

Apresentação de Trabalho Final

Disciplina SER 301
Análise Espacial

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Regressão Geograficamente
Ponderada aplicada na análise do
incômodo causado pelo ruído
aeronáutico

Curvas de ruído aeronáutico

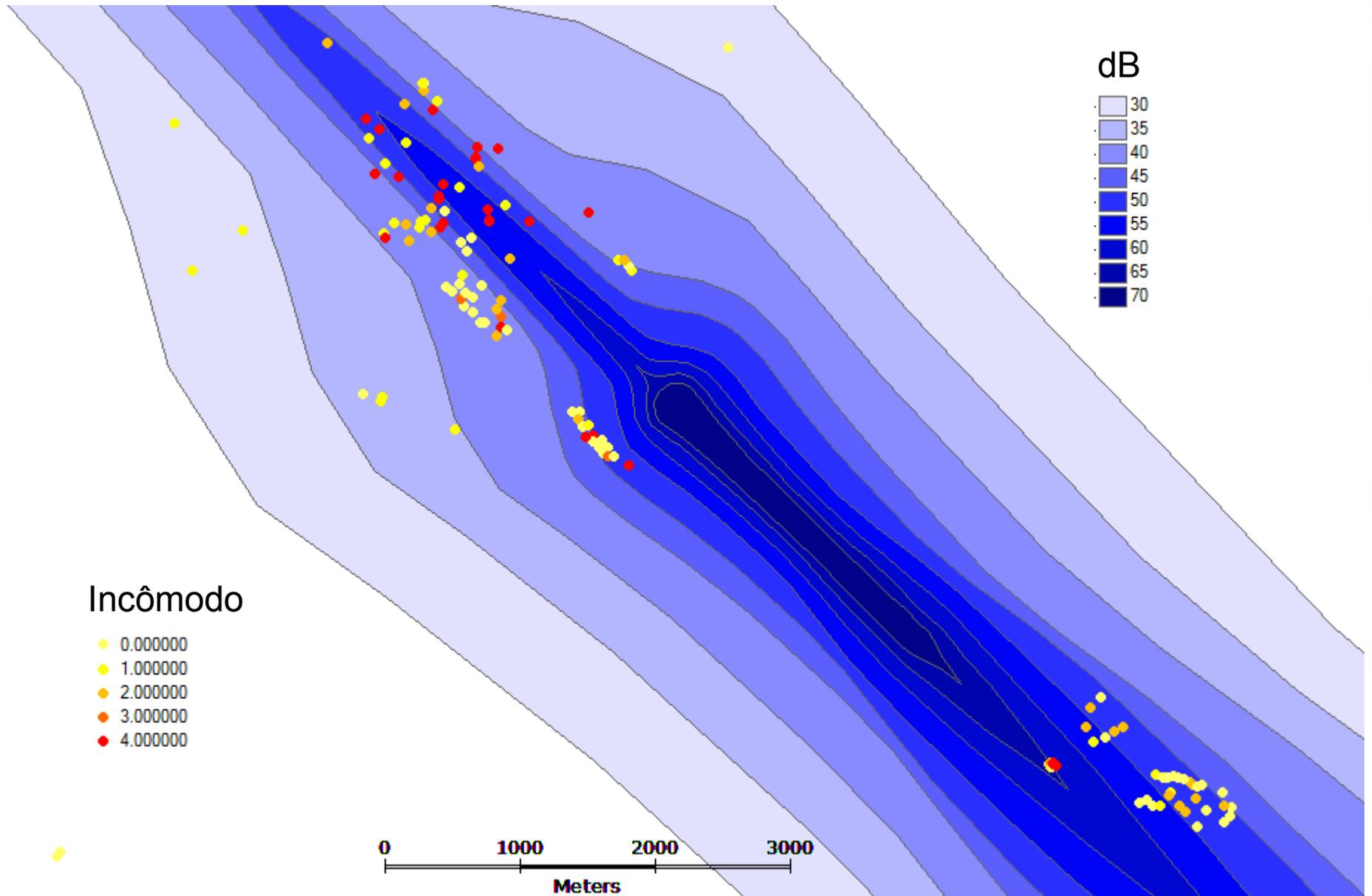
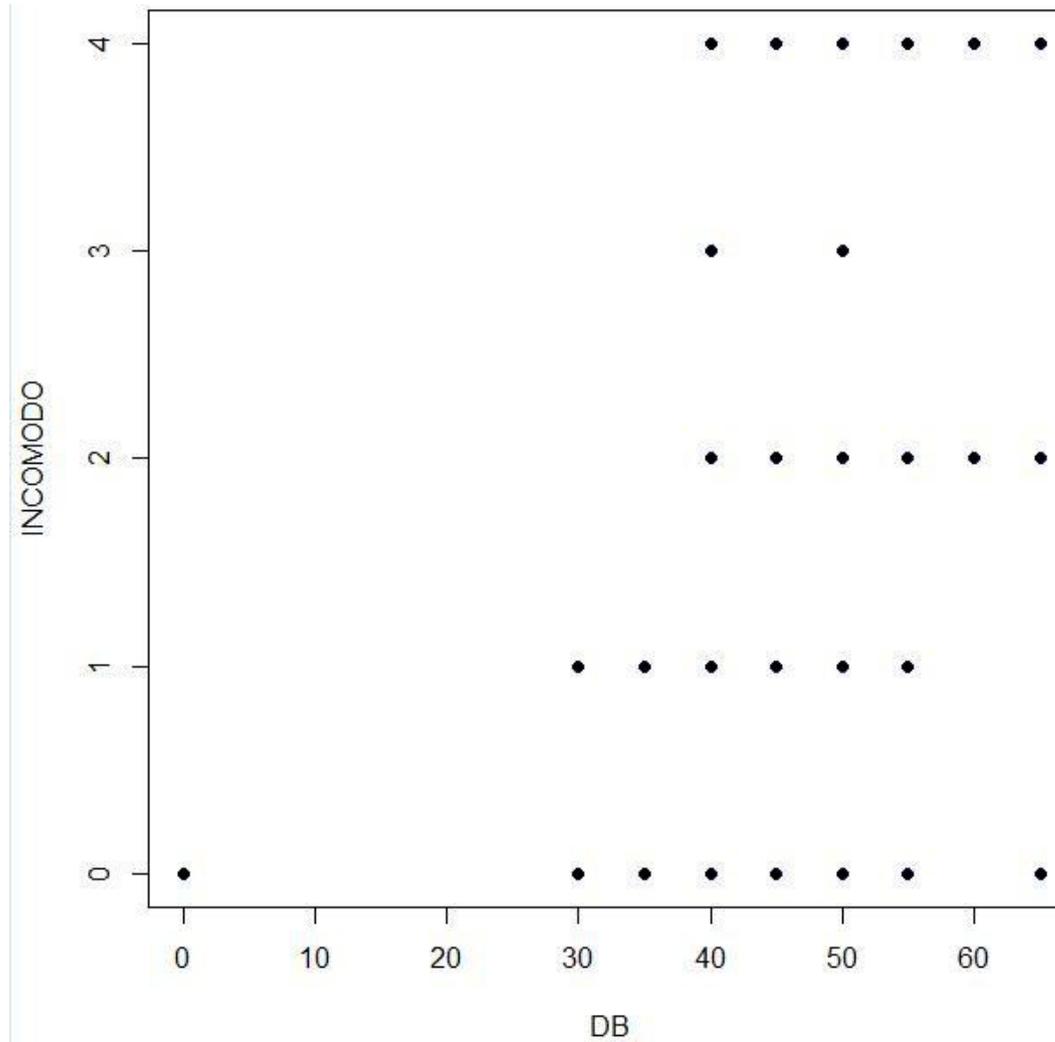
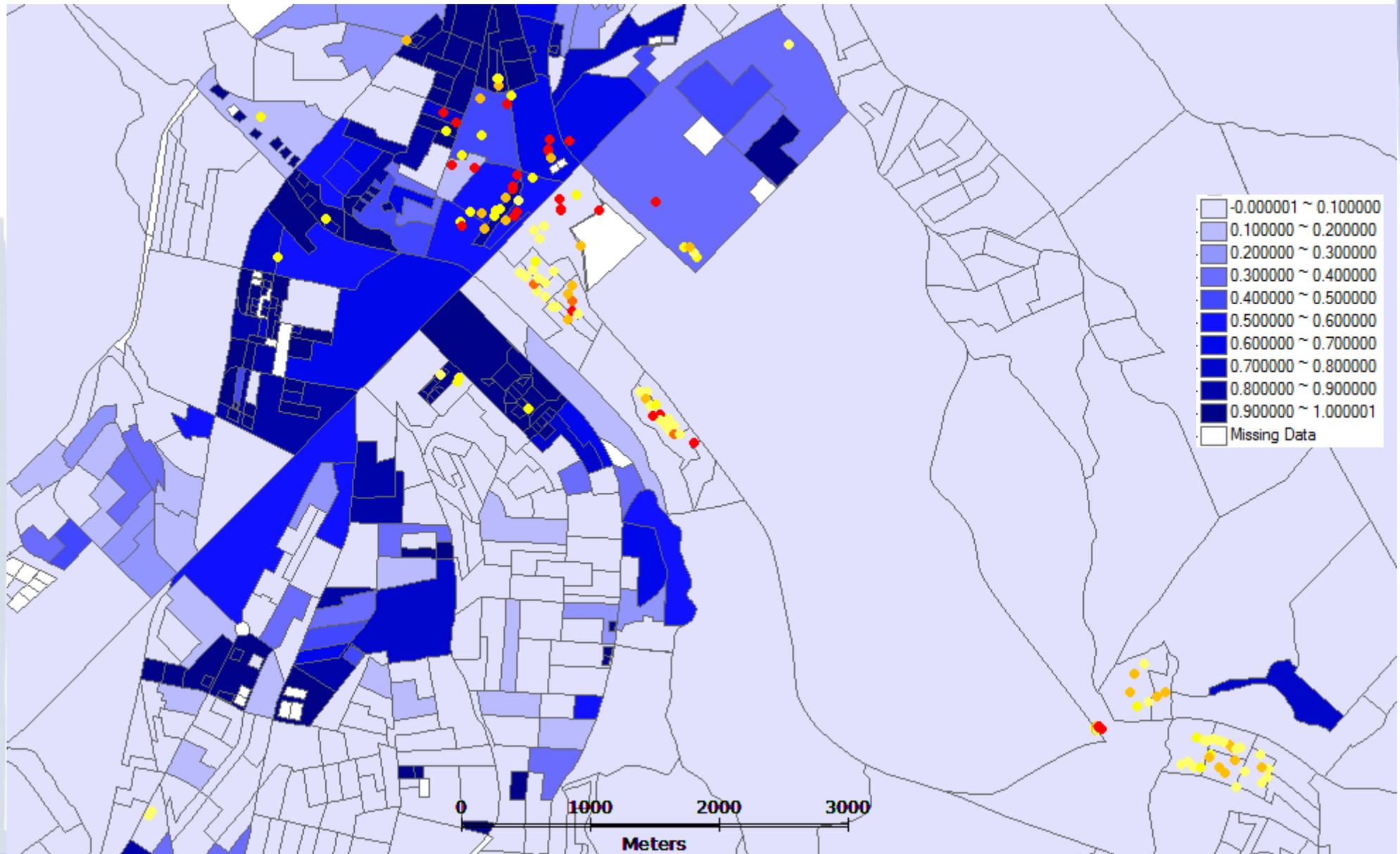


