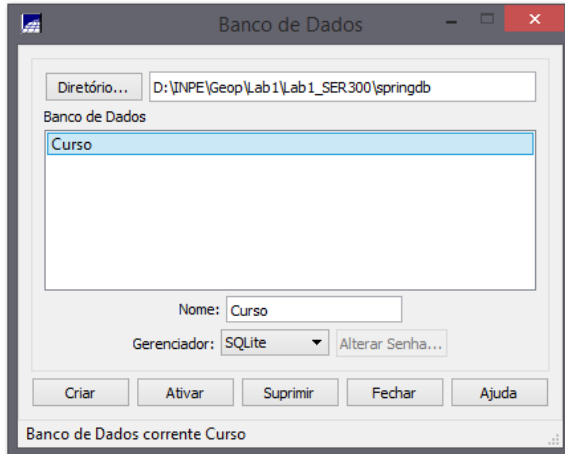


SER-300 - Introdução ao Geoprocessamento
Laboratório 1 - Bruno Borma Brugger

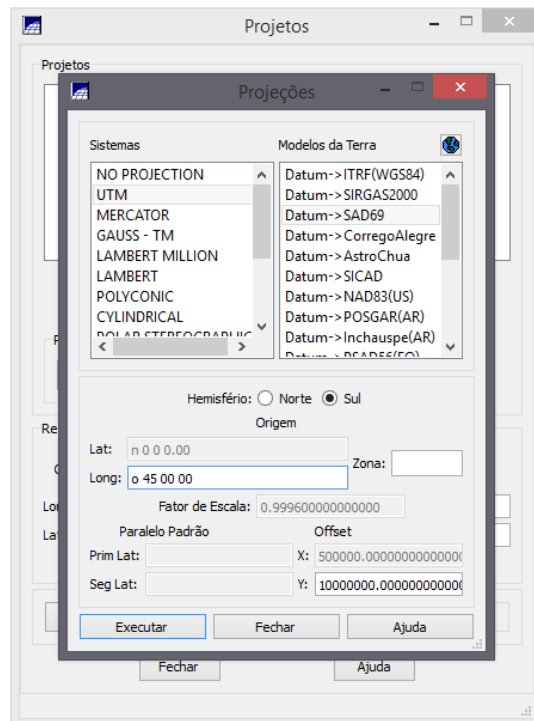
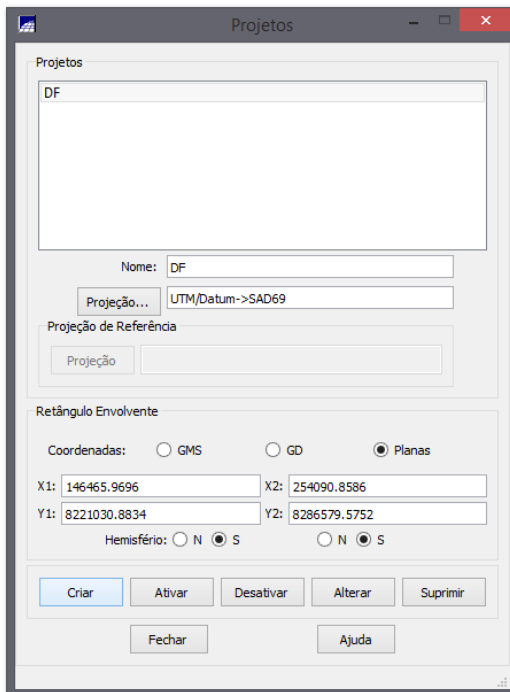
Modelagem de Base de Dados: Base de Dados Georreferenciados para Estudos Urbanos no Plano Piloto de Brasília.

Exercício 1:

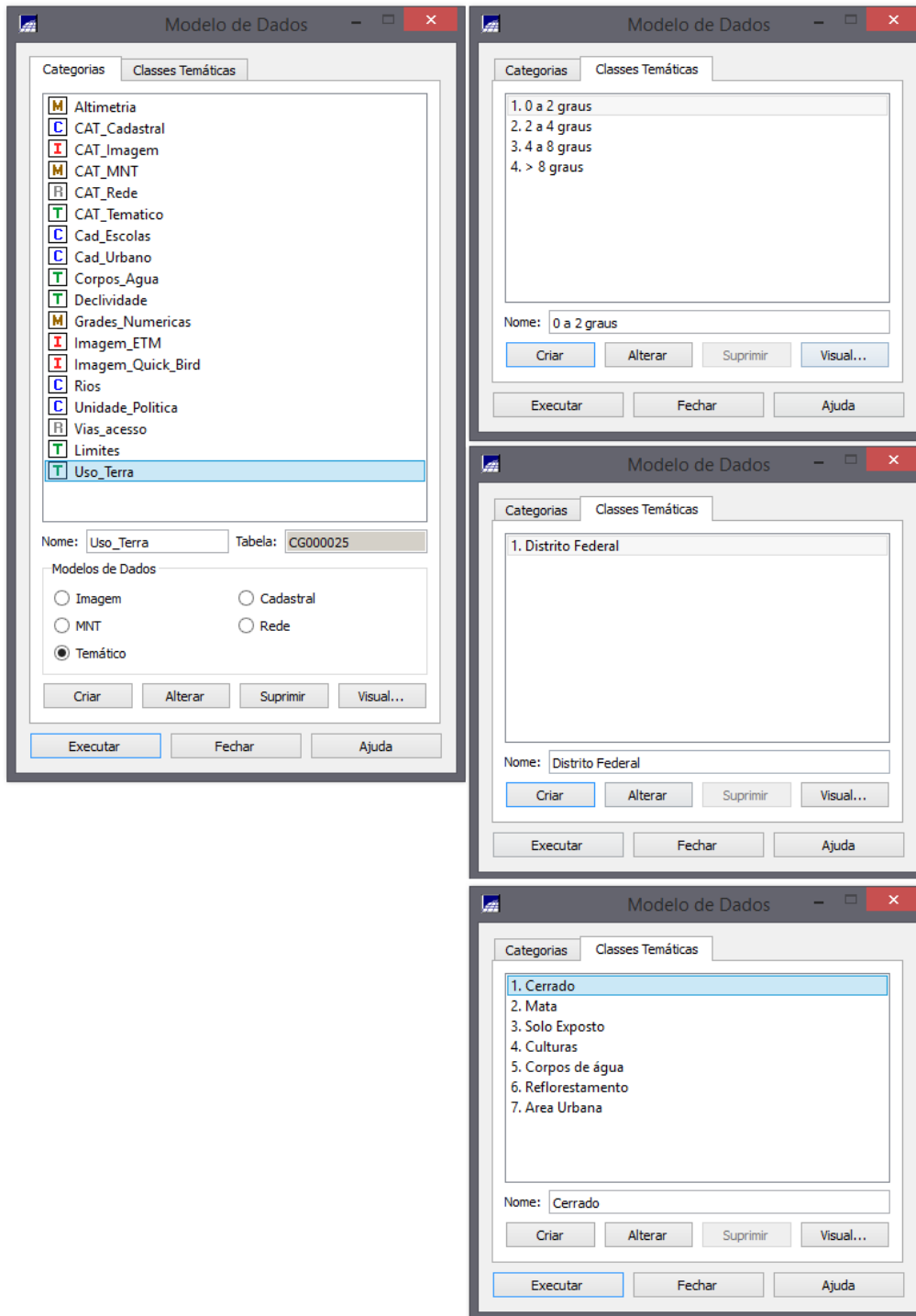
Passo 1 - Criar o Banco de Dados



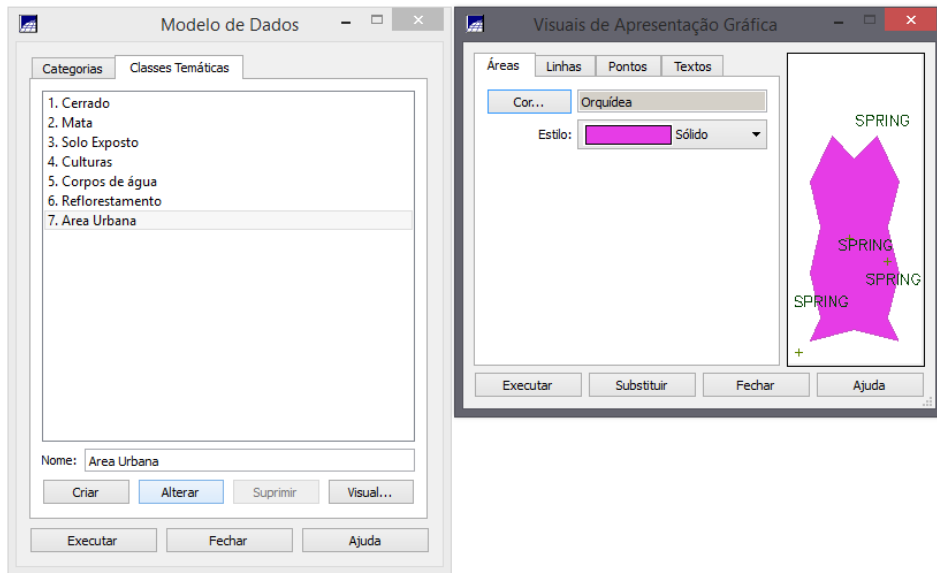
Passo 2 - Criar o Projeto



Passo 2 - Criar categorias e classes. Alterar o visual das classes temáticas.

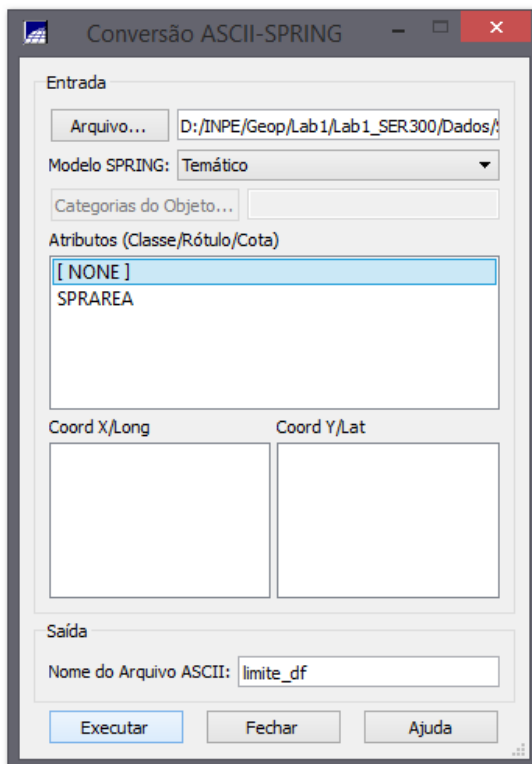


Definir o visual para classes temáticas:

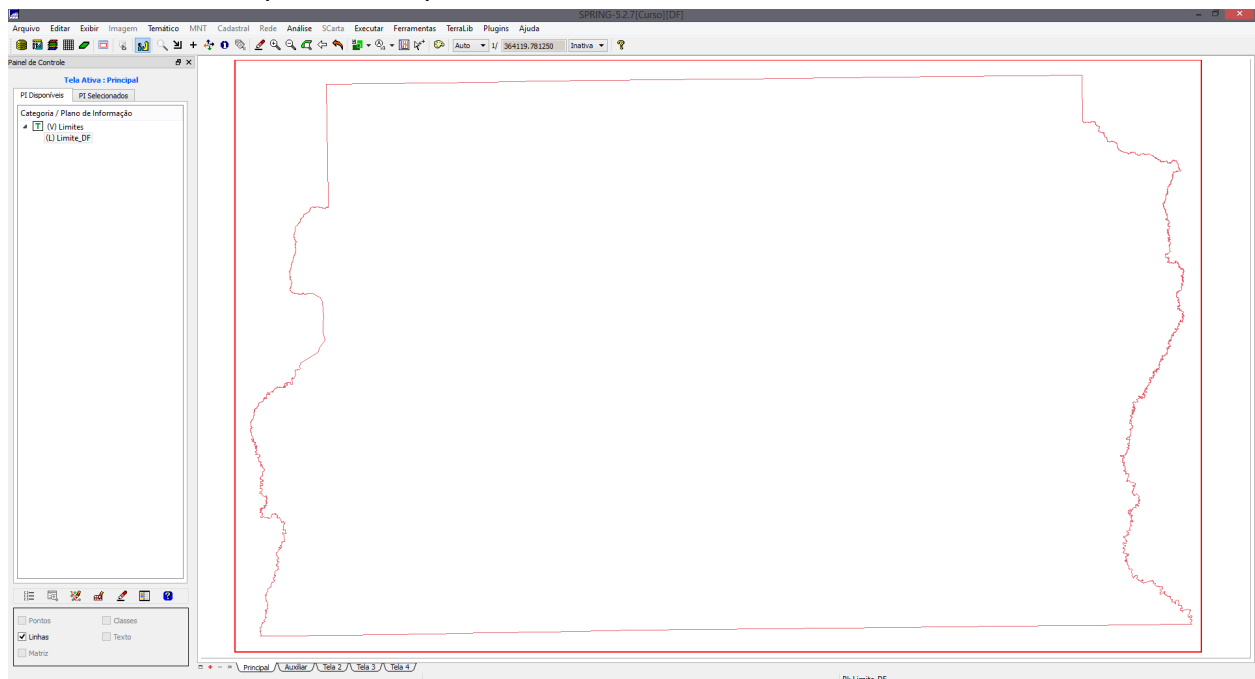


Exercício 2 – Importando Limite do Distrito Federal:

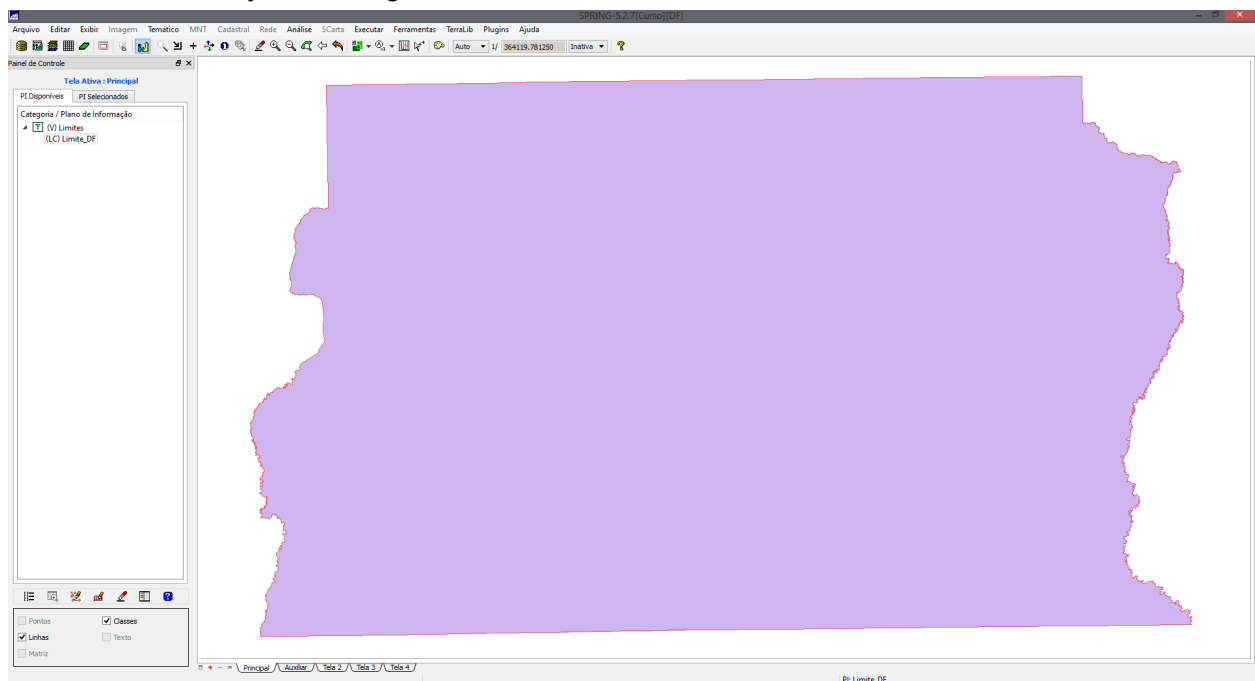
Passo 1 - Converter o arquivo Shape para ASCII-SPRING



