

# Reporte Tarea 5

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# Chapter 1

## Problema 1

Instancia	Mejor solucion		Peor solucion		Solucion promedio	
	Valor	Peso	Valor	Peso	Valor	Peso
ks-4-0	19	11	12.0	7.0	18.04	9.96
ks-19-0	12248	30996	8142.0	21384.0	10919.44	28126.88
ks-30-0	99764	99779	89750.0	89751.0	98822.04	98830.08
ks-40-0	99913	99896	96003.0	96001.0	99209.0	99197.9
ks-45-0	23974	58148	14564.0	35728.0	19199.88	46885.76
ks-50-0	141611	341022	130467.0	314634.0	138971.06	335644.12
ks-50-1	5210	4988	4694.0	4795.0	4943.64	4884.46
ks-60-0	99779	99809	87750.0	87751.0	98323.66	98338.32
ks-82-0	104710920	104710920	9.4529142e7	9.4529142e7	1.02801462e8	1.02801462e8
ks-100-0	99796	99843	93766.0	93783.0	98747.52	98771.04
ks-100-1	1331419	3187738	1.127287e6	2.699574e6	1.28013444e6	3.06689488e6
ks-100-2	10473	9873	9395.0	9258.0	9895.8	9768.28
ks-106-0	106917397	106917397	8.5361792e7	8.5361792e7	1.0100383372e8	1.0100383372e8
ks-200-0	99935	99842	79501.0	79500.0	90265.12	90249.56
ks-200-1	1095937	2637974	1.06421e6	2.57162e6	1.08485316e6	2.61725032e6
ks-300-0	1680290	4036980	1.620773e6	3.904646e6	1.67077534e6	4.02019468e6
ks-400-0	3955280	9485160	3.794975e6	9.10725e6	3.9228375e6	9.411907e6
ks-500-0	52317	49903	45654.0	46136.0	49955.48	49008.28
ks-1000-0	104559	98890	92272.0	94357.0	98633.84	97372.88
ks-10000-0	1037704	999890	944474.0	964875.0	994545.5	982512.58

## Chapter 2

## Problema 2

Instancia	Mejor Solucion	Solucion Promedio	Peor Solucion
	Suma de Distancias	Suma de Distancias	Suma de Distancias
kcenter-1	34187.2	35943.13999999999	38943.3
kcenter-2	1310.75	1605.8989999999994	1918.82
kcenter-3	1900.48	2019.1342000000006	2228.0
kcenter-4	3785.08	3989.5181999999995	4401.32
kcenter-5	2926.1	3048.1572000000001	3254.96
kcenter-6	6849.27	7212.512199999998	7725.54
kcenter-7	8.11192e7	8.126886e7	8.52988e7
kcenter-8	1.99967e8	2.0821136e8	2.22676e8