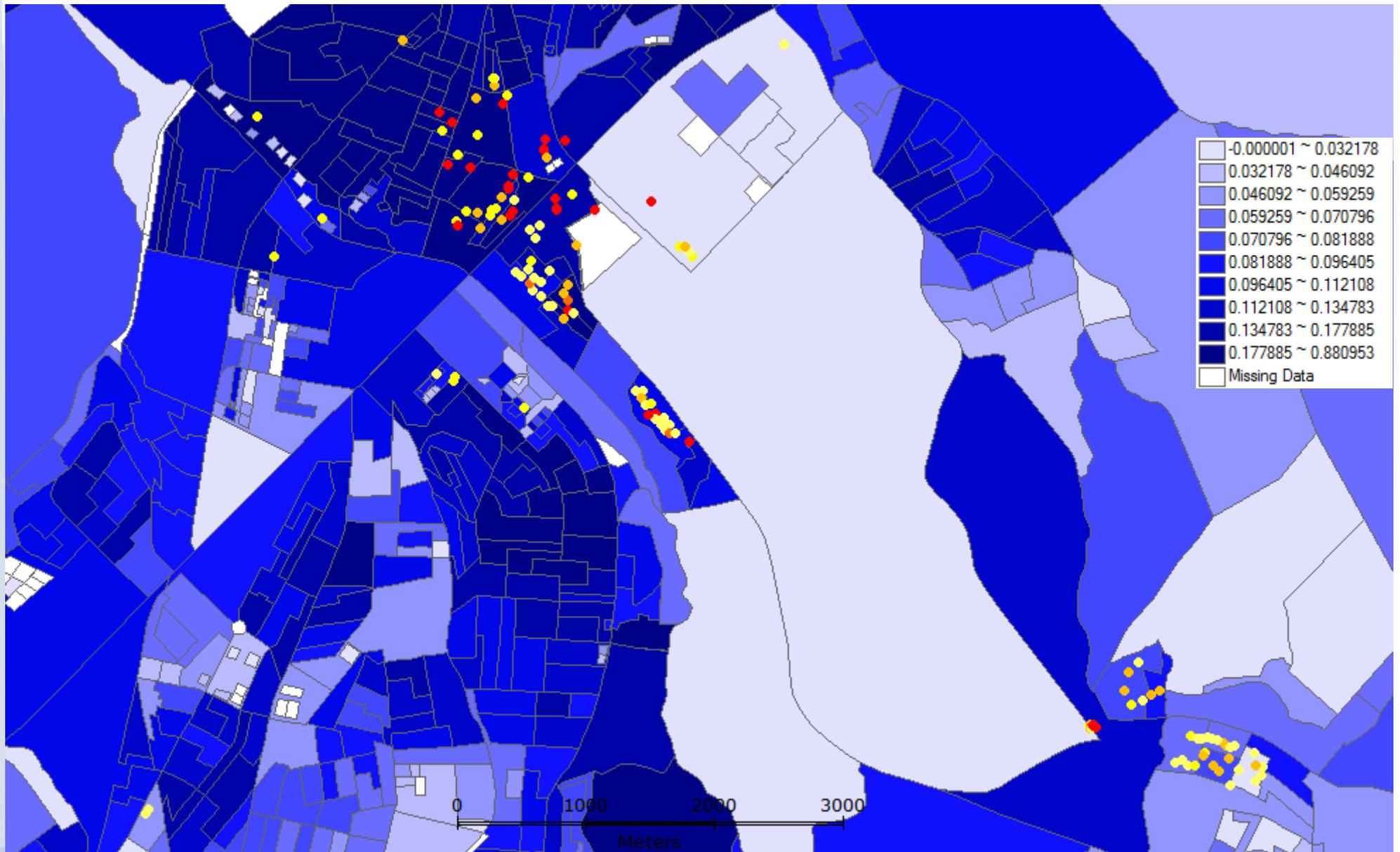
Diagrama de Dispersão



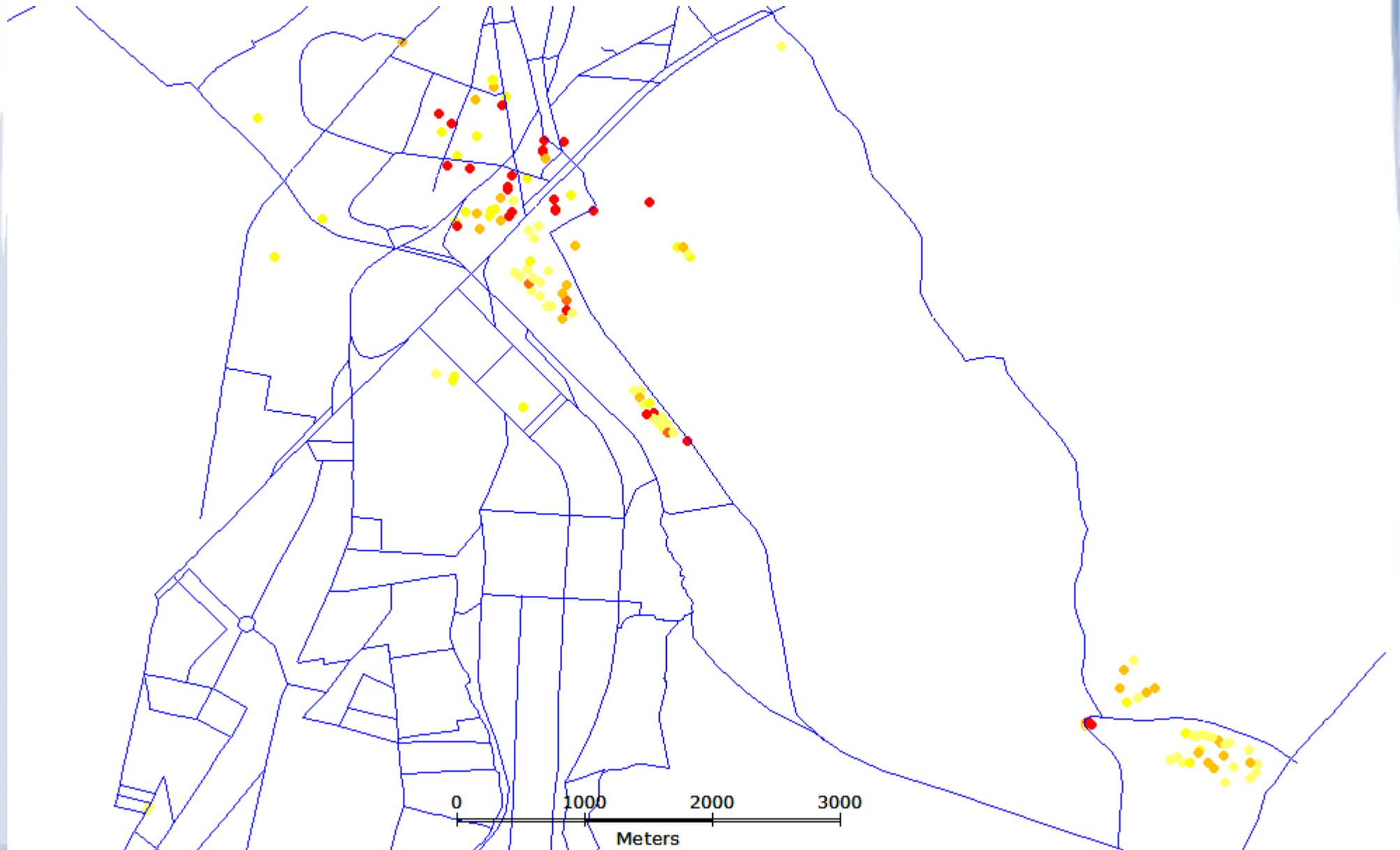
Quantidade de Apartamentos



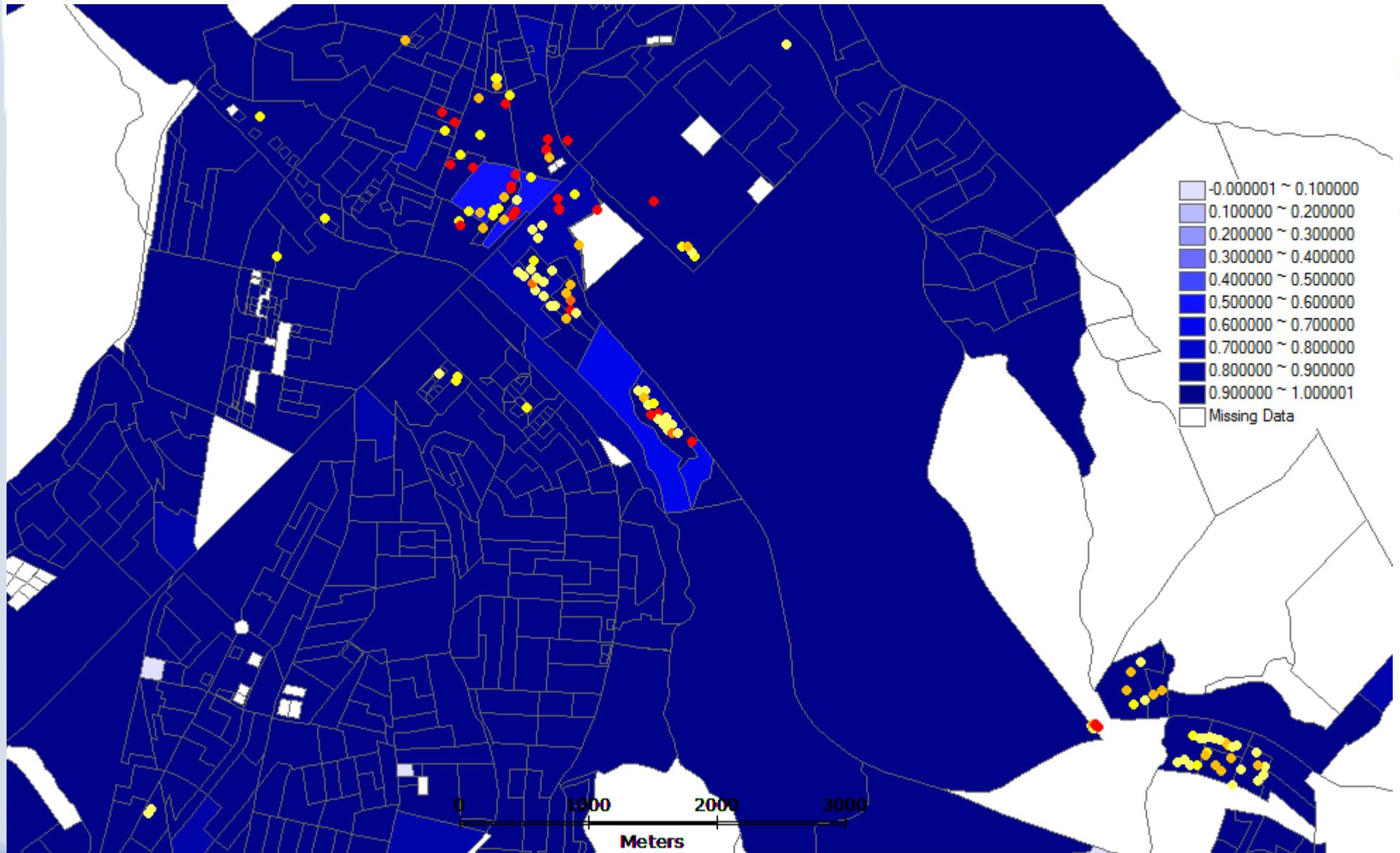
Quantidade de idosos



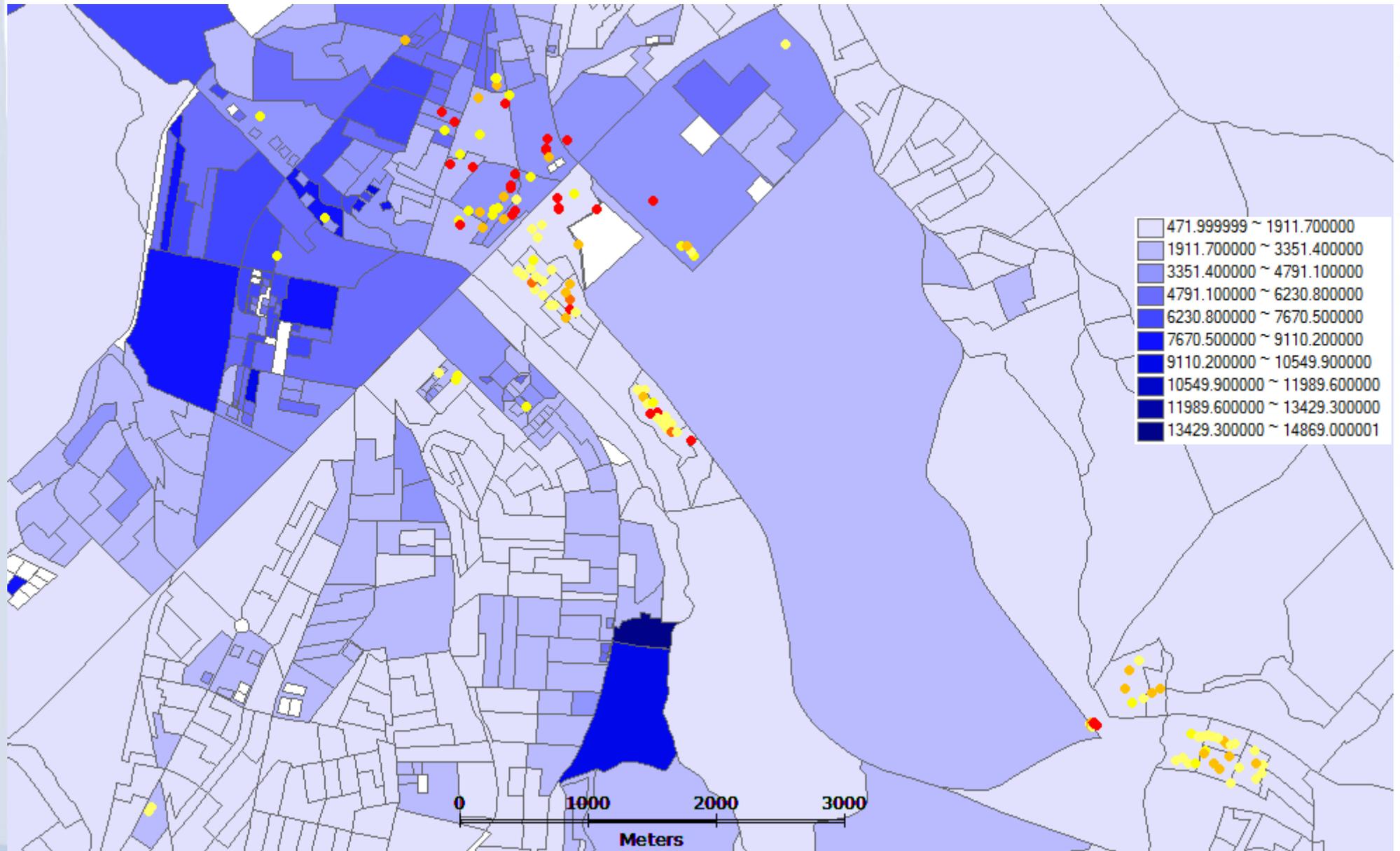
Principais Avenidas



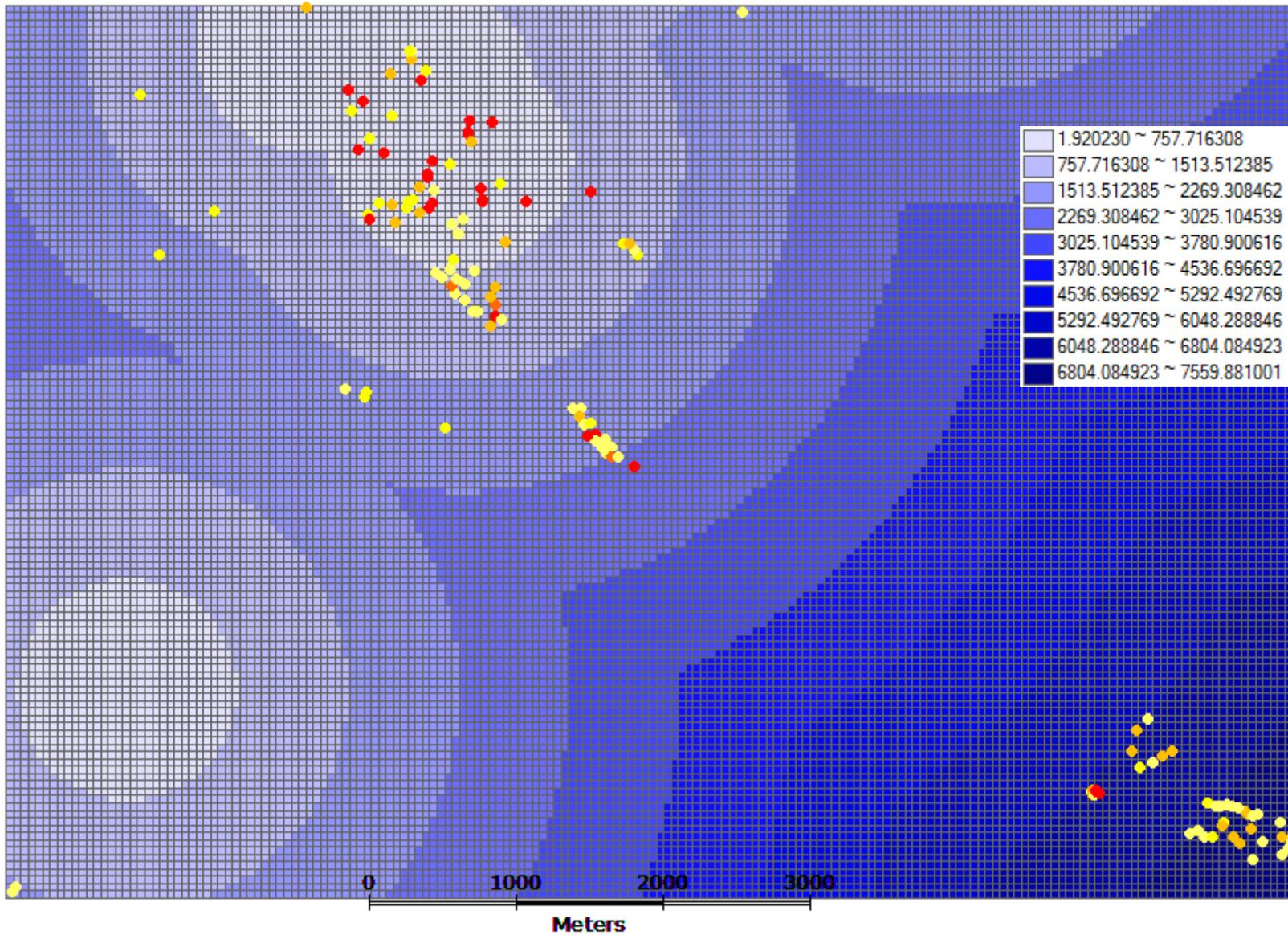
Percentual de Imóveis com árvores



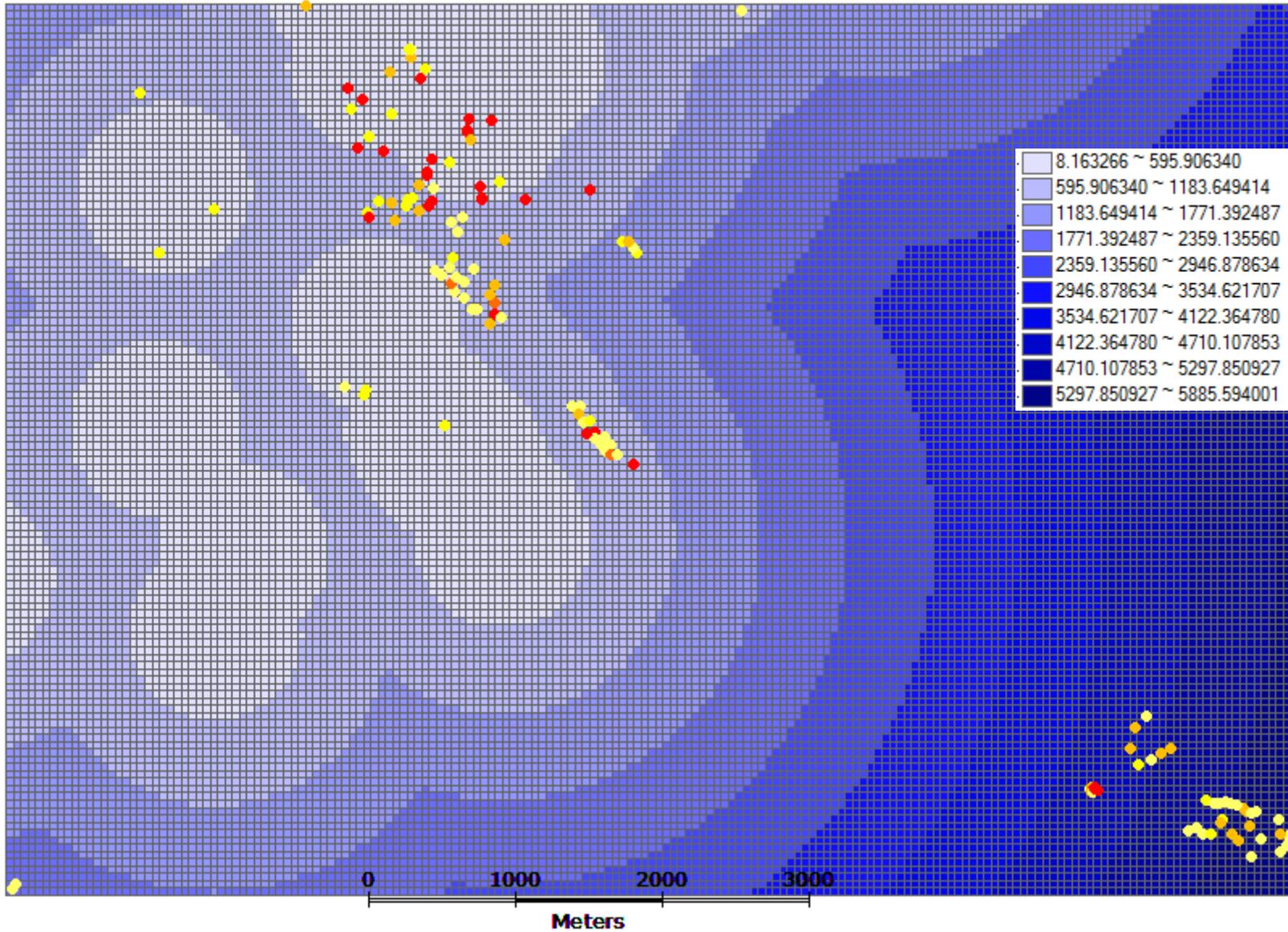
Renda Média



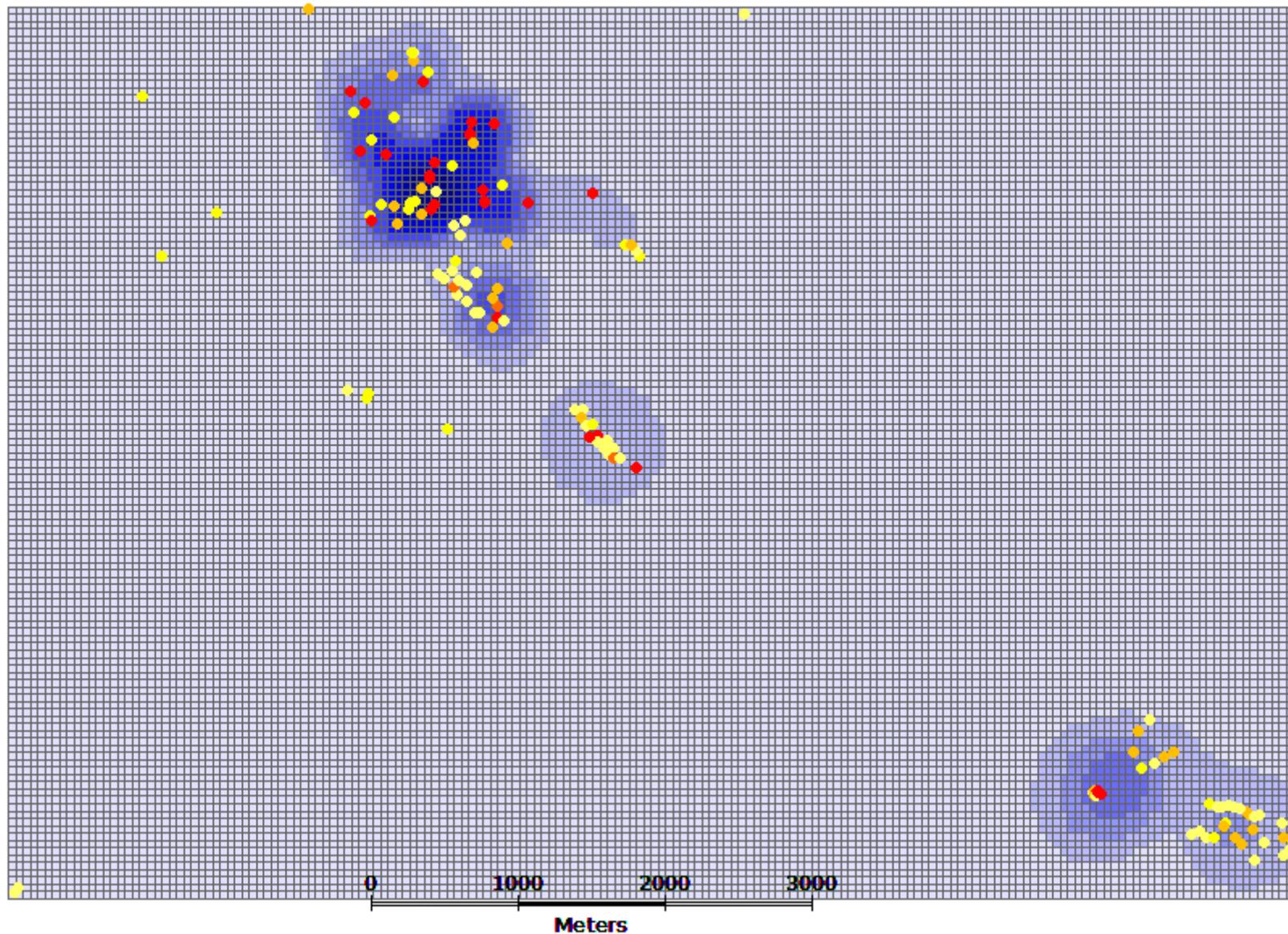
Distância de Hospitais



Distância de Bancos



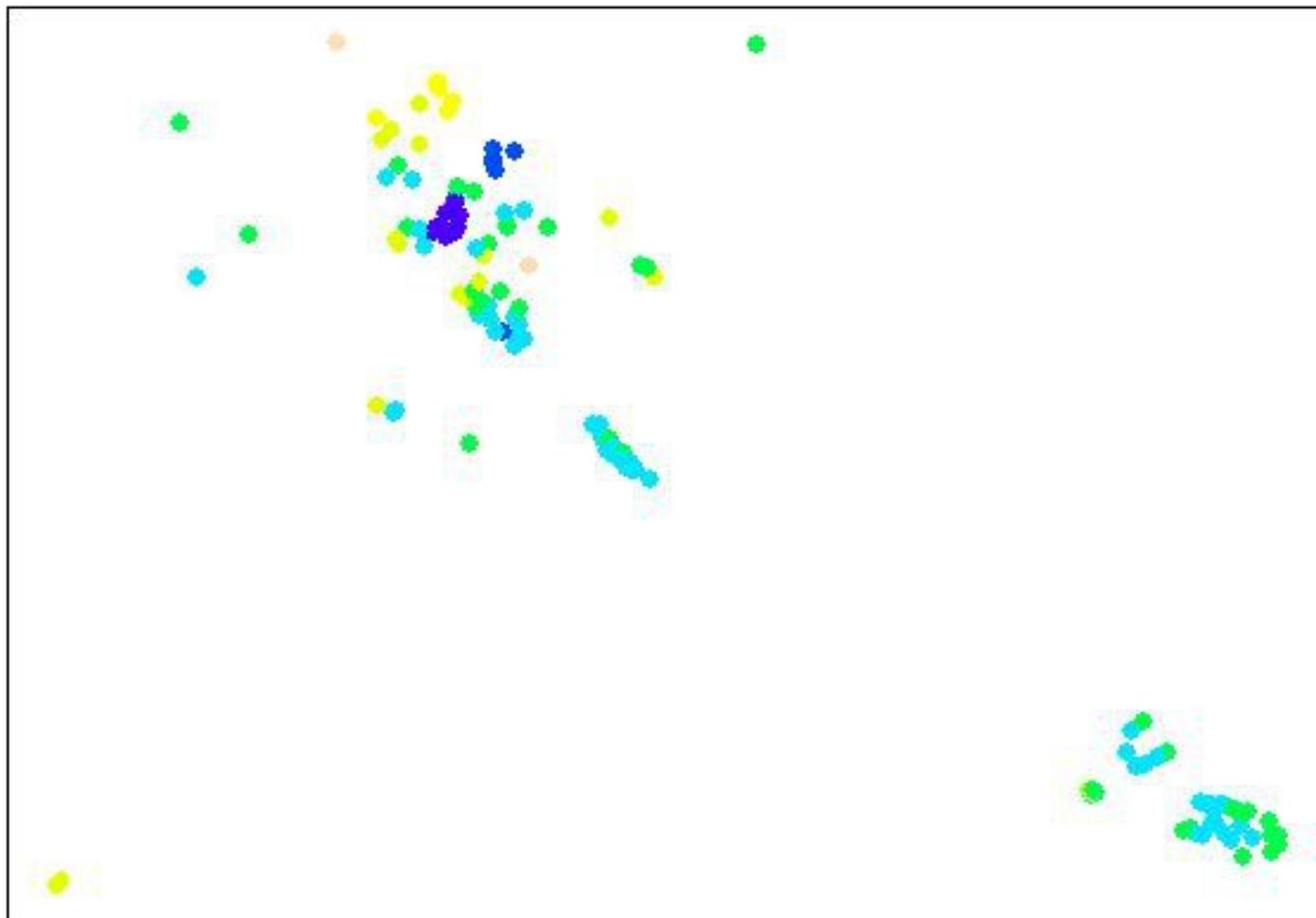
Dados de Densidade de Incômodo por Kernel Adaptativo



Modelo linear

Resíduos (ε)	Mínimo	Médio	Máximo	
	-6.78e-005	2.23e-006	5.39e-005	
Coeficientes	Estimado	Desvio Padrão	t valor	P > t
α	1.458e-05	1.766e-05	0.826	0.410547
β_1 (dB)	1.414e-06	2.583e-07	5.472	2.28e-007***