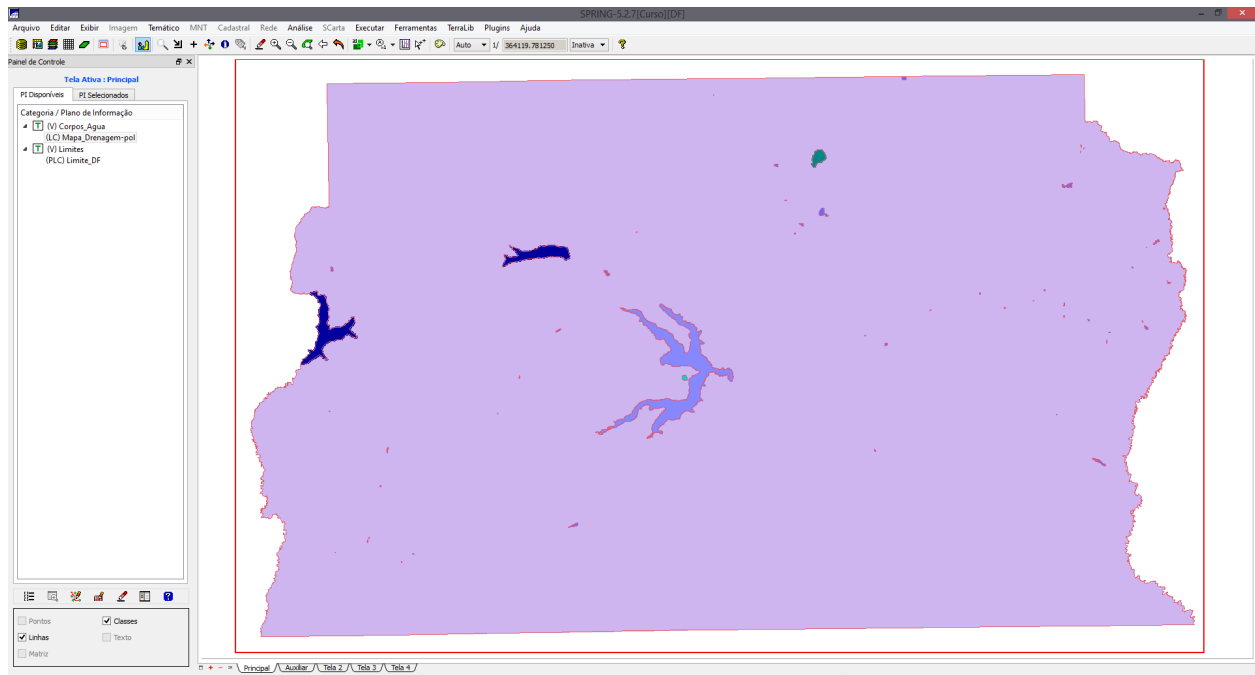
Passo 2 - Importar os arquivos ASCII



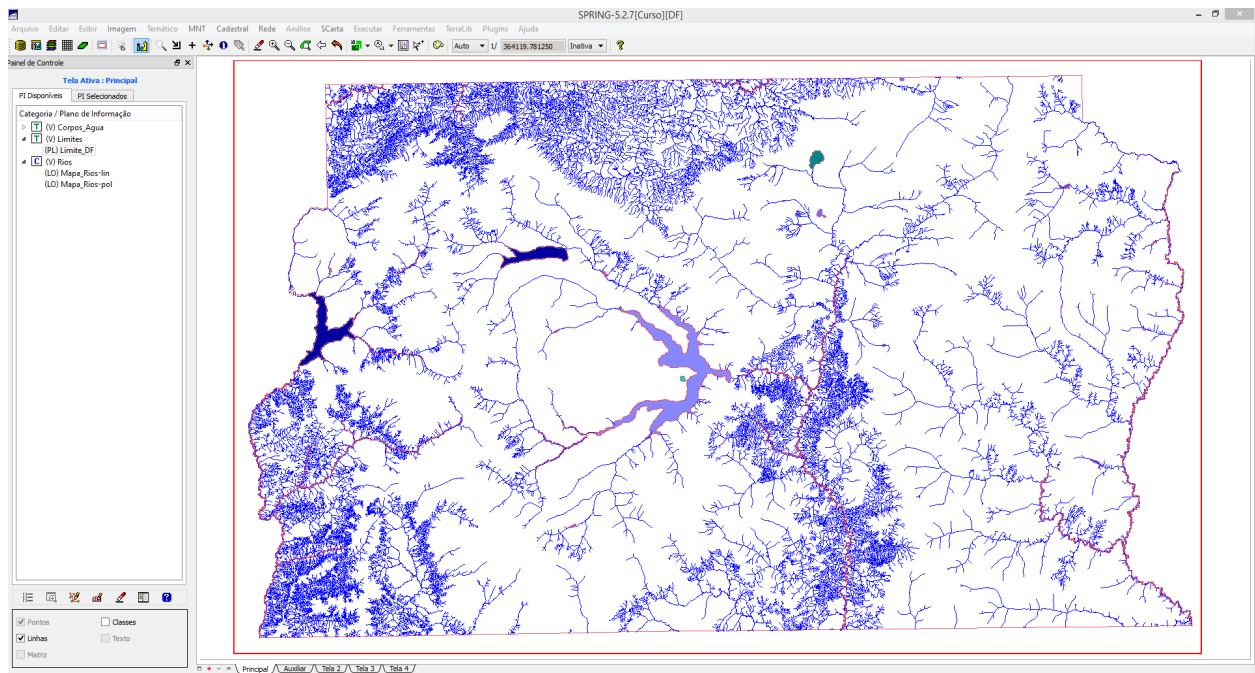
Passo 3 - Ajustar, Poligonalizar e Associar a classe temática



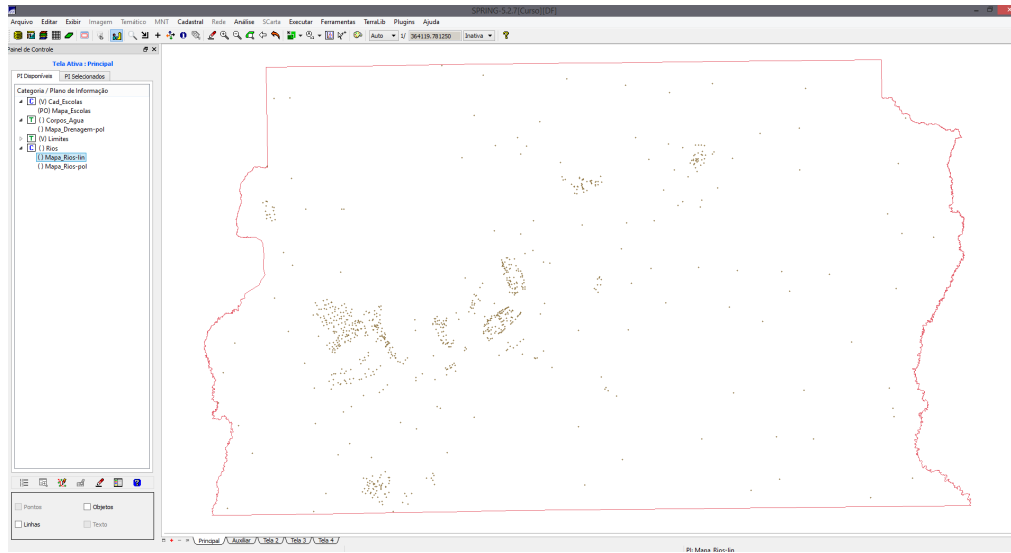
Exercício 3 – Importando Corpos de Água:



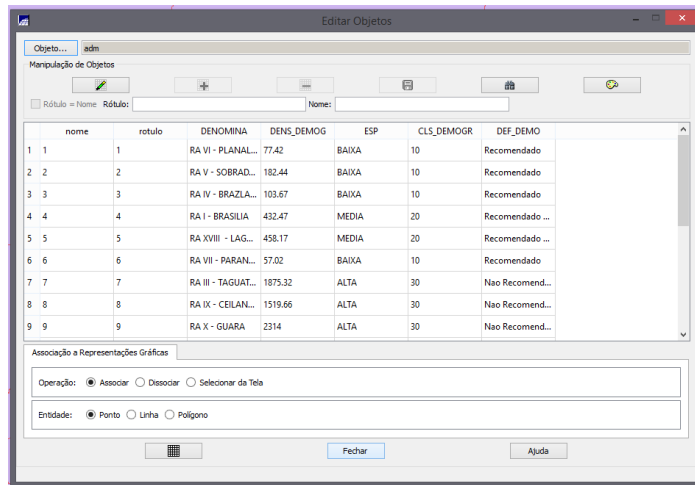
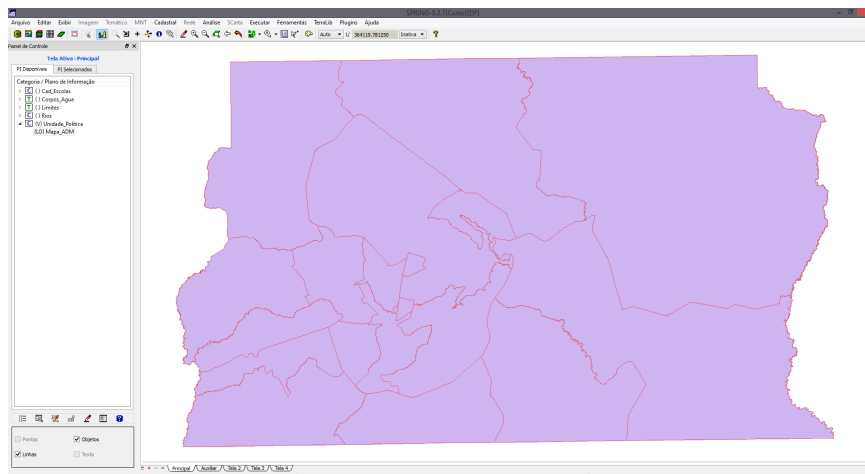
Exercício 4 – Importando Rios de arquivo Shape



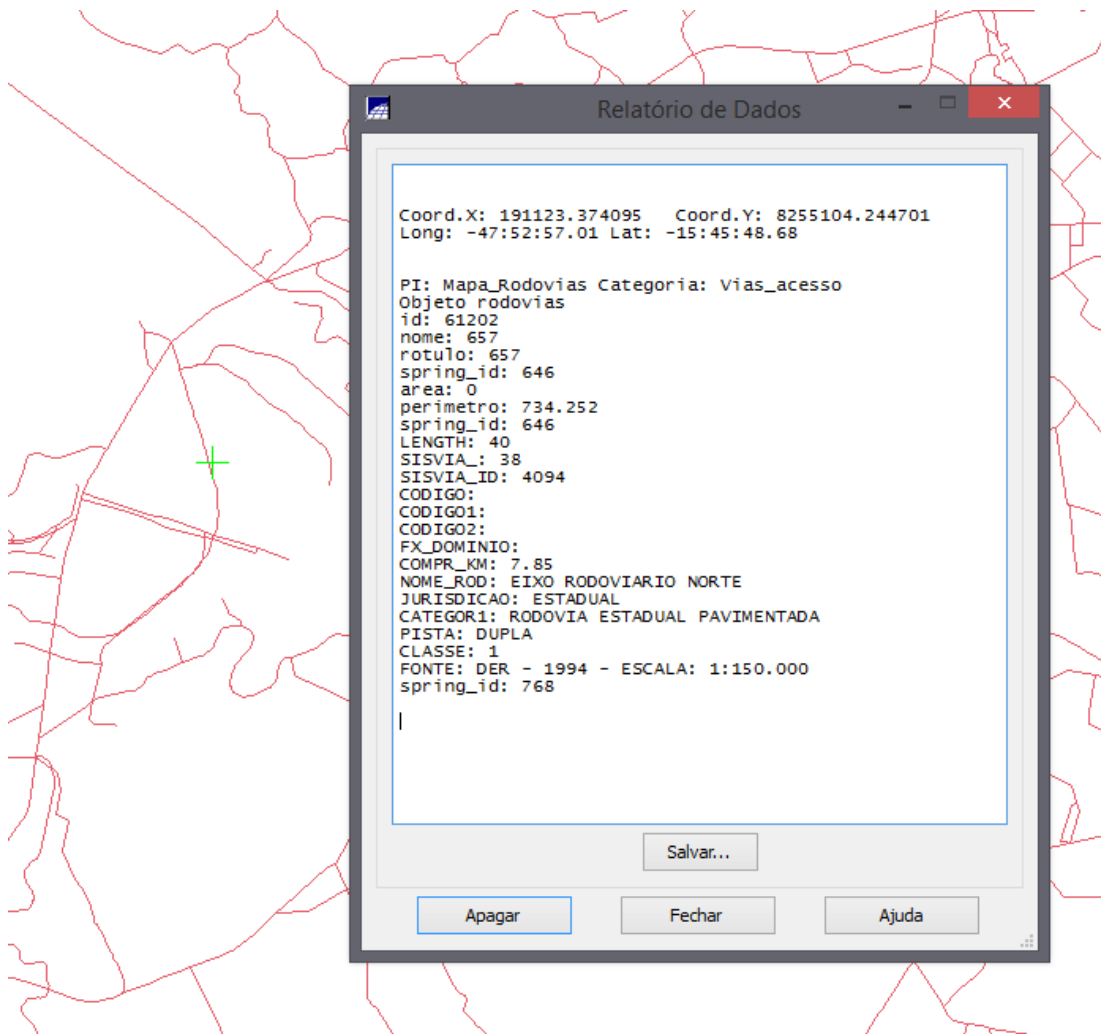
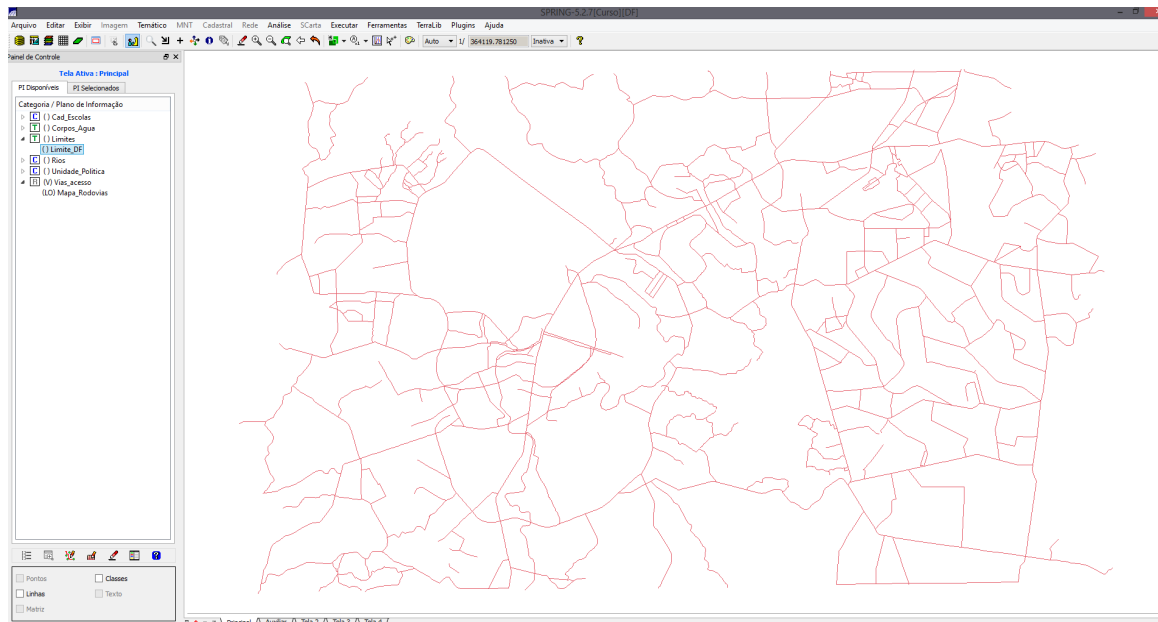
Exercício 5 – Importando Escolas de arquivo Shape



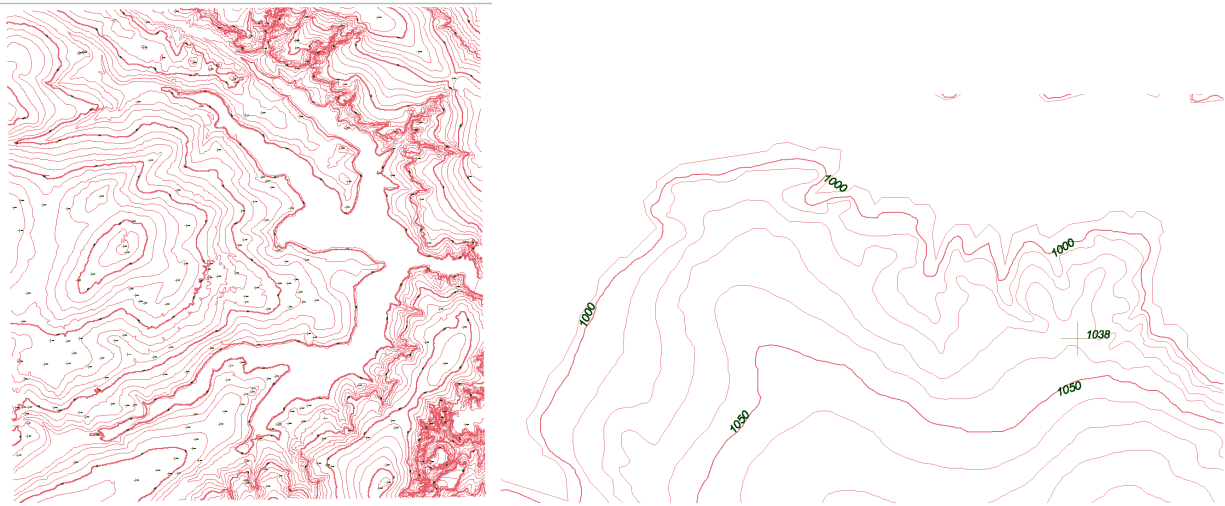
Exercício 6 – Importando Regiões Administrativas de arquivos ASCII-SPRING



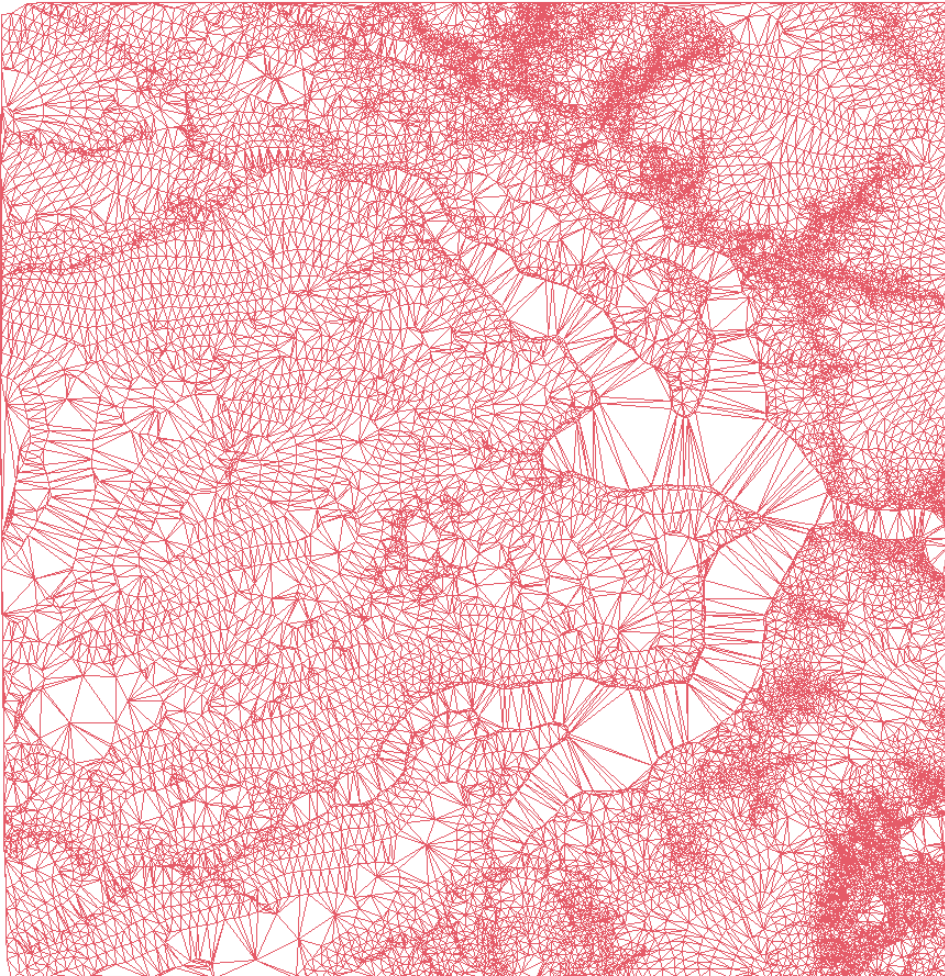
Exercício 7 – Importando Rodovias de arquivos ASCII-SPRING



Exercício 8 – Importando Altimetria de arquivos DXF



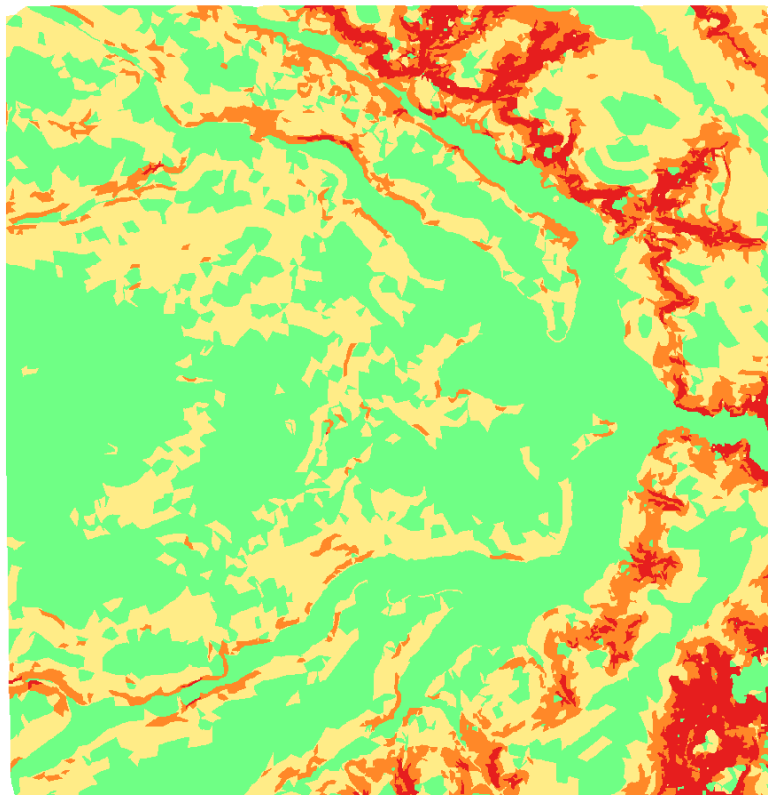
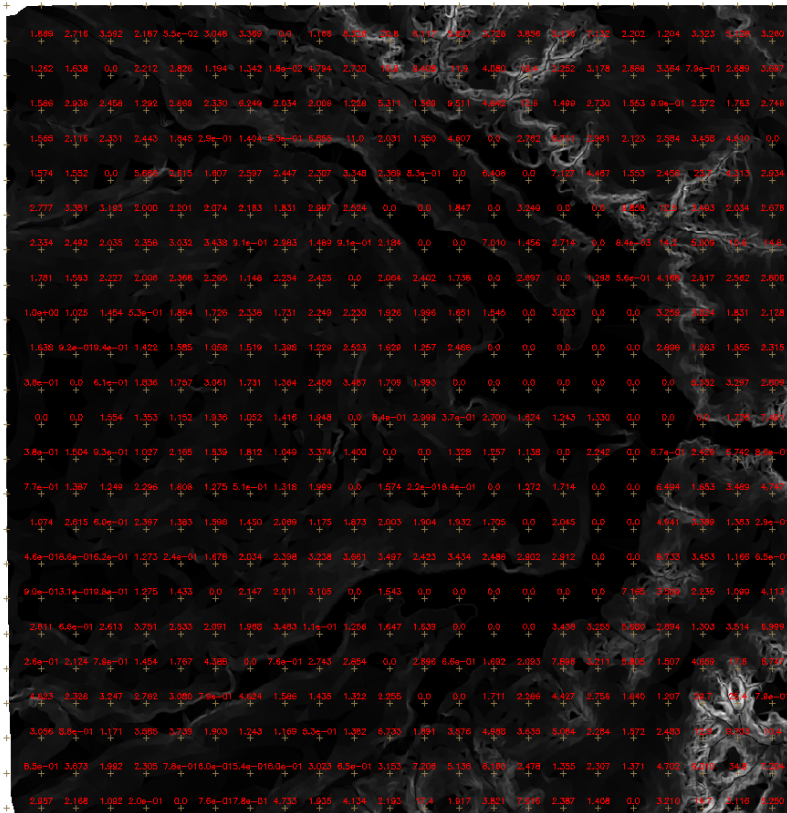
Exercício 9 - Gerar grade triangular- TIN



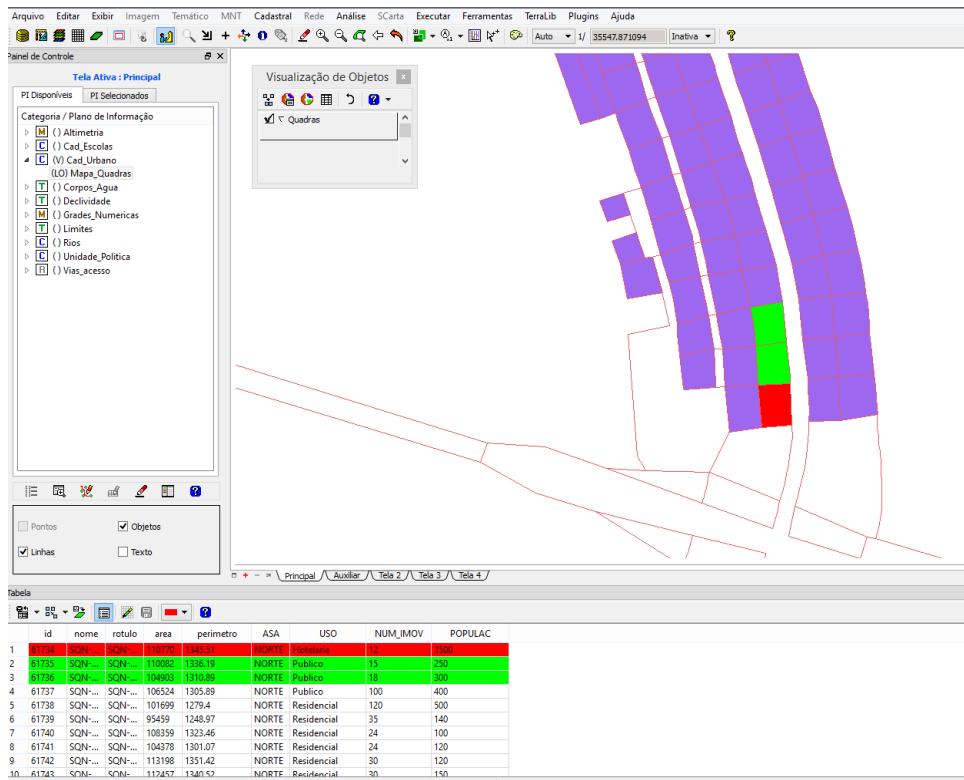
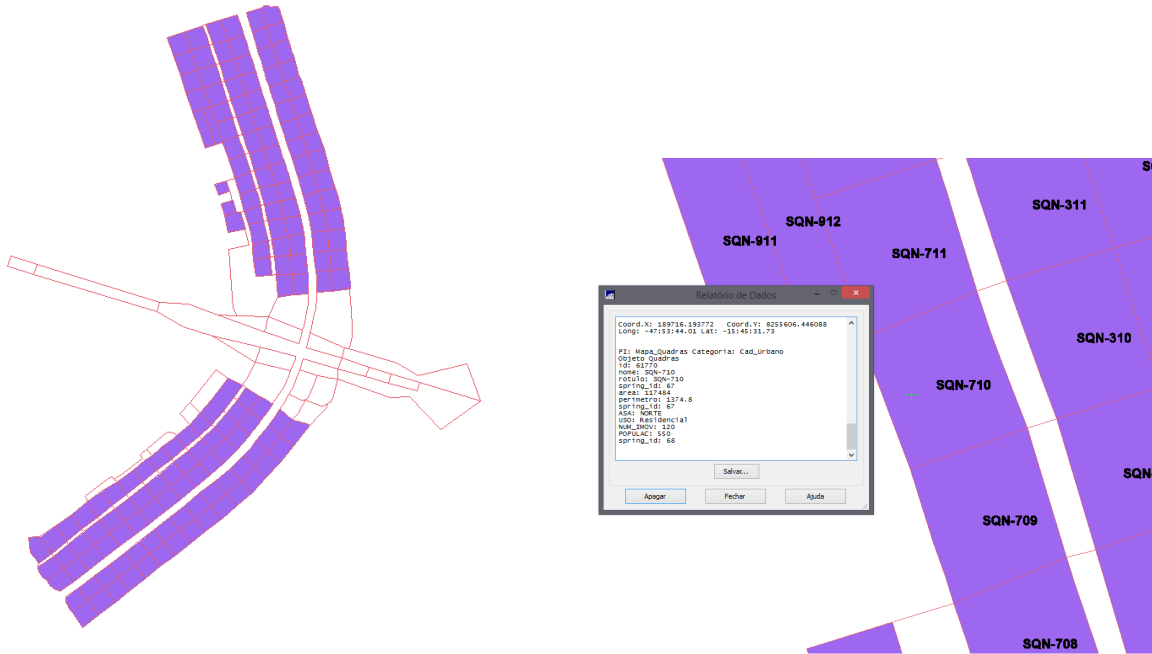
Exercício 10 - Gerar grades retangulares a partir do TIN

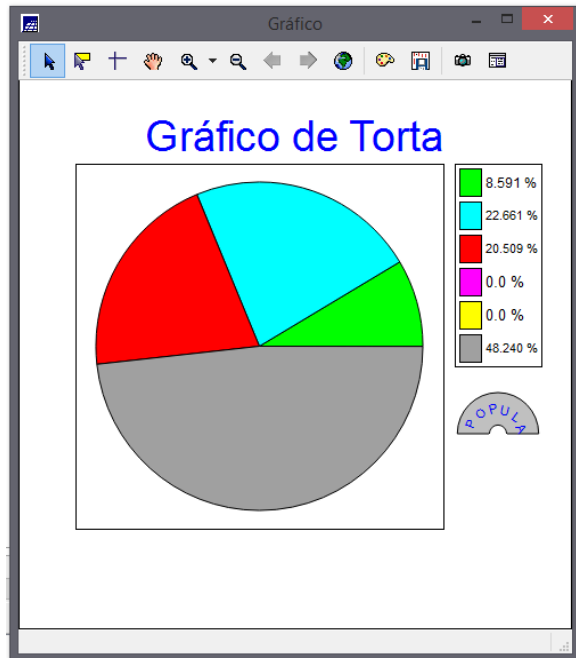
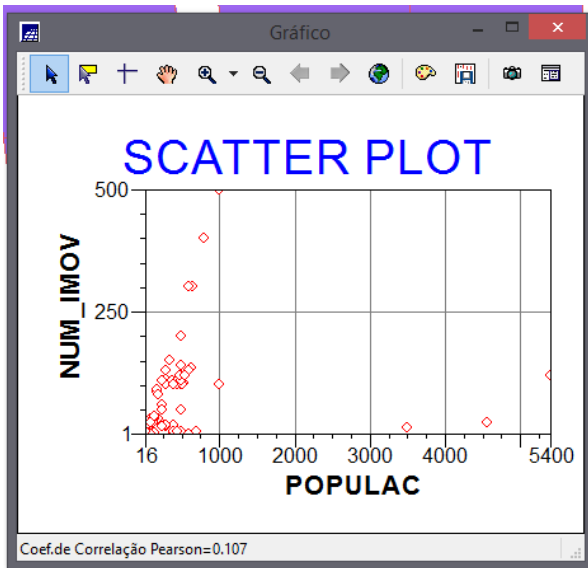
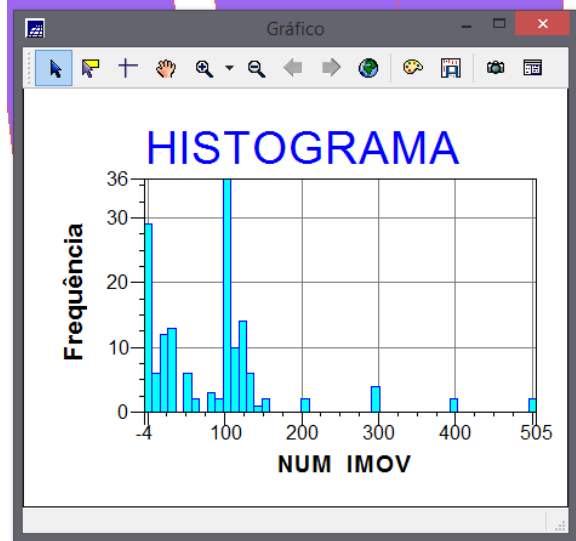
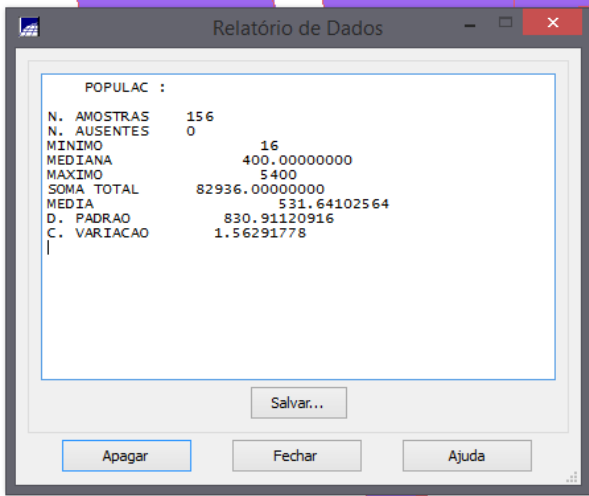
1069.8	1056.3	1036.2	1029.9	1045.0	1070.0	1067.4	1042.9	1035.0	1014.7	1031.2	1067.3	1066.9	1084.2	1110.6	1144.2	1150.5	1157.6	1209.8	1201.9	1172.9	1130.9	1069.3	
1084.8	1077.7	1057.8	1040.0	1017.8	1043.1	1063.5	1068.8	1090.0	1061.7	1025.1	1020.0	1035.5	1080.5	1097.3	1052.6	1128.5	1151.9	1166.8	1178.9	1181.7	1158.3	1115.7	
1063.8	1077.7	1056.0	1025.4	1026.1	1025.3	1034.5	1043.4	1051.6	1058.2	1050.0	1036.1	998.0	1012.7	1023.5	1080.3	1110.7	1113.1	1135.6	1146.3	1160.3	1166.4	1148.5	
1102.4	1084.1	1062.2	1045.2	1036.7	1010.0	1025.2	1011.0	998.0	990.3	1018.1	1041.9	1021.0	1020.0	998.0	1021.9	1039.3	1067.5	1119.5	1122.9	1124.6	1117.1	1170.0	
1110.0	1088.9	1071.7	1060.0	1033.7	1013.0	1033.3	1025.4	1020.0	1018.0	1020.0	1021.8	1020.4	1020.0	1027.7	998.0	1026.0	1074.4	1095.4	1090.6	1059.2	1110.4	1155.3	
1077.6	1062.0	1041.7	1044.9	1049.0	1046.1	1022.6	1063.9	1057.1	1034.4	1018.8	998.0	998.0	1022.1	1025.0	1020.5	998.0	998.0	1056.6	1025.8	1082.5	1119.0	1163.5	
1063.0	1073.8	1070.5	1076.1	1082.1	1080.6	1085.7	1090.7	1070.7	1033.9	1038.0	1017.7	998.0	998.0	1025.0	1018.3	1024.4	998.0	998.0	1136.5	1066.8	1090.8	1138.4	
1112.2	1103.8	1086.5	1107.4	1117.2	1123.1	1107.8	1080.2	1089.2	1057.9	1050.0	1034.8	1026.0	998.0	998.0	1021.7	1020.0	998.4	998.0	1023.0	1087.6	1114.3	1147.6	
1130.3	1117.7	1113.1	1128.4	1141.5	1129.6	1112.6	1107.5	1083.6	1081.8	1067.0	1044.8	1027.0	1018.8	998.0	998.0	1020.0	998.0	998.0	1021.8	1073.9	1099.4	1126.9	
1130.2	1121.6	1118.0	1130.8	1137.9	1142.1	1142.2	1135.8	1118.1	1108.6	1085.1	1054.3	1034.0	1017.1	998.0	998.0	998.0	998.0	998.0	1015.5	1070.5	1086.0	1104.5	
1130.2	1120.0	1120.0	1128.0	1143.0	1160.7	1162.0	1140.3	1120.4	1100.9	1074.9	1047.7	1021.9	998.0	998.0	998.0	998.0	998.0	998.0	998.0	1043.6	1051.7	1063.8	
1130.1	1120.0	1120.0	1134.4	1154.7	1184.4	1154.0	1137.6	1120.7	1107.5	1060.0	1060.0	1036.8	1020.1	1020.0	1010.3	1007.4	1005.2	998.0	998.0	998.0	998.0	1023.4	
1125.7	1119.7	1123.9	1142.9	1152.8	1140.6	1128.5	1125.2	1124.4	1108.8	1083.3	1070.0	1060.0	1044.5	1037.8	1027.6	1010.0	1020.9	998.0	998.0	1023.9	1018.7	998.0	
1112.0	1125.9	1141.0	1136.0	1116.0	1111.5	1119.6	1114.3	1094.5	1070.0	1061.9	1060.0	1050.2	1040.0	1021.4	1013.8	998.0	998.0	1021.4	1062.5	1055.3	1079.0		
1103.4	1113.5	1110.0	1101.5	1089.5	1097.0	1107.5	1084.3	1083.1	1064.2	1036.3	1040.2	1035.8	1023.2	1030.0	1023.8	998.0	998.0	1037.5	1071.4	1090.3	1100.0		
1090.0	1084.1	1091.9	1083.3	1089.1	1077.6	1083.8	1071.2	1052.3	1026.0	1026.8	1011.0	1004.1	1000.0	1012.8	1004.7	998.0	998.0	1044.2	1086.6	1108.1	1110.0		
1090.8	1097.9	1093.8	1088.3	1076.3	1060.0	1056.8	1043.2	1020.2	998.0	1002.6	998.0	998.0	998.0	998.0	998.0	998.0	998.0	1024.0	1073.4	1085.3	1114.4	1095.8	
1074.9	1090.3	1077.7	1067.8	1051.5	1036.6	1022.4	1019.4	998.0	1012.3	1014.9	1018.3	998.0	998.0	998.0	998.0	1011.4	1008.0	1040.7	1071.7	1106.5	1098.6	1068.9	
1050.1	1059.8	1048.4	1042.9	1036.0	1025.4	998.0	998.0	1005.8	1028.1	1030.0	1021.2	998.0	1025.4	1026.6	1025.1	1063.3	1051.5	1095.9	1085.9	1040.2	1024.0		
1040.1	1021.6	1029.8	1033.9	1011.7	998.0	1017.9	1024.8	1021.8	1040.2	1026.4	998.0	1010.0	1013.5	1027.6	1020.2	1085.9	1104.2	1106.1	1025.5	1025.0	1047.0		
1038.1	1020.9	1007.8	1011.2	1020.1	1036.6	1049.6	1047.2	1041.7	1041.0	1027.9	1013.8	1007.0	1026.5	1062.6	1086.2	1109.0	1126.2	1113.9	1044.0	969.7	930.7		
1007.8	1017.7	1030.2	1046.8	1051.1	1052.8	1056.0	1051.6	1032.7	1007.9	1018.3	1027.8	1044.3	1027.6	1083.7	1113.4	1132.1	1146.7	1115.6	1010.9	998.0	1007.0		
1001.2	1044.5	1053.7	1080.0	1080.0	1056.8	1051.4	1027.8	1018.0	1020.0	1067.1	1072.2	1081.5	1034.4	1066.2	1107.9	1142.4	1180.0	1115.3	1048.5	1033.8	963.1		

Exercício 11 - Geração de Grade de Declividade e Fatiamento



Exercício 12 - Criar Mapa Quadras de Brasília

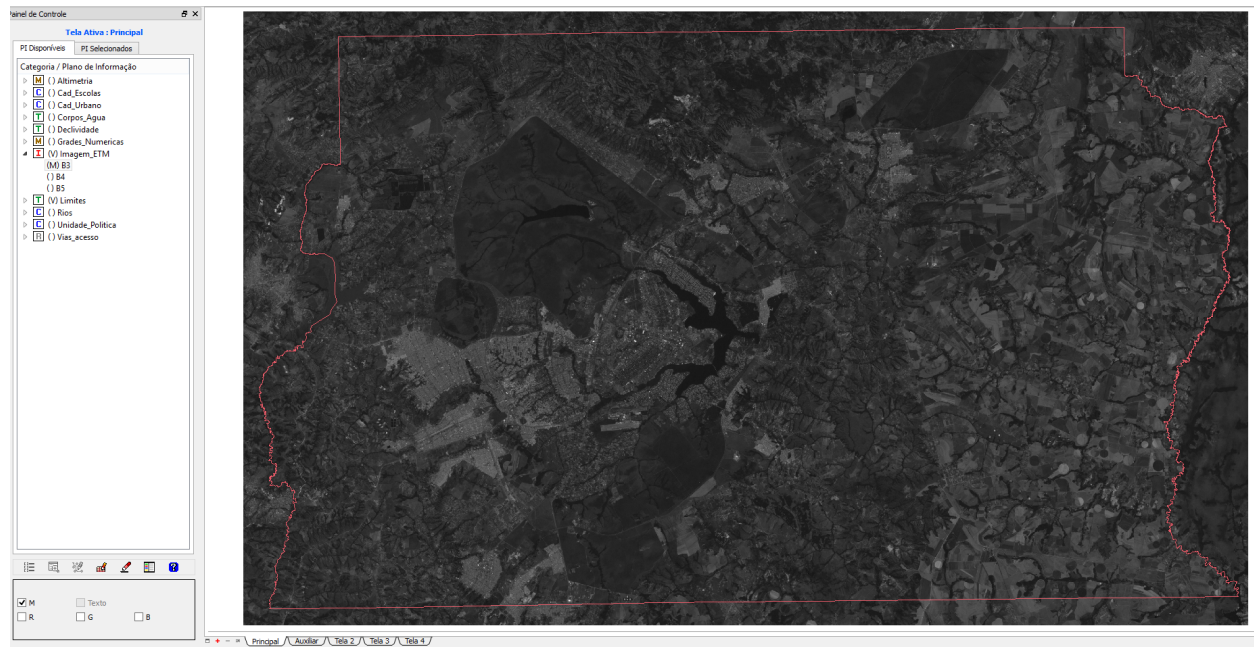




Exercício 13 – Atualização de Atributos utilizando o LEGAL

	id	nome	rotulo	area	perimetro	ASA	USO	NUM_IMOV	POPULAC	MDECLIV
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotelaria	12	3500	2.415296056017
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	2.013620211428
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.488793394063
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.880875738549
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Residencial	120	500	2.61597250946
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Residencial	35	140	1.996088841839
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Residencial	24	100	1.764534577613
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Residencial	24	120	1.919879876192
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Residencial	30	120	1.97784571771
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Residencial	30	150	1.637316382756
11	61744	SQN-...	SQN-...	109396	1325.76	NORTE	Residencial	30	200	2.475995662052
12	61745	SQN-...	SQN-...	103022	1287.3	NORTE	Comercial	15	300	2.761941424636
13	61746	SQN-...	SQN-...	105360	1300.16	NORTE	Comercial	18	400	2.061762328972
14	61747	SQN-...	SQN-...	116923	1372.41	NORTE	Residencial	30	180	2.058464426895
15	61748	SQN-...	SQN-...	128360	1439.54	NORTE	Lazer	5	100	2.58139710594
16	61728	SQN-...	SQN-...	111250	1361.4	NORTE	Comercial	120	5400	2.122996300141

Exercício 14 – Importação de Imagem Landsat e Quick-Bird



Panel de Controle

Tela Ativa : Principal

PI Disponíveis PI Selecionados

Categoria / Plano de Informação

- (M) Altimetria
- (C) Cad_Estados
- (U) Cad_Urbano
- (V) Corpo_Agua
- (D) Decididade
- (N) Grades_Numericas
- (I) Imagem_ETM
- (B)
- (M) B1
- (B)
- (V) Limites
- (R) Rios
- (P) Unidades_Publicas
- (A) Vias_Acesso

M Texto
 R G B



Panel de Controle

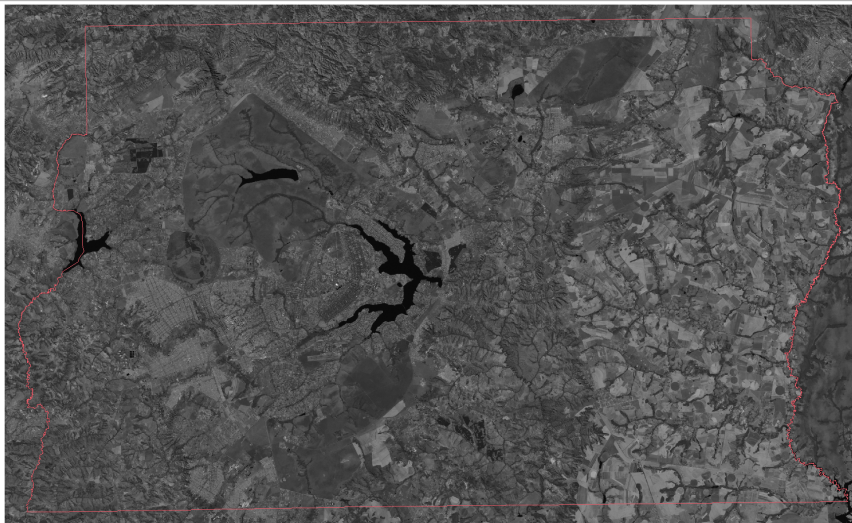
Tela Ativa : Principal

PI Disponíveis PI Selecionados

Categoria / Plano de Informação

- (M) Altimetria
- (C) Cad_Estados
- (U) Cad_Urbano
- (V) Corpo_Agua
- (D) Decididade
- (N) Grades_Numericas
- (I) Imagem_ETM
- (B)
- (M) B1
- (B)
- (V) Limites
- (R) Rios
- (P) Unidades_Publicas
- (A) Vias_Acesso

M Texto
 R G B



Exercício 15 - Classificação supervisionada por pixel

Passo 1 – Criar uma imagem sintética de fundo:

