



## **INTRODUÇÃO AO GEOPROCESSAMENTO**

### **LAB 1 - Modelagem da Base de Dados / Bruna Cristina Braga 130133**

#### **Exercício 1 – Modelagem do Banco – OMT-G p/ SPRING**

**Passo 1 – Criar o Banco de Dados**

**Passo 2 – Criar o Projeto**

**Passo 3 - Criar categorias e classes. Alterar o visual das classes temáticas se desejar**

#### **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**

**Passo 1 - Importar arquivo DXF com isolinhas num PI numérico**

**Passo 2 - Importar arquivo DXF com pontos cotados no mesmo PI das isolinhas**

**Passo 3 - Gerar toponímia para amostras**

#### **Exercício 9 - Gerar grade triangular- TIN**

**Passo 1 - Importar a drenagem de arquivo DXF para PI temático**

**Passo 2 - Gerar grade triangular utilizando o PI drenagem como linha de quebra**

#### **Exercício 10 - Gerar grades retangulares a partir do TIN**

#### **Exercício 11 - Geração de Grade de Declividade e Fatiamento**

#### **Exercício 12 - Criar Mapa Quadras de Brasília**

**Passo 1 - Importar arquivo de linhas para criar mapa cadastral**

**Passo 2 - Associação automática de objetos e importação de tabela ASCII**

**Passo 3 - Geração de toponímia dentro de cada polígono**

**Passo 4 - Carregar módulo de consulta e verificar tabela**

### Exercício 13 – Atualização de Atributos utilizando o LEGAL

**Passo 1 - Criar um novo atributo para o objeto Quadras**

**Passo 2 - Atualizar atributo pelo operador de média zonal**

### Exercício 14 – Importação de Imagem Landsat e Quick-Bird

**Exercício 15 - Classificação supervisionada por pixel**

**Passo 1 – Criar uma imagem sintética de fundo**

**Passo 2 - Criação de um arquivo de contexto**

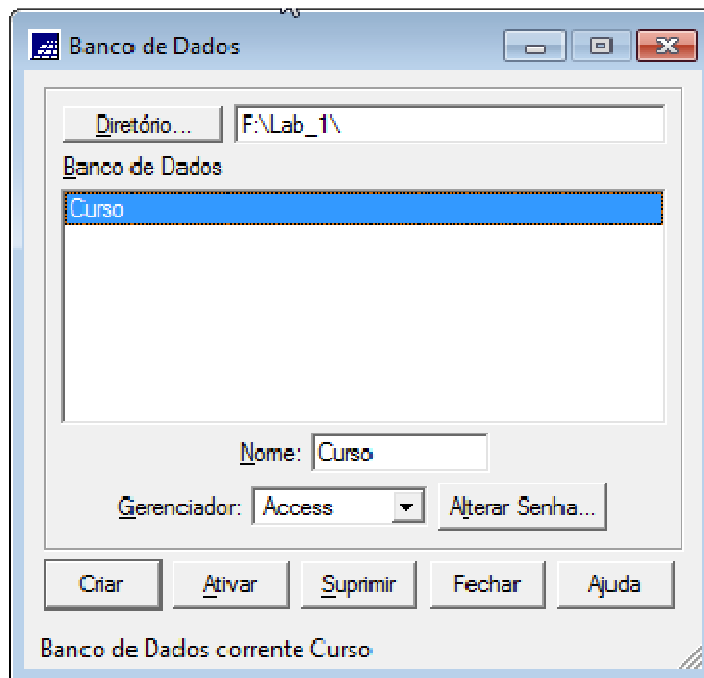
**Passo 3 – Treinamento**

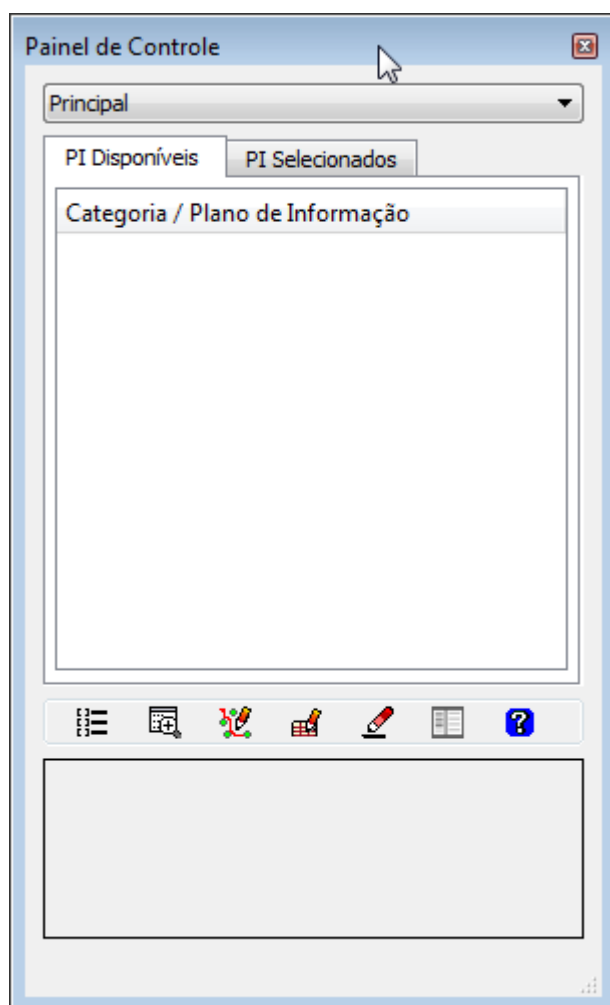
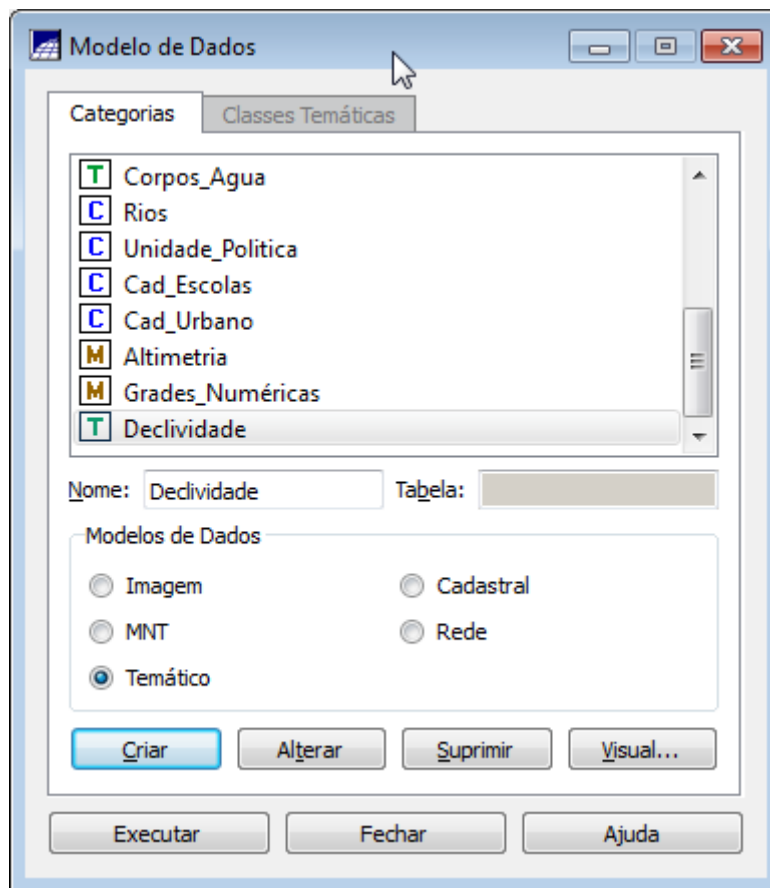
**Passo 4 - Análise das amostras**

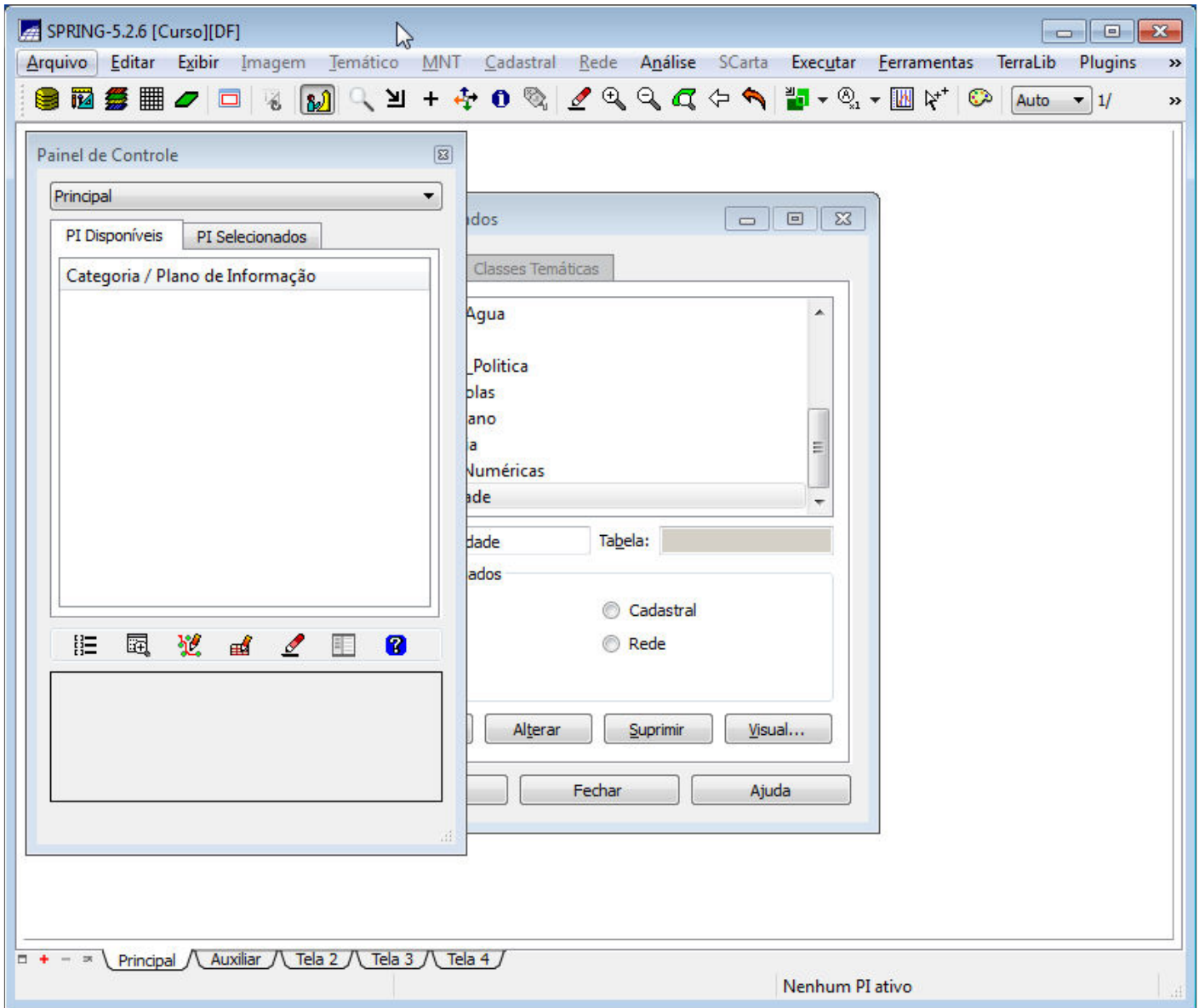
**Passo 5 - Classificação da imagem**

**Passo 6 - Pós-classificação**

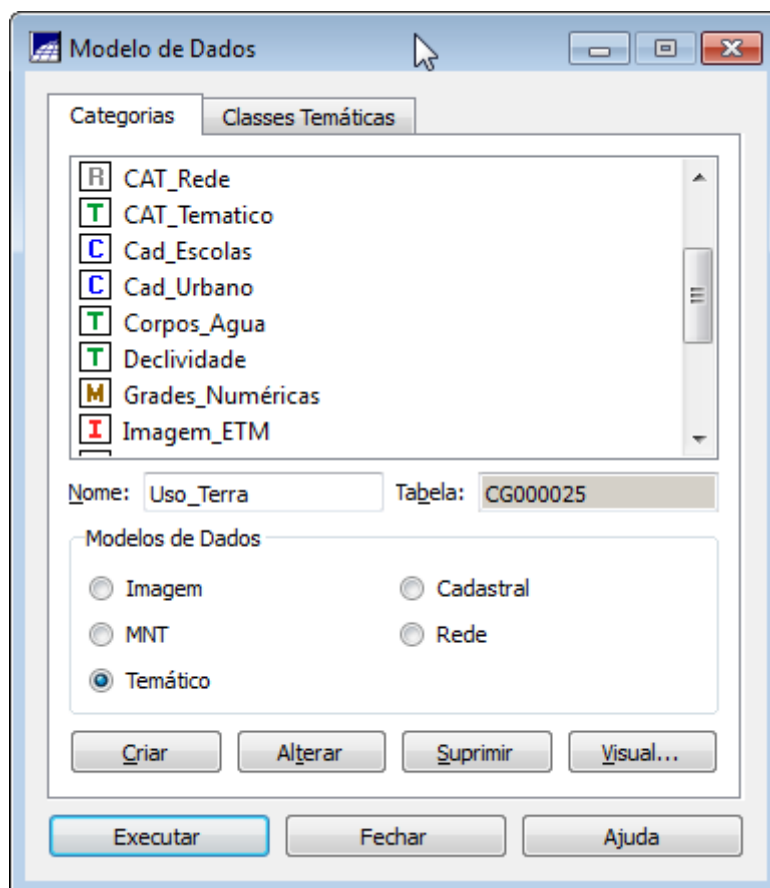
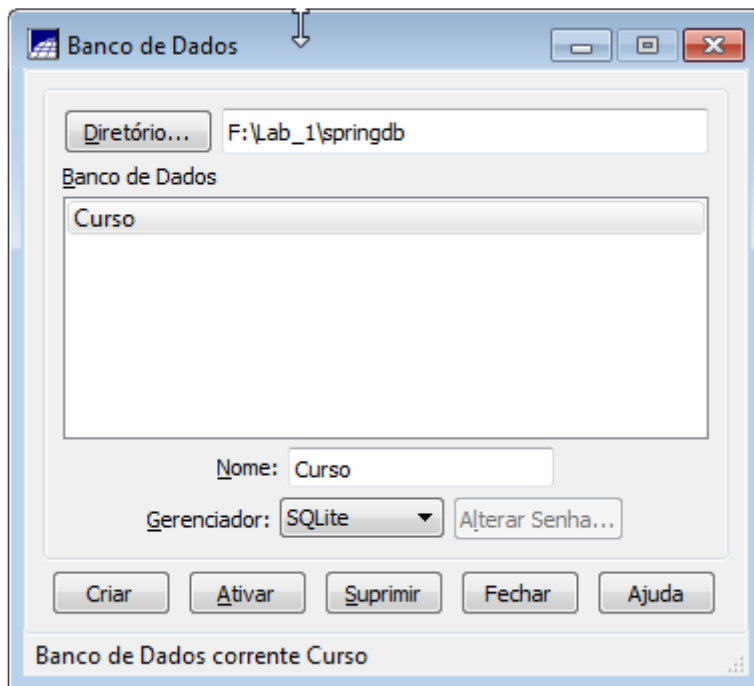
**Passo 7 - Mapeamento para o modelo temático**