β_2 (Idosos)	4.064e-05	4.329e-05	0.939	0.349644
β_2 (Ap.)	4.120e-05	1.174e-05	3.508	0.000626***
β_2 (Avenidas)	-3.607e-08	1.546e-08	-2.333	0.021193*
β_2 (Hospitais)	-3.611e-08	4.310e-09	-8.378	8.58e-14***
β_2 (Bancos)	4.119e-08	5.235e-09	7.869	1.36e-12***
β_2 (Renda Média)	-3.754e-09	2.586e-09	-1.452	0.148999
β_2 (Árvores)	-2.350e-05	8.432e-06	-2.787	0.006143**
Signif.	0 ‘***’	0.001 ‘***’	0.01 ‘**’	0.05 ‘.’
Desvio padrão dos resíduos: 2.139e-05 com 127 graus de liberdade				
R²: 0,6472		R² ajustado: 0,625		

Resíduos do Modelo linear



- [-6.778e-05,-5.04e-05]
- (-5.04e-05,-3.301e-05]
- (-3.301e-05,-1.563e-05]
- (-1.563e-05,1.758e-06]
- (1.758e-06,1.914e-05]
- (1.914e-05,3.653e-05]
- (3.653e-05,5.391e-05]

Teste Moran

Estimado

Variância

p valor

0.586205416

0.0021727

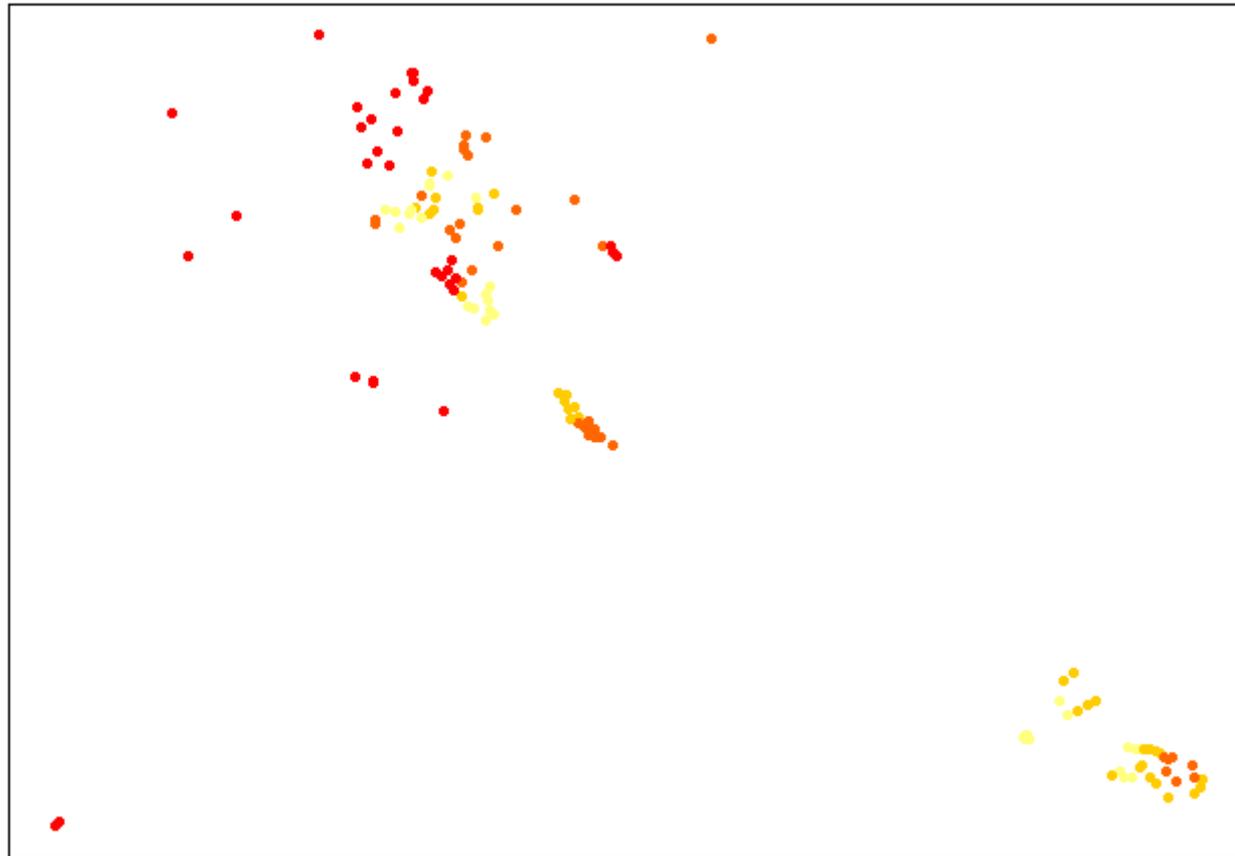
