PEPILIYA KANKANAMAGE

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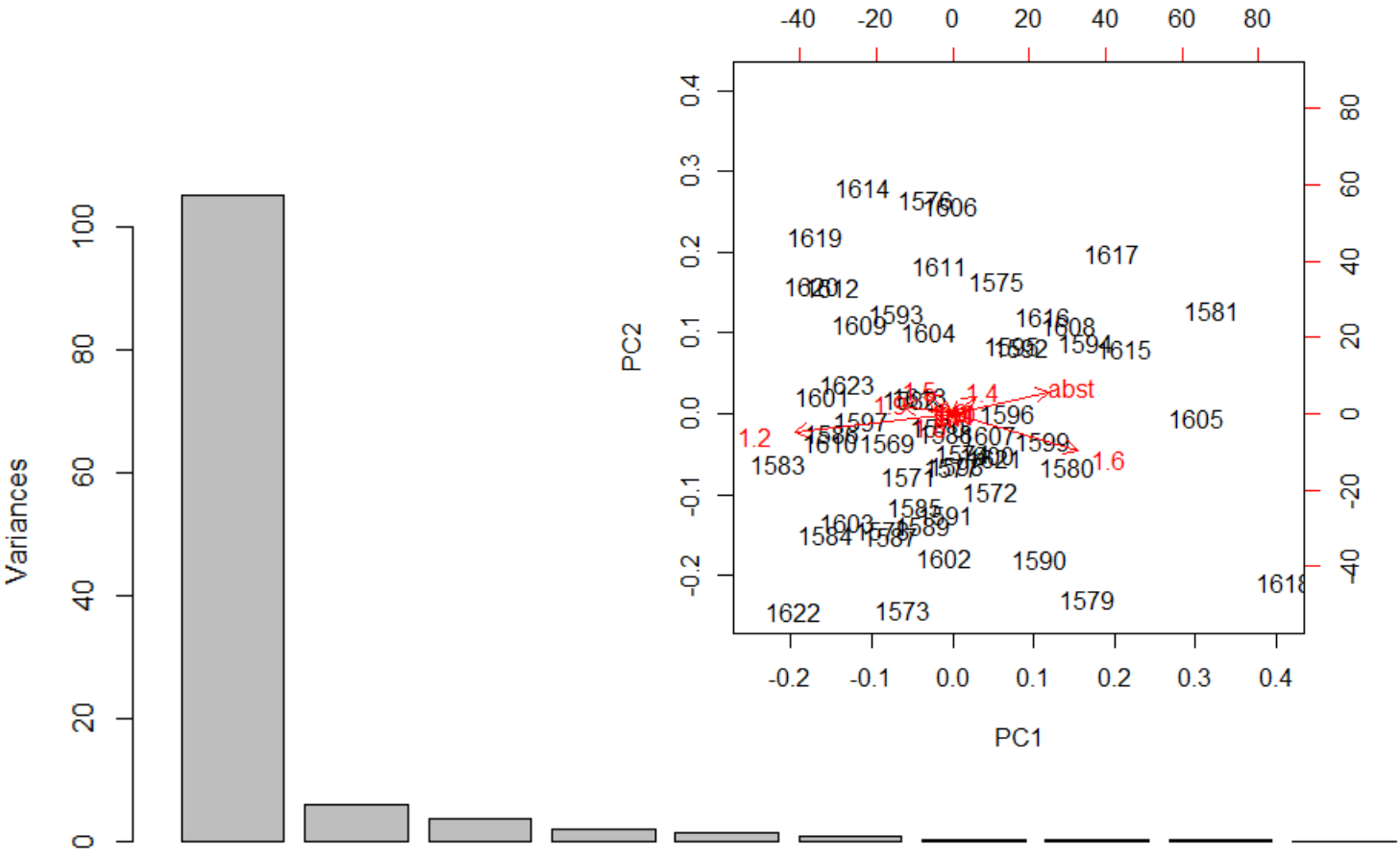
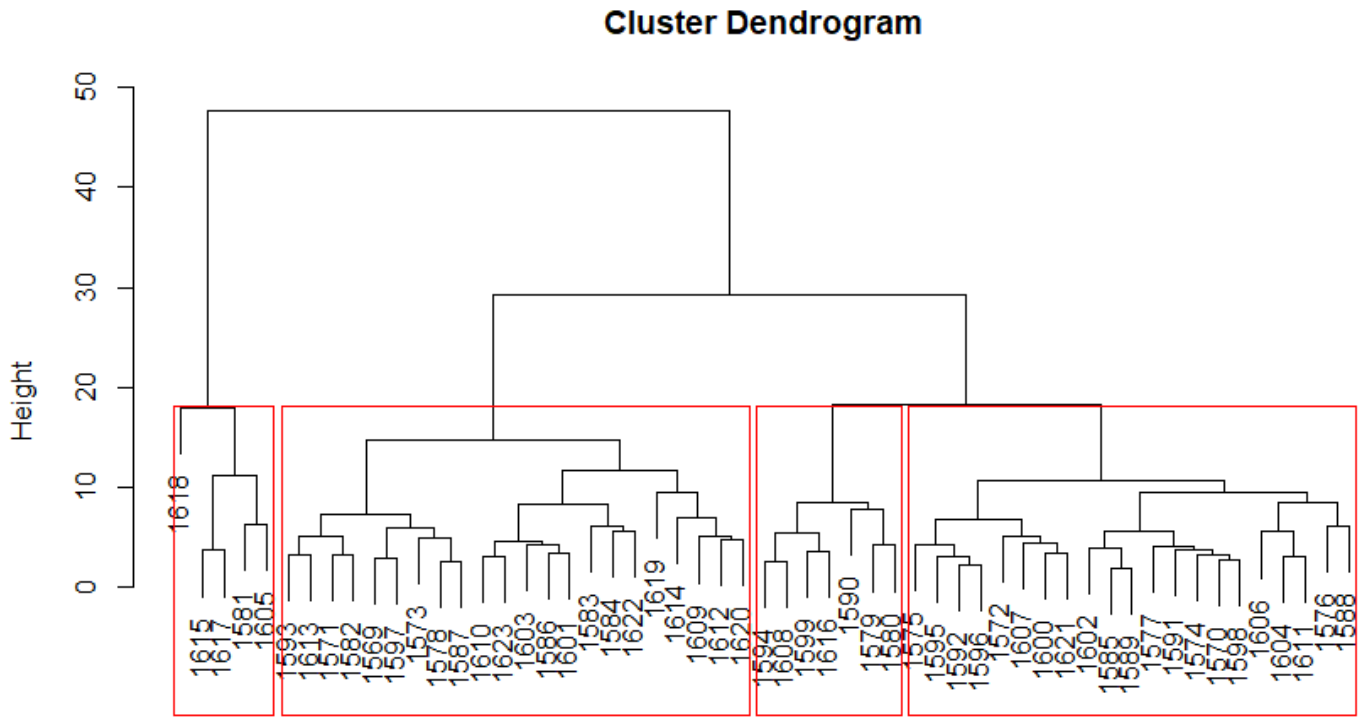
```r
getwd()
data <- read.csv("data/election2022.csv", fileEncoding = "UTF-8", dec = ",")
names(data)

data <- data [data$INSEE_COM == '92073',]
ind <- grep("Ins", names(data))
pct <- data [, ind]
ind <- grep("Nom", names(data))
noms <- data [1,ind]
names(pct) [c(7:18)]


