

```

# install.packages("devtools")
library("devtools")

## Loading required package: usethis
install_github("kassambara/factoextra")

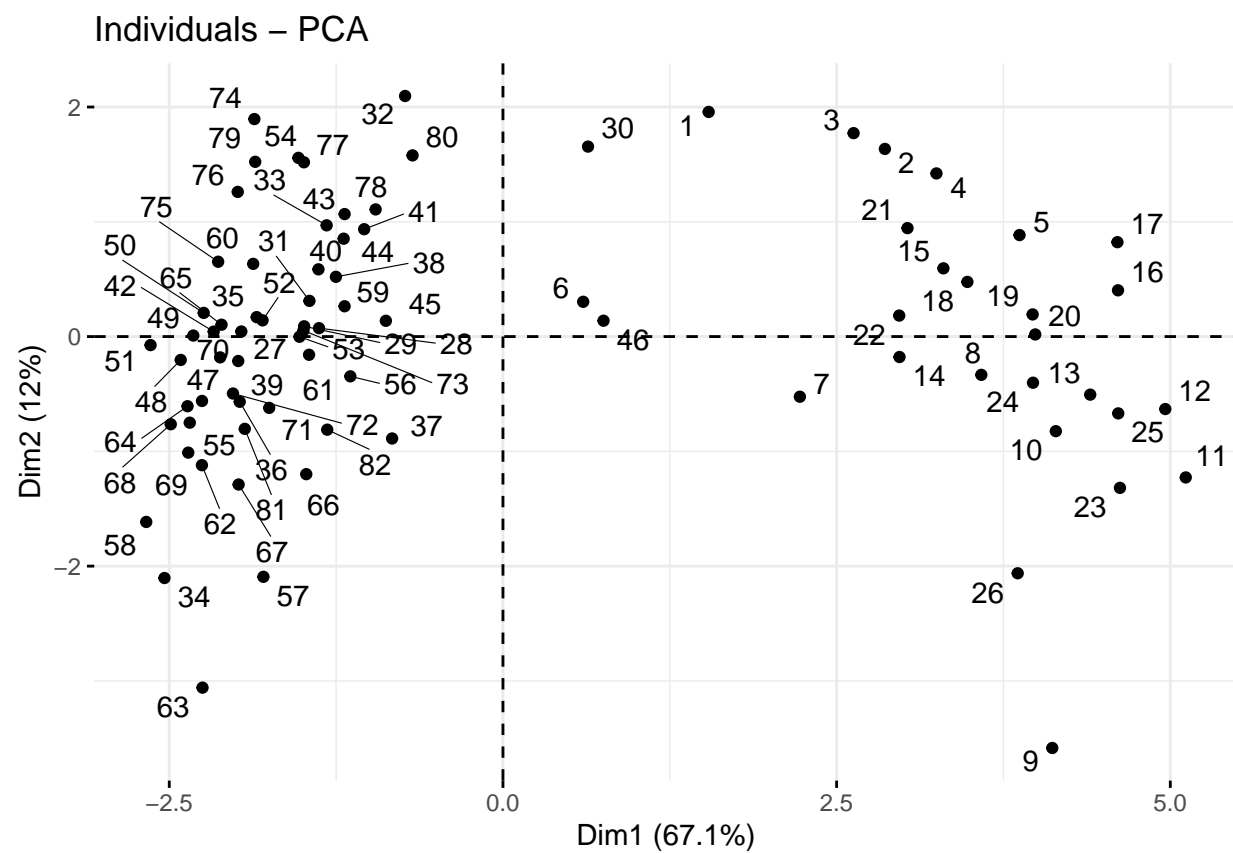
## Skipping install of 'factoextra' from a github remote, the SHA1 (1689fc74) has not changed since last
## Use `force = TRUE` to force installation
library("factoextra")

## Loading required package: ggplot2
## Welcome! Want to learn more? See two factoextra-related books at https://goo.gl/ve3WBa
library(readr)
R_XRF_Data_Biplot_2_ <- read_csv("R_XRF_Data - Biplot (2).csv")

## Rows: 82 Columns: 11
## -- Column specification -----
## Delimiter: ","
## chr (1): Site
## dbl (10): SiO2, TiO2, Al2O3, Fe2O3, MnO, MgO, CaO, Na2O, K2O, P2O5
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.
# before the PCA analysis
res.pca <- prcomp(R_XRF_Data_Biplot_2_[, -1], scale = TRUE)

fviz_pca_ind(res.pca, repel = T)

```



```
fviz_pca_biplot(res.pca, label="var", habillage=R_XRF_Data_Biplot_2_$Site, addEllipses=TRUE, ellipse.level=0.95)
```

PCA – Biplot

