(commune != "") %>%
  mutate(prix_m2 = `mean(prix_m2)`,
         surface = `mean(surface_all)`)

nordloccom
```

```
## # A tibble: 30 x 7
##   commune `mean(prix_m2)` `mean(surface_a... `mean(prix)` nombre prix_m2
##   <chr>          <dbl>          <dbl>          <dbl> <int> <dbl>
##   <dbl>
## 1 "Arment...      12.2          50.7          561.    31  12.2
## 50.7
## 2 "Bourbo...      8.57          53.3          444.    11  8.57
## 53.3
## 3 "Cambra...     10.7          54.7          520.    73  10.7
## 54.7
## 4 "Caudry...      8.17          68.4          514.    15  8.17
## 68.4
## 5 "Croix "       18.0          42.9          617.    14  18.0
## 42.9
## 6 "Denain...      8.56          73.8          536.    11  8.56
## 73.8
## 7 "Douai "       12.5          49.8          537.    61  12.5
## 49.8
## 8 "Dunker...     12.0          55.2          594.    33  12.0
## 55.2
## 9 "Faches...     12.2          64.3          720.    17  12.2
## 64.3
## 10 "Gravel...    10.7          68.1          668.    13  10.7
## 68.1
## # ... with 20 more rows
```

Visualisation locations

```
prixm2locnord <- ggplot(data = nordloccom)+  
  aes(x = reorder(commune, - prix_m2), y = prix_m2, fill = prix_m2) +  
  theme(axis.text.x = element_text(angle = 90, hjust = 1)) +  
  geom_col()+  
  xlab("commune")+  
  ylab("prix moyen au mètre carré")
```

prixm2locnord