## 2.1 kcenter-1

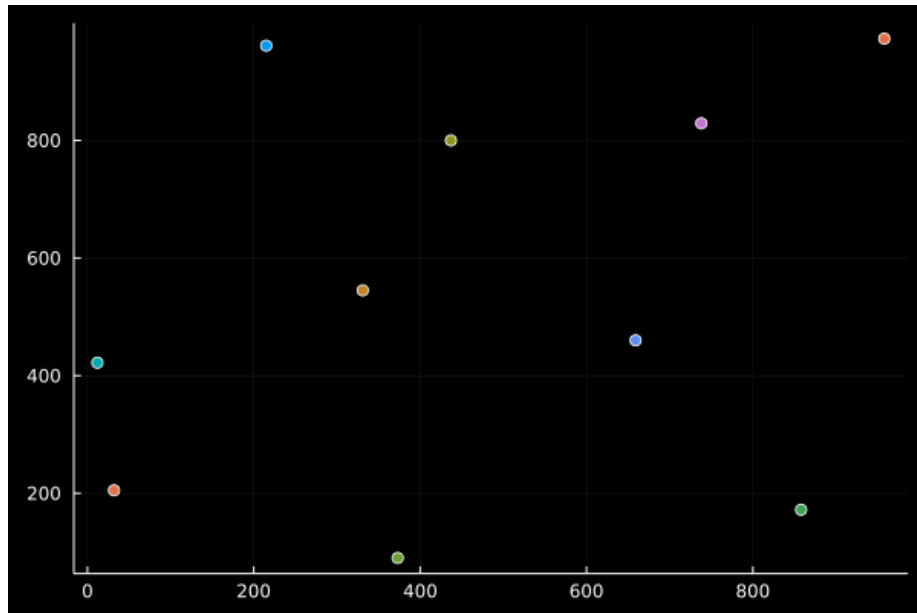


Figure 2.1: Mejores centros encontrados

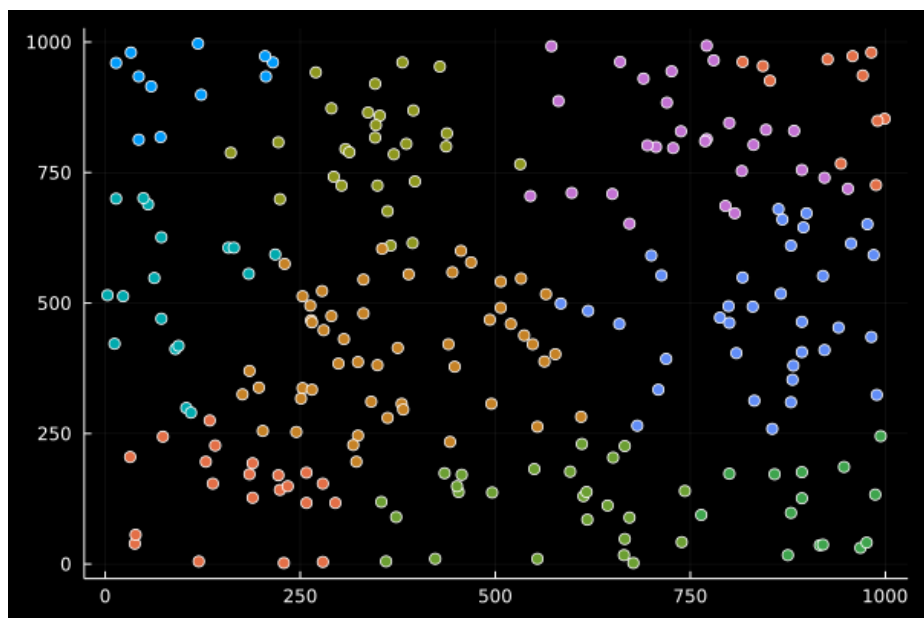


Figure 2.2: Distribucion de puntos por centro

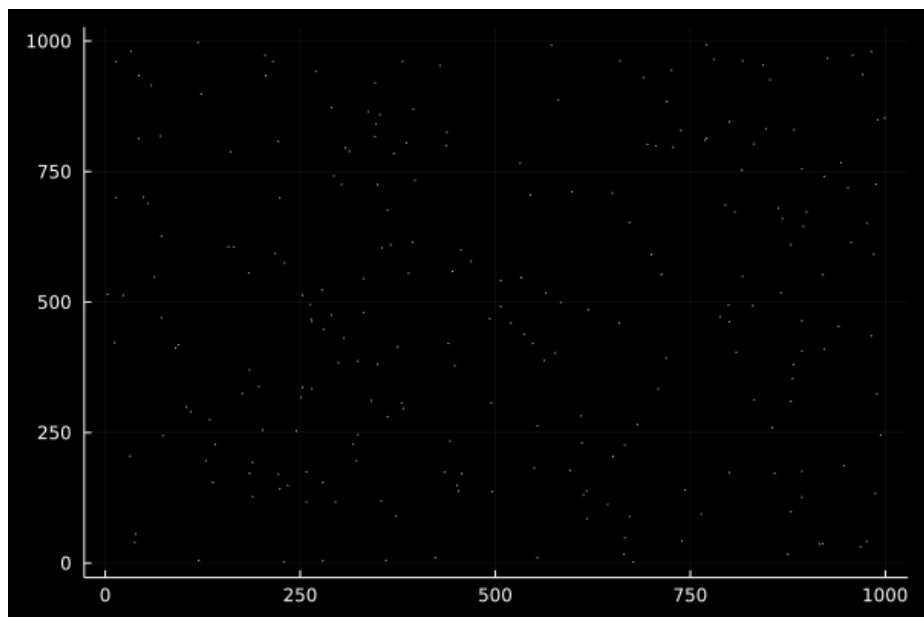


Figure 2.3: Distribucion de puntos por centro (miniatura)

