

exemple de presentation

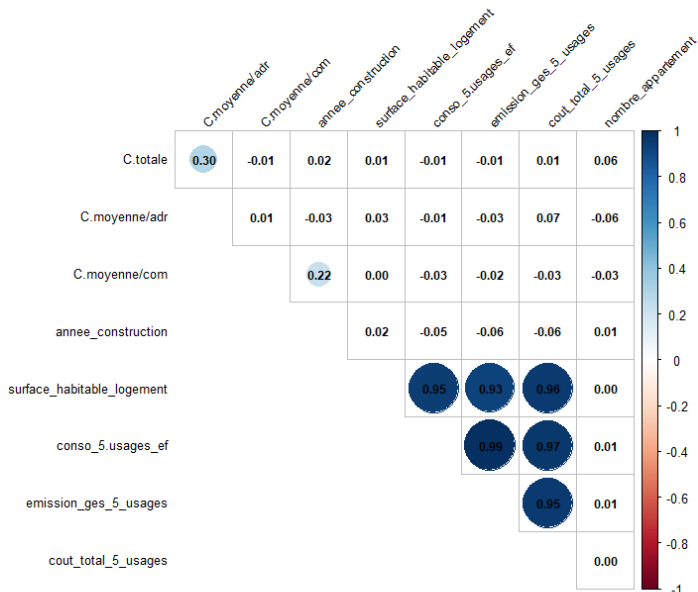
Kenny Jean-elie Ibrahima Caba Bah Fatou Diop Ndeye

2025-12-11

Section 1

Analyse en composantes principales

Matrice de corrélation



Etude des inerties

	eigenvalue	percentage of variance	cumulative percentage of variance
comp 1	3.88	43.1	43.1
comp 2	1.30	14.5	57.5
comp 3	1.21	13.4	70.9
comp 4	1.03	11.4	82.4
comp 5	0.79	8.8	91.2
comp 6	0.68	7.5	98.7
comp 7	0.08	0.9	99.6
comp	0.03	0.4	100.0

Observation des variables

	Dim.1	Dim.2	Dim.3
C.totale	0.001	0.801	0.036
C.moyenne/adr	0.021	0.809	0.005
C.moyenne/com	-0.031	-0.019	0.774
annee_construction	-0.056	-0.024	0.773
surface_habitable_logement	0.972	0.013	0.071
conso_5.usages_ef	0.993	-0.022	0.002
emission_ges_5_usages	0.984	-0.046	0.000
cout_total_5_usages	0.986	0.036	-0.004
nombre_appartement	0.005	-0.003	-0.074

Qualité de représentation des variables sur l'axe F1F2

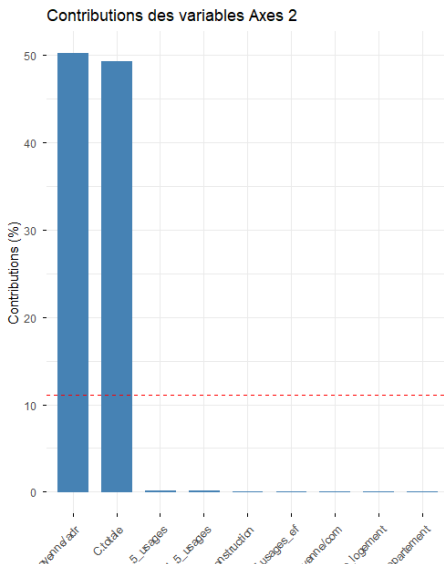
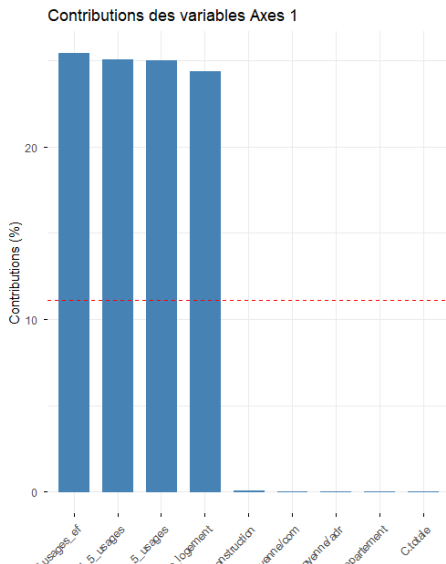
	x
C.totale	0.642
C.moyenne/adr	0.655
C.moyenne/com	0.001
annee_construction	0.004
surface_habitable_logement	0.944
conso_5.usages_ef	0.987
emission_ges_5_usages	0.971
cout_total_5_usages	0.974
nombre_appartement	0.000