2.2e-16

GWR

	Mínimo	1st Qu.	Médio	3rd Qu.	Máximo
α	-6.884e-05	-2.771e-06	8.099e-05	1.303e-04	4.799e-04
β_1 (dB)	-1.626e-06	-2.892e-07	7.957e-08	6.244e-07	2.138e-06
β_2 (Idosos)	-5.495e-04	-1.425e-04	1.630e-05	1.687e-04	4.070e-04
β_2 (Ap.)	-1.376e-04	2.711e-06	4.542e-05	1.372e-04	2.119e-03
β_2 (Avenidas)	-1.917e-07	-4.577e-08	3.118e-08	7.869e-08	1.315e-07
β_2 (Hospitais)	-2.567e-07	-7.680e-08	-2.460e-08	1.029e-08	1.223e-07
β_2 (Bancos)	-1.398e-07	-1.319e-09	3.887e-08	6.260e-08	2.330e-07
β_2 (Renda Média)	-3.424e-08	-1.438e-09	6.923e-09	1.794e-08	1.826e-07
β_2 (Árvores)	-1.555e-04	-7.795e-05	-2.534e-05	5.224e-06	4.822e-05

Coeficientes do ruído

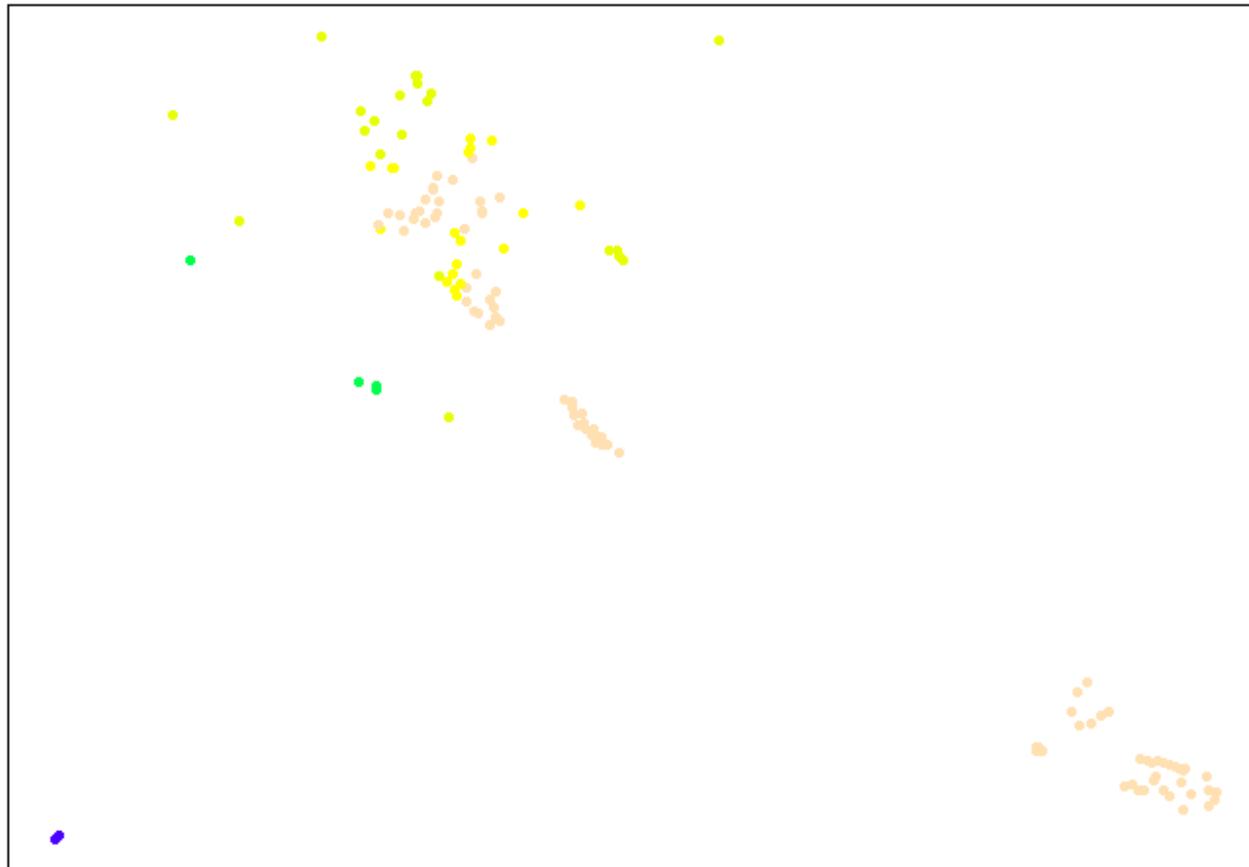
DB Coef



- $[-1.626e-06, -2.892e-07]$
- $(-2.892e-07, 7.957e-08]$
- $(7.957e-08, 6.244e-07]$
- $(6.244e-07, 2.138e-06]$