## 2.2 kcenter-2

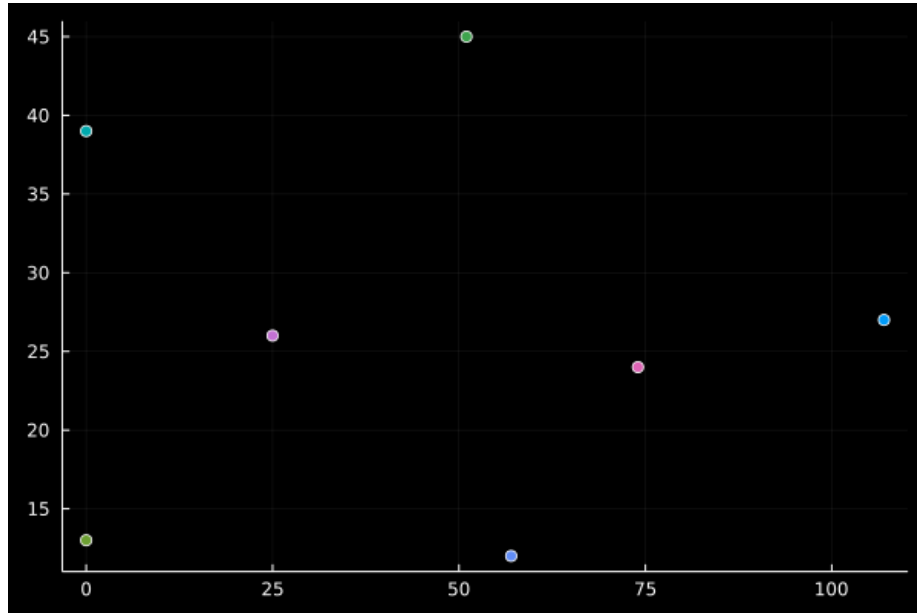


Figure 2.4: Mejores centros encontrados

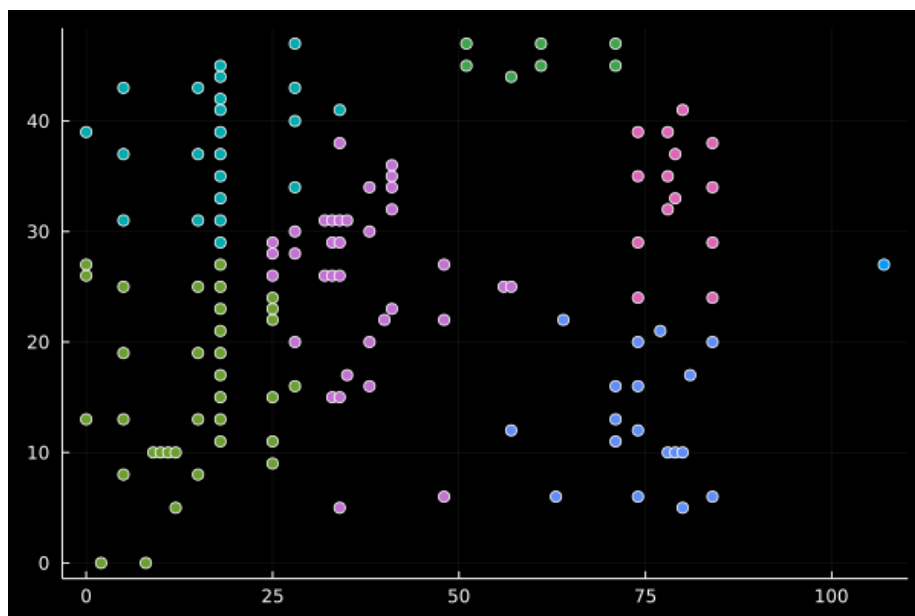


Figure 2.5: Distribucion de puntos por centro

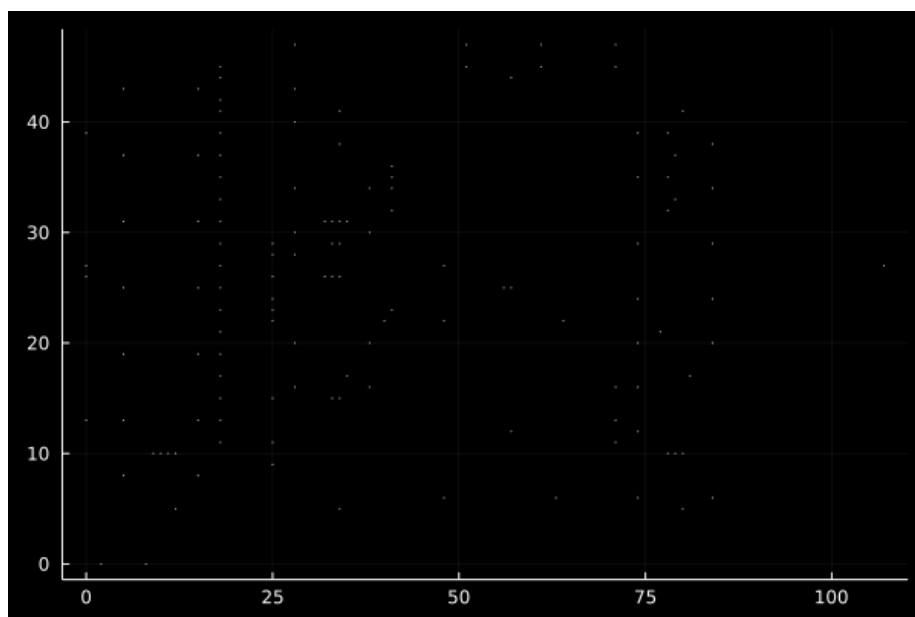


Figure 2.6: Distribucion de puntos por centro (miniatura)