Tableau des coordonnées des variables

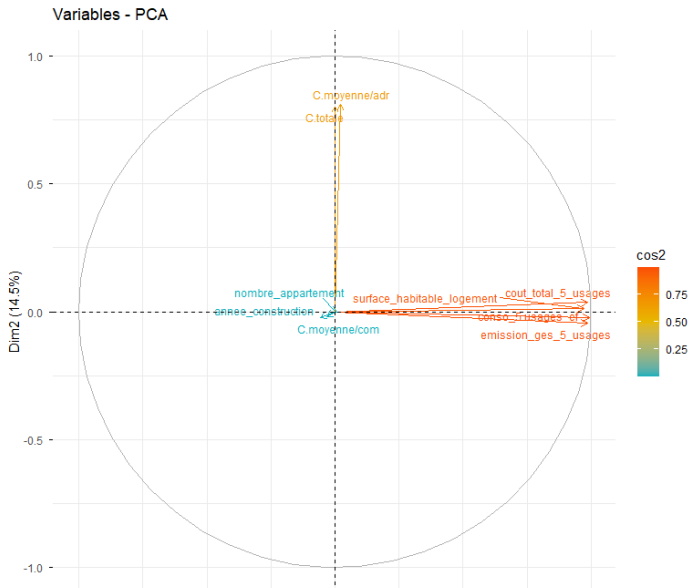
	F1	F2	F3
C.totale	0.00	0.8	0.0
C.moyenne/adr	0.02	0.8	0.0
C.moyenne/com	-0.03	0.0	0.8
annee_construction	-0.06	0.0	0.8
surface_habitable_logement	0.97	0.0	0.1
conso_5.usages_ef	0.99	0.0	0.0
emission_ges_5_usages	0.98	0.0	0.0
cout_total_5_usages	0.99	0.0	0.0
nombre_appartement	0.00	0.0	-0.1

Etude des contributions des variables

\$'1'