T-valor do ruído

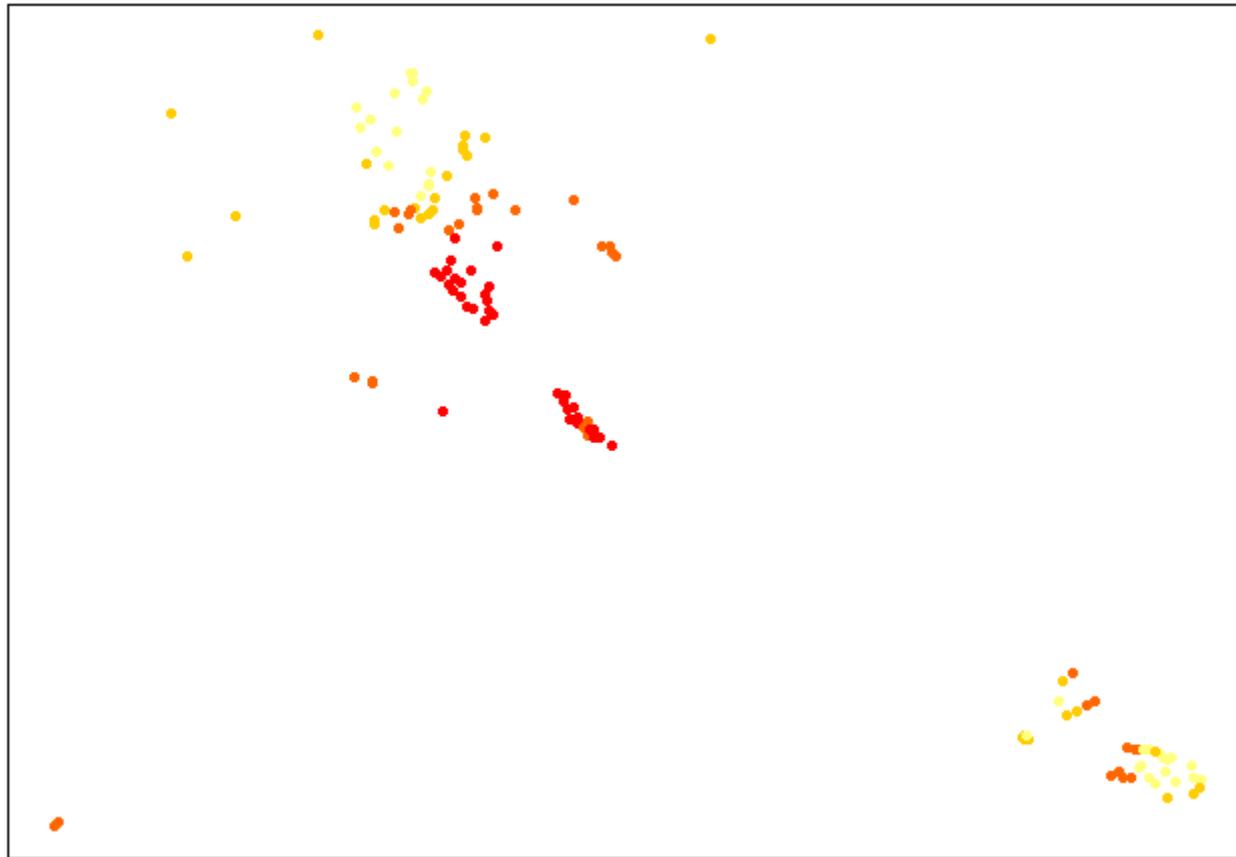
t - Value



- [-1.272,0.3888]
- (0.3888,2.049]
- (2.049,3.709]
- (3.709,5.37]
- (5.37,7.03]
- (7.03,8.69]
- (8.69,10.35]

Coeficientes do Percentual de Idosos

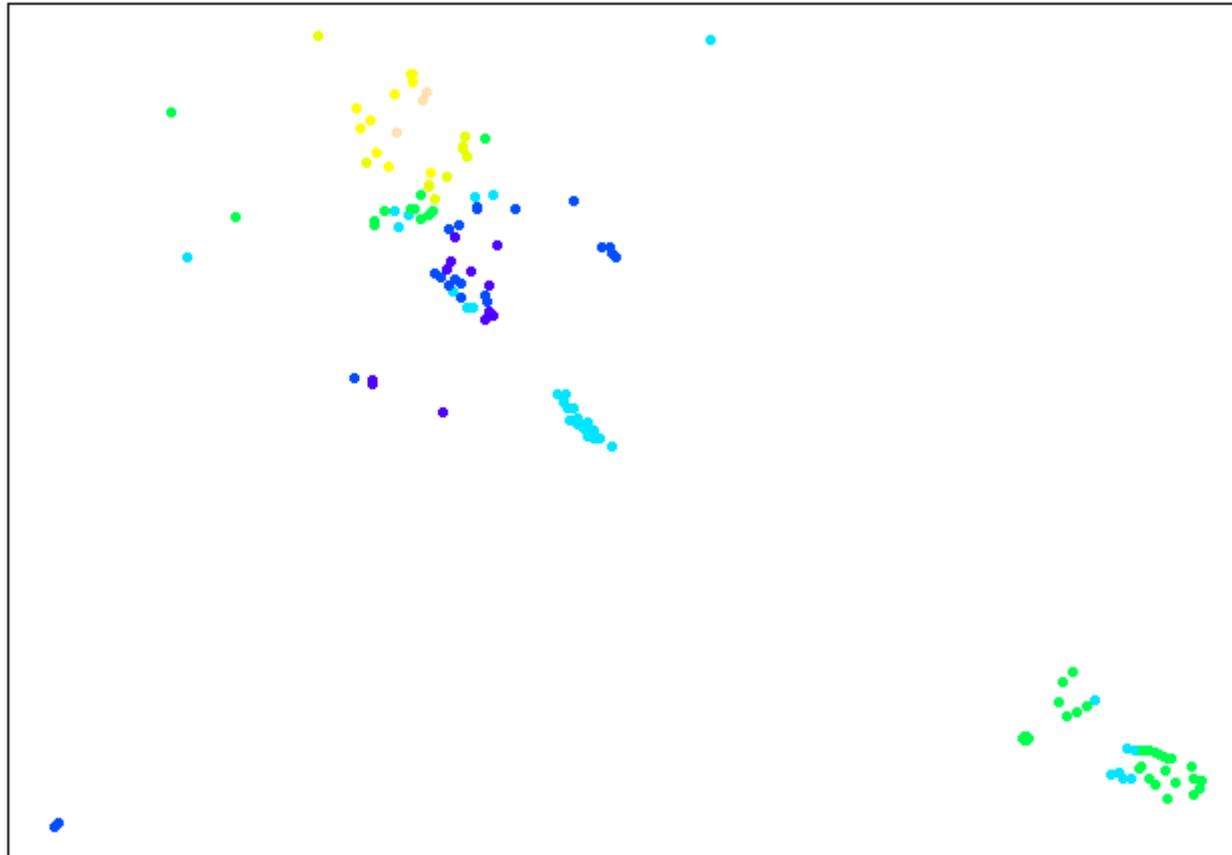
PERC_IDOSO Coef



- [-0.0005495,-0.0001425]
- (-0.0001425,1.63e-05]
- (1.63e-05,0.0001687]
- (0.0001687,0.000407]

T-valor do Percentual de Idosos

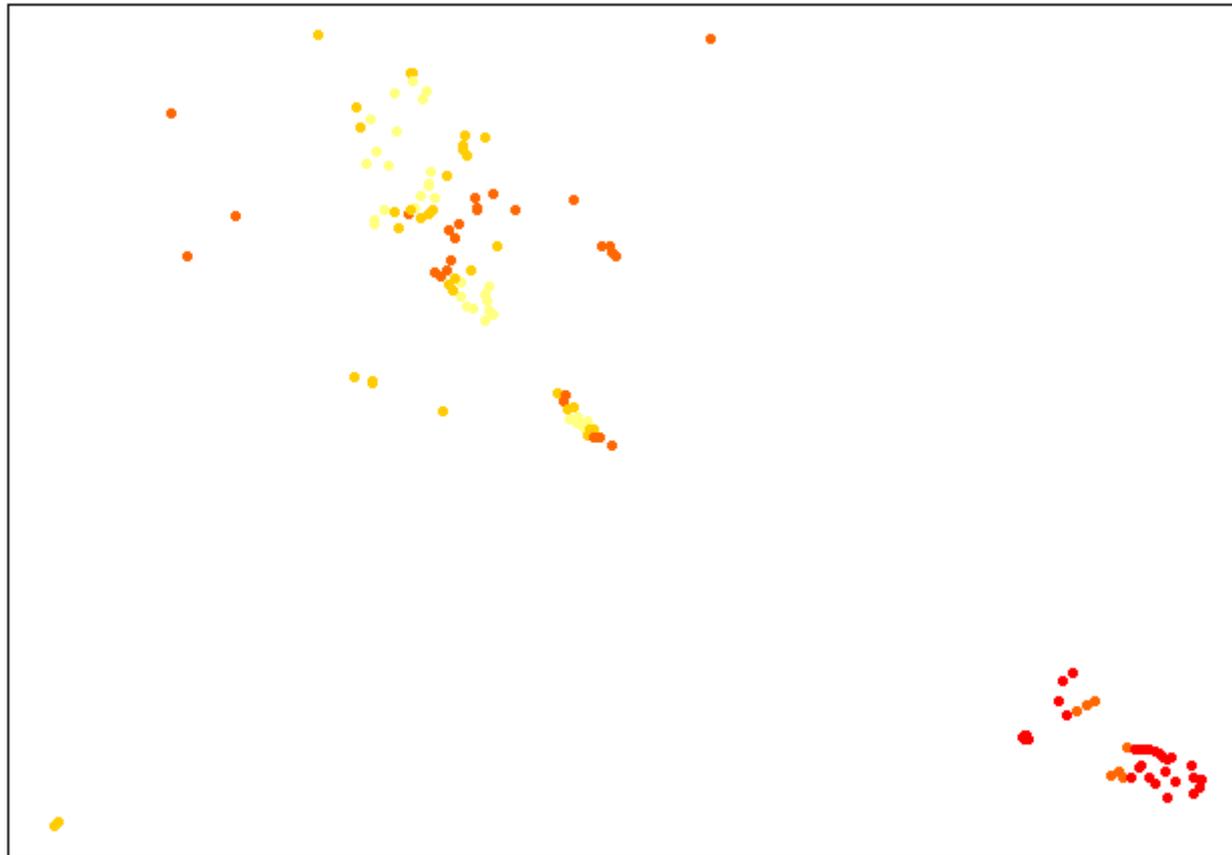
t - Value



- [-6.147,-4.553]
- (-4.553,-2.96]
- (-2.96,-1.366]
- (-1.366,0.2278]
- (0.2278,1.821]
- (1.821,3.415]
- (3.415,5.009]

Coeficiente do Percentual de Ap.