## 2.3 kcenter-3

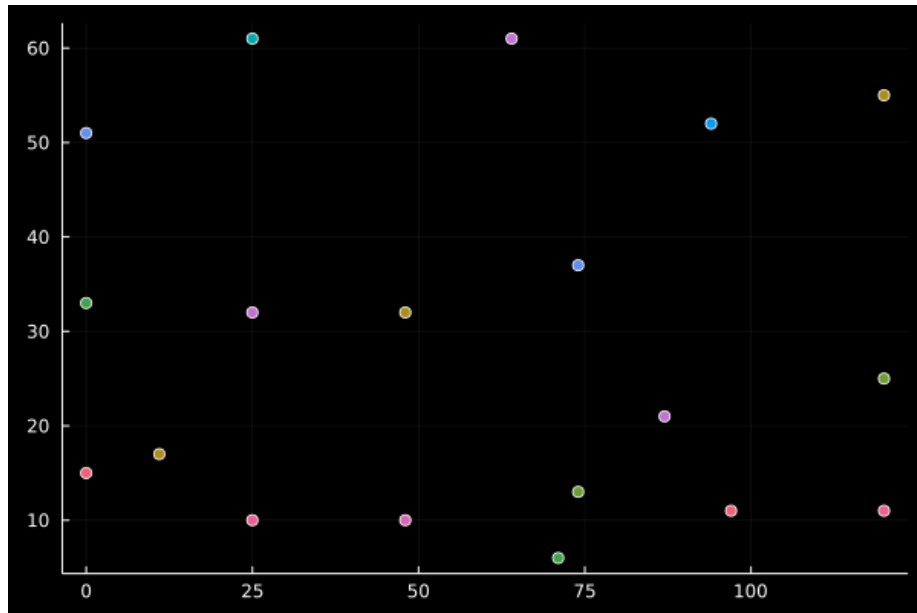


Figure 2.7: Mejores centros encontrados



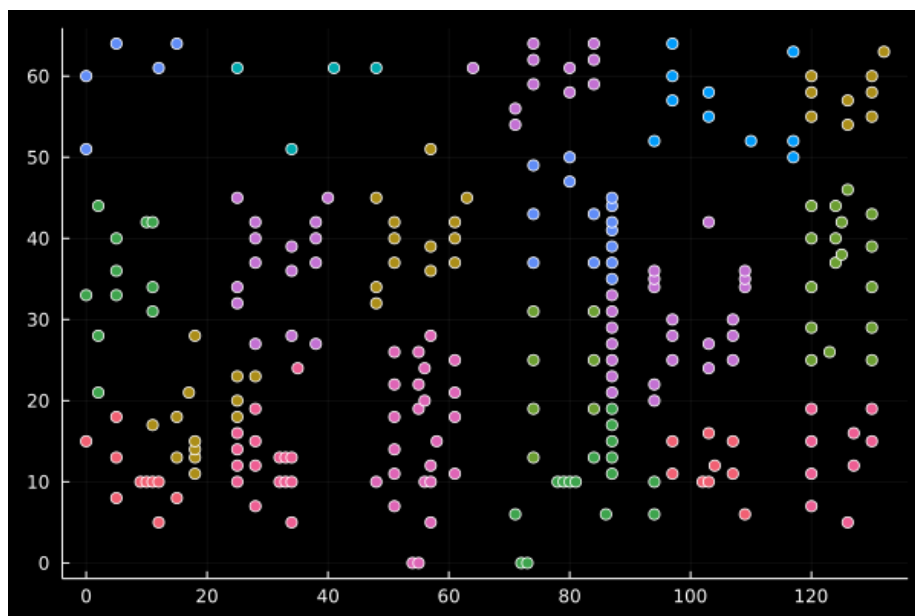


Figure 2.8: Distribucion de puntos por centro

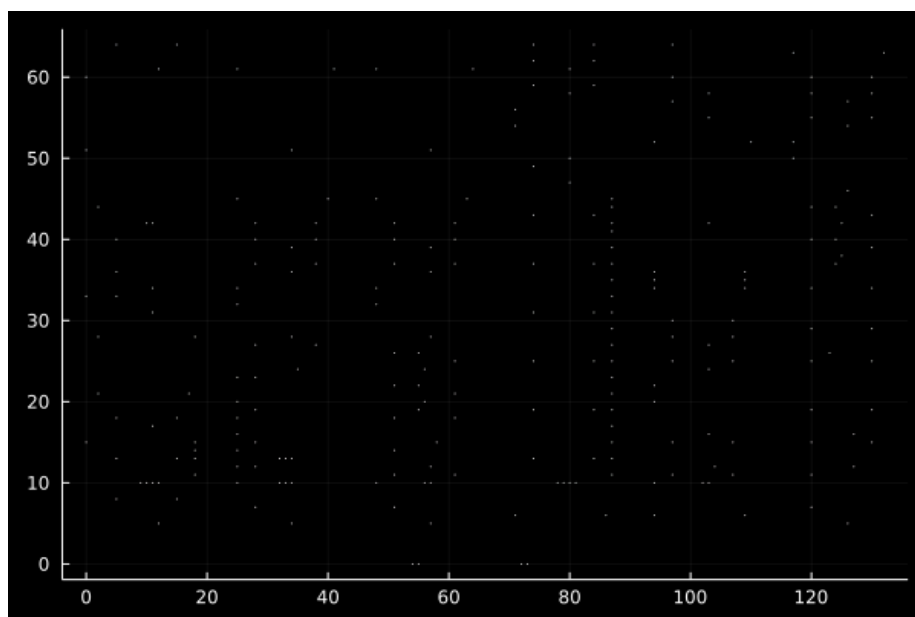


Figure 2.9: Distribucion de puntos por centro (miniatura)