names(pct) [c(7:18)] <- noms
pct <- pct [,c(2, 7:18)]
names(pct) [1] <- "abst"

rownames(pct) <- c(1:32)

summary(pct)

cor(pct)

pairs(pct)

res <- prcomp(pct)
plot(res)

biplot(res)

# matrice des distances
d.pct <- dist(pct)
cah <- hclust(d.pct)
plot(cah)

plot(cah)
rect.hclust(cah,k=4)

groupes.cah <- cutree(cah,k=4)
#liste des groupes
print(sort(groupes.cah))
```




Cluster Dendrogram
Height
0
10
20
30
40
50
1618
1615
1617
1581
1605
1593
1613
1571
1582
1569
1597
1573
1578
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1623
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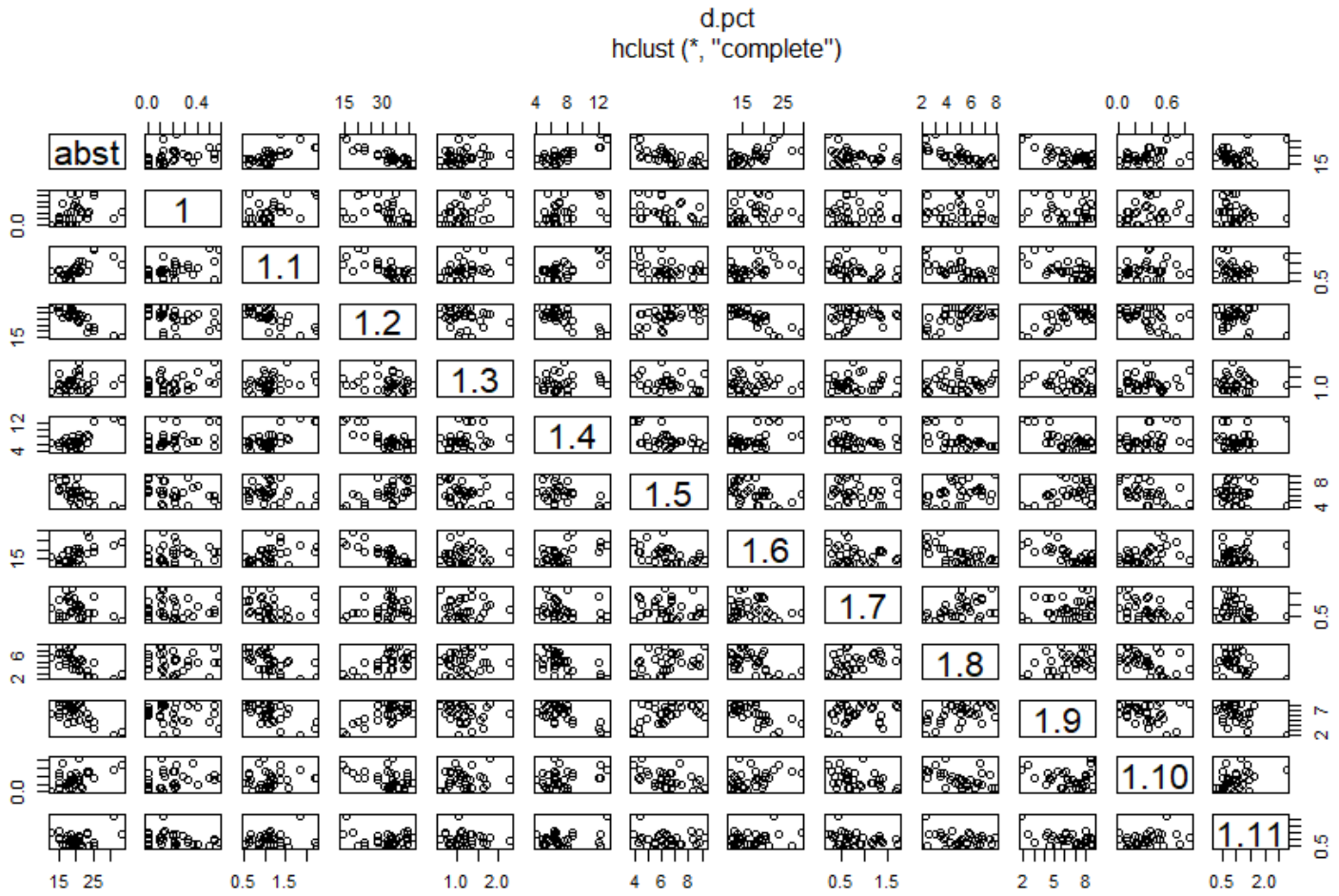
1595
1592
1596
1572
1607
1600
1621
1602
1585
1589
1577
1591
1574
1570
1598
1606
1604
1611
1576
1588


d.pct
hclust (*, "complete")
abst
1
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
1.10
1.11