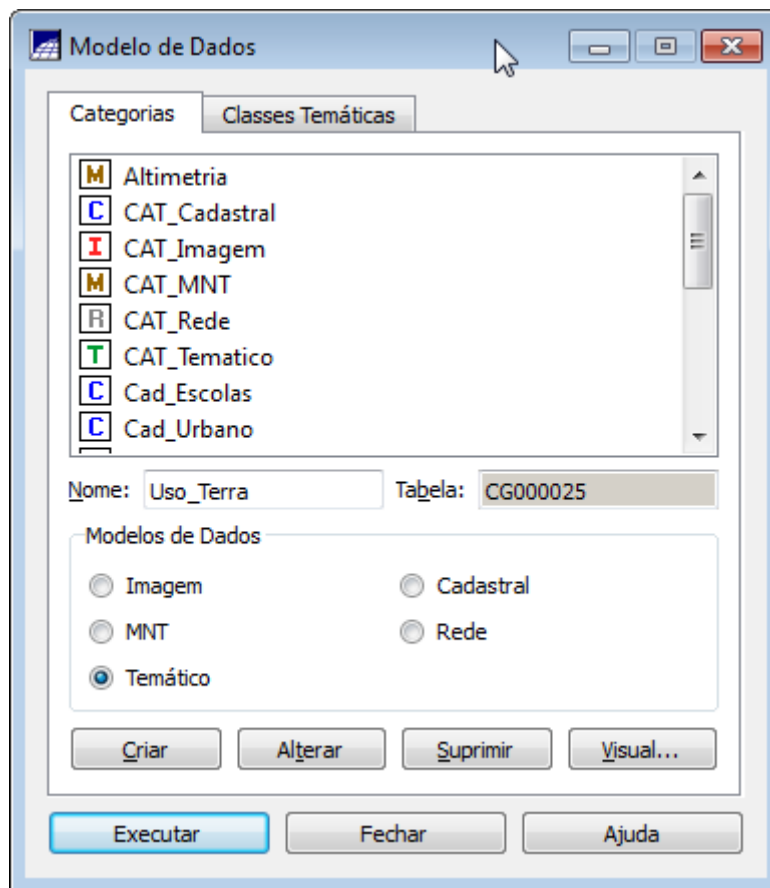


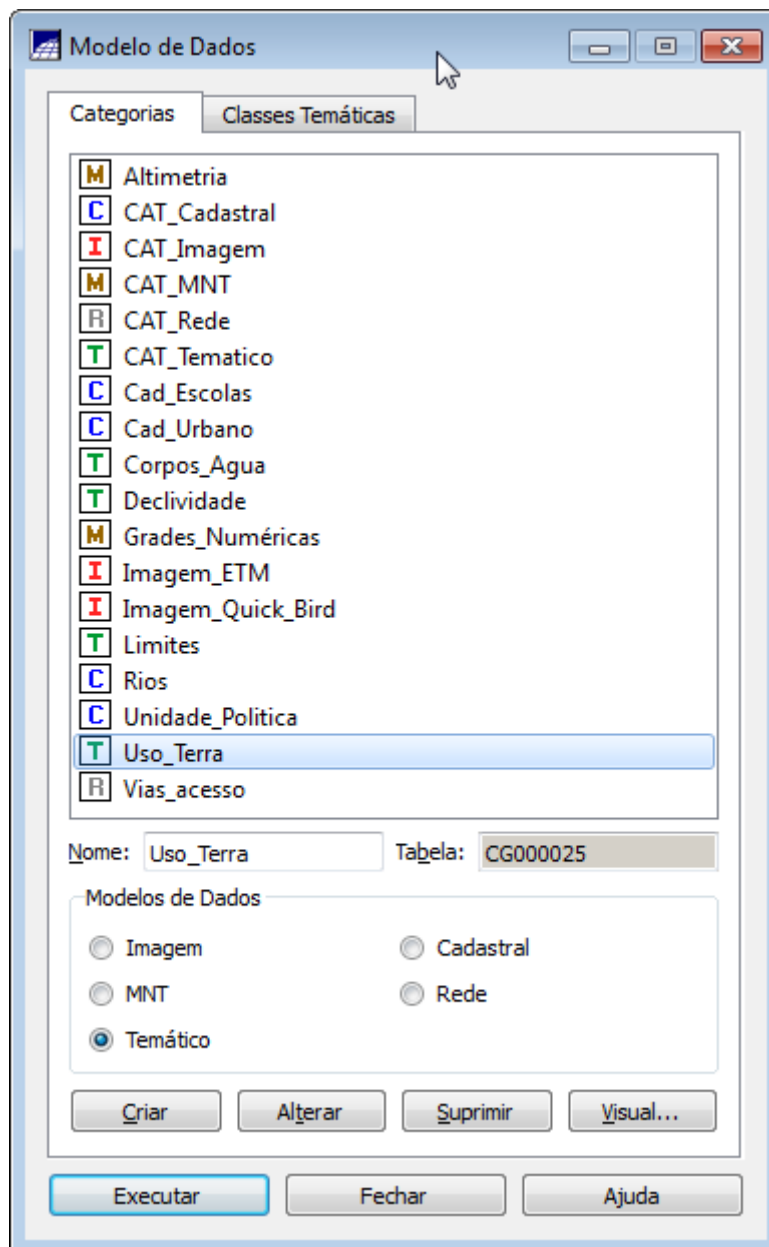


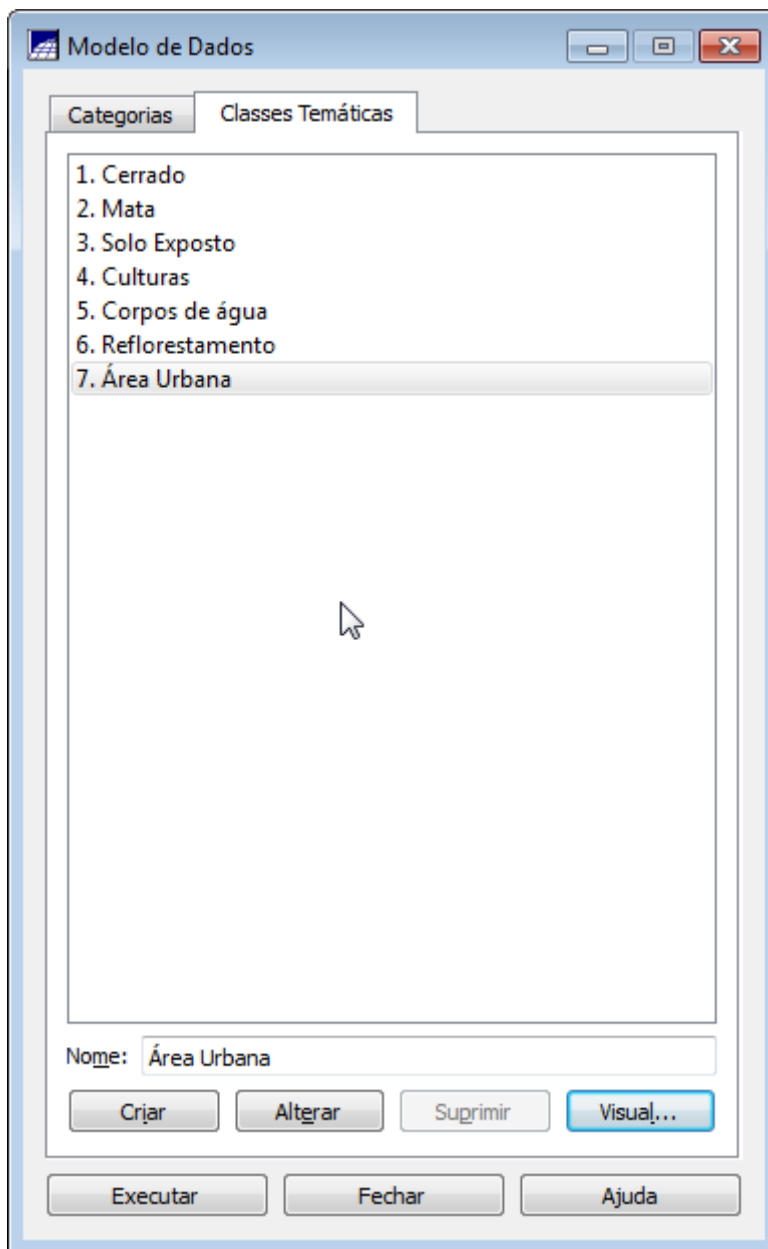


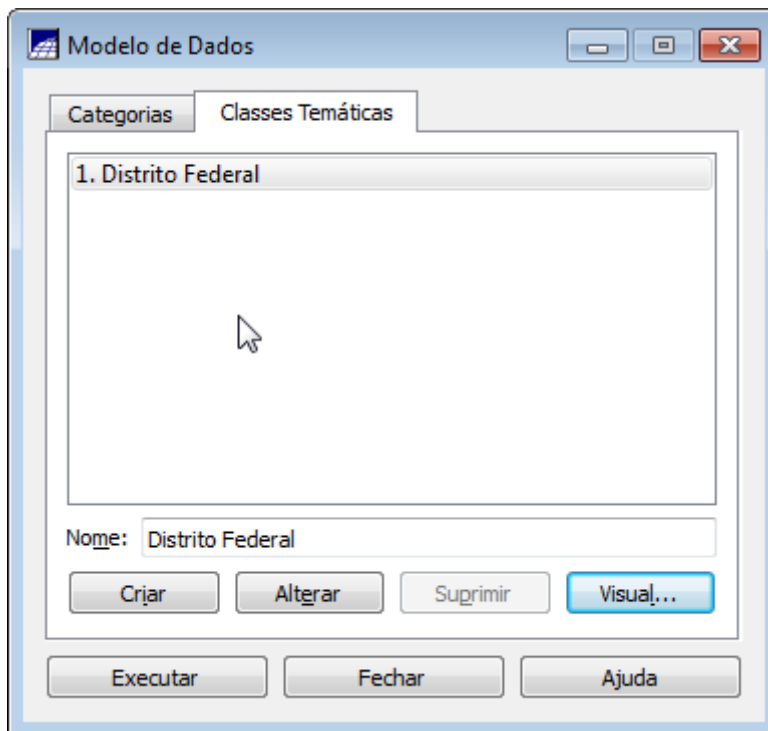
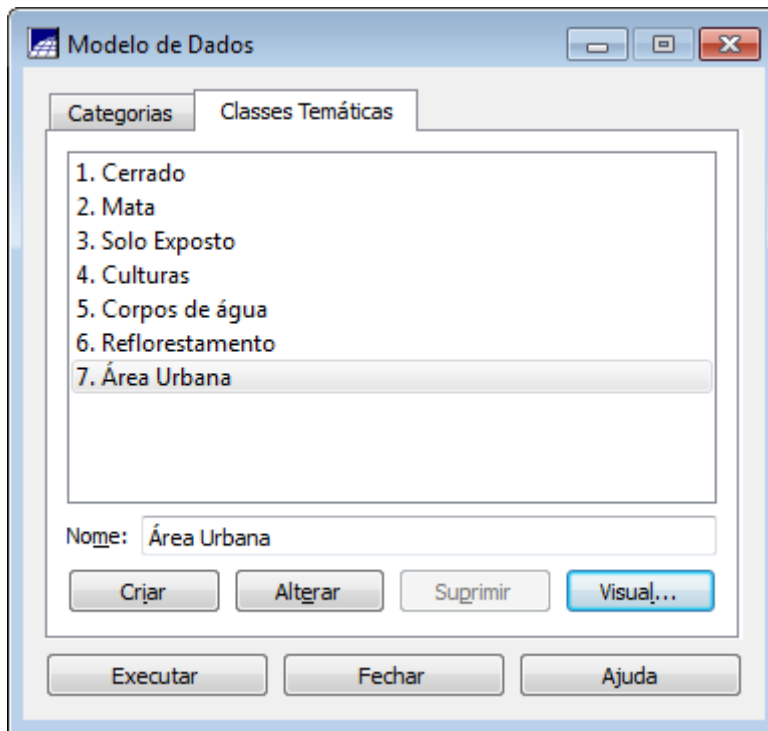


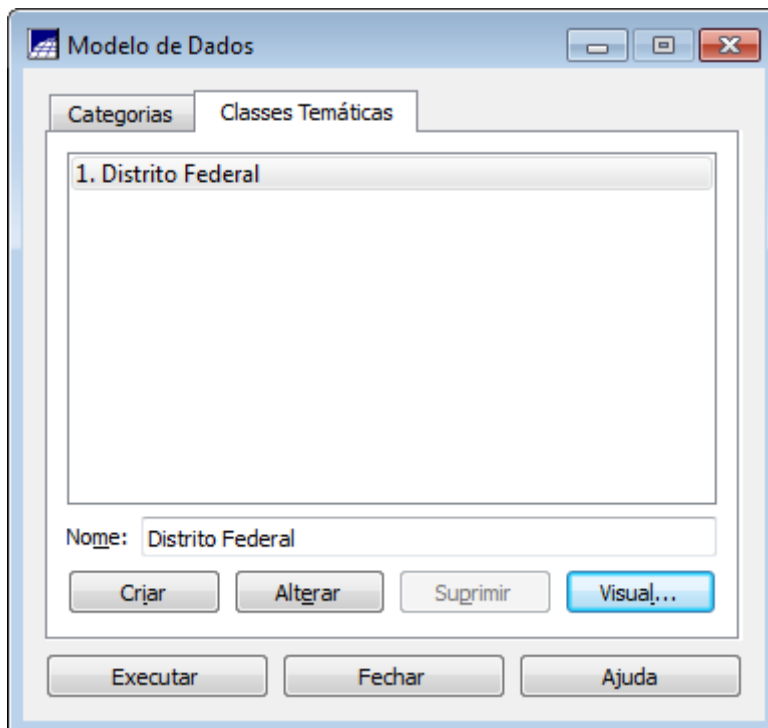
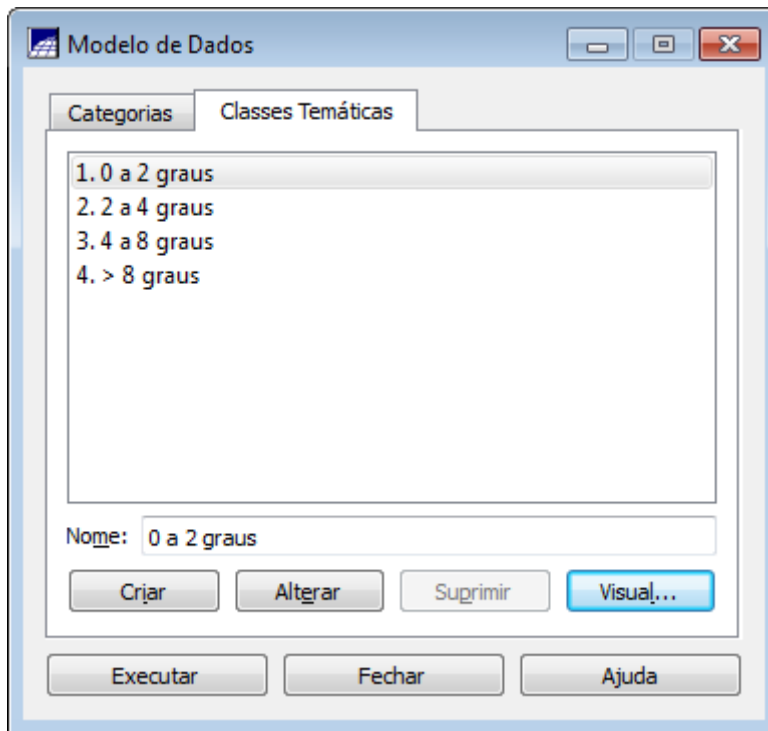


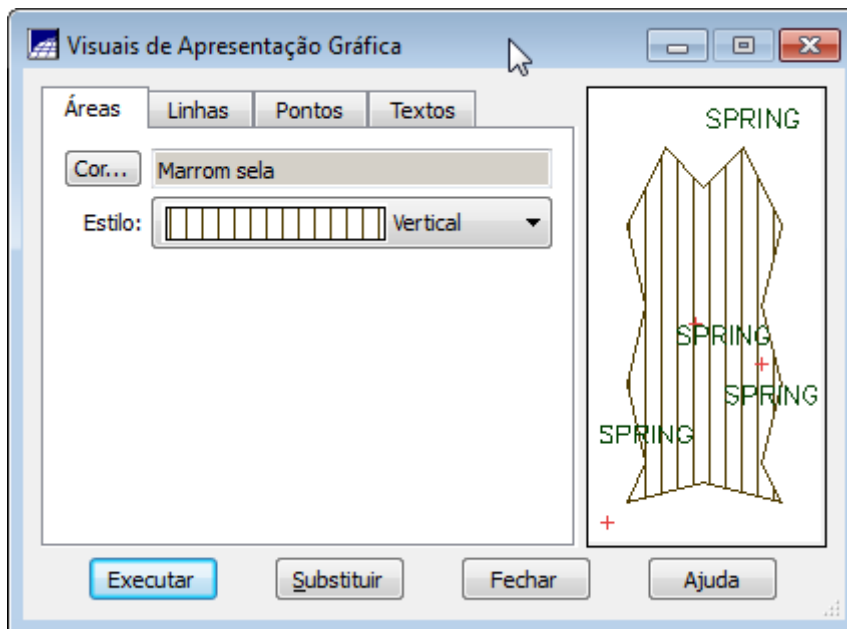


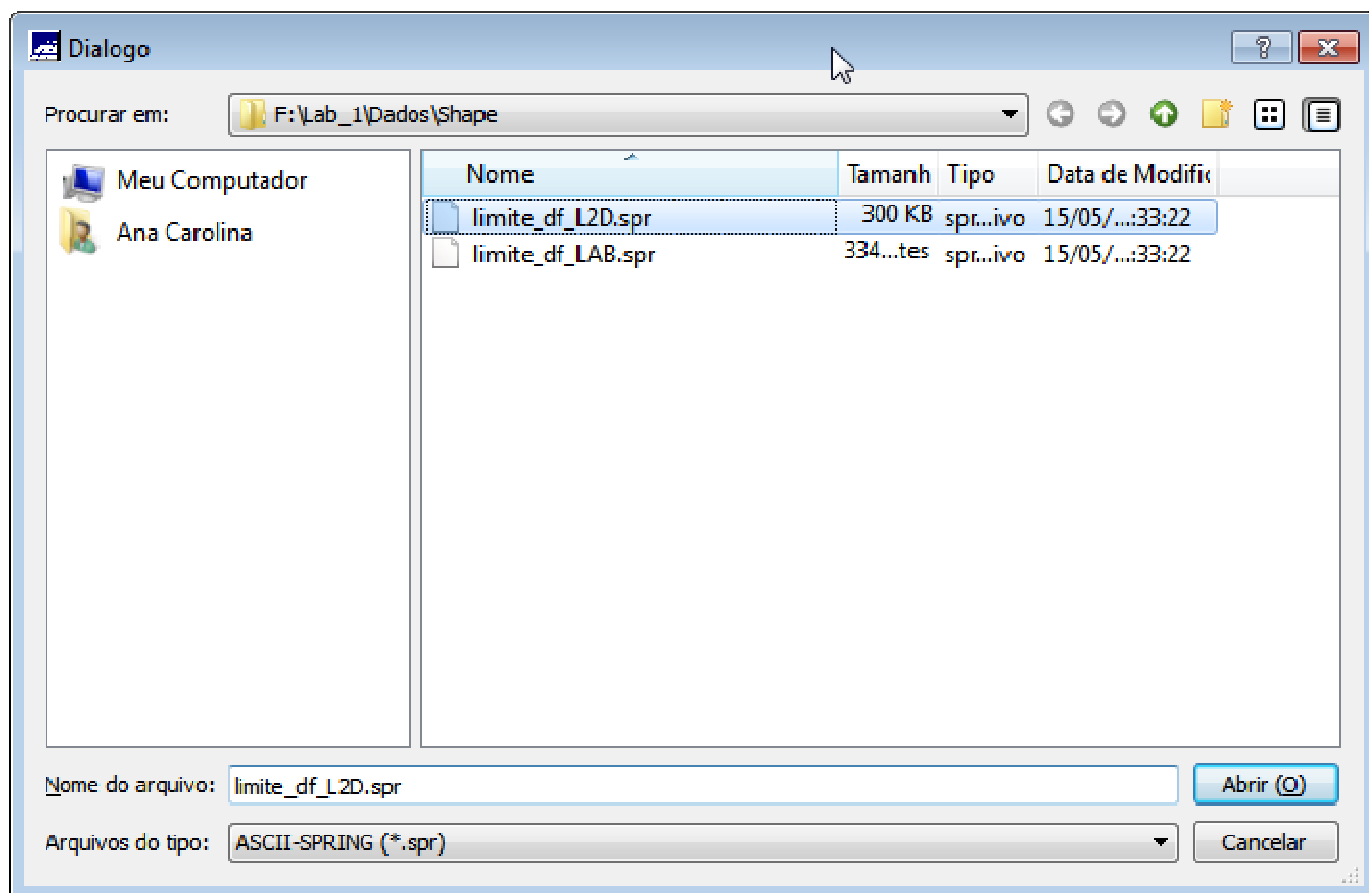
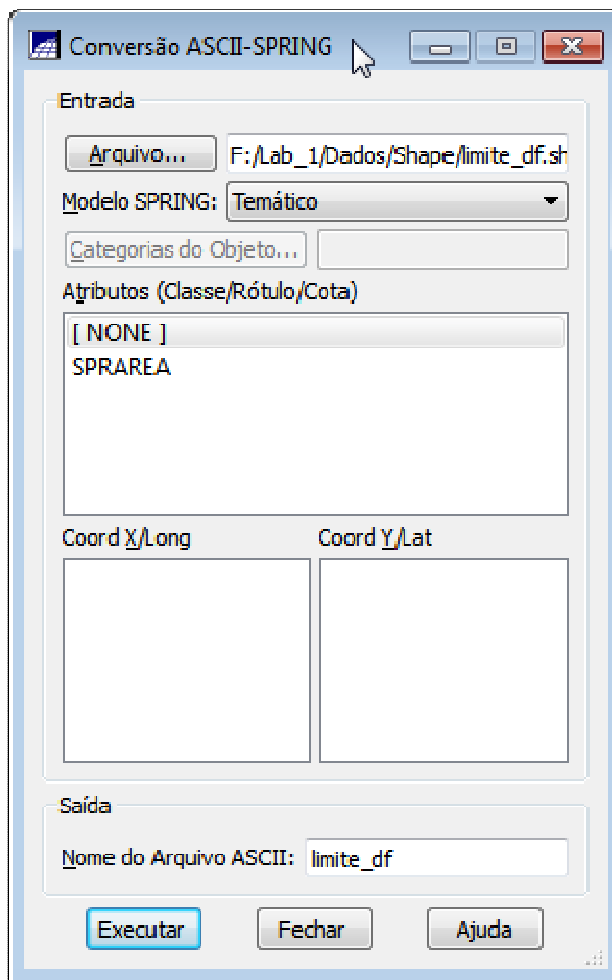