Représentation des variables avec la qualité de représentation



Section 2

Analyse des Correspondances Factorielles

Présentation générale de l'ACF

Resultat test

$$\chi^2_{\text{obs}} = 14907.6$$

$$\text{df} = 36$$

$$p\text{-value} = 0$$

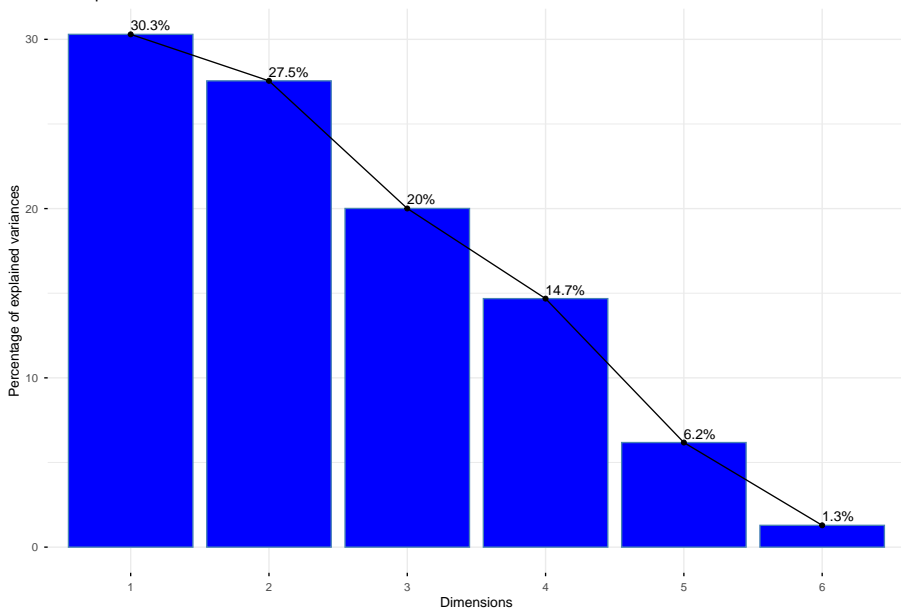
Description des variables

Variables actives:

Étiquette_dpe, Étiquette_ges
pour quoi?

Qualité globale de l'ACF

Scree plot

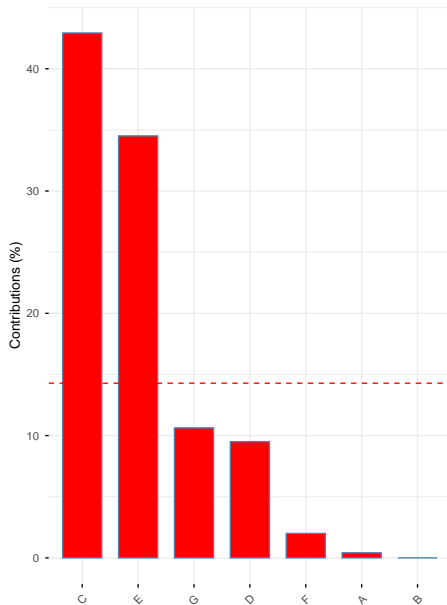


Qualité de IACF

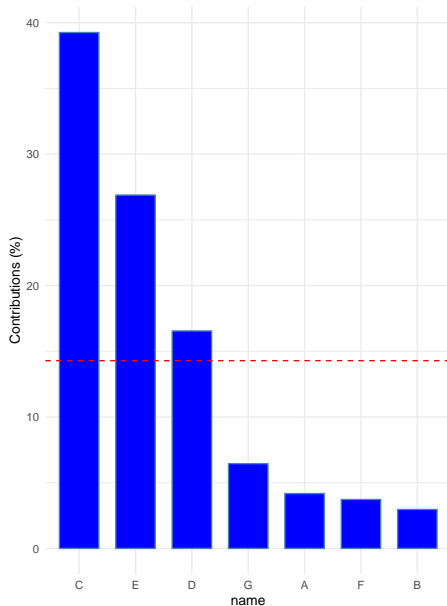
	eigenvalue	percentage of variance	cumulative percentage of variance
dim 1	0.63	30.3	30.3
dim 2	0.57	27.5	57.8
dim 3	0.42	20.0	77.9
dim 4	0.31	14.7	92.5
dim 5	0.13	6.2	98.7
dim 6	0.03	1.3	100.0