## 2.4 kcenter-4

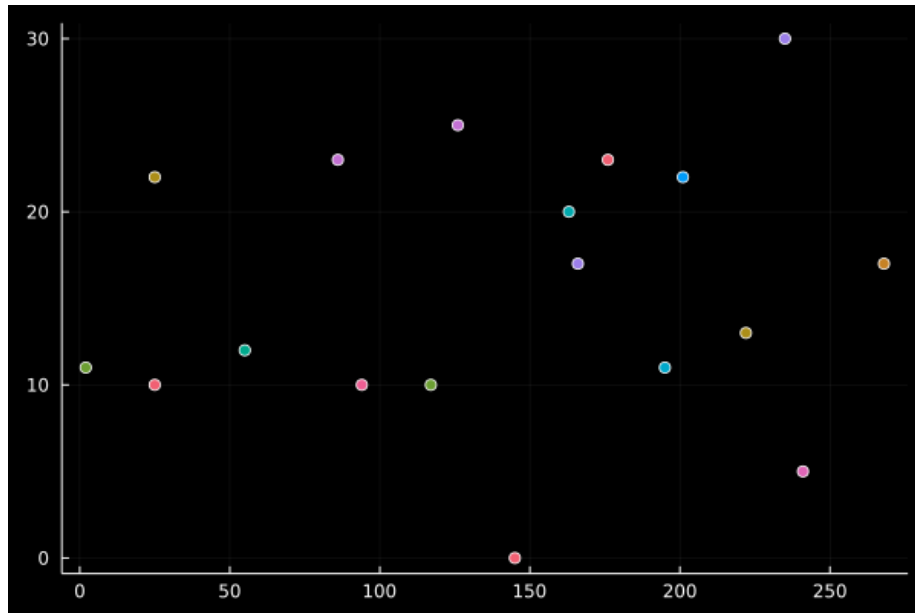


Figure 2.10: Mejores centros encontrados

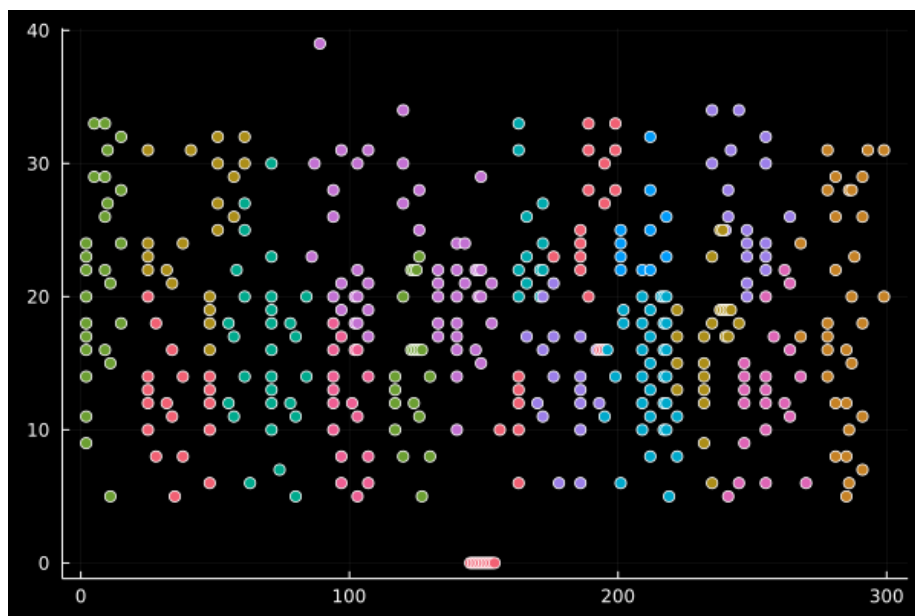


Figure 2.11: Distribucion de puntos por centro

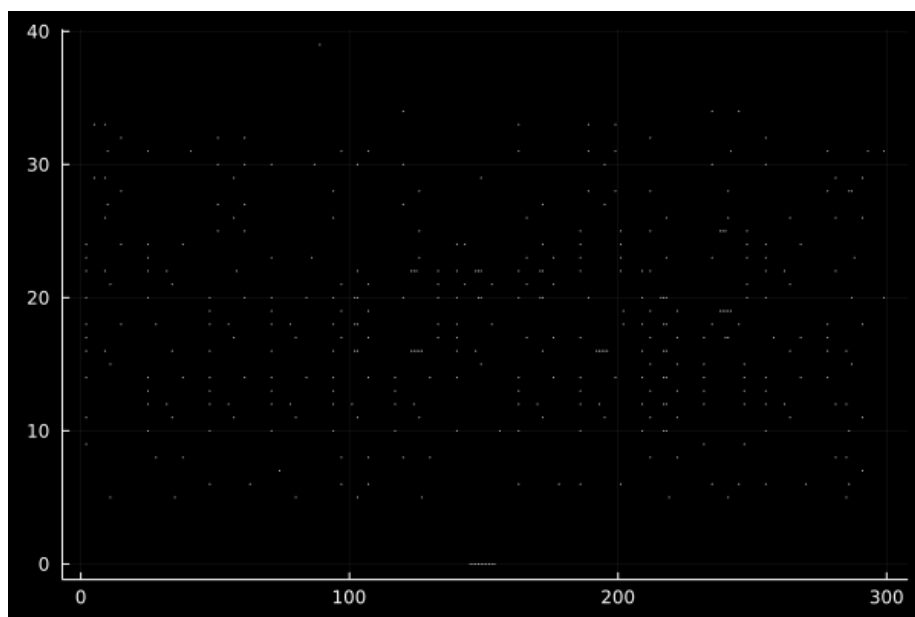


Figure 2.12: Distribucion de puntos por centro (miniatura)

## 2.5 kcenter-5

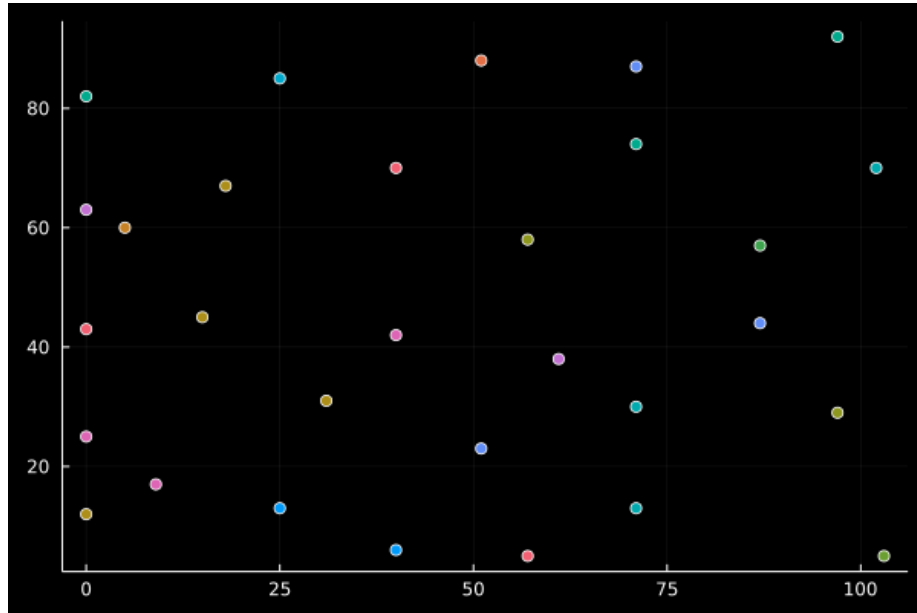


Figure 2.13: Mejores centros encontrados

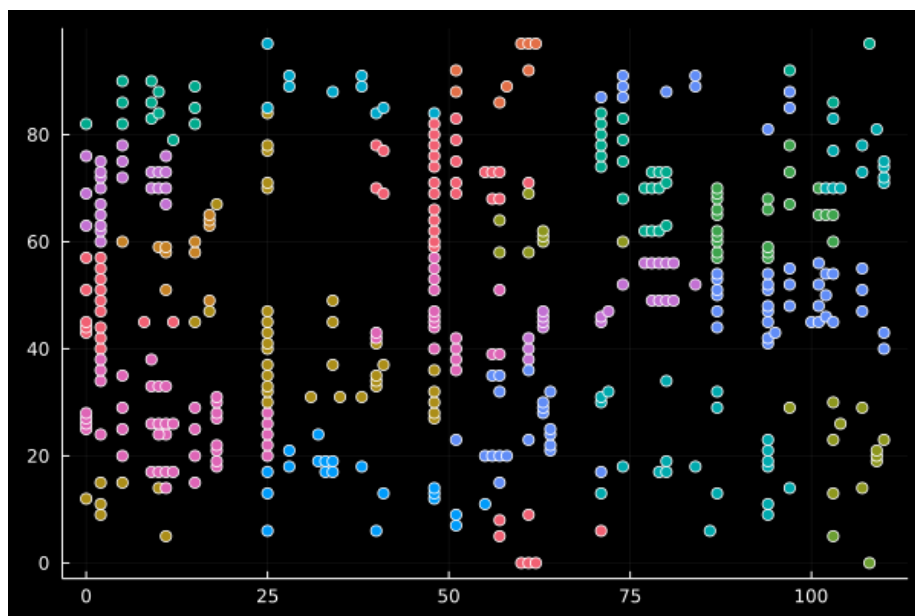


Figure 2.14: Distribucion de puntos por centro

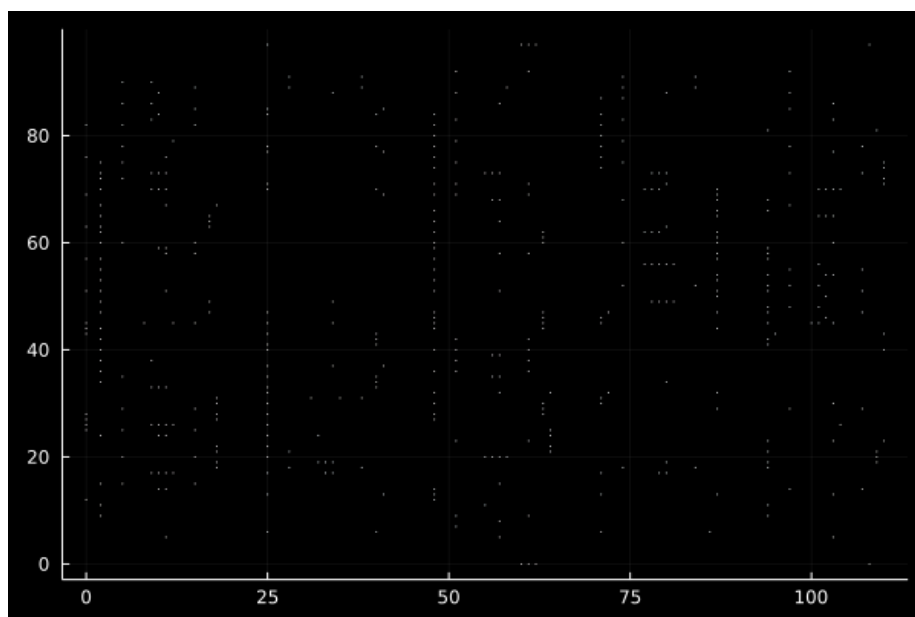


Figure 2.15: Distribucion de puntos por centro (miniatura)

## 2.6 kcenter-6

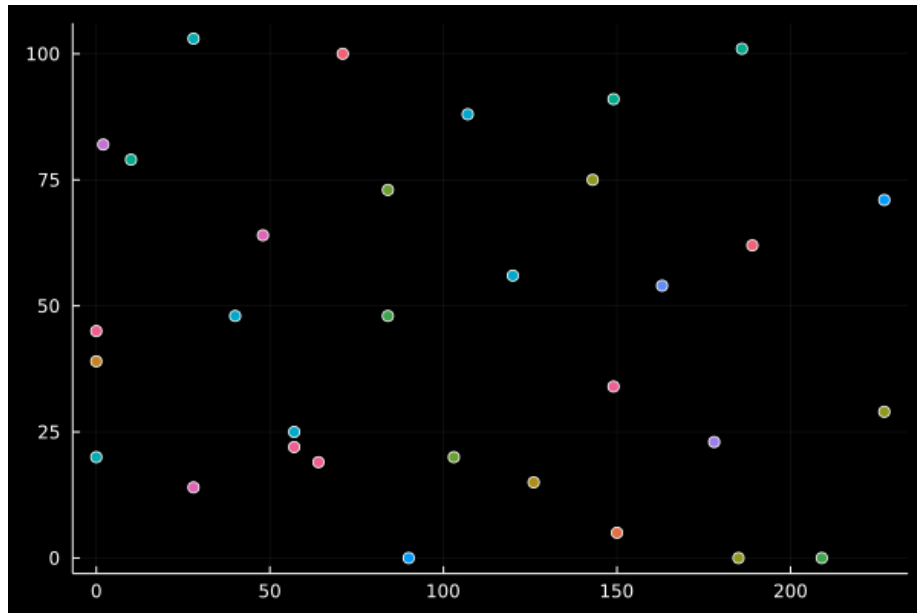


Figure 2.16: Mejores centros encontrados

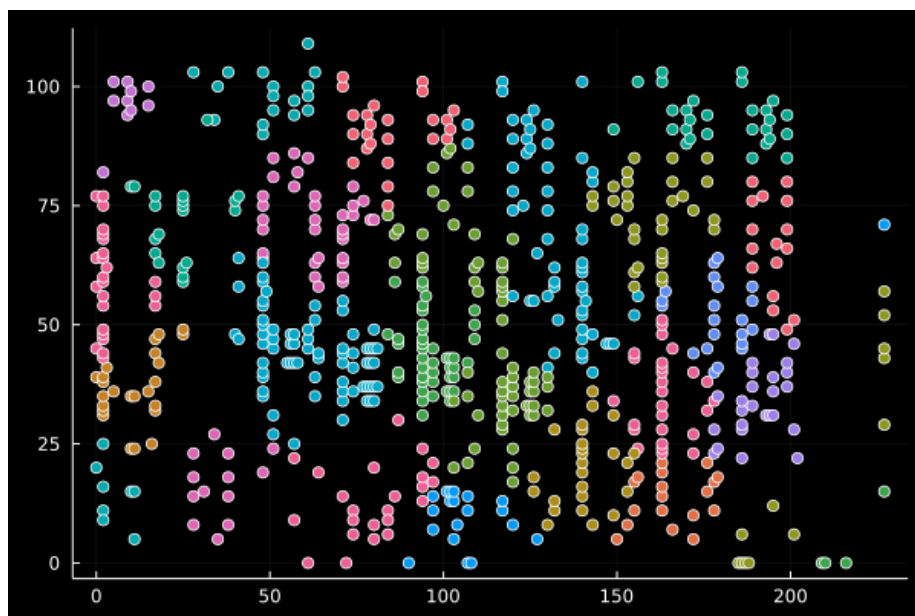


Figure 2.17: Distribucion de puntos por centro

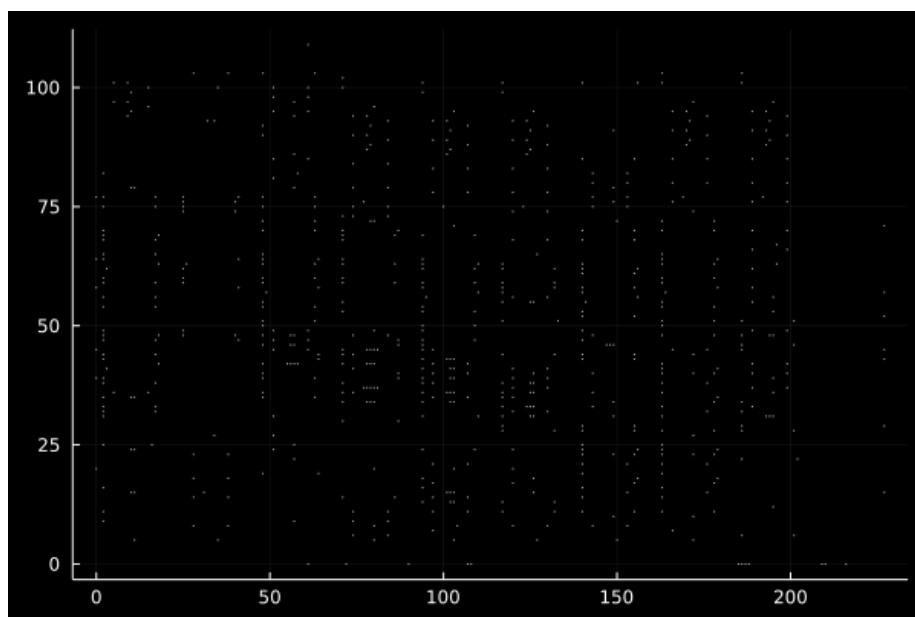


Figure 2.18: Distribucion de puntos por centro (miniatura)

## 2.7 kcenter-7

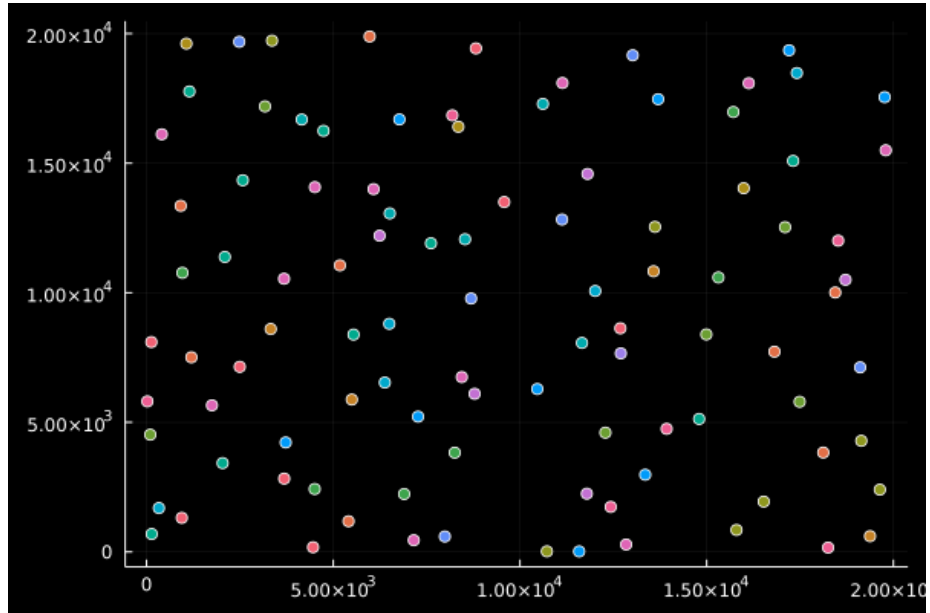


Figure 2.19: Mejores centros encontrados



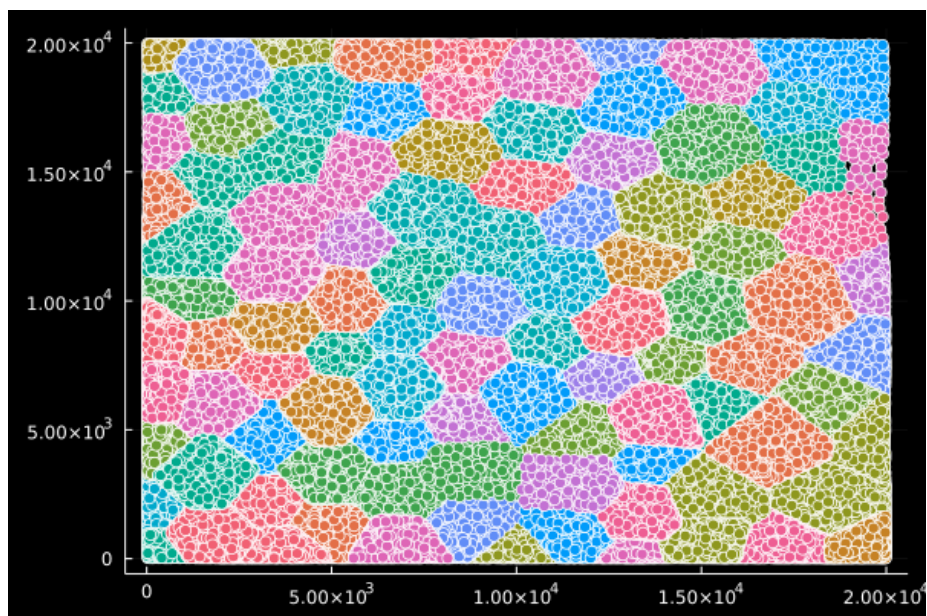


Figure 2.20: Distribucion de puntos por centro



Figure 2.21: Distribucion de puntos por centro (miniatura)

## 2.8 kcenter-8

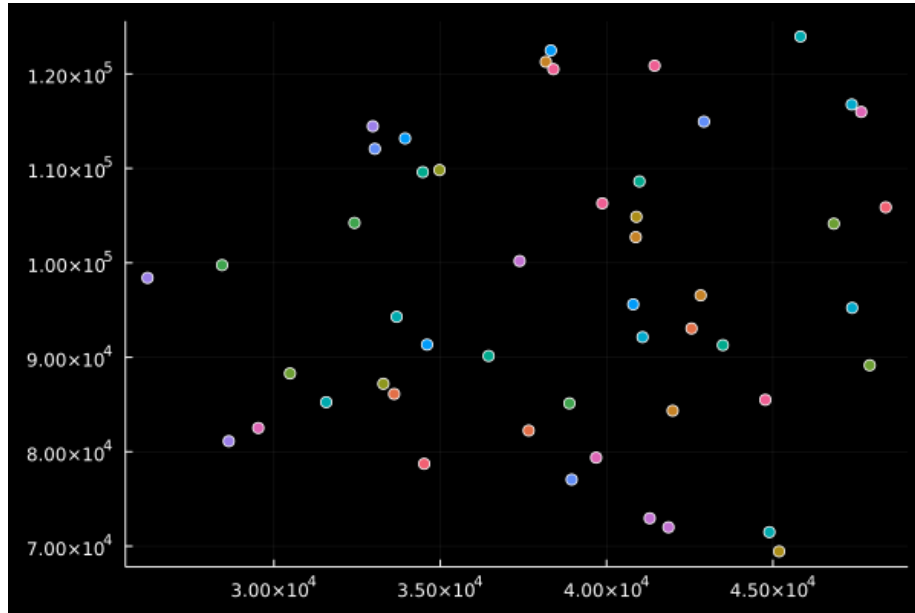


Figure 2.22: Mejores centros encontrados

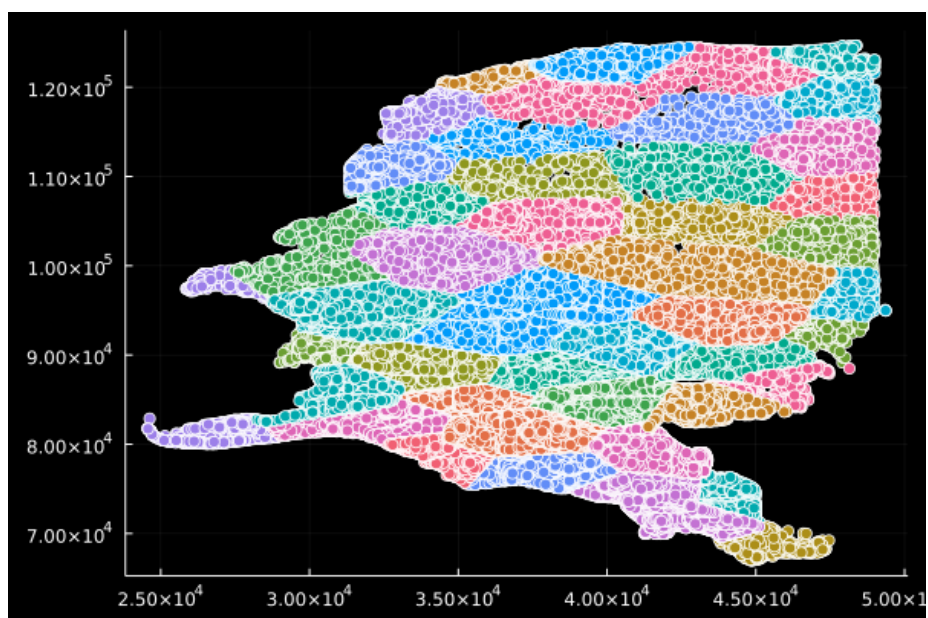


Figure 2.23: Distribucion de puntos por centro

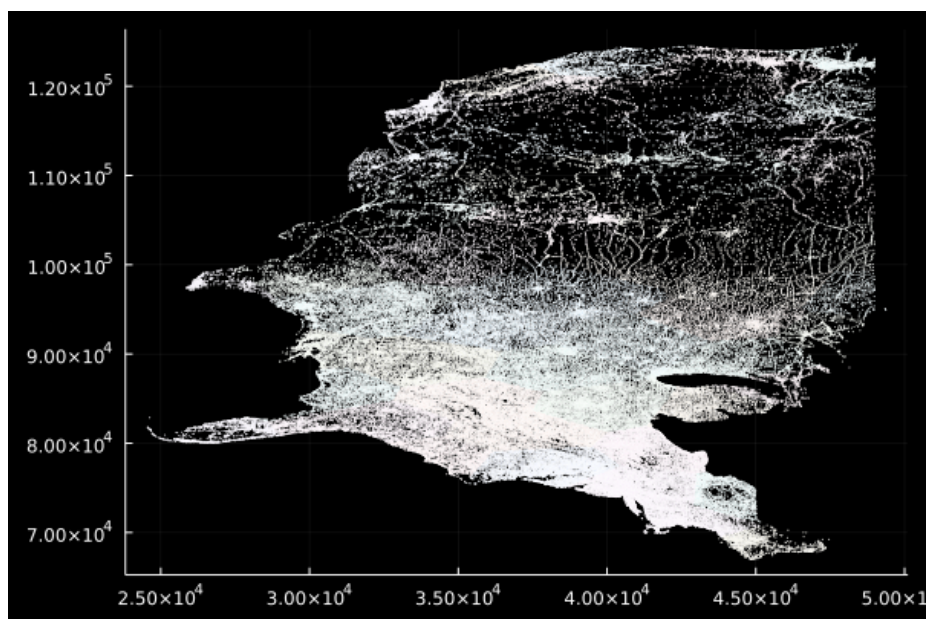


Figure 2.24: Distribucion de puntos por centro (miniatura)