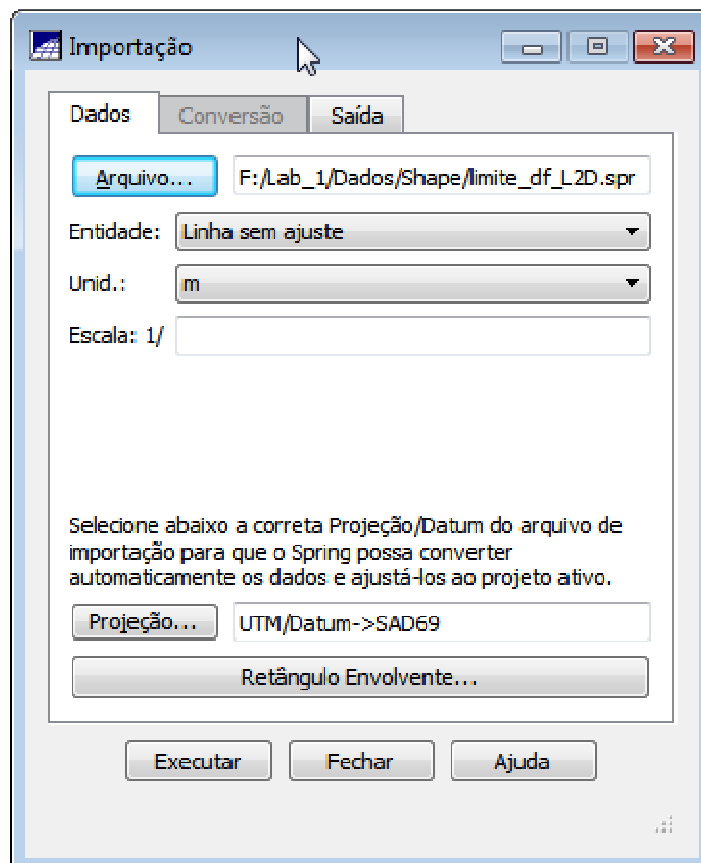
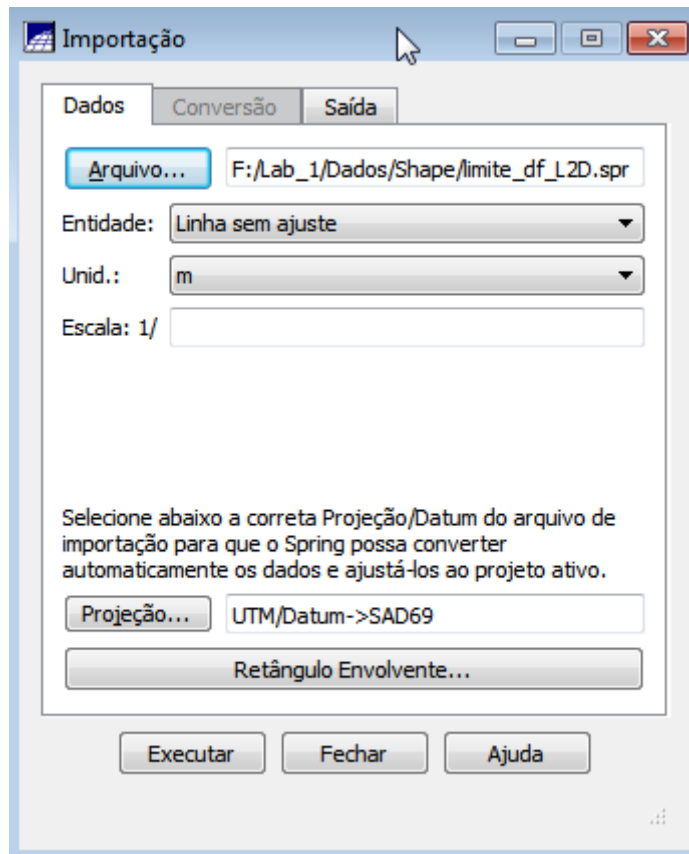


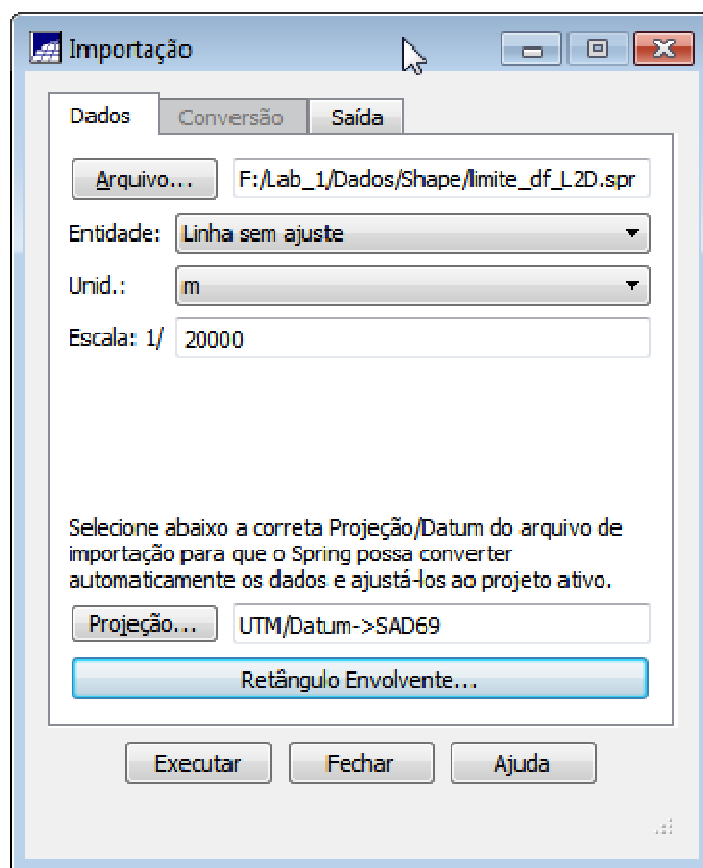
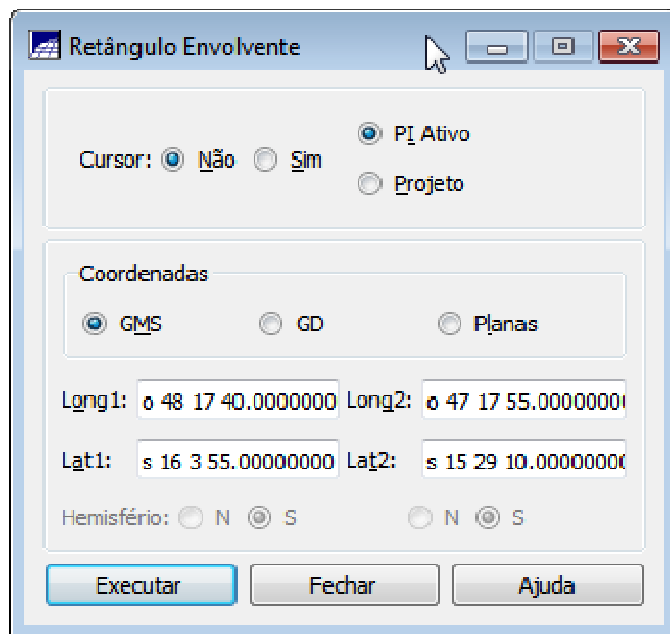


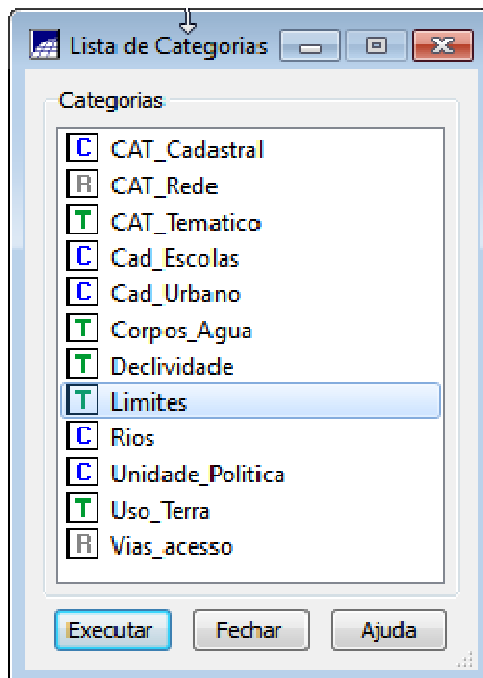
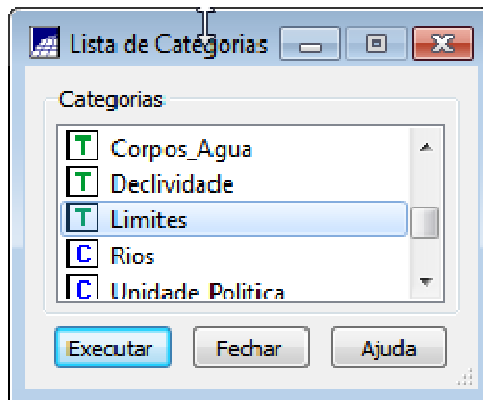
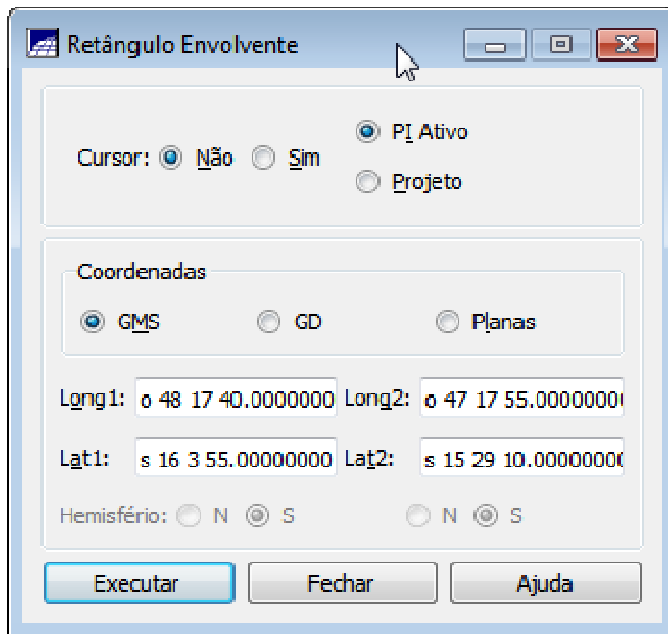


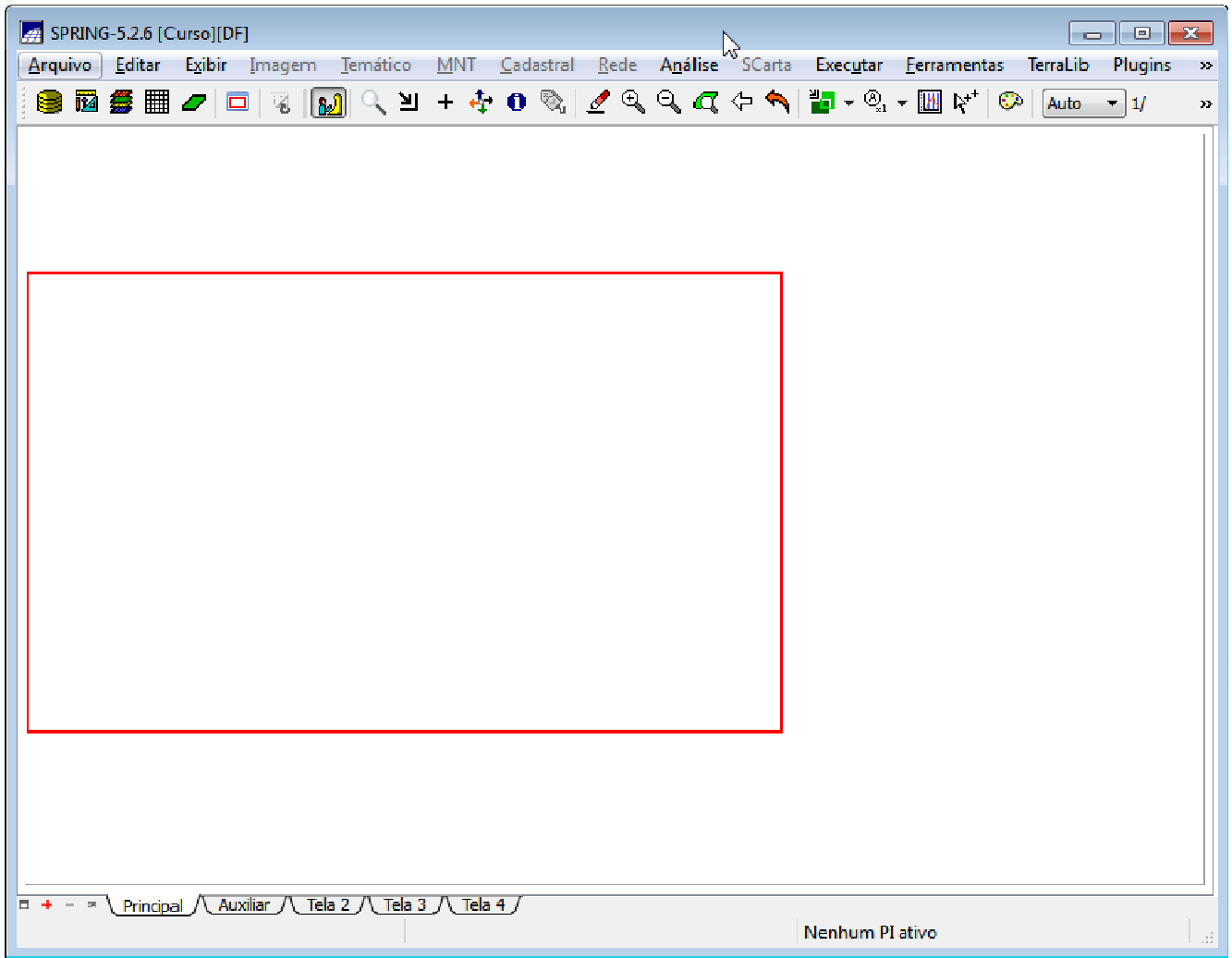


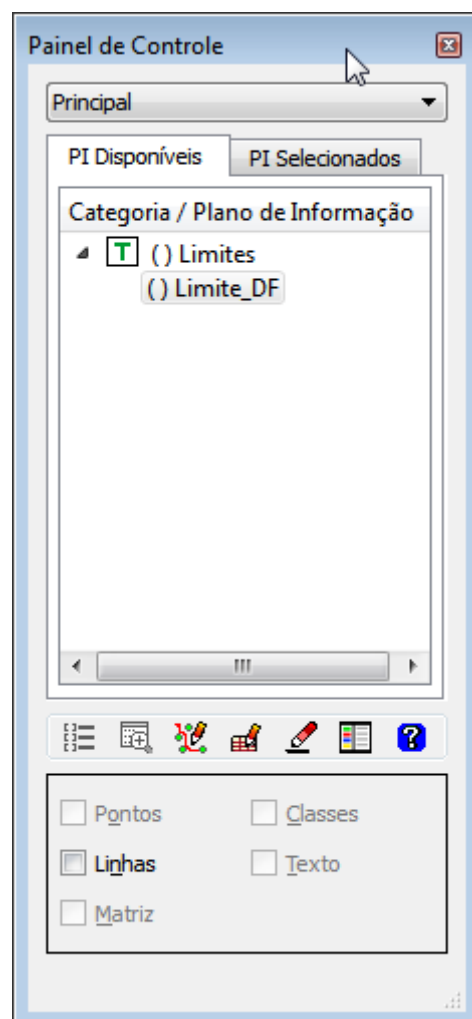
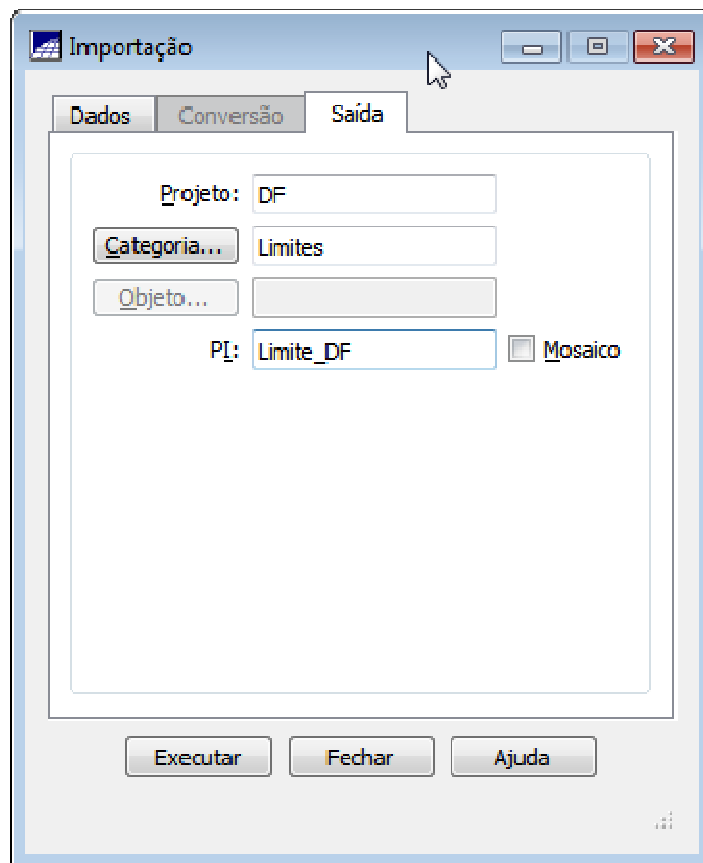