interprétation de l'axe 1

Contribution des DPE à la Dime 1

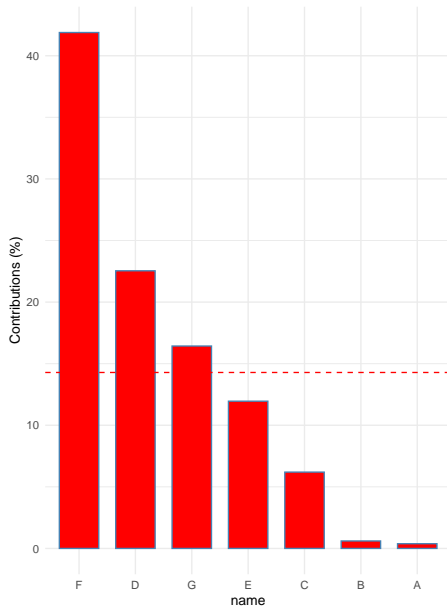


Contribution des GES à la Dim1

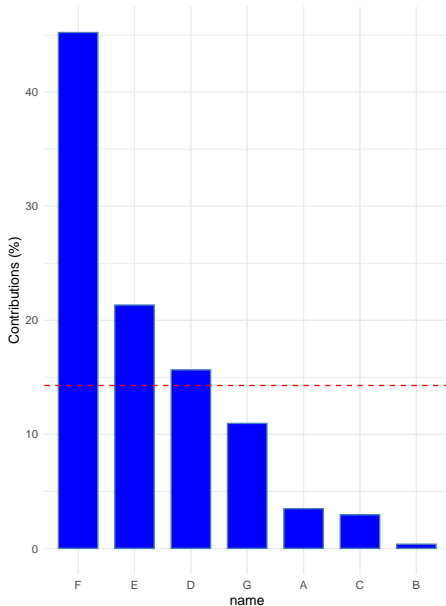


interprétation de l'axe 2

Contribution des DPE à la Dime 2

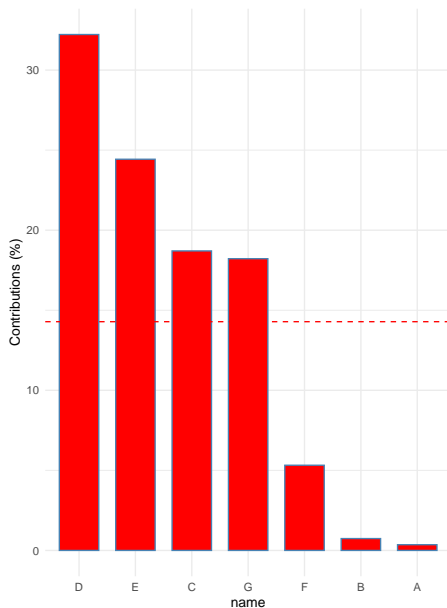


Contribution des GES à la Dim2

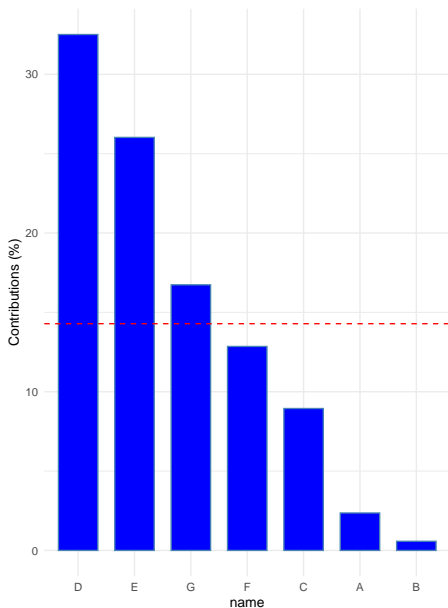


interprétation de l'axe 3

Contribution des DPE à la Dime 3

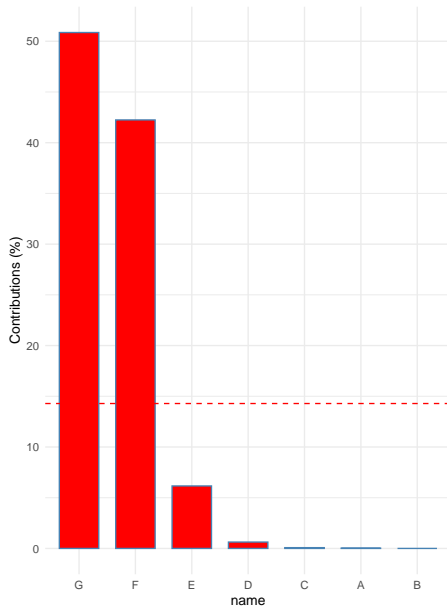


Contribution des GES à la Dim3

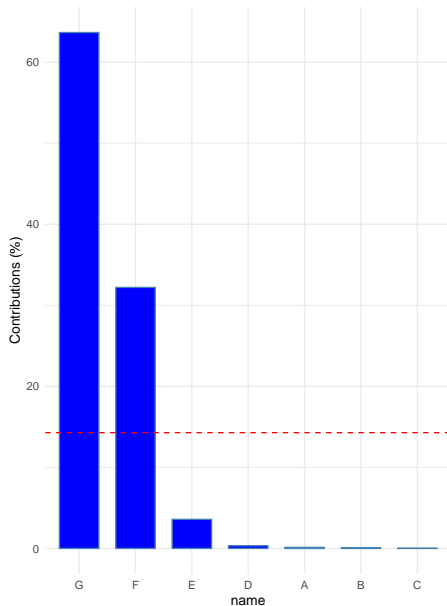