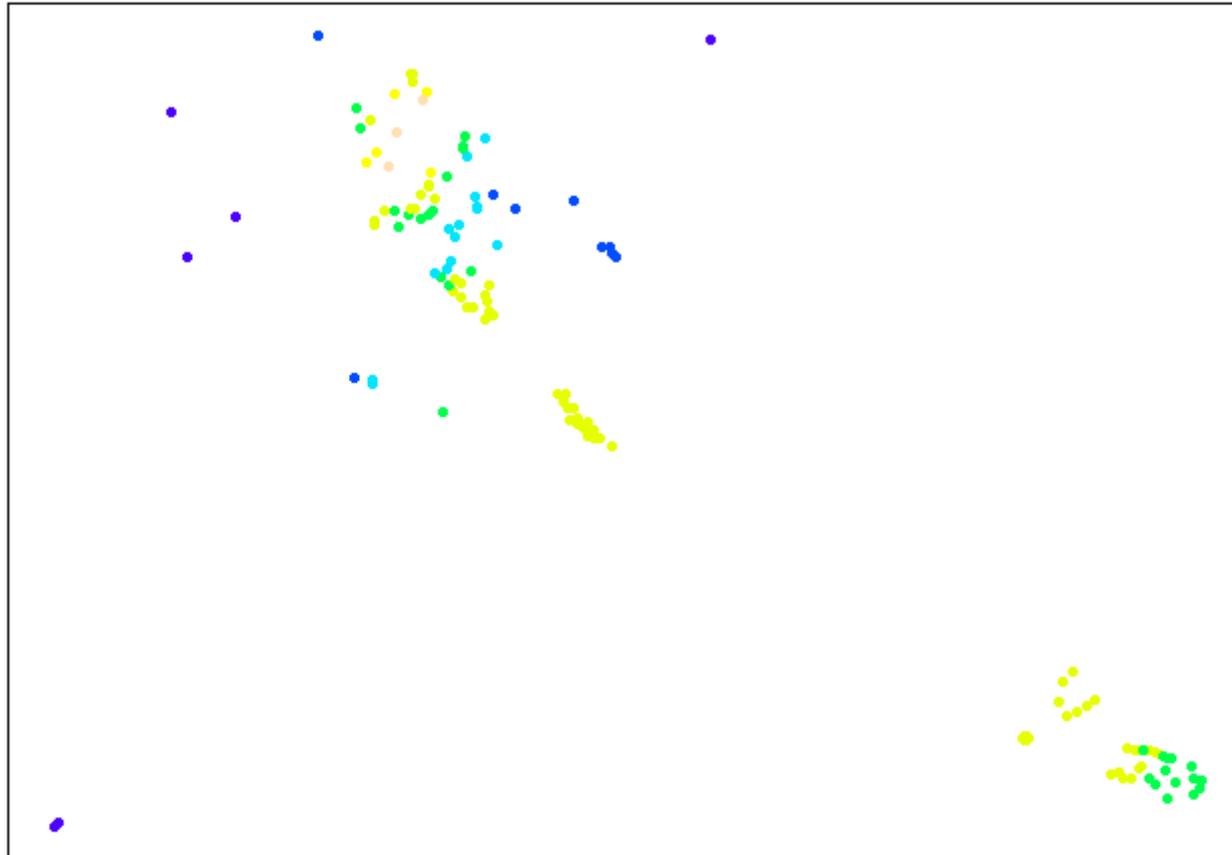
PERC_AP Coef



- [-0.0001376,2.711e-06]
- (2.711e-06,4.542e-05]
- (4.542e-05,0.0001372]
- (0.0001372,0.002119]

T-valor do Percentual de Ap.

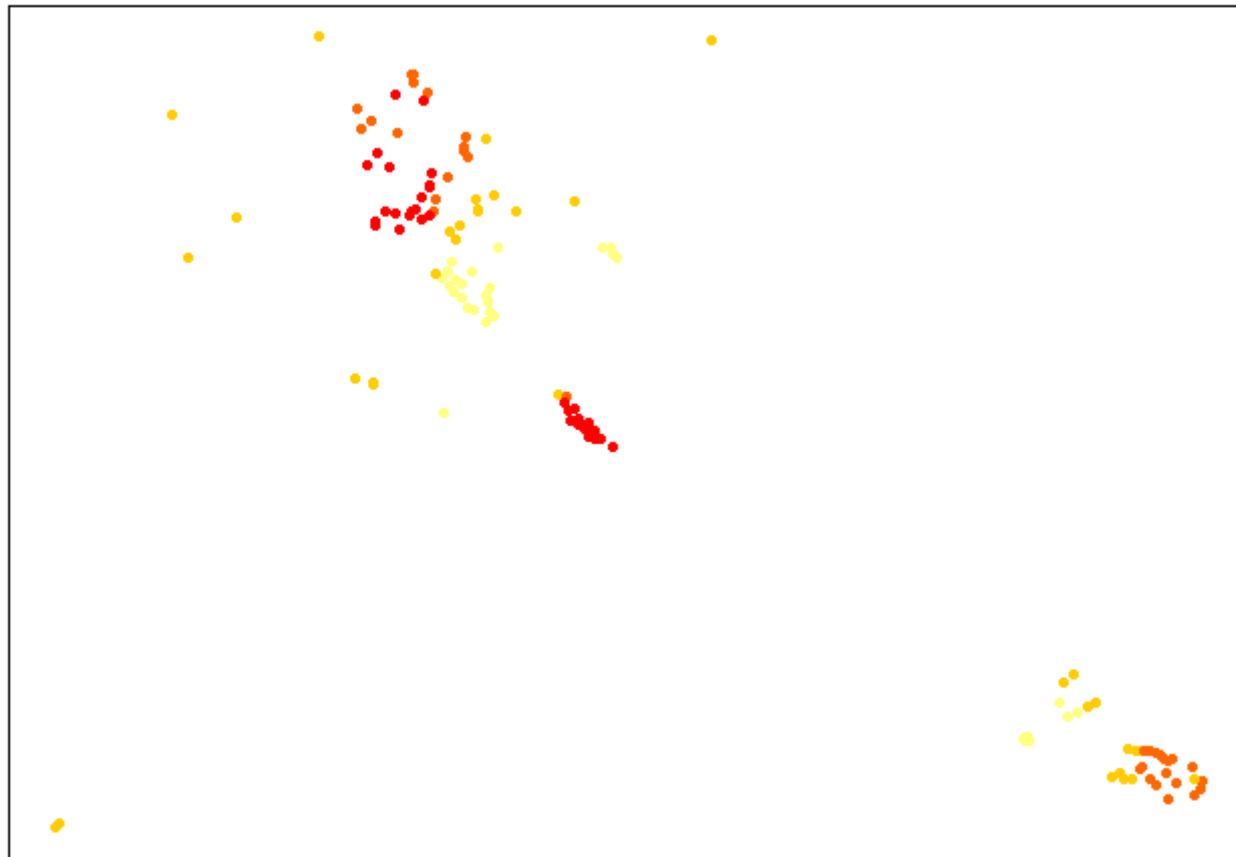
t - Value



- [-4.296,-2.766]
- (-2.766,-1.235]
- (-1.235,0.296]
- (0.296,1.827]
- (1.827,3.358]
- (3.358,4.888]
- (4.888,6.419]

Distancia de Avenidas

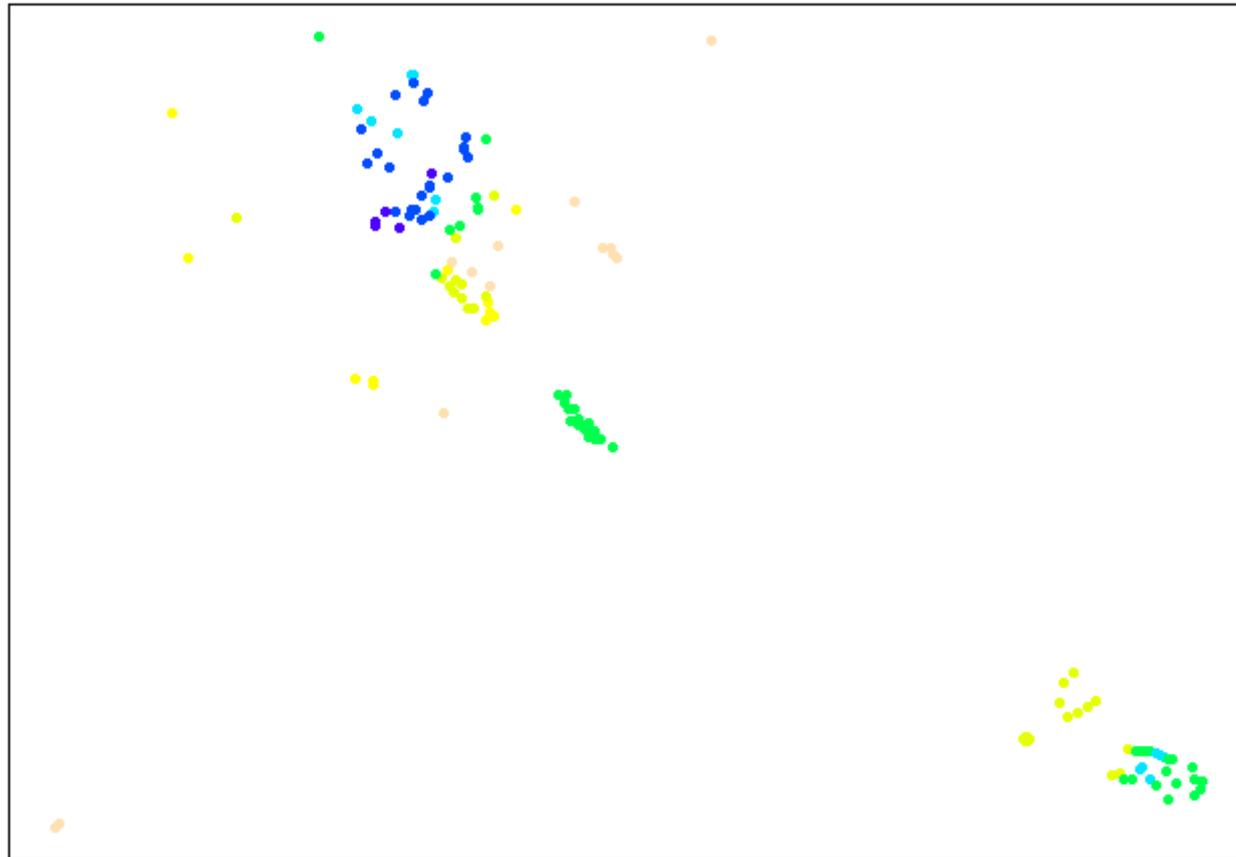
Distenidas Coef



- $[-1.917e-07, -4.577e-08]$
- $(-4.577e-08, 3.118e-08]$
- $(3.118e-08, 7.869e-08]$
- $(7.869e-08, 1.315e-07]$

T-valor da distância de Avenidas

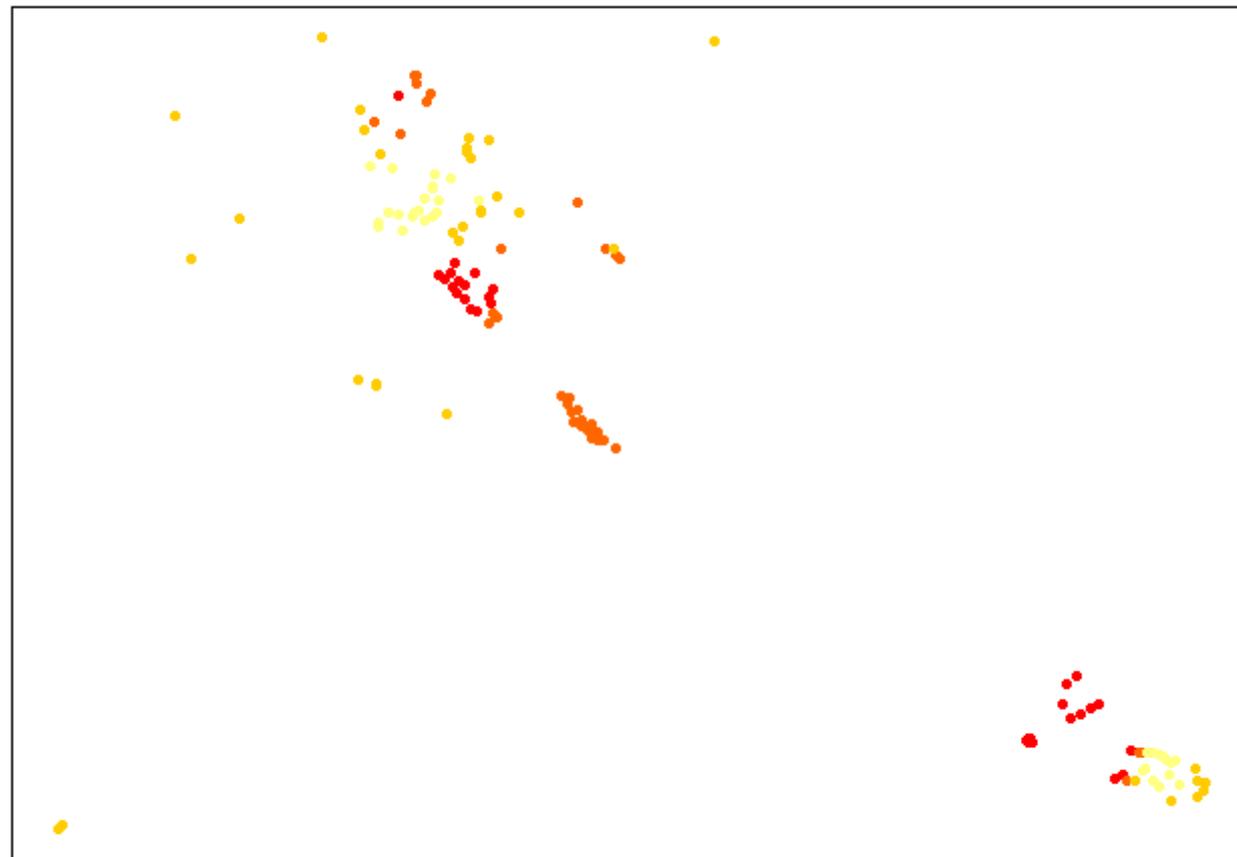
t - Value



- [-3.792,-2.712]
- (-2.712,-1.632]
- (-1.632,-0.5518]
- (-0.5518,0.5283]
- (0.5283,1.608]
- (1.608,2.688]
- (2.688,3.769]

Coeficiente da Distância de hospitais

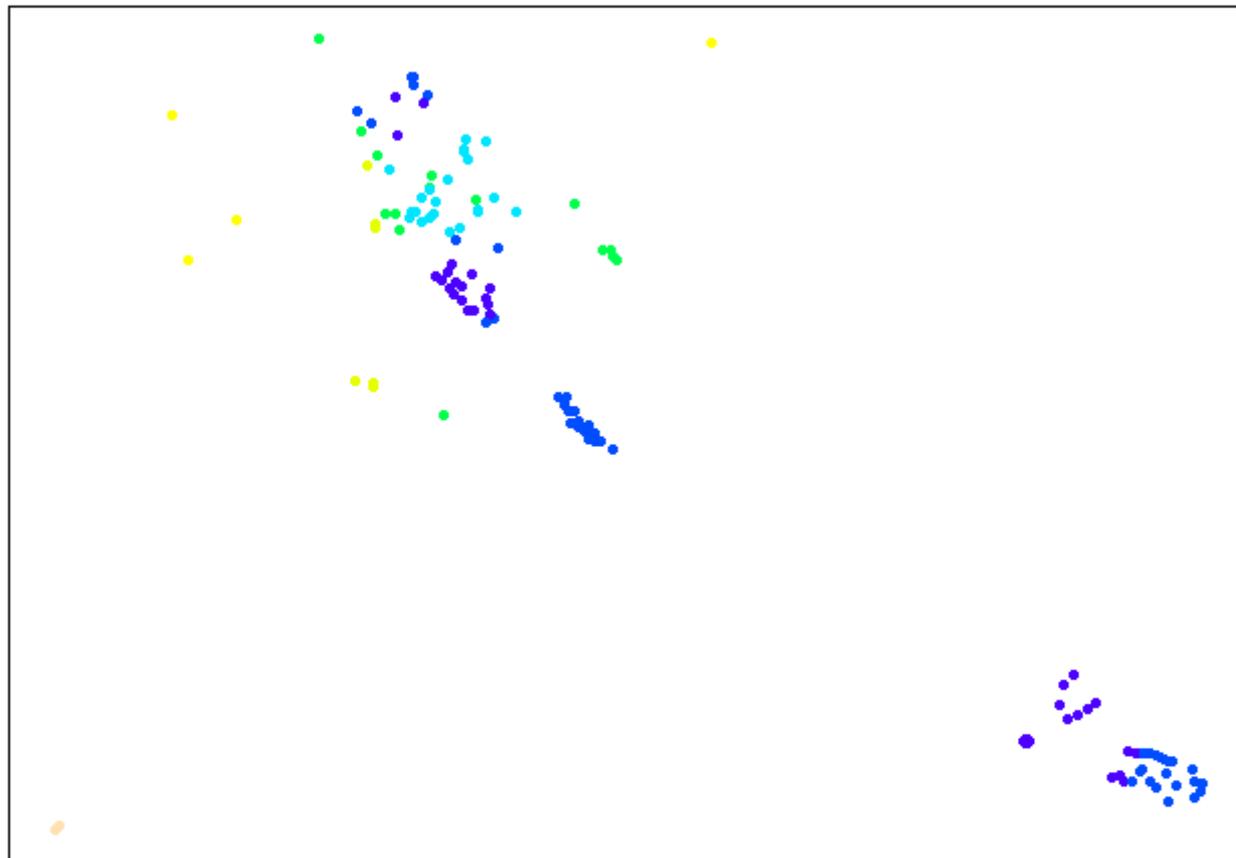
DISTITAIS Coef



- $[-2.567e-07, -7.68e-08]$
- $(-7.68e-08, -2.46e-08]$
- $(-2.46e-08, 1.029e-08]$
- $(1.029e-08, 1.223e-07]$

T-valor da distância de hospitais

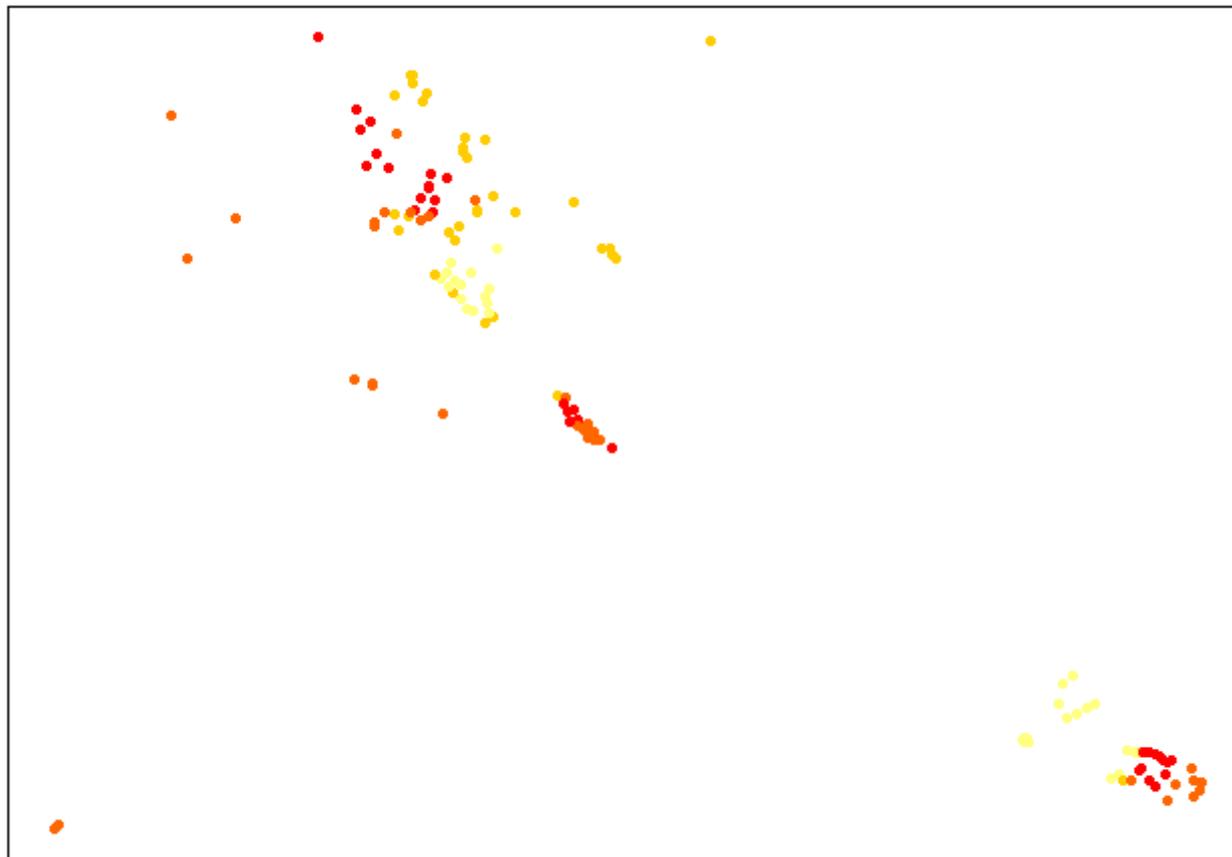
t - Value



- [-14.72,-12.27]
- (-12.27,-9.823]
- (-9.823,-7.372]
- (-7.372,-4.922]
- (-4.922,-2.471]
- (-2.471,-0.02054]
- (-0.02054,2.43]

Coeficiente da distância de Bancos

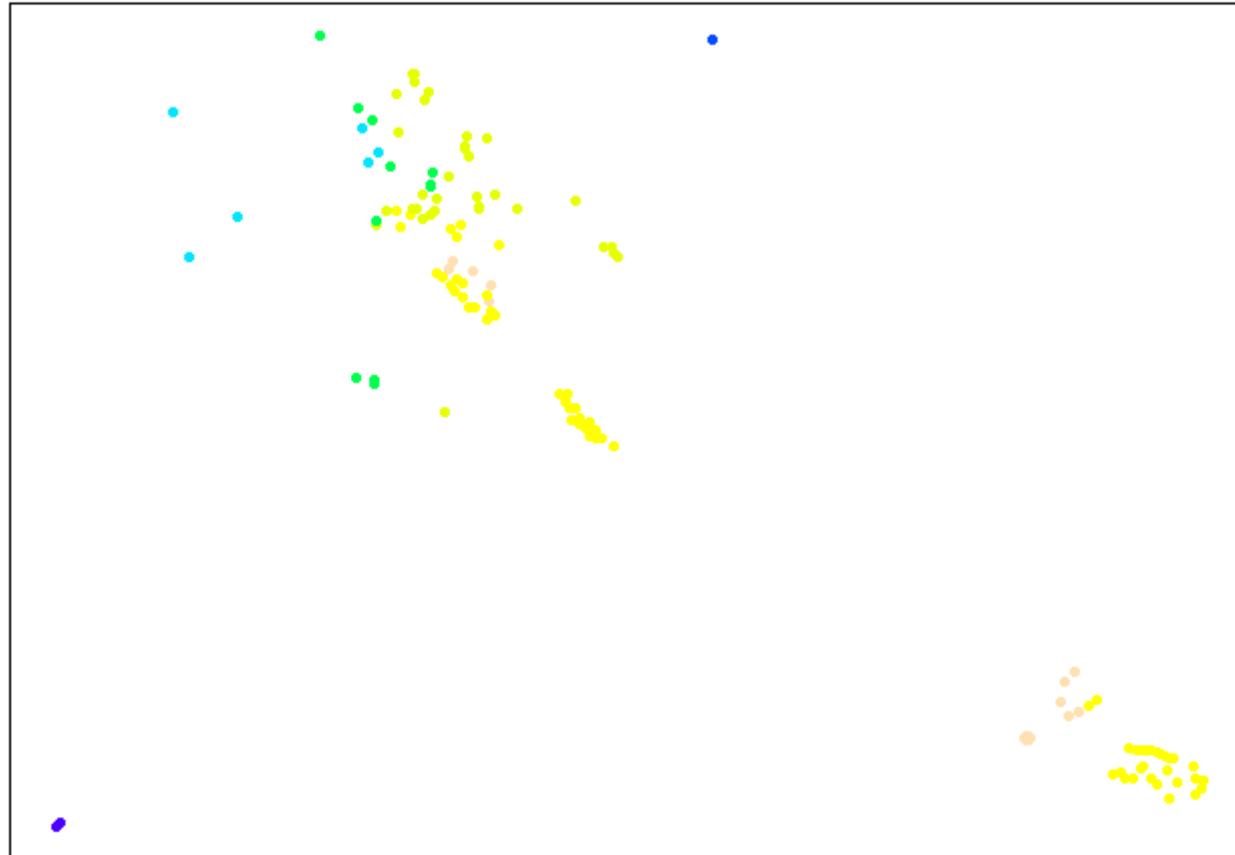
DISTBANCOS Coef



- $[-1.398e-07, -1.319e-09]$
- $(-1.319e-09, 3.887e-08]$
- $(3.887e-08, 6.26e-08]$
- $(6.26e-08, 2.33e-07]$

T-valor da distância de Bancos

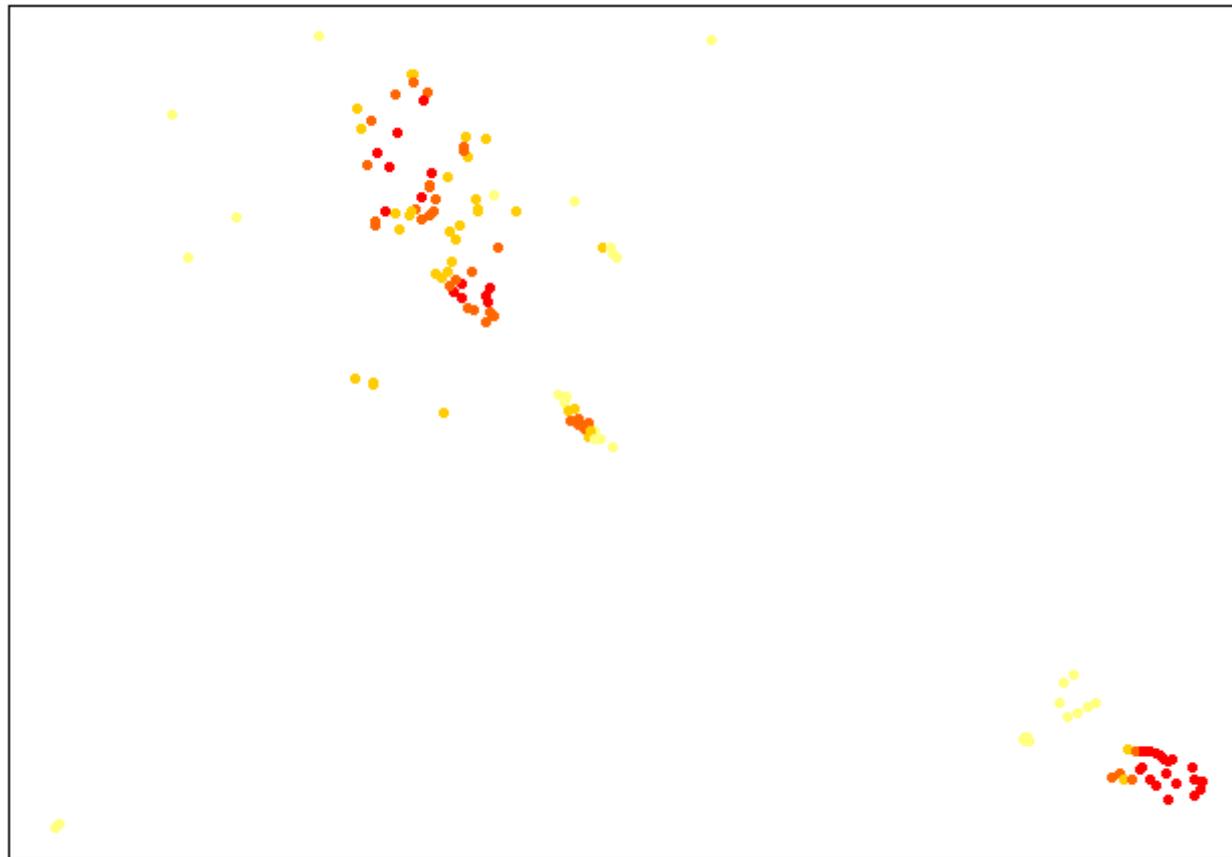
t - Value



- [-3.295,-0.8816]
- (-0.8816,1.532]
- (1.532,3.945]
- (3.945,6.358]
- (6.358,8.771]
- (8.771,11.18]
- (11.18,13.6]

