Informe clustering con 42000 series temporales

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Las series temporales utilizadas son las 42000 primeras de la base de datos y para realizar clustering se calcularon 11 medidas de complejidad sobre cada una de ellas. En cuanto a los métodos de clustering se han utilizado 3.

Las medidas de complejidad utilizadas son:
- Kolmogorov
- LempelZiv
- AproximationEntropy
- PermutationEntropy
- PracmaSampleEntropy
- SampleEntropy
- ShannonEntropy
- ChaoShenEntropy
- DirichletEntropy
- MillerMadowEntropy
- ShrinkEntropy

Los métodos de clustering utilizados son:
- KMeans
- CMeans
- HClust

Los métodos de predicción utilizados son:
- Arima
- Ets
- HoltWinters
- StrucTS
- Bats
- Stl
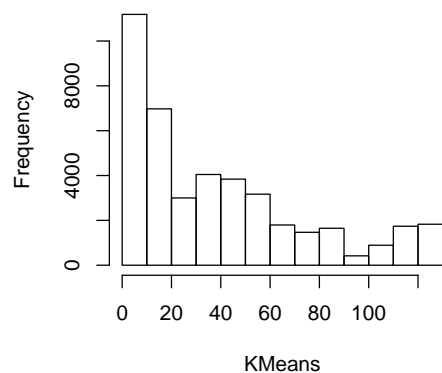

La división en bloques de series temporales es:
- A: 1-14000
- B: 14001-28000
- C: 28001-42000
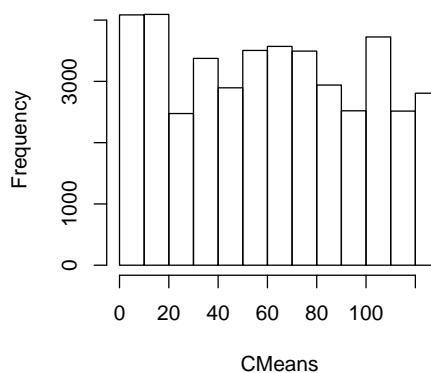
1 Clustering del conjunto completo

1.1 Informe individual de cluster

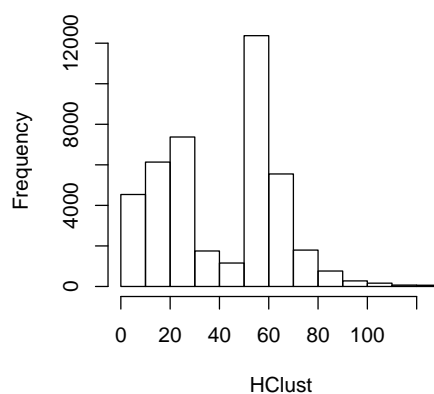|	ncenters	max.density	min.density	standard.desviation
KMeans	129.00	2045.00	1.00	396.42
CMeans	129.00	948.00	1.00	167.84
HClust	129.00	2984.00	1.00	576.39

Histogram of hist_kmeans

Histogram of hist_cmeans

Histogram of hist_hclust
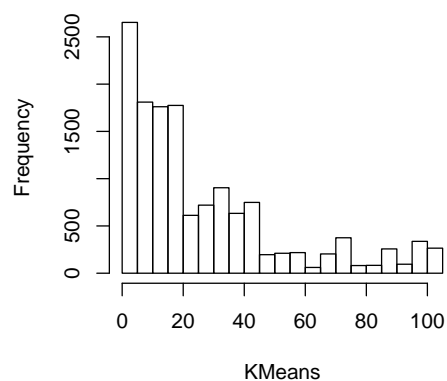
1.2 Comparación por parejas de clustering

	centers.identical	centers.different	centers.comun.percent	similarility.mean
KMeans-CMeans	1	3	0	28
KMeans-HClust	8	0	6	45
CMeans-HClust	1	1	0	23

2 Clustering Bloque A

2.1 Informe individual de cluster

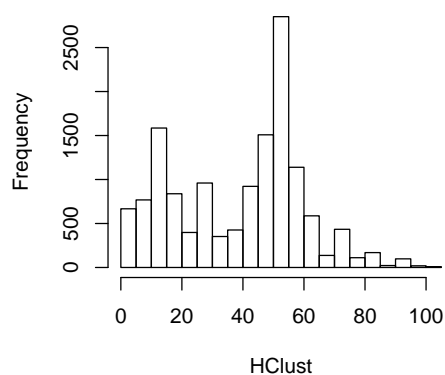|	ncenters	max.density	min.density	standard.desviation
KMeans	104.00	891.00	1.00	181.60
CMeans	104.00	351.00	1.00	76.78
HClust	104.00	1187.00	1.00	224.19

Histogram of hist_kmeans

Histogram of hist_cmeans
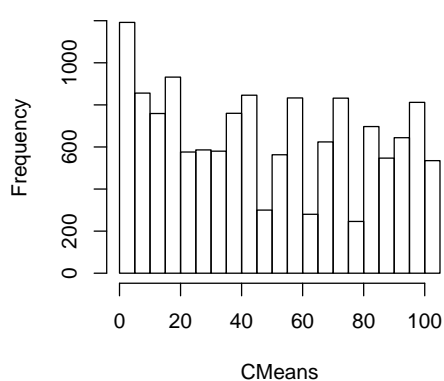
Histogram of hist_hclust

2.2 Comparación por parejas de clustering

	centers.identical	centers.different	centers.comun.percent	similarility.mean
KMeans-CMeans	2	2	1	30
KMeans-HClust	6	0	5	47
CMeans-HClust	0	0	0	26

3 Clustering Bloque B

3.1 Informe individual de cluster

	ncenters	max.density	min.density	standard.desviation
KMeans	122.00	577.00	1.00	126.90
CMeans	122.00	301.00	1.00	73.85
HClust	122.00	999.00	1.00	158.67

Histogram of hist_kmeans
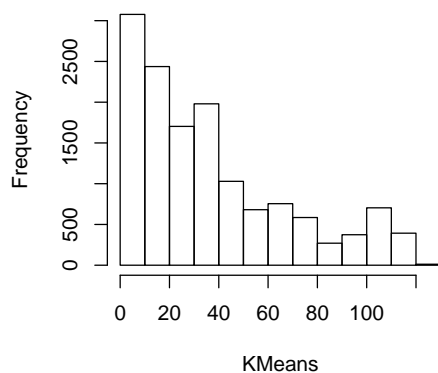
Histogram of hist_cmeans
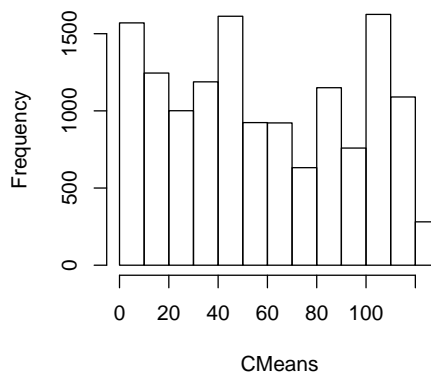
Histogram of hist_hclust
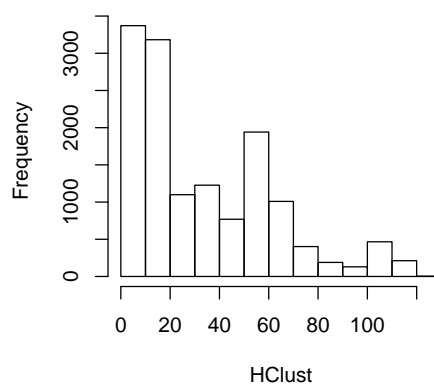
3.2 Comparación por parejas de clustering

	centers.identical	centers.different	centers.comun.percent	similarility.mean
KMeans-CMeans	3	3	2	29
KMeans-HClust	7	0	5	46
CMeans-HClust	1	0	0	26

4 Clustering Bloque C

4.1 Informe individual de cluster

	ncenters	max.density	min.density	standard.desviation
KMeans	110.00	644.00	1.00	158.97
CMeans	110.00	269.00	1.00	64.67
HClust	110.00	1007.00	1.00	192.55

Histogram of hist_kmeans
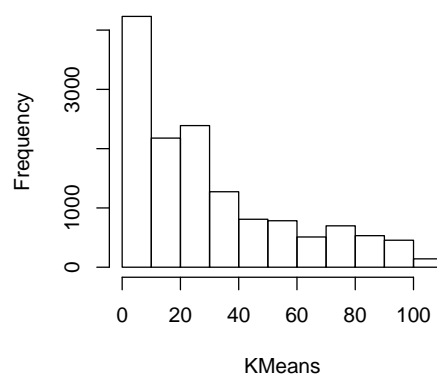
Histogram of hist_cmeans
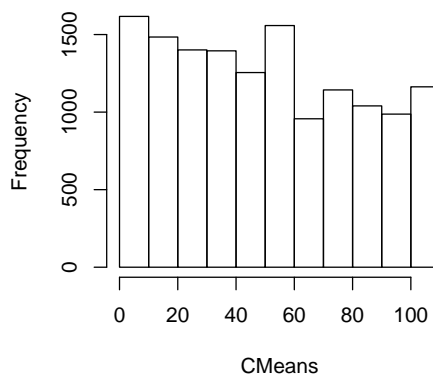
Histogram of hist_hclust
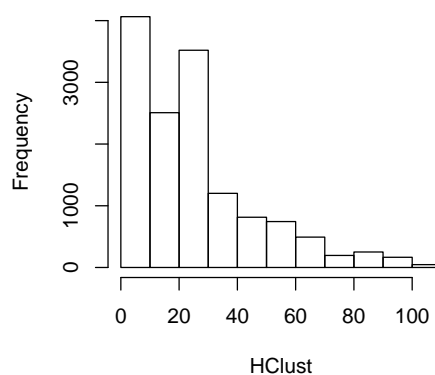

4.2 Comparación por parejas de clustering

	centers.identical	centers.different	centers.comun.percent	similarility.mean
KMeans-CMeans	5	2	4	33
KMeans-HClust	4	0	3	46
CMeans-HClust	1	0	0	28

5 Análisis Comparación Conjunto total y Bloque A

	centers.identical	centers.different	centers.comun.percent	similarility.mean
KMeans_X-KMeans_Subset	0	127	0	0
KMeans_X-CMeans_Subset	0	127	0	0
KMeans_X-HClust_Subset	0	127	0	0
CMeans_X-KMeans_Subset	0	127	0	0
CMeans_X-CMeans_Subset	0	127	0	0
CMeans_X-HClust_Subset	0	127	0	0
HClust_X-KMeans_Subset	0	127	0	0
HClust_X-CMeans_Subset	0	127	0	0
HClust_X-HClust_Subset	0	127	0	0

6 Análisis Comparación Conjunto total y Bloque B

	centers.identical	centers.different	centers.comun.percent	similarility.mean
KMeans_X-KMeans_Subset	2	127	1	1
KMeans_X-CMeans_Subset	2	127	1	1
KMeans_X-HClust_Subset	2	127	1	1
CMeans_X-KMeans_Subset	2	127	1	1
CMeans_X-CMeans_Subset	2	127	1	1
CMeans_X-HClust_Subset	2	127	1	1
HClust_X-KMeans_Subset	2	127	1	1
HClust_X-CMeans_Subset	2	127	1	1
HClust_X-HClust_Subset	2	127	1	1

7 Análisis Comparación Conjunto total y Bloque C

	centers.identical	centers.different	centers.comun.percent	similarility.mean
KMeans_X-KMeans_Subset	2	127	1	1
KMeans_X-CMeans_Subset	2	127	1	1
KMeans_X-HClust_Subset	2	127	1	1
CMeans_X-KMeans_Subset	2	127	1	1
CMeans_X-CMeans_Subset	2	127	1	1
CMeans_X-HClust_Subset	2	127	1	1
HClust_X-KMeans_Subset	2	127	1	1
HClust_X-CMeans_Subset	2	127	1	1
HClust_X-HClust_Subset	2	127	1	1