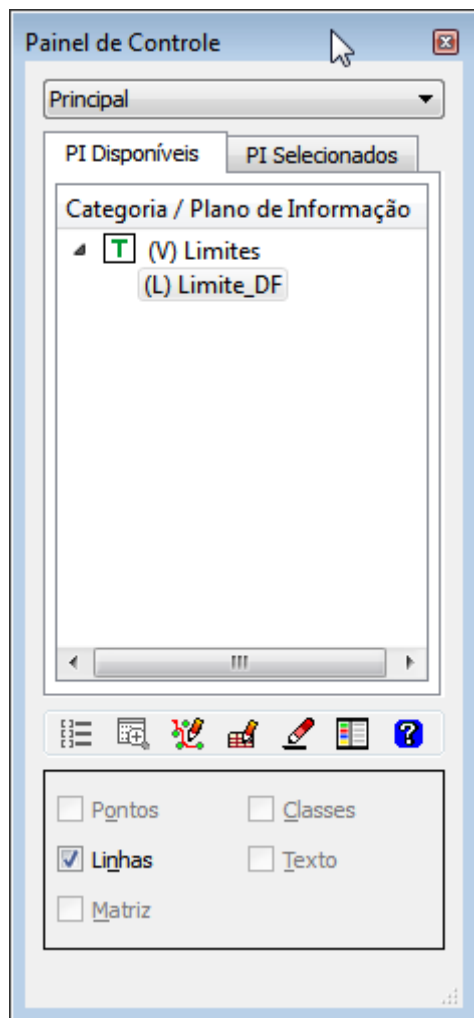


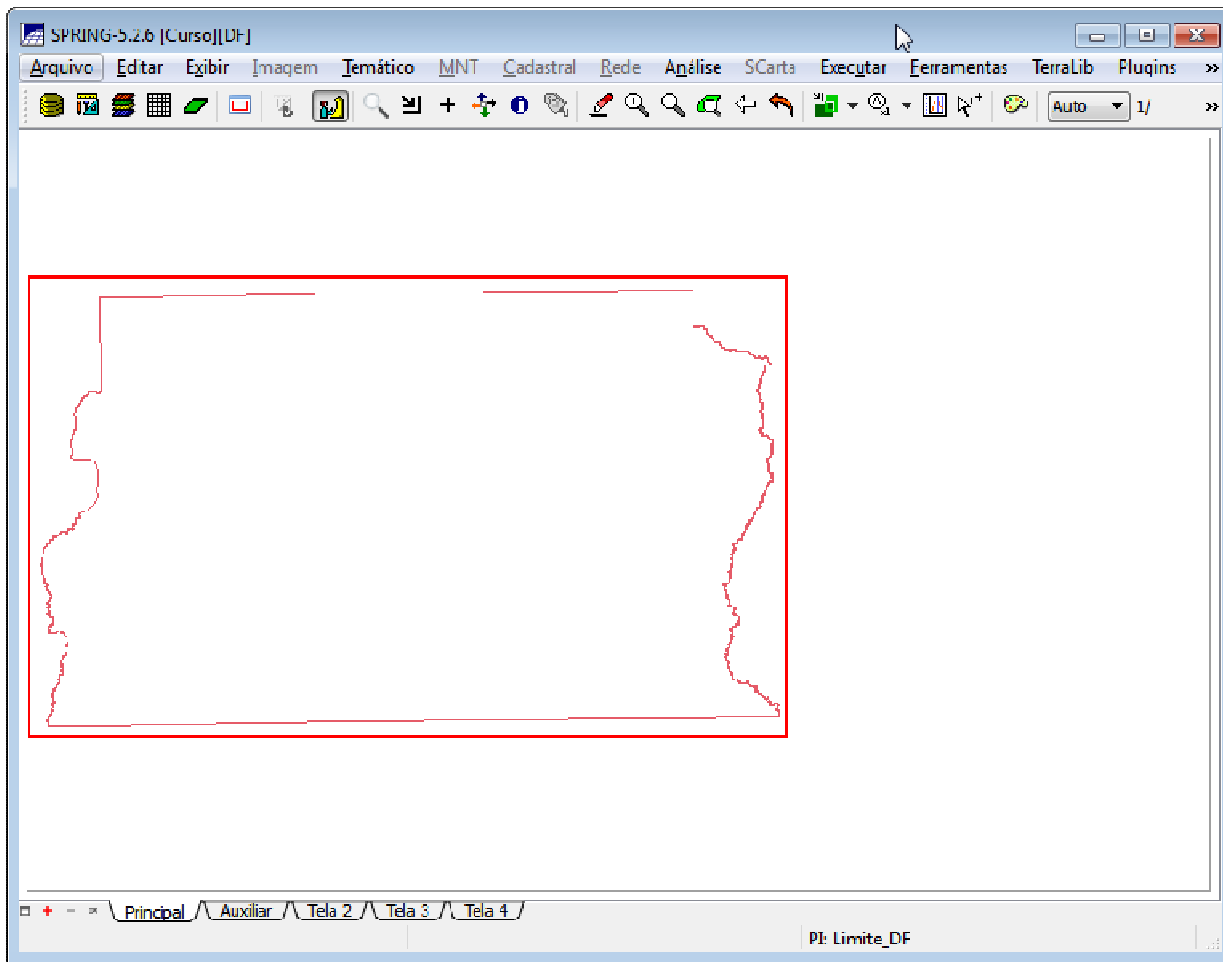


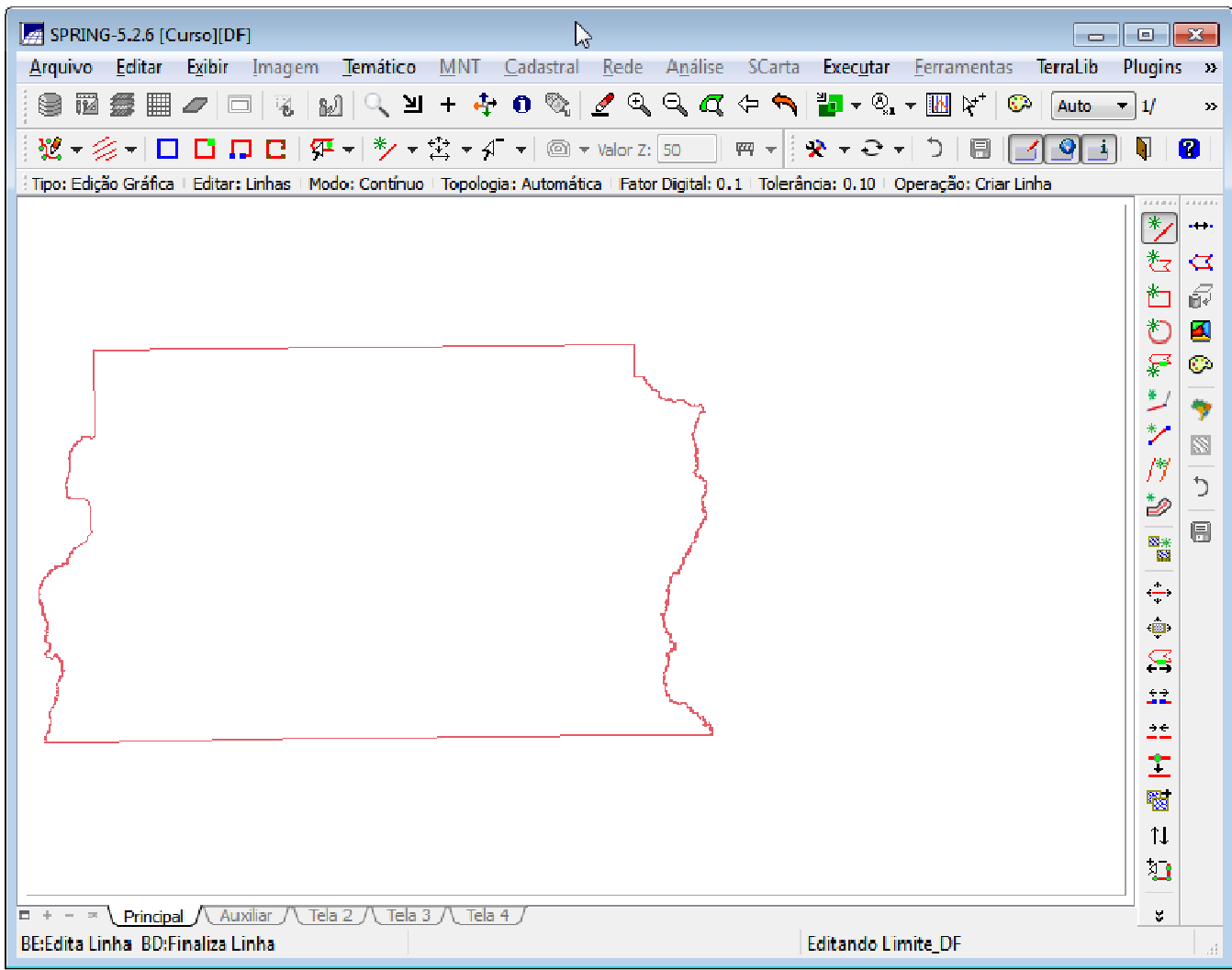




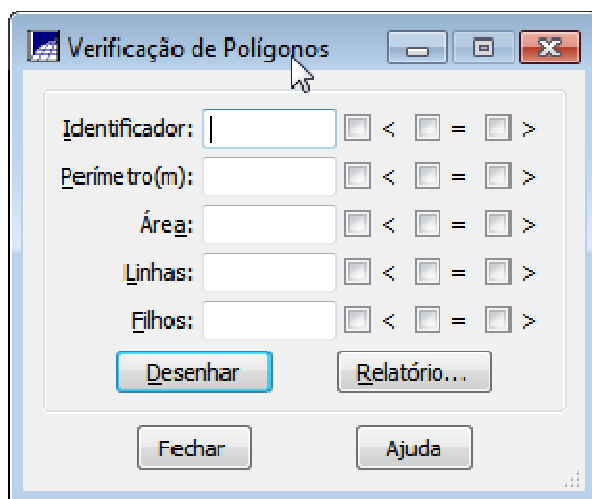
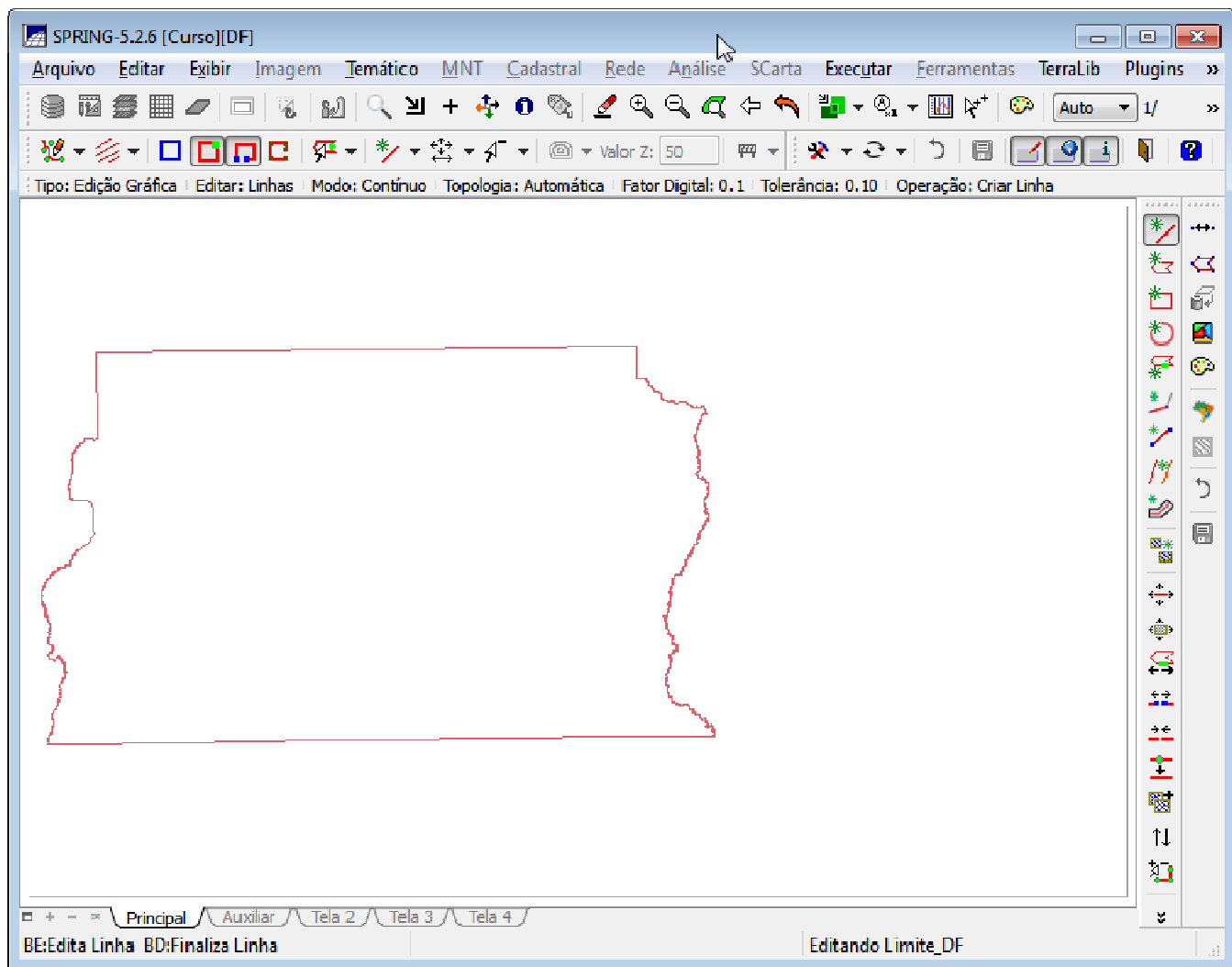


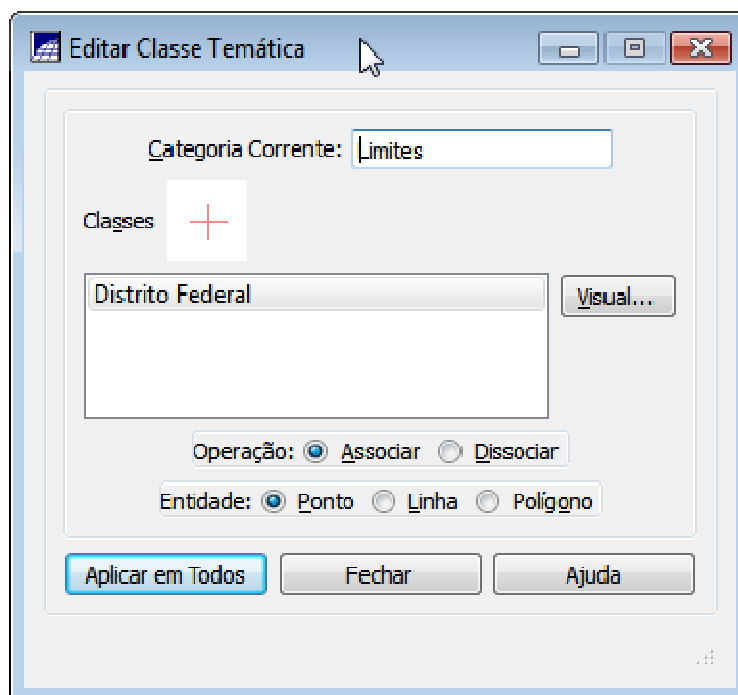
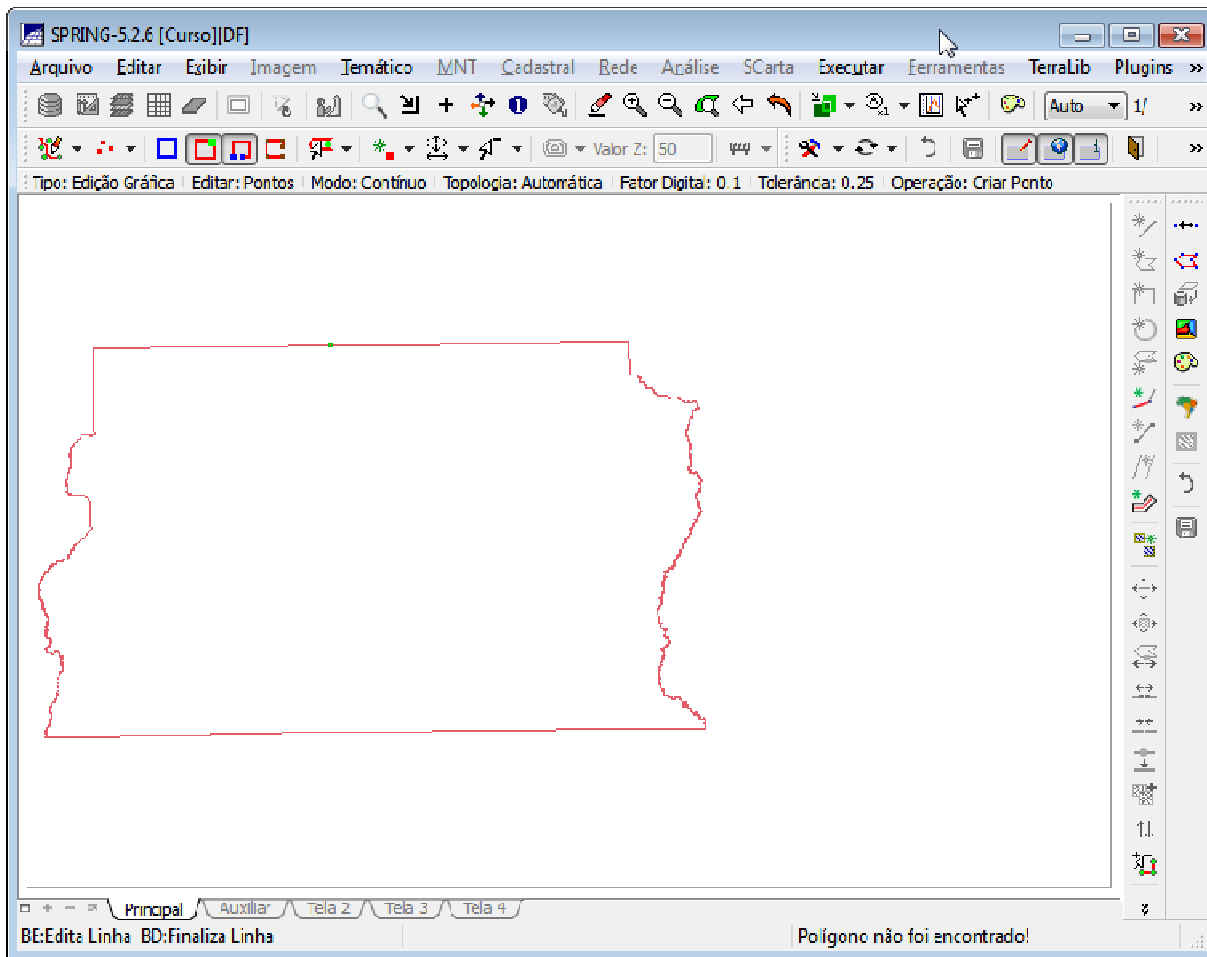


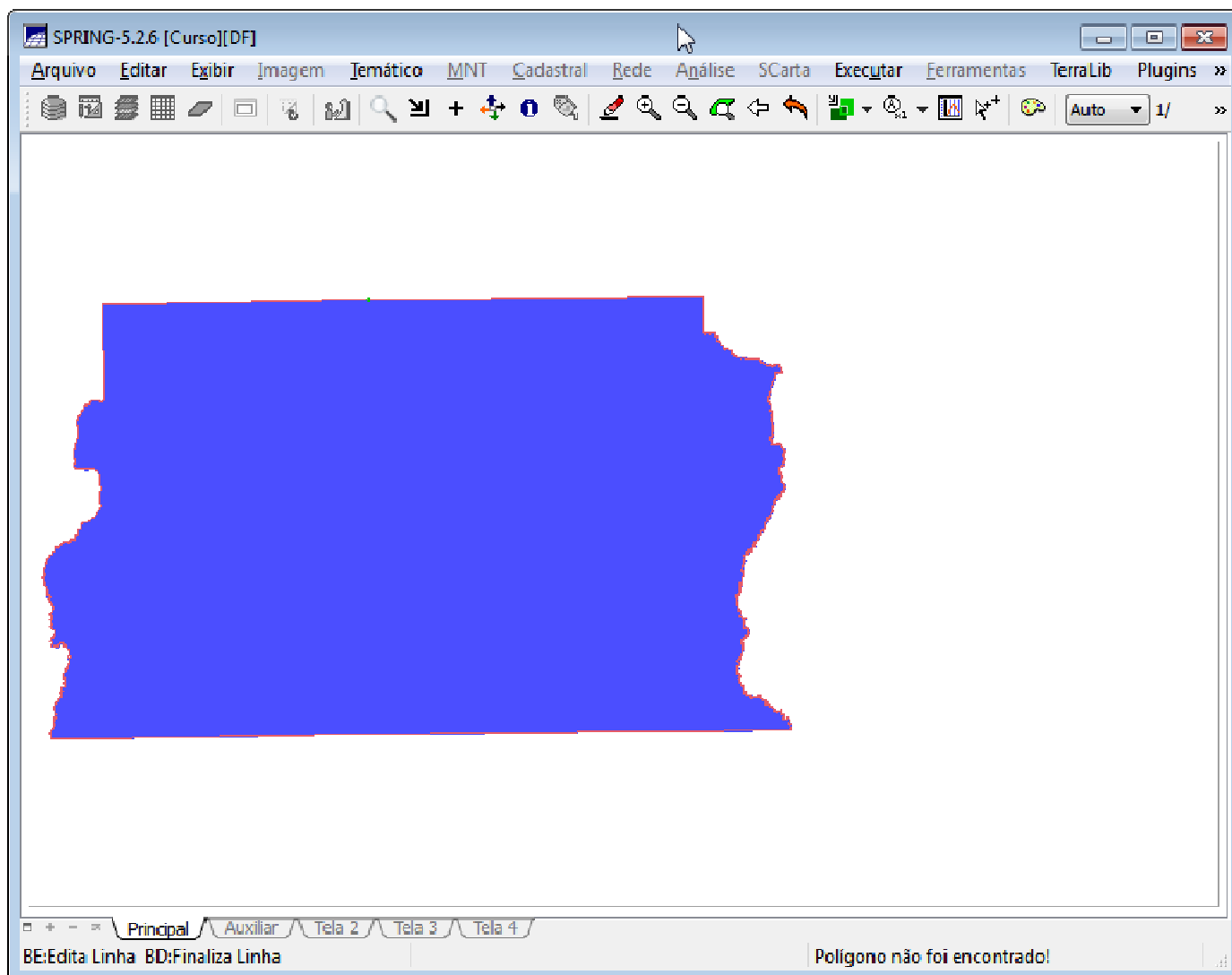
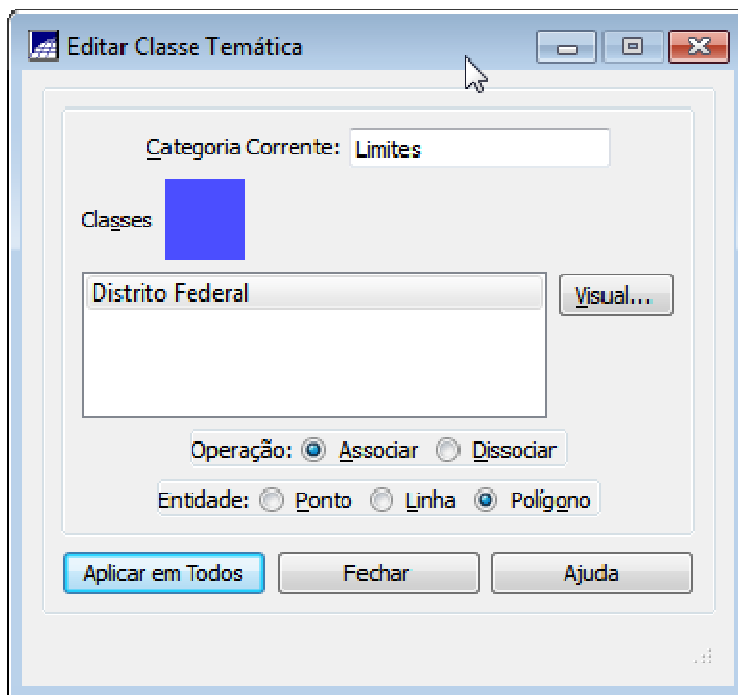


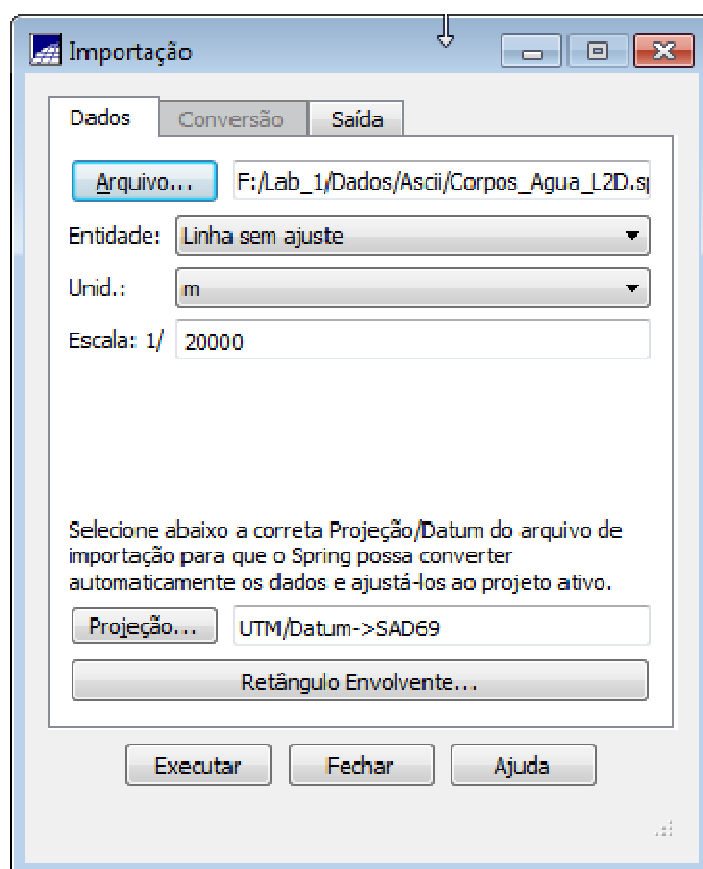
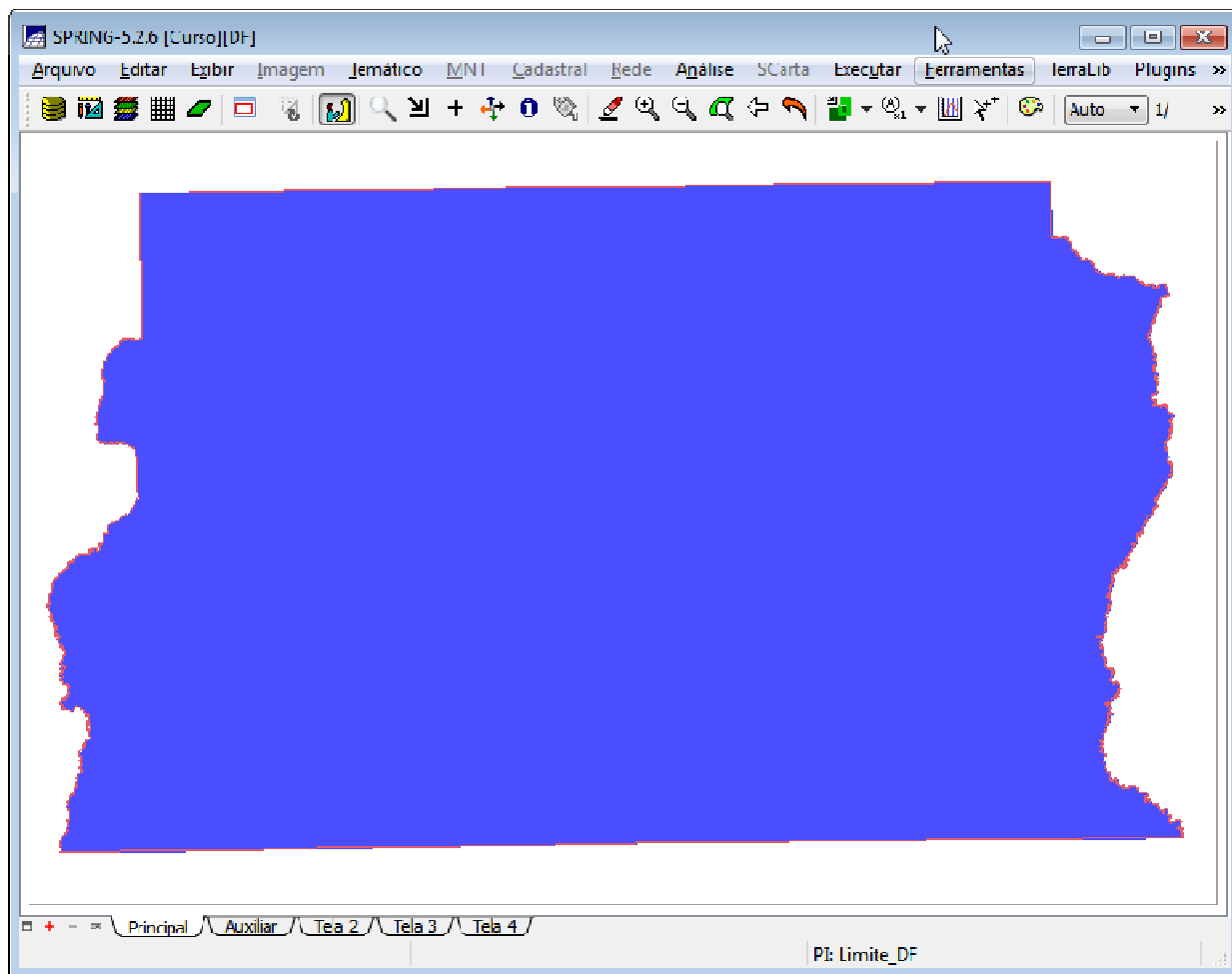


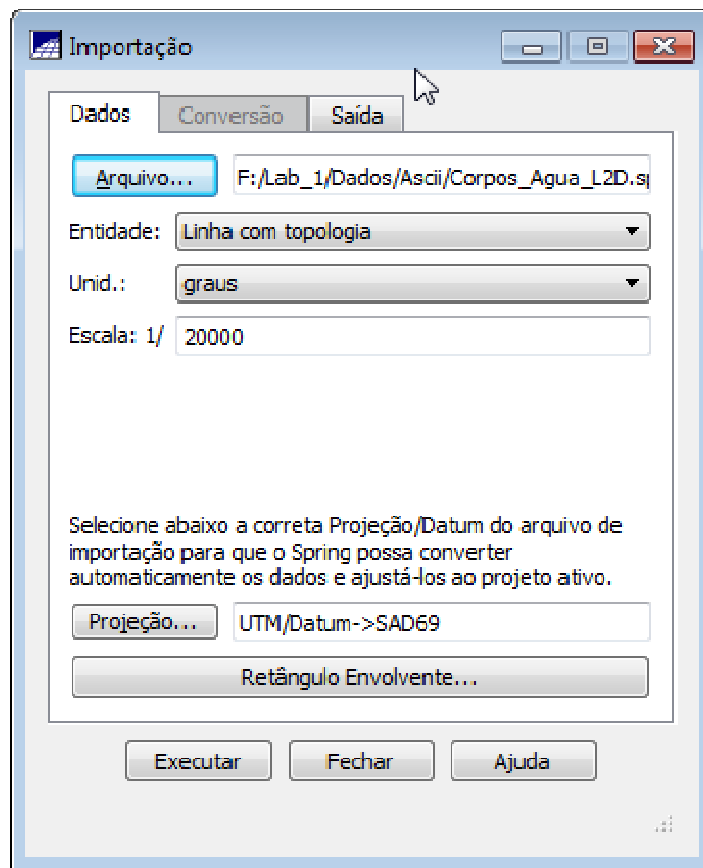


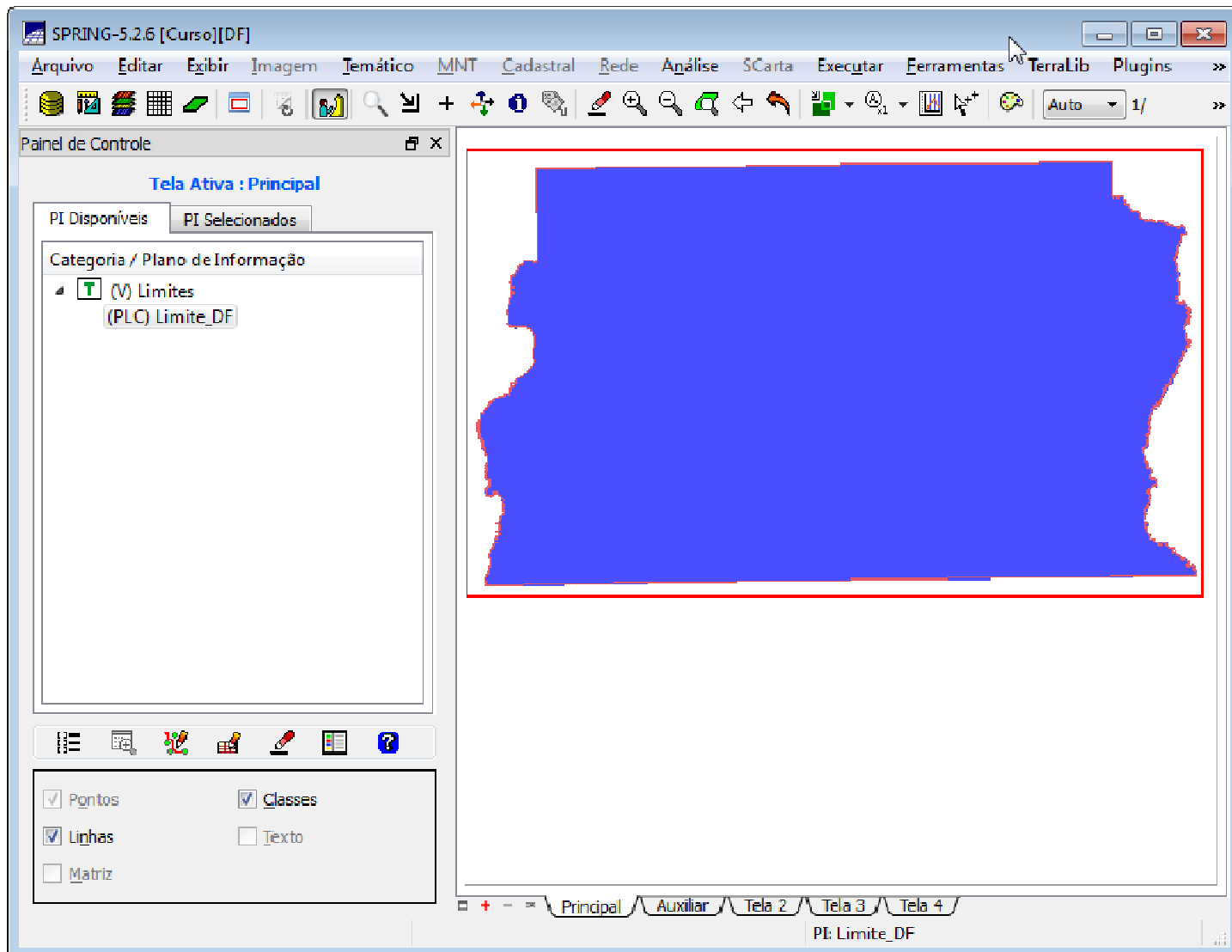


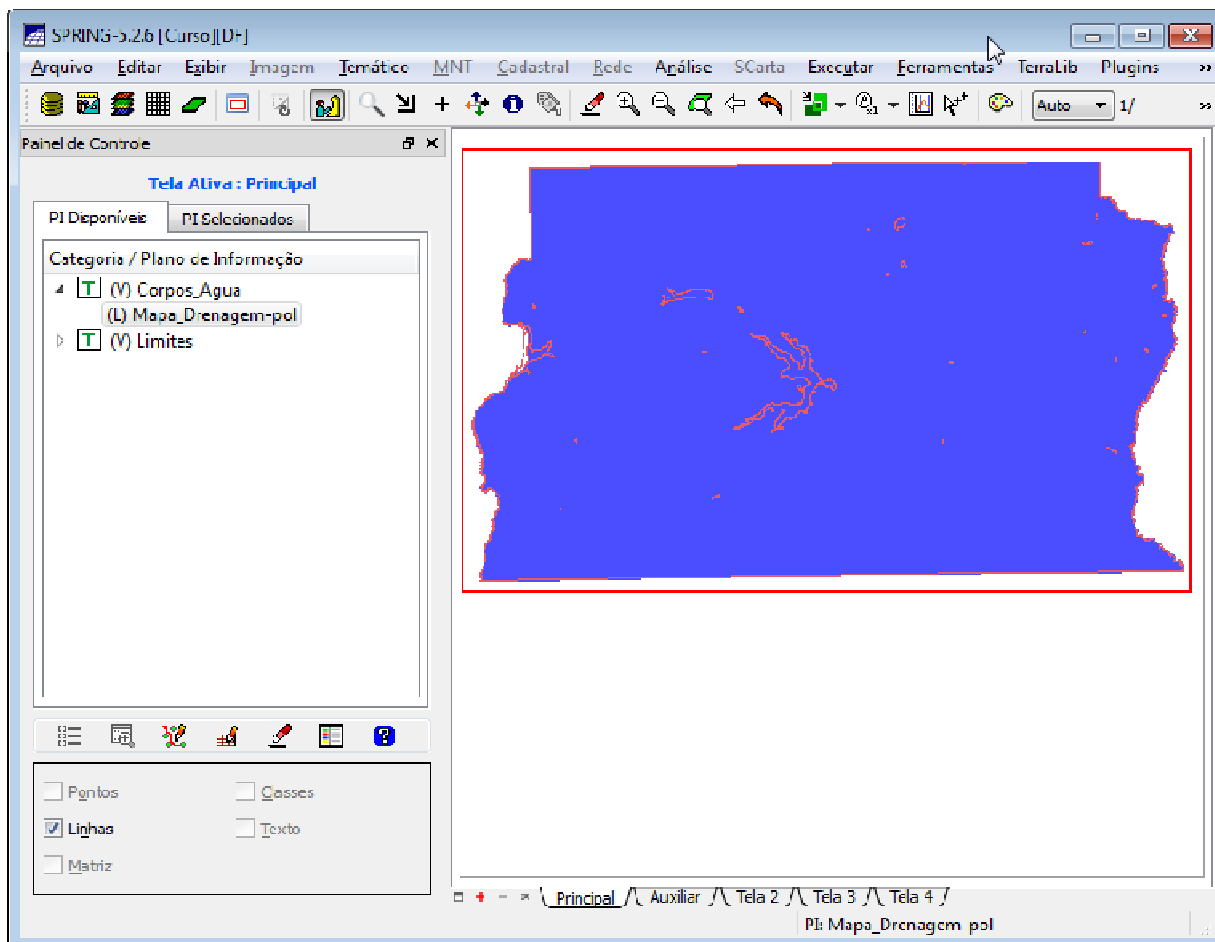
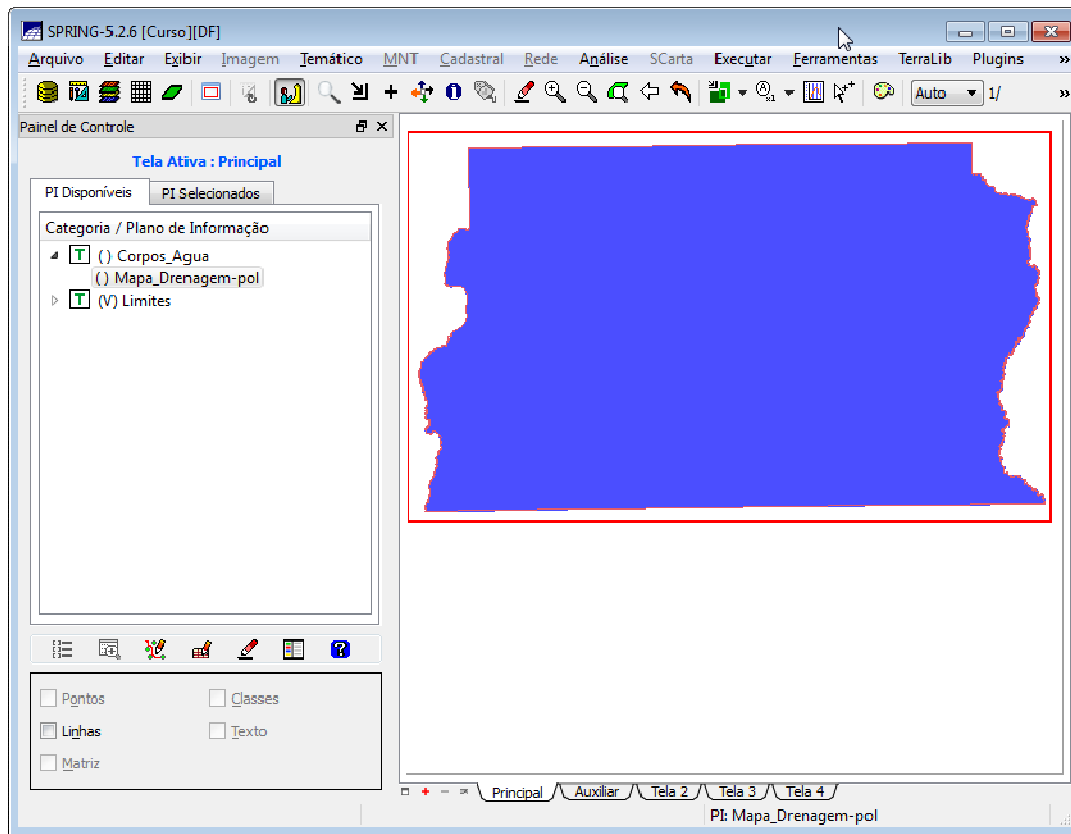


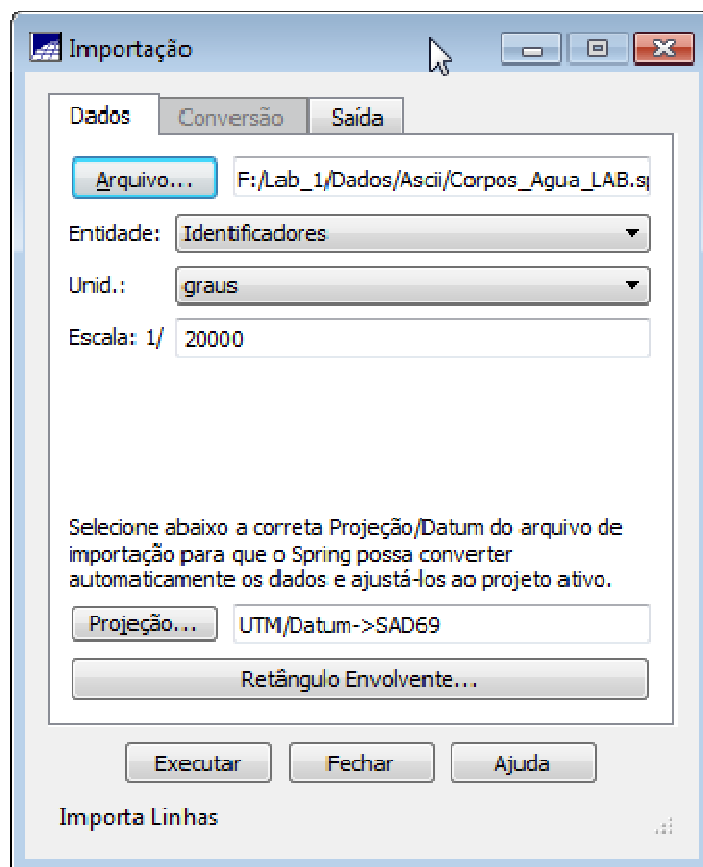




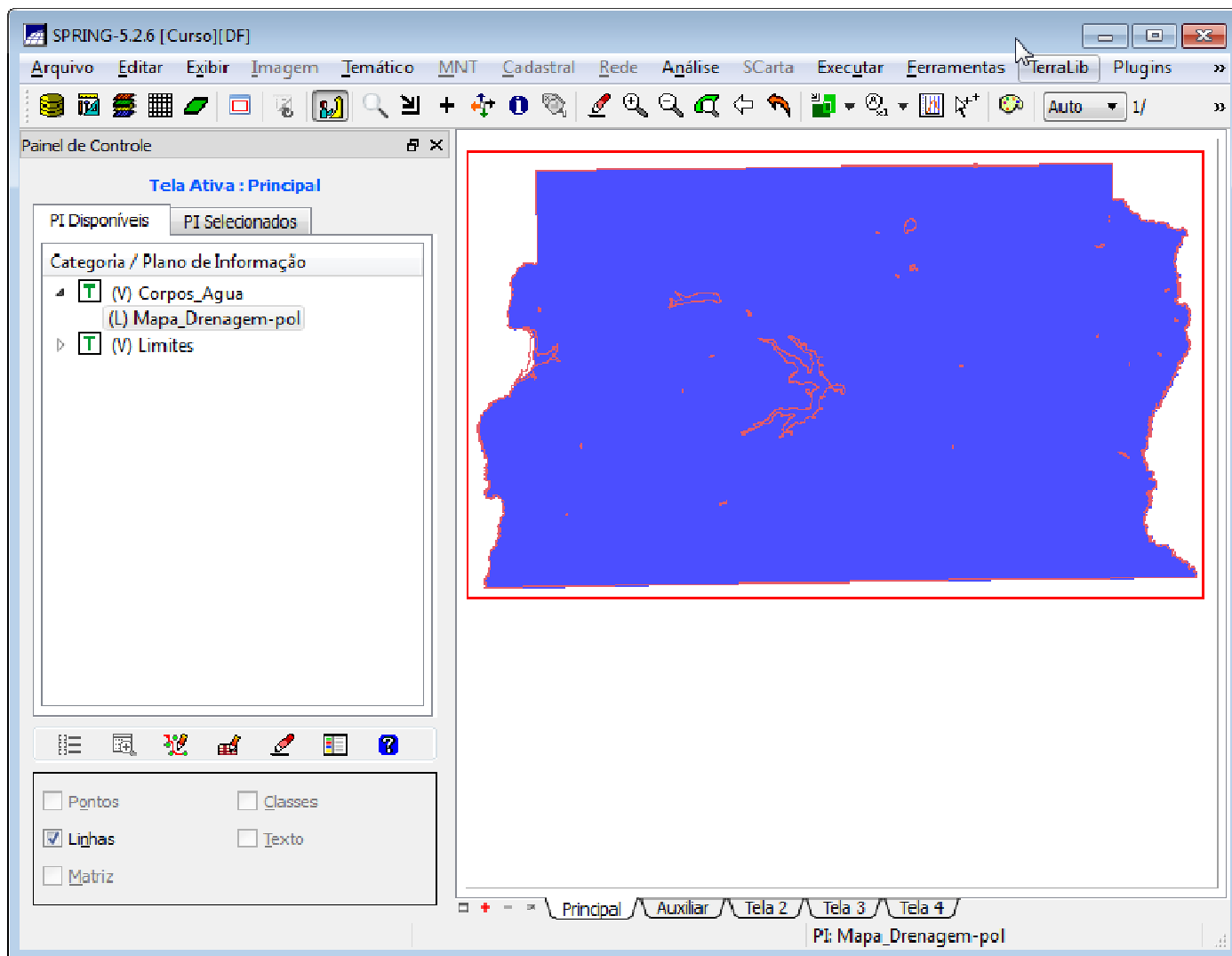


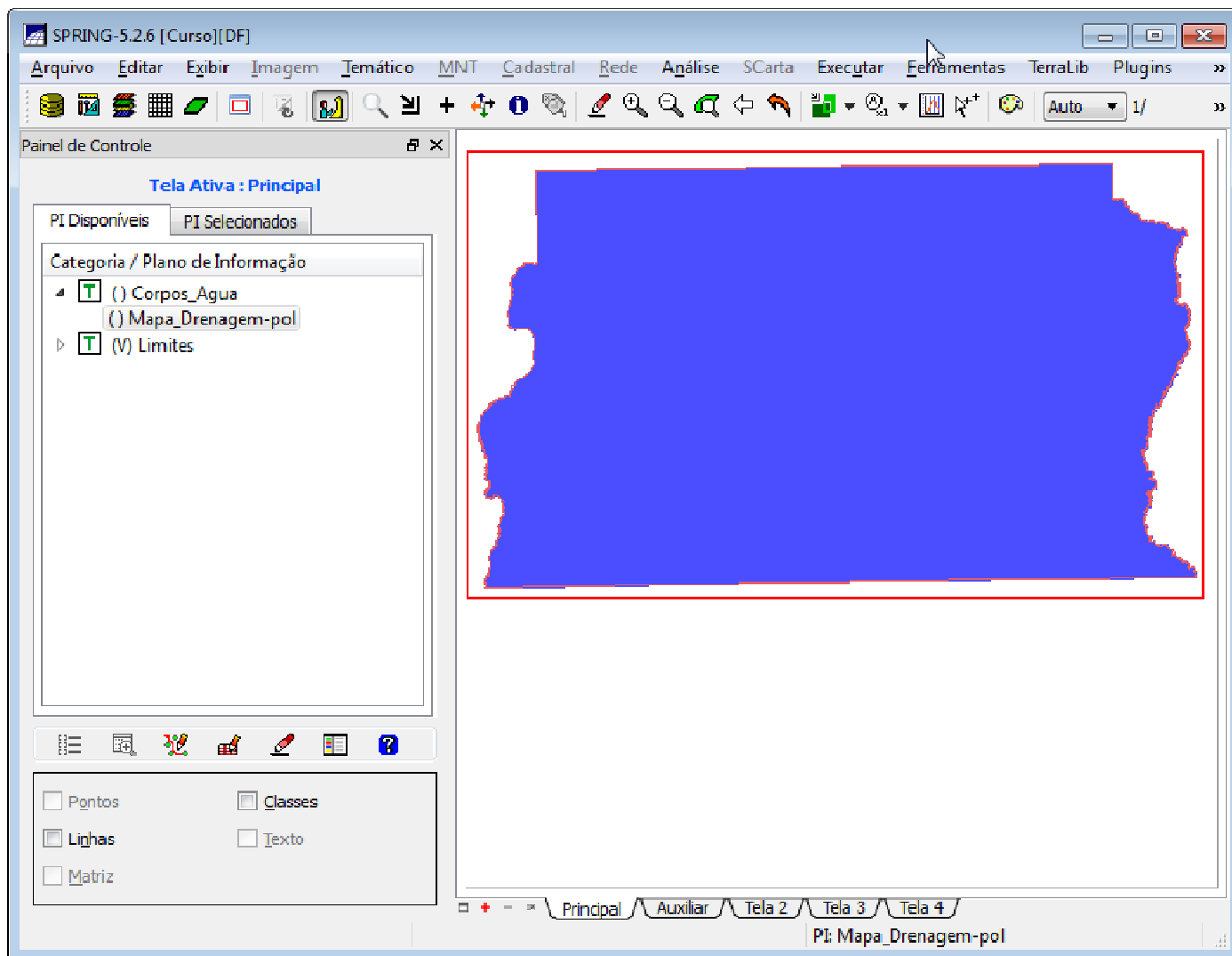


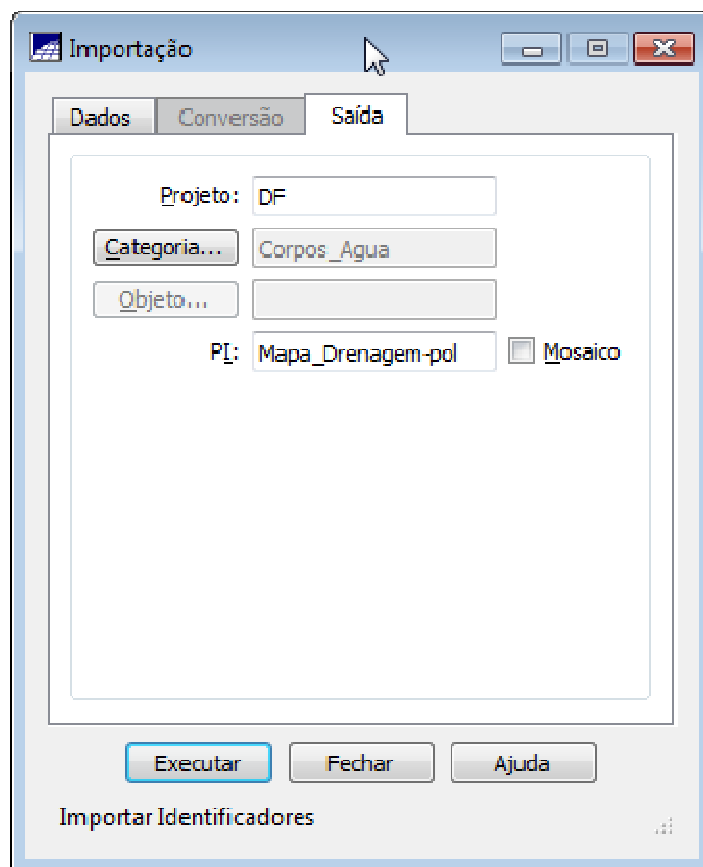


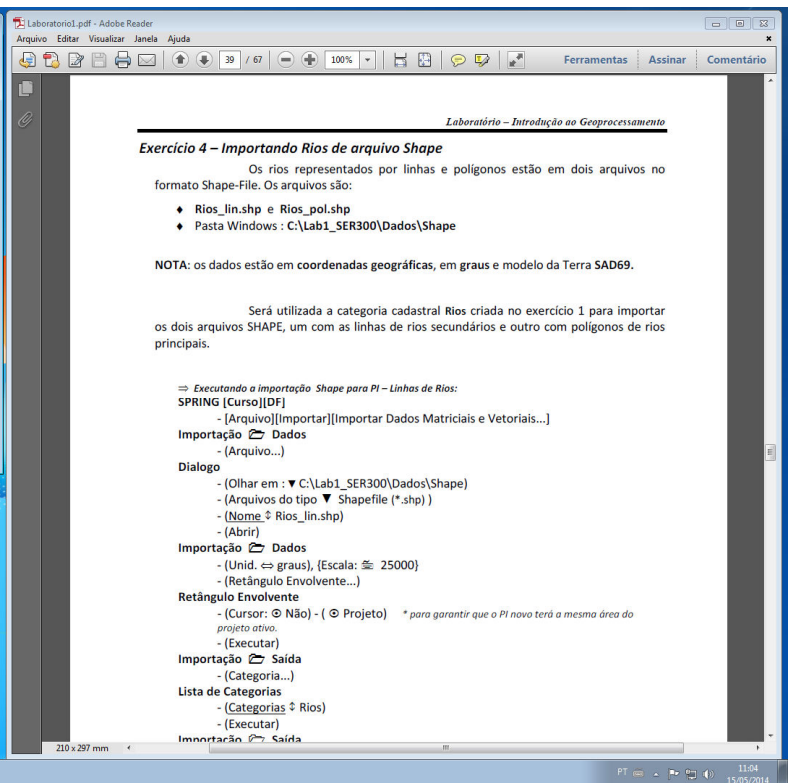
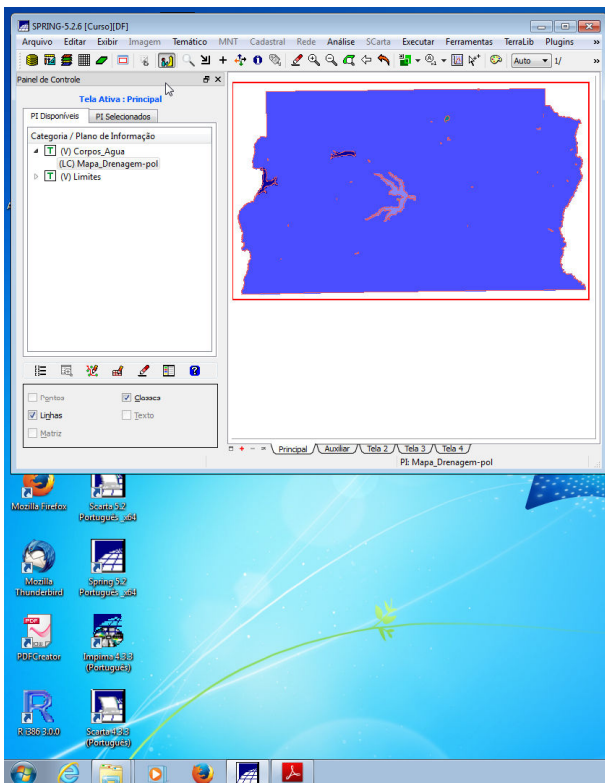
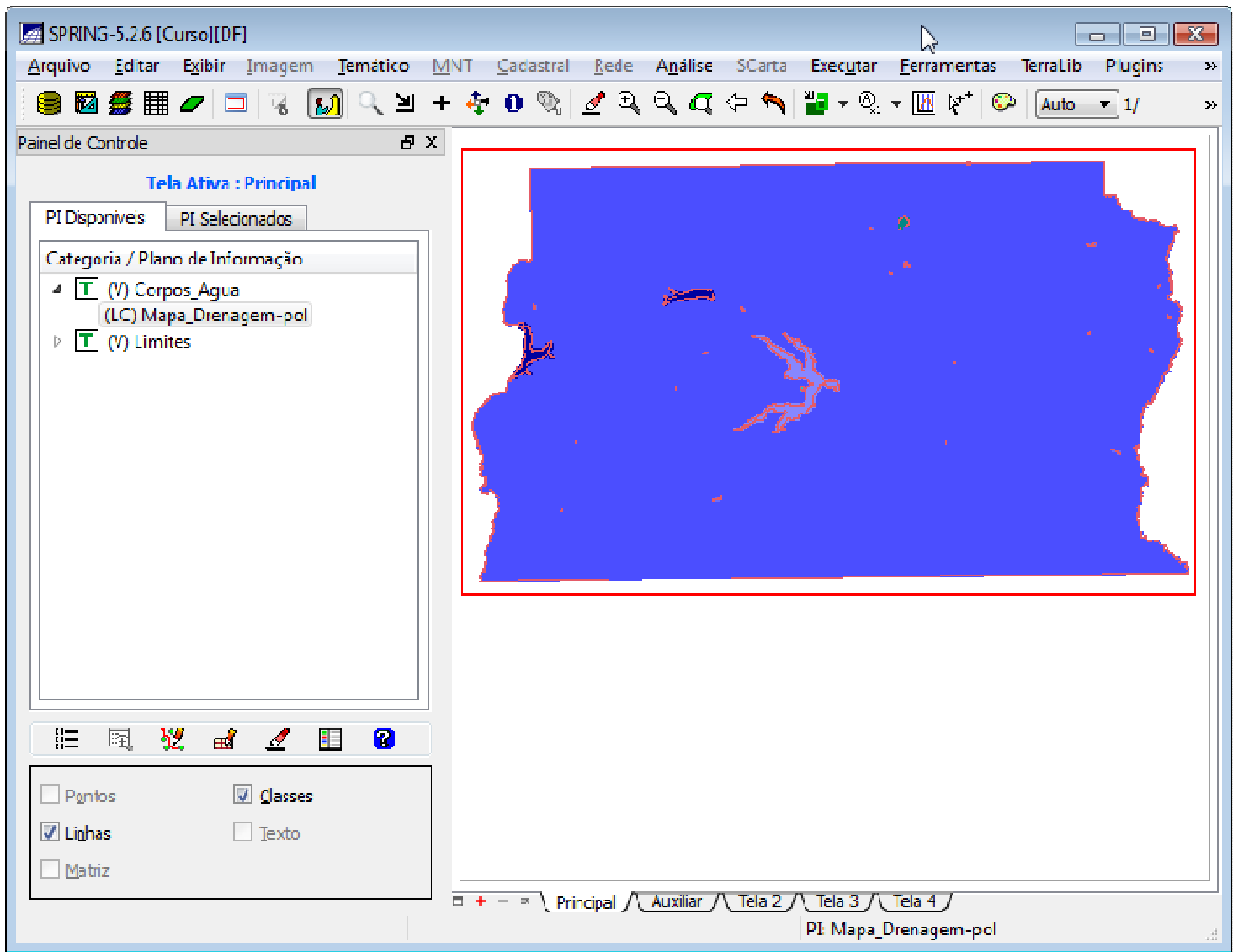


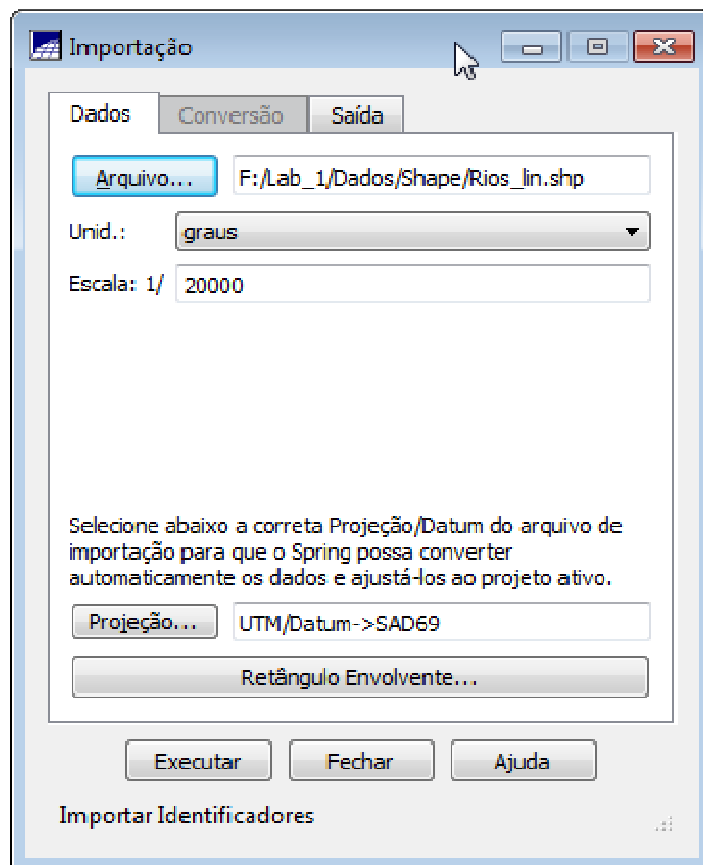
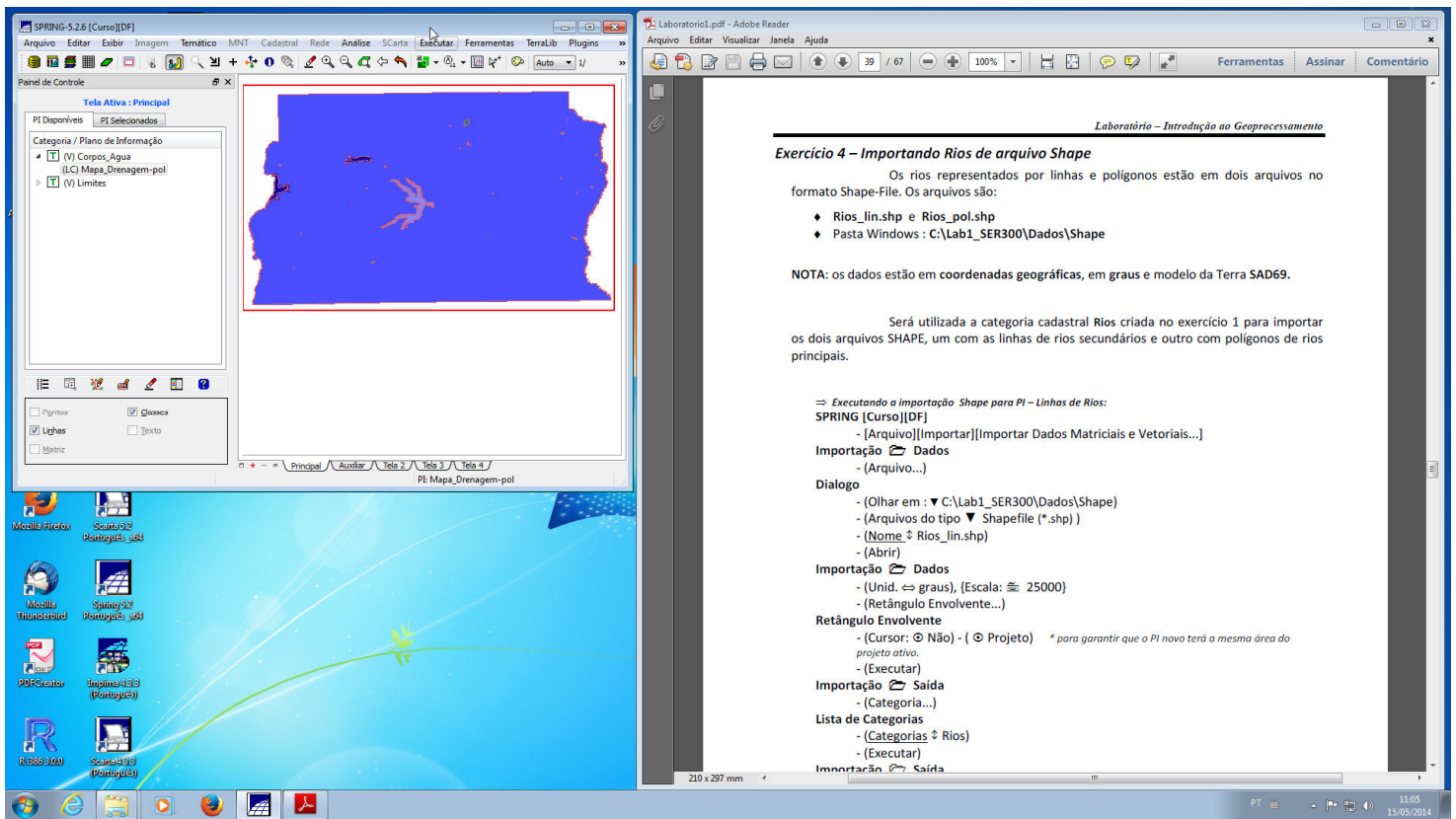


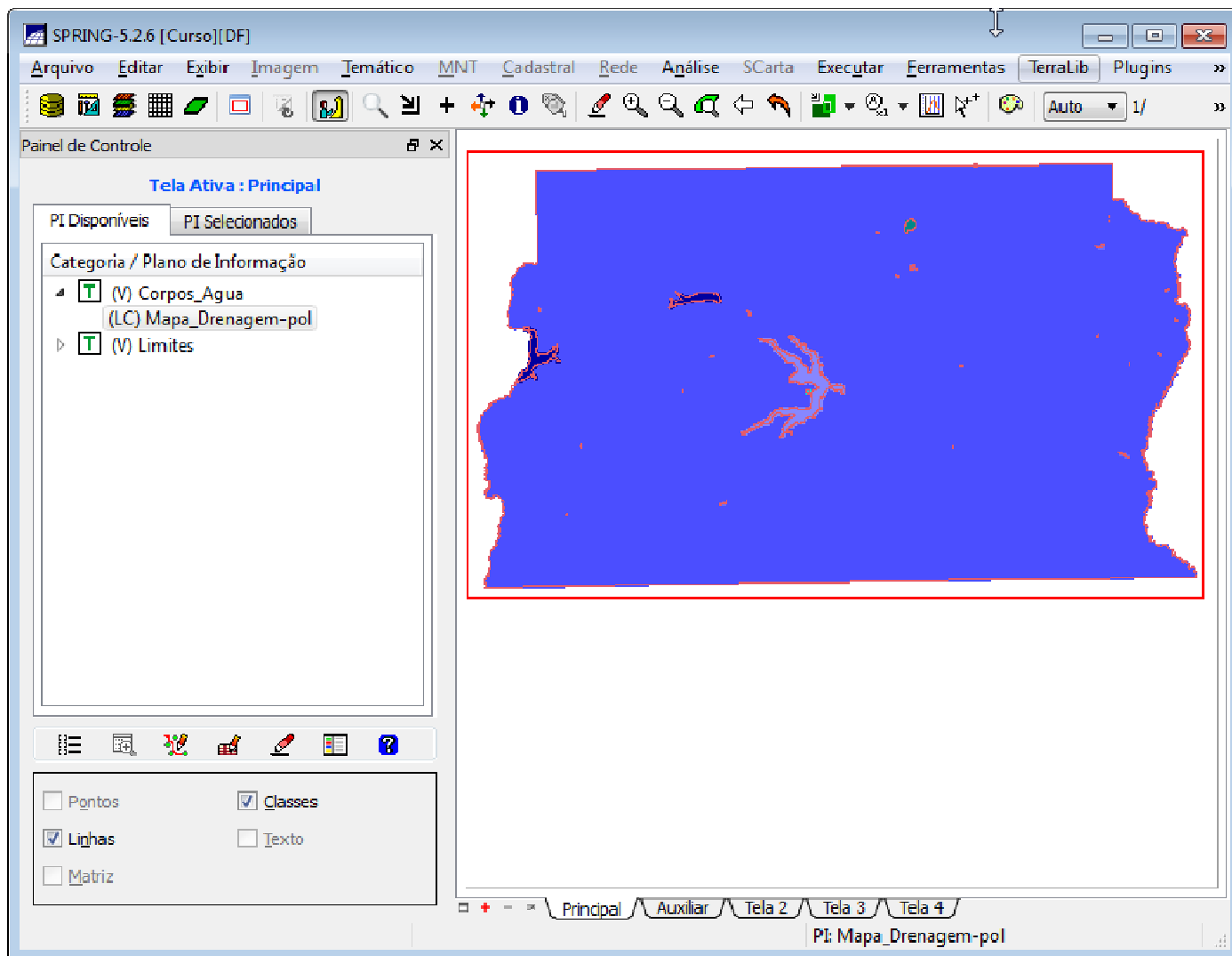


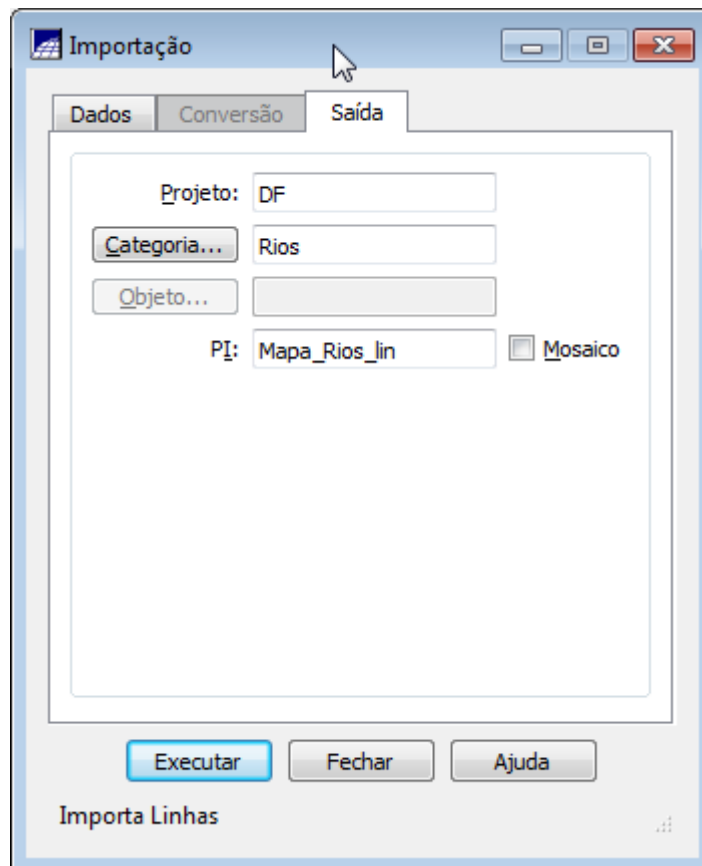
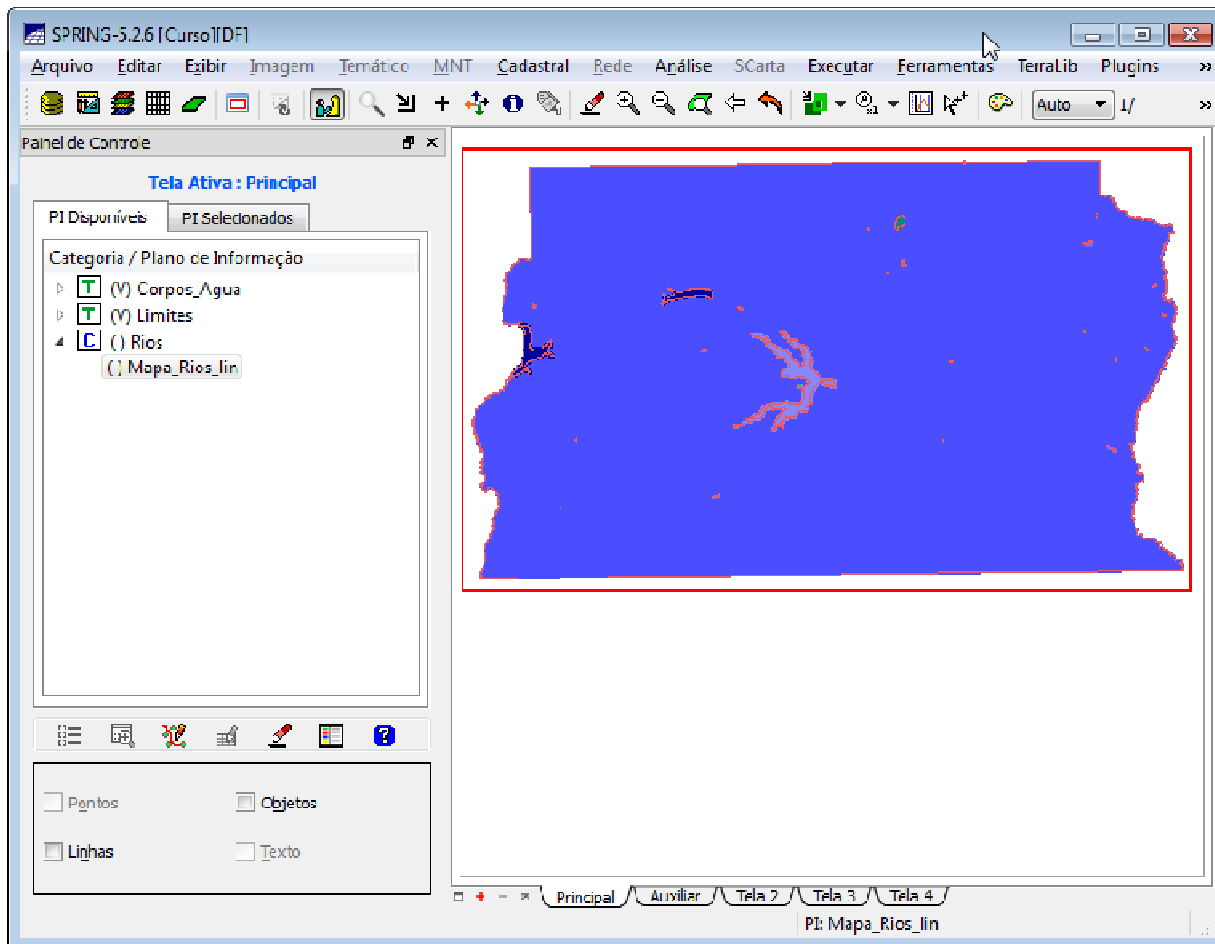


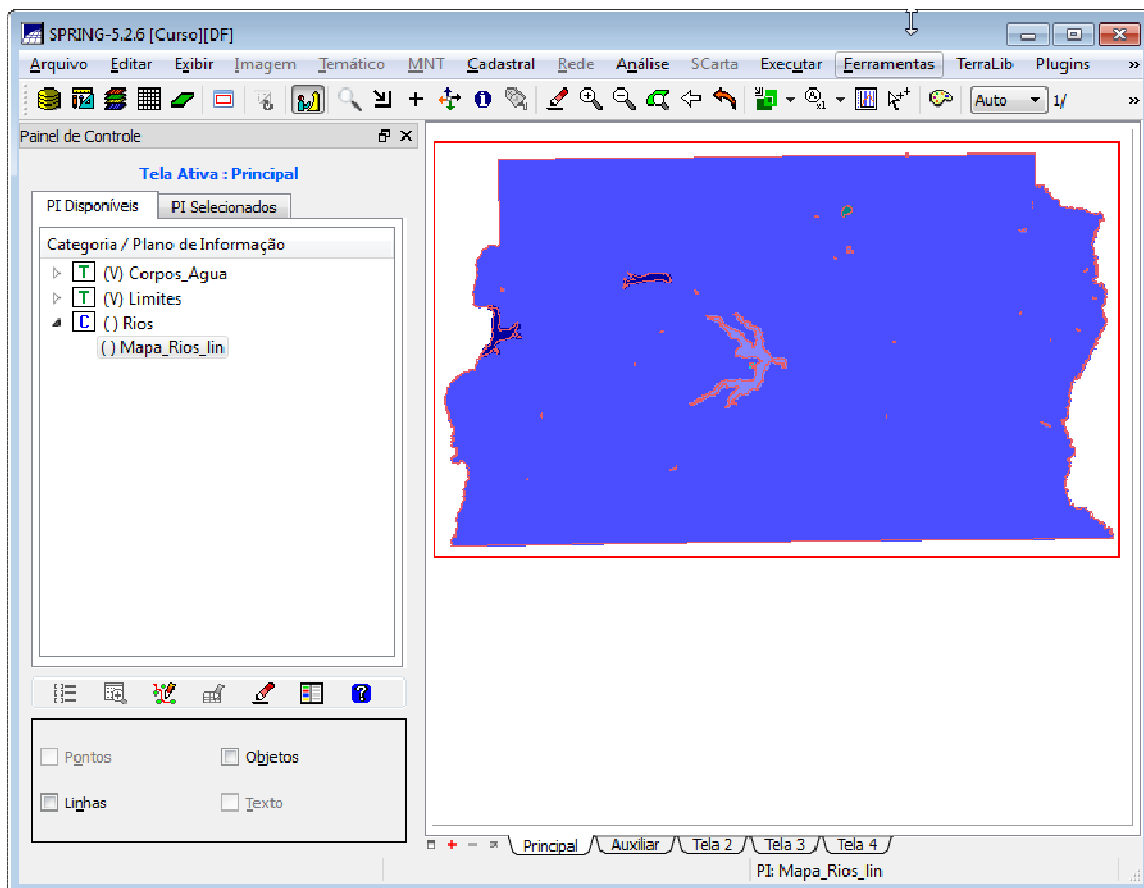
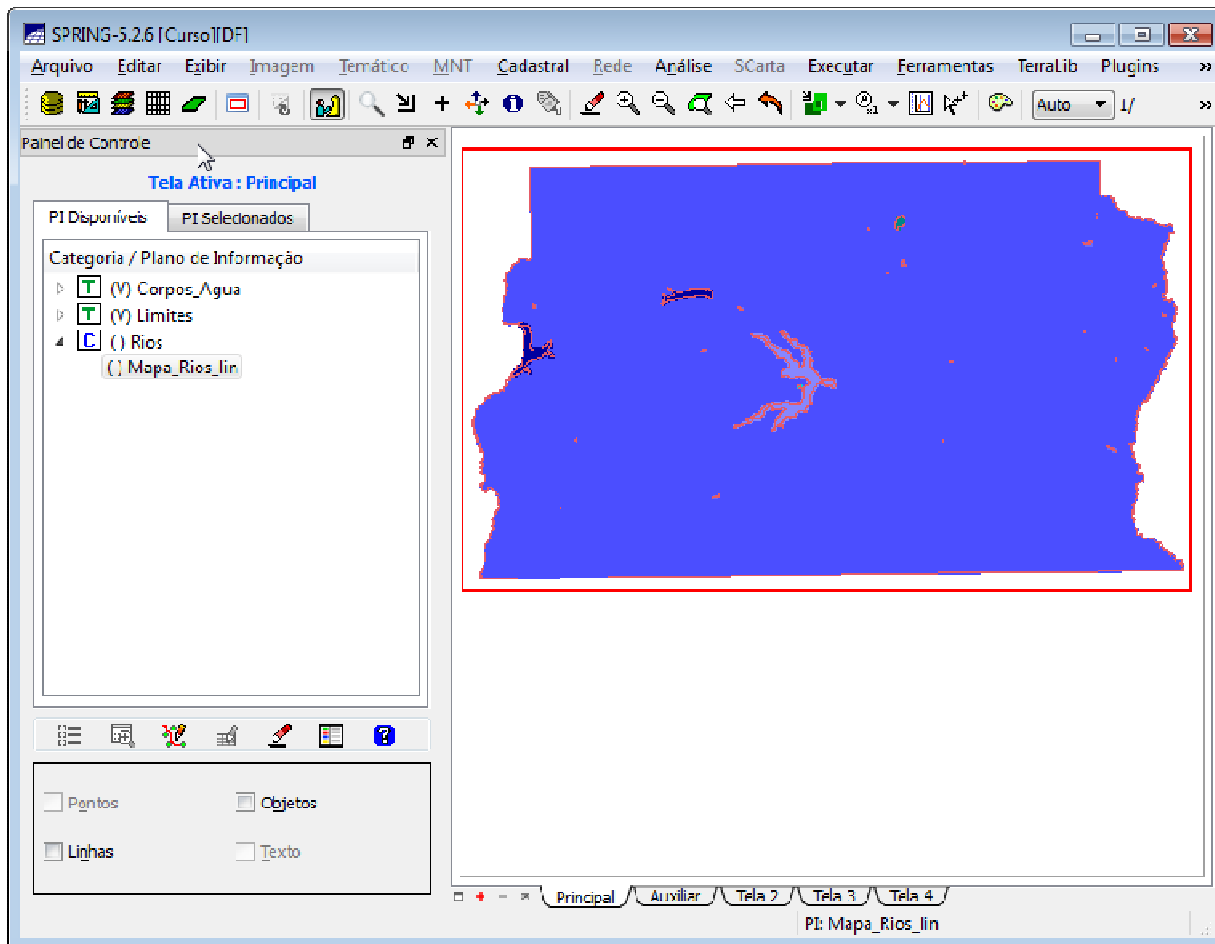




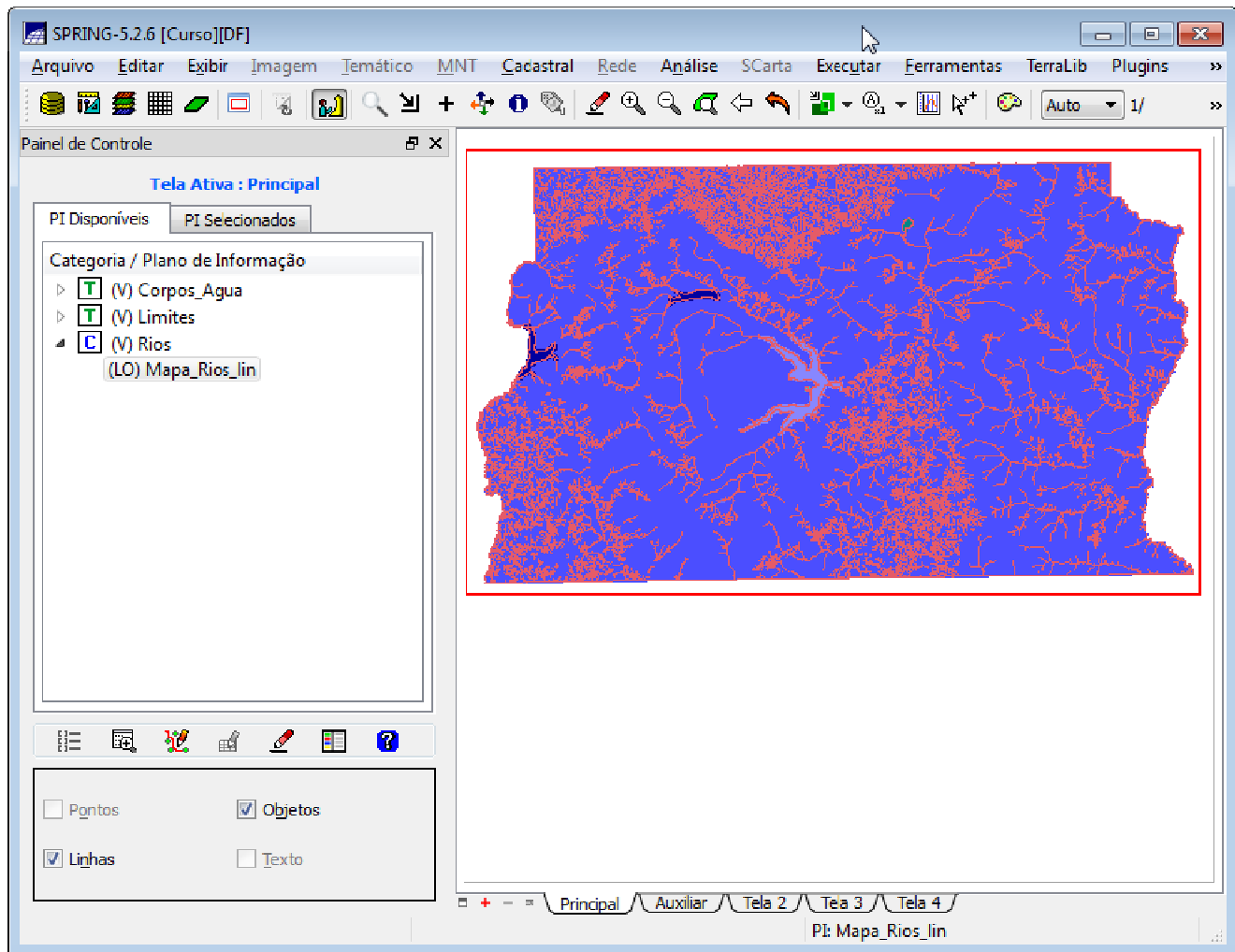


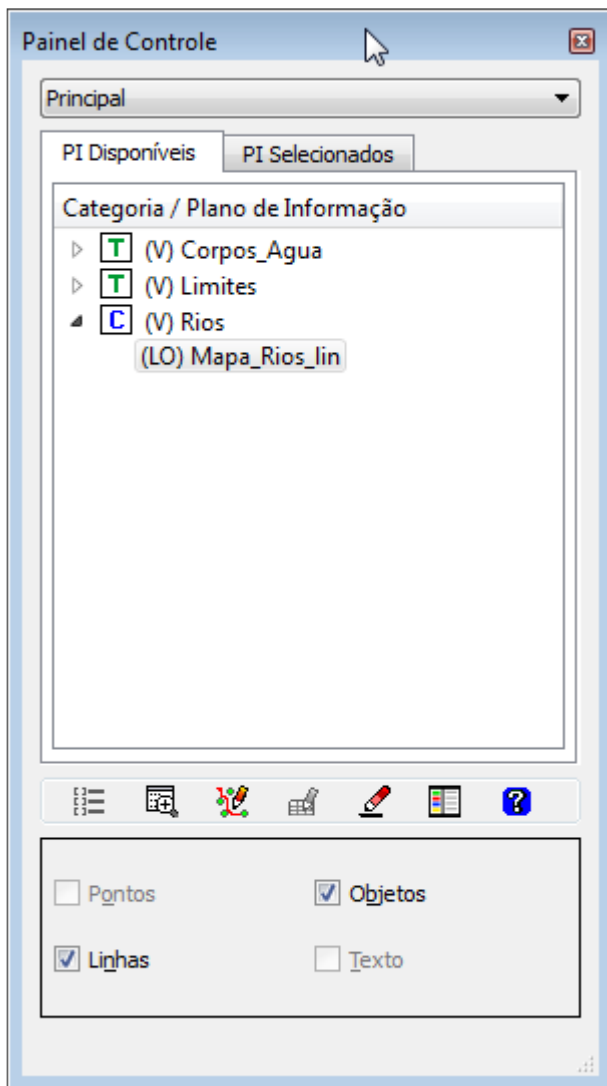


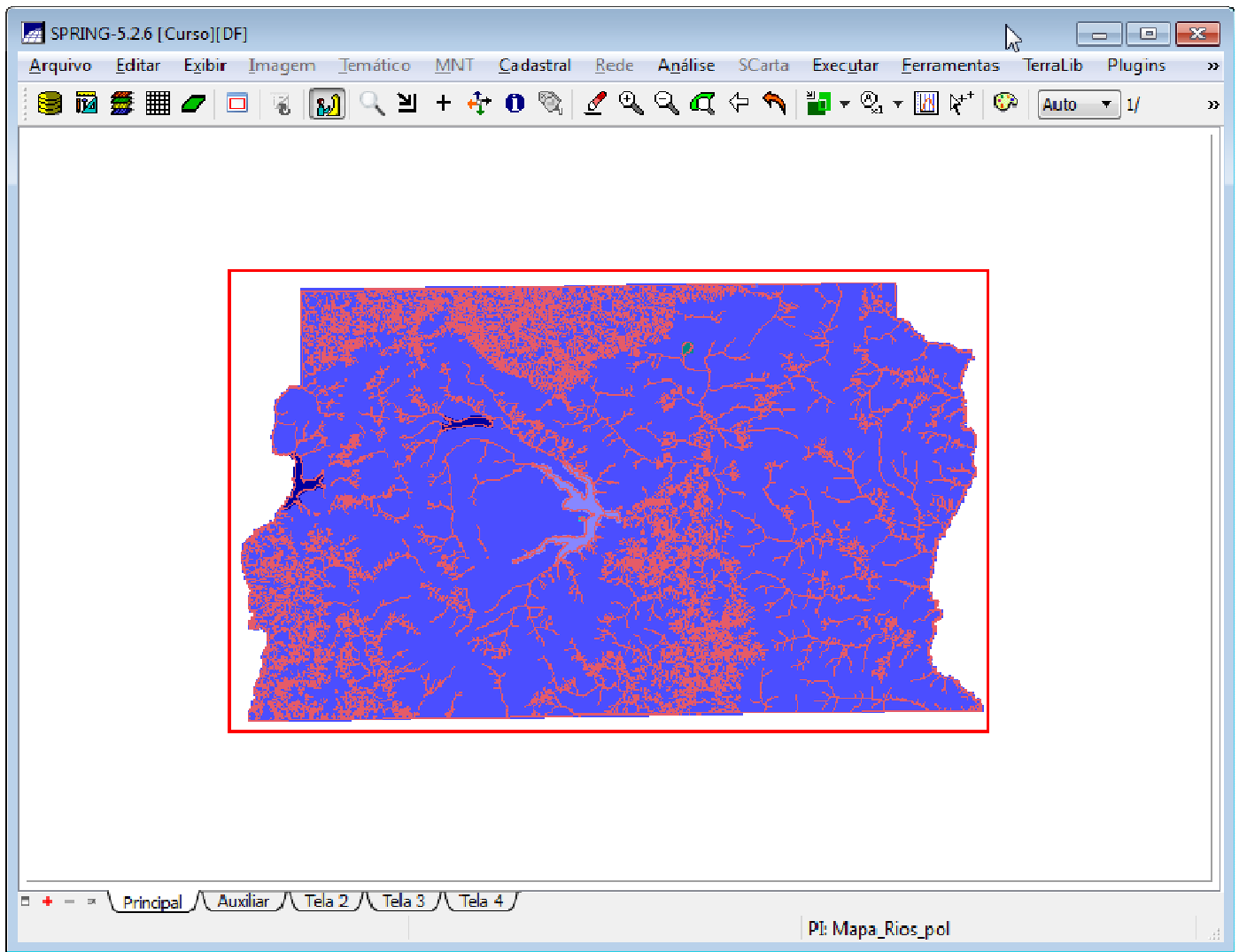


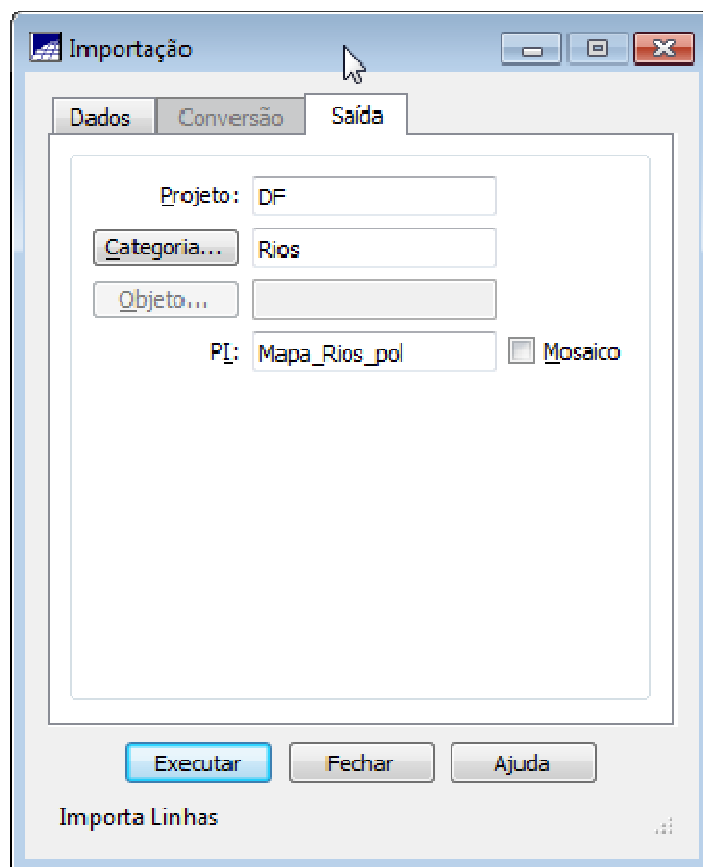


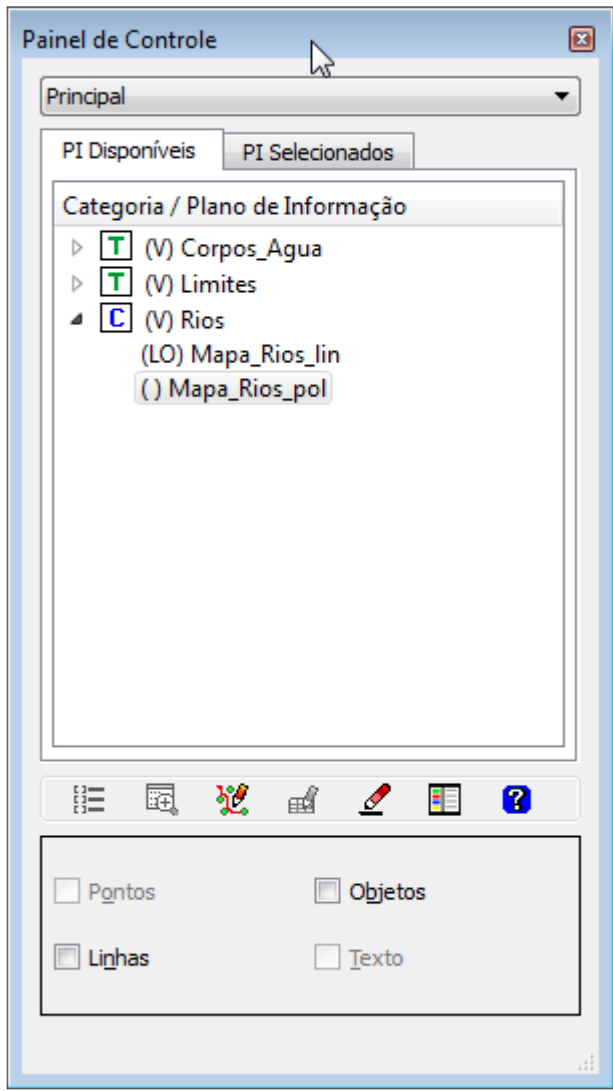


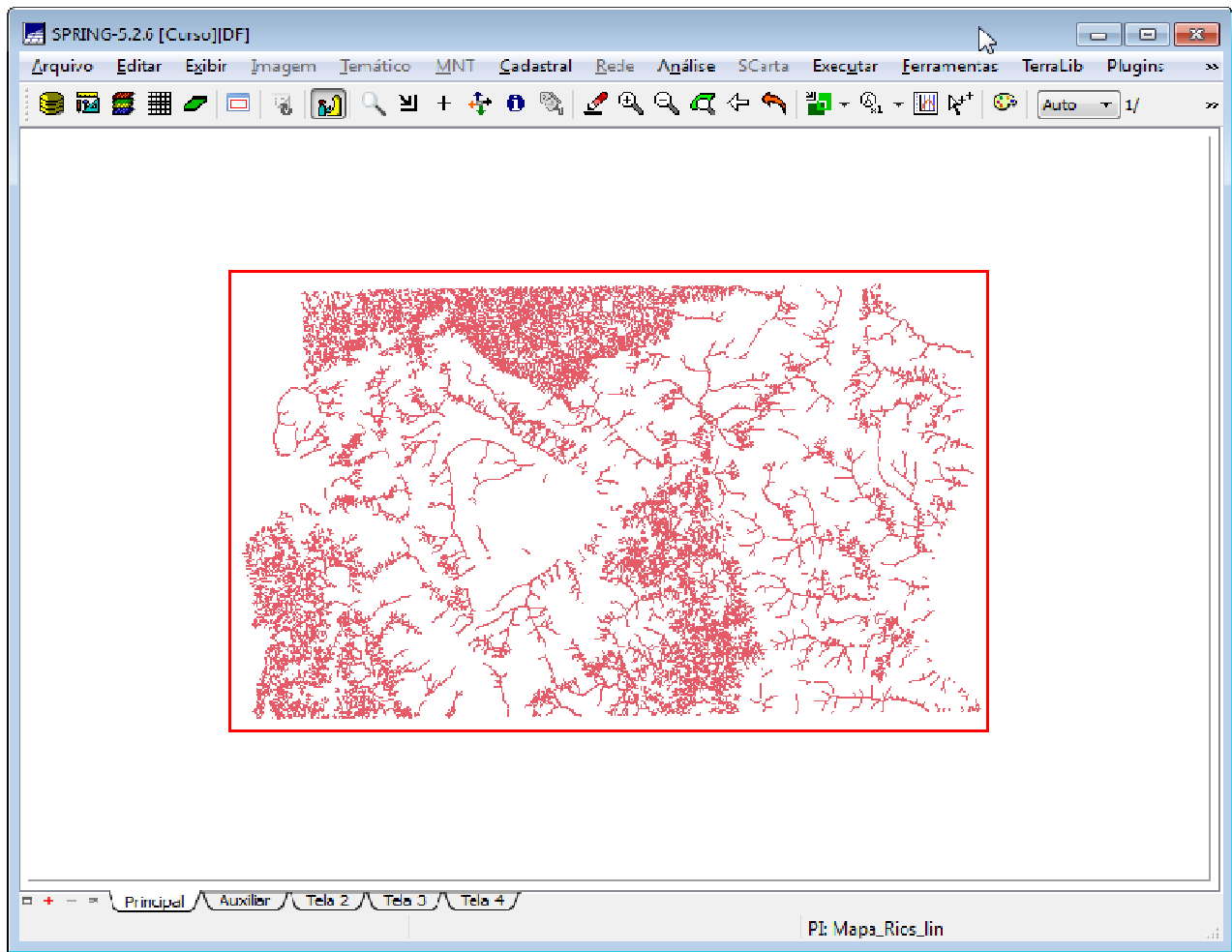


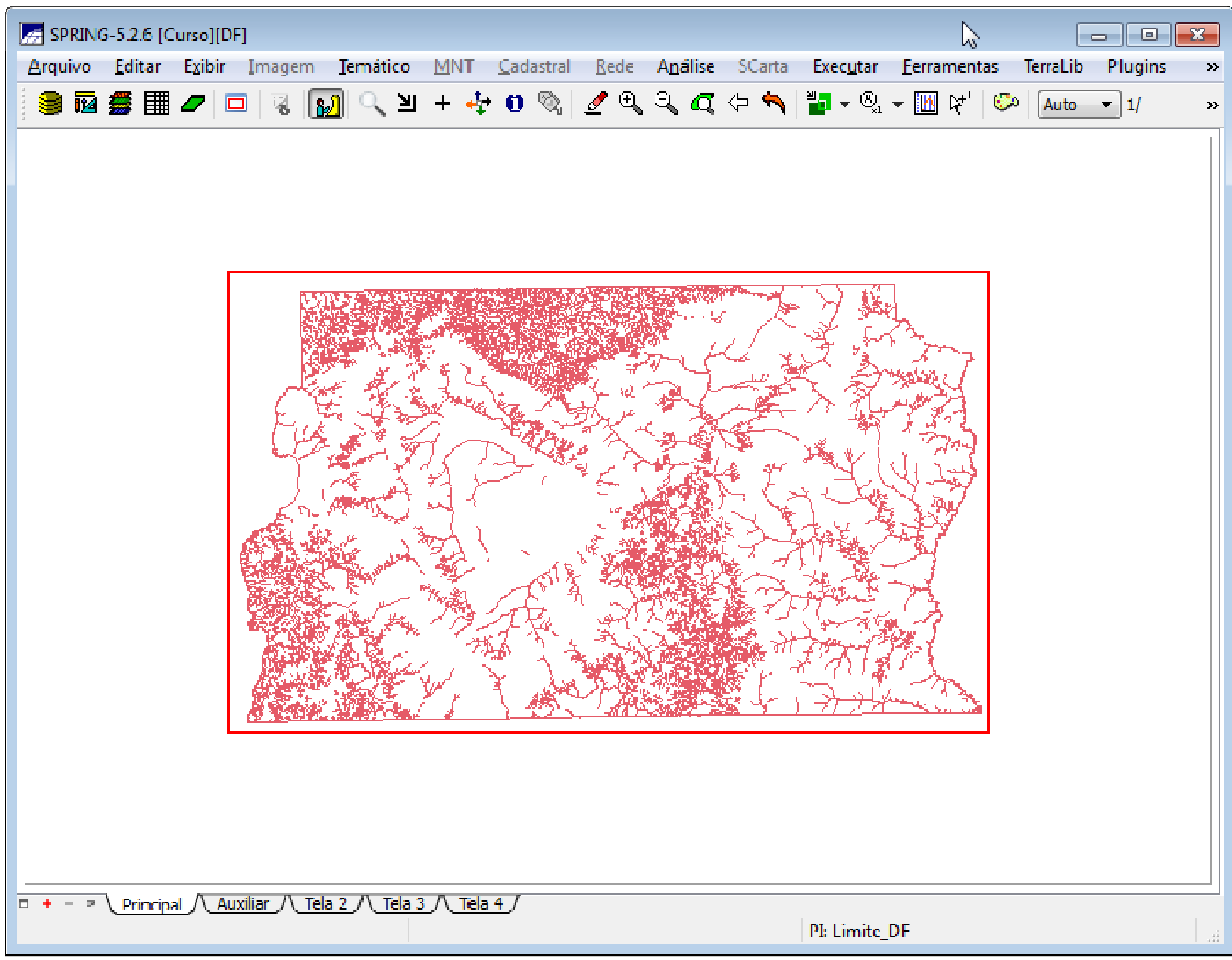