Coeficientes da Renda Média

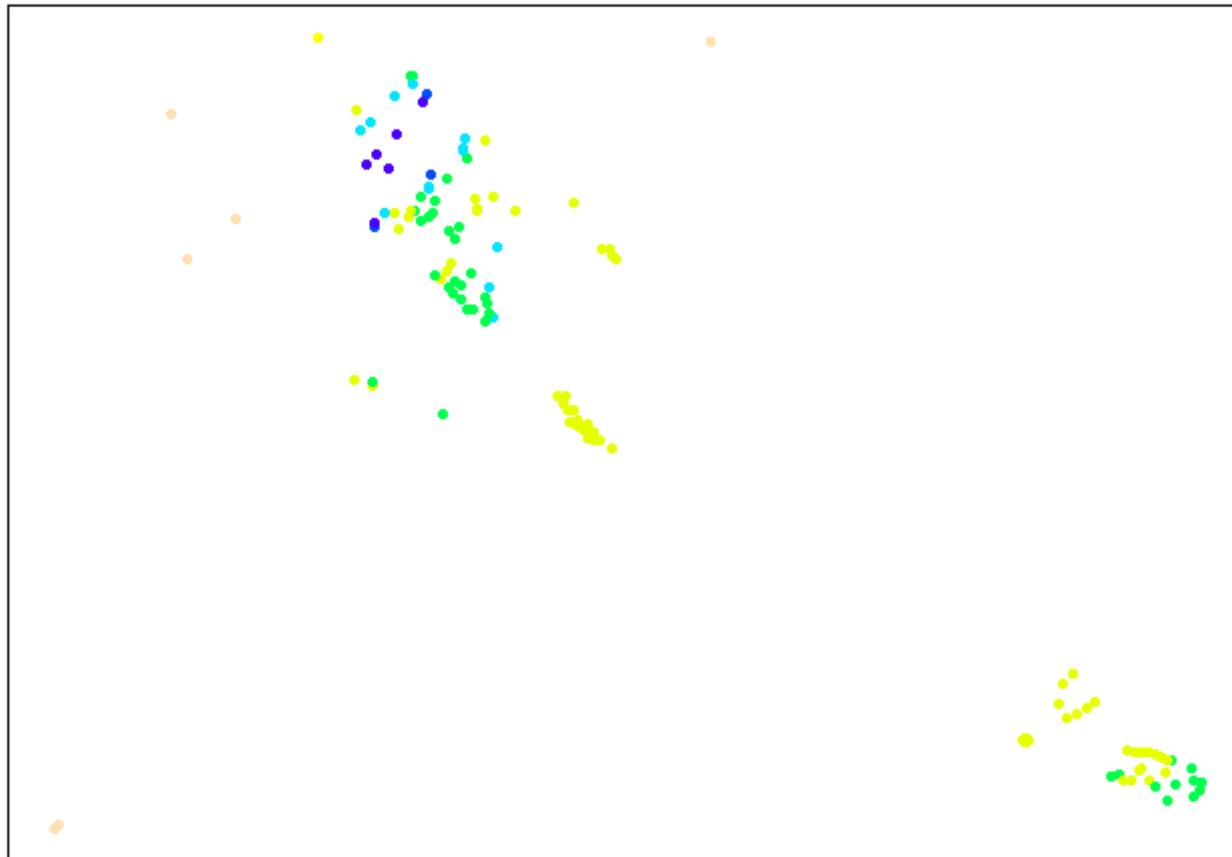
RENDAMEDIA Coef



- [-3.424e-08,-1.438e-09]
- (-1.438e-09,6.923e-09]
- (6.923e-09,1.794e-08]
- (1.794e-08,1.826e-07]

T-valor da Renda Média

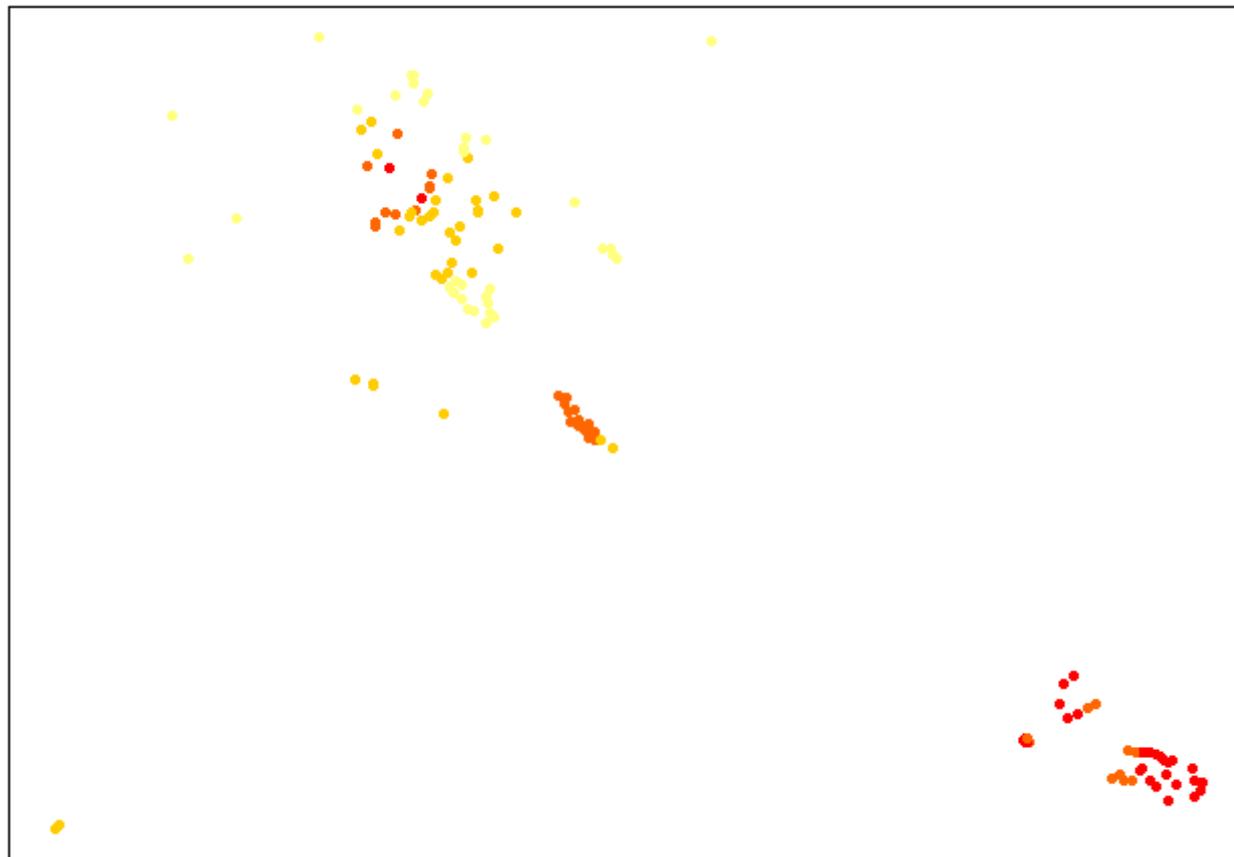
t - Value



- [-3.615,-2.294]
- (-2.294,-0.9736]
- (-0.9736,0.347]
- (0.347,1.668]
- (1.668,2.988]
- (2.988,4.309]
- (4.309,5.629]

Coeficiente do Percentual de Imóveis com Árvores

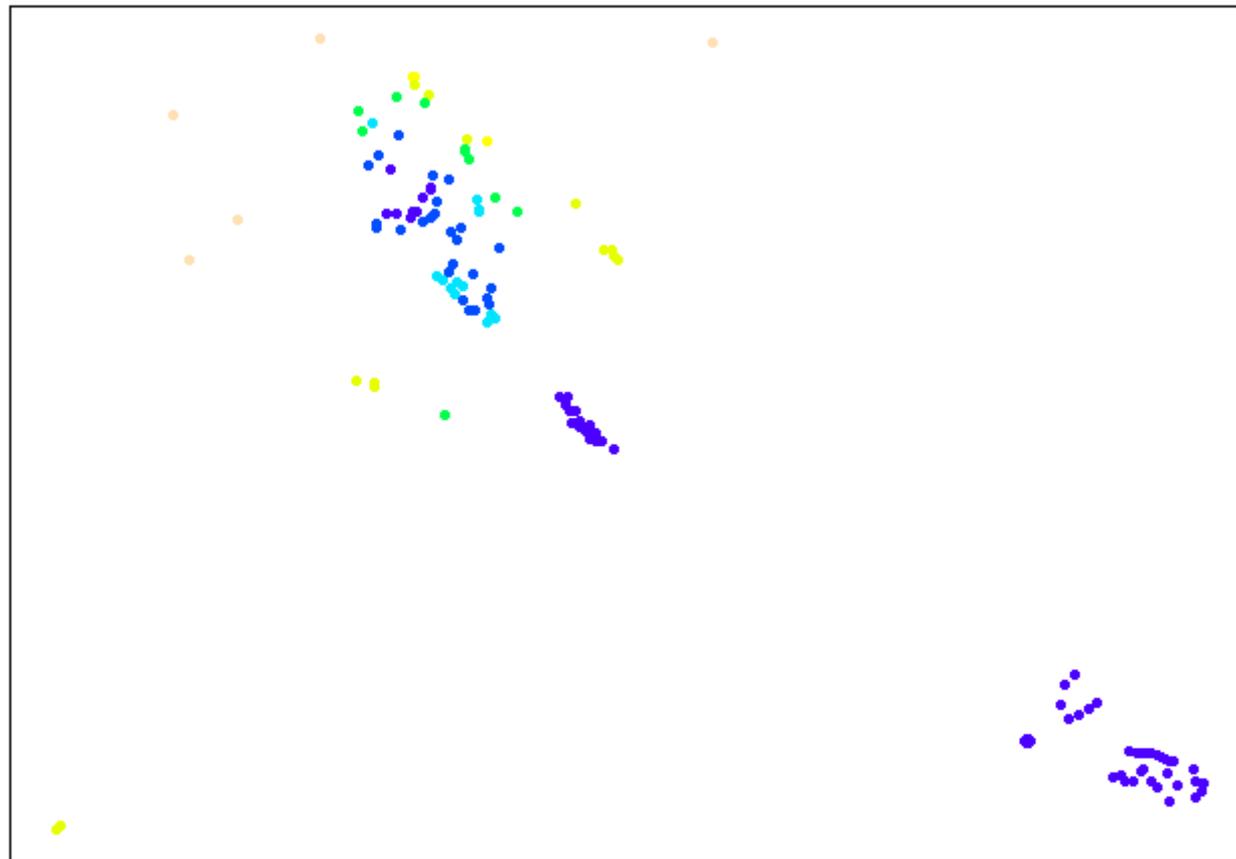
PERCRVORE Coef



- [-0.0001555,-7.795e-05]
- (-7.795e-05,-2.534e-05]
- (-2.534e-05,5.224e-06]
- (5.224e-06,4.822e-05]

T-valor do Percentual de imóveis com árvore

t - Value



- [-10.74,-9.105]
- (-9.105,-7.465]
- (-7.465,-5.825]
- (-5.825,-4.186]
- (-4.186,-2.546]
- (-2.546,-0.906]
- (-0.906,0.7338]