interprétation de l'axe 4

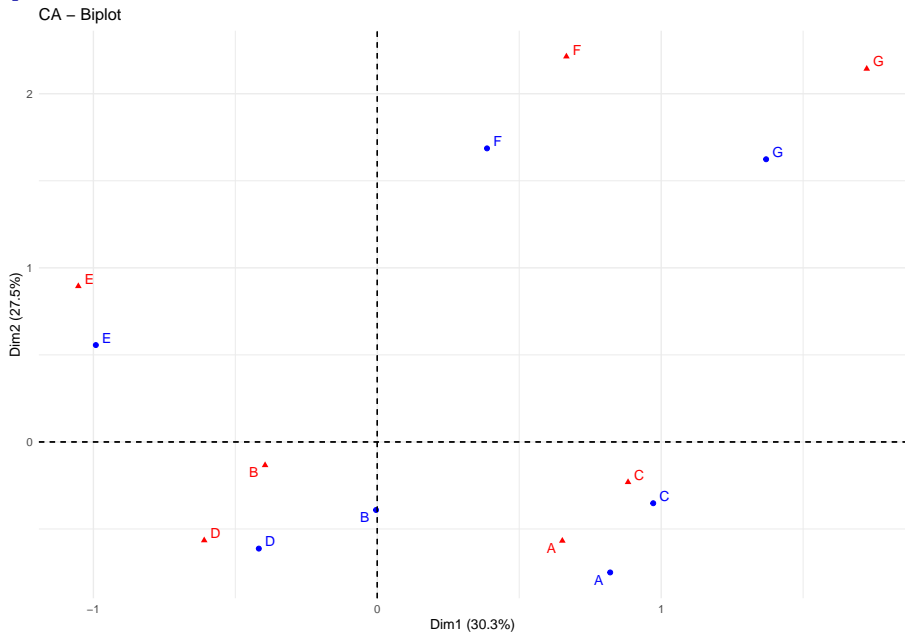
Contribution des DPE à la Dime 3



Contribution des GES à la Dim3



synthèse finale



Section 3

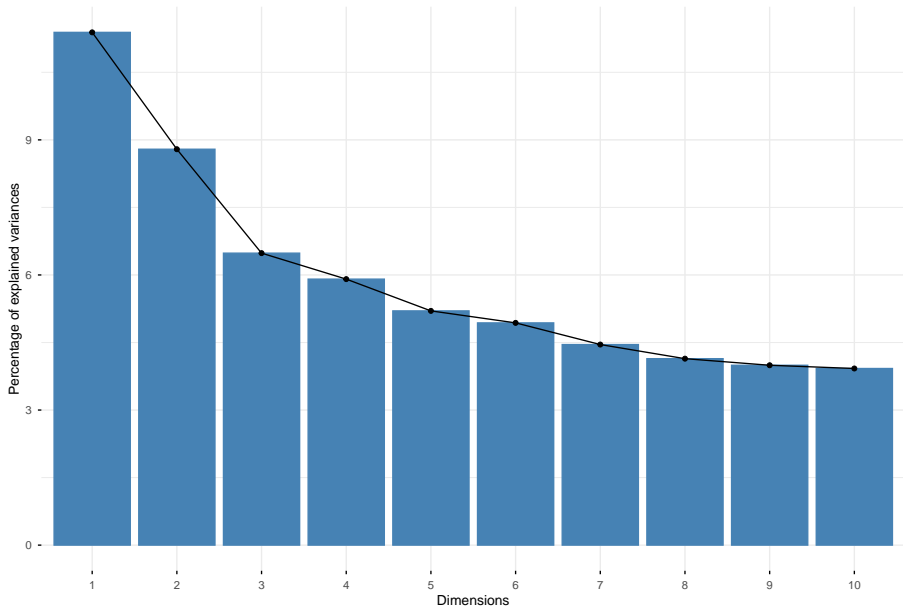
Analyse des correspondances multiples

Inertie

	eigenvalue	percentage of variance	cumulative percentage of variance
dim 1	0.3	11.4	11.4
dim 2	0.3	8.8	20.2
dim 3	0.2	6.5	26.7
dim 4	0.2	5.9	32.6
dim 5	0.2	5.2	37.8
dim 6	0.1	4.9	42.7
dim 7	0.1	4.5	47.2
dim 8	0.1	4.1	51.3
dim 9	0.1	4.0	55.3
dim 10	0.1	3.9	59.2
dim 11	0.1	3.9	63.1
dim 12	0.1	3.7	66.9

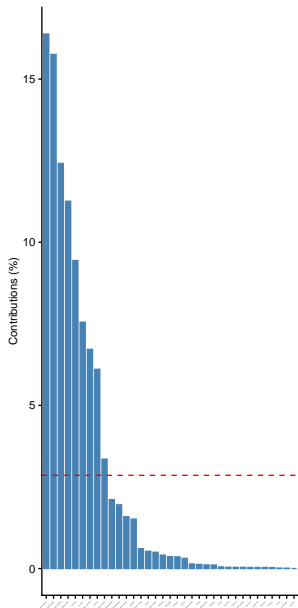
Inertie

Scree plot

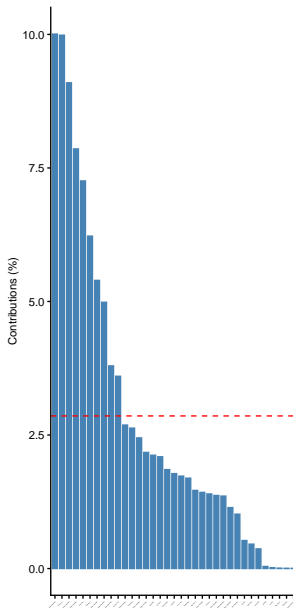


Contribution des variables

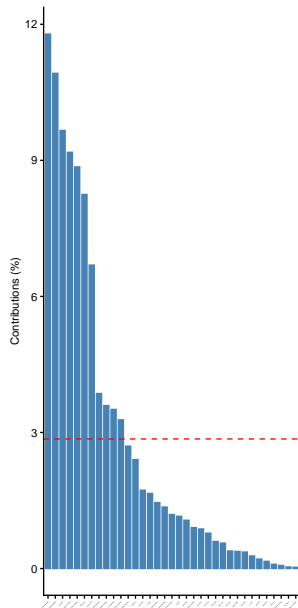
Contribution of variables to Dim-1



Contribution of variables to Dim-2



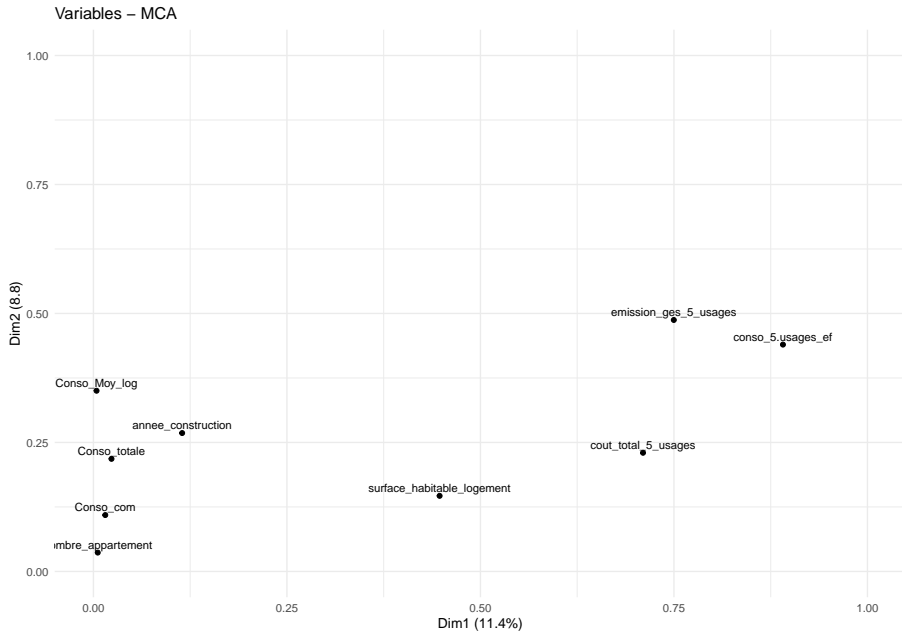
Contribution of variables to Dim-3



corrélation des var

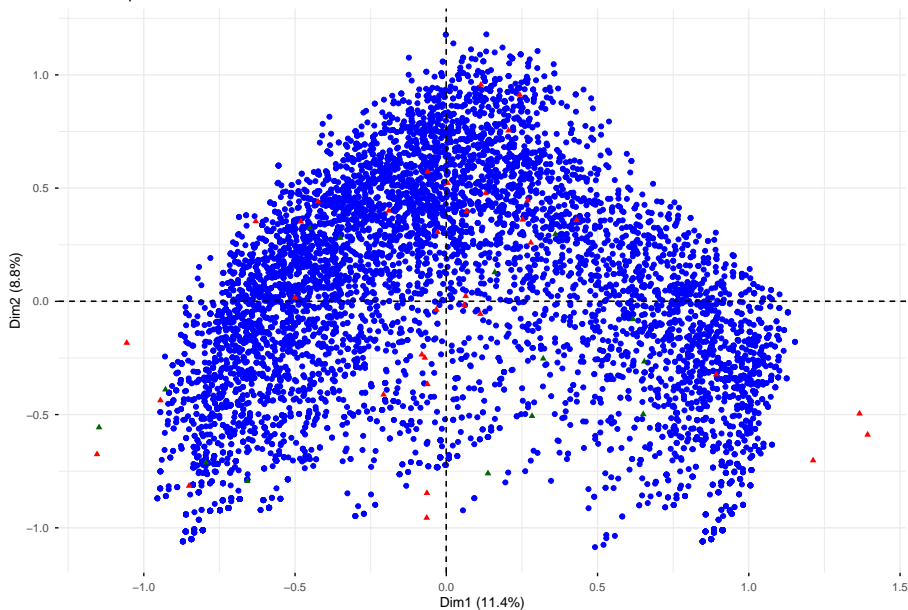
	dim1	dim2	dim3	dim4	dim5
conso_5.usages_ef	0.89	0.44	0.29	0.10	0.02
emission_ges_5_usages	0.75	0.49	0.41	0.09	0.02
cout_total_5_usages	0.71	0.23	0.35	0.01	0.04
surface_habitable_logement	0.45	0.15	0.02	0.21	0.07
annee_construction	0.11	0.27	0.16	0.47	0.14
Conso_totale	0.02	0.22	0.06	0.04	0.58
Conso_com	0.02	0.11	0.02	0.25	0.01
nombre_appartement	0.01	0.04	0.11	0.21	0.37
Conso_Moy_log	0.00	0.35	0.27	0.17	0.11

visualisation des corrélations



Nuages des points

MCA – Biplot



Section 4

Mise en Oeuvre de la clasifcation non supervisée à
partir de l'ACM

Mise en Oeuvre de la clasifcation non supervisée à partir de l'ACM

On commence par faire par faire une classification hierarchique ascendante sur la sortie de l'ACM avec consolidation puis faire la méthodes **k-means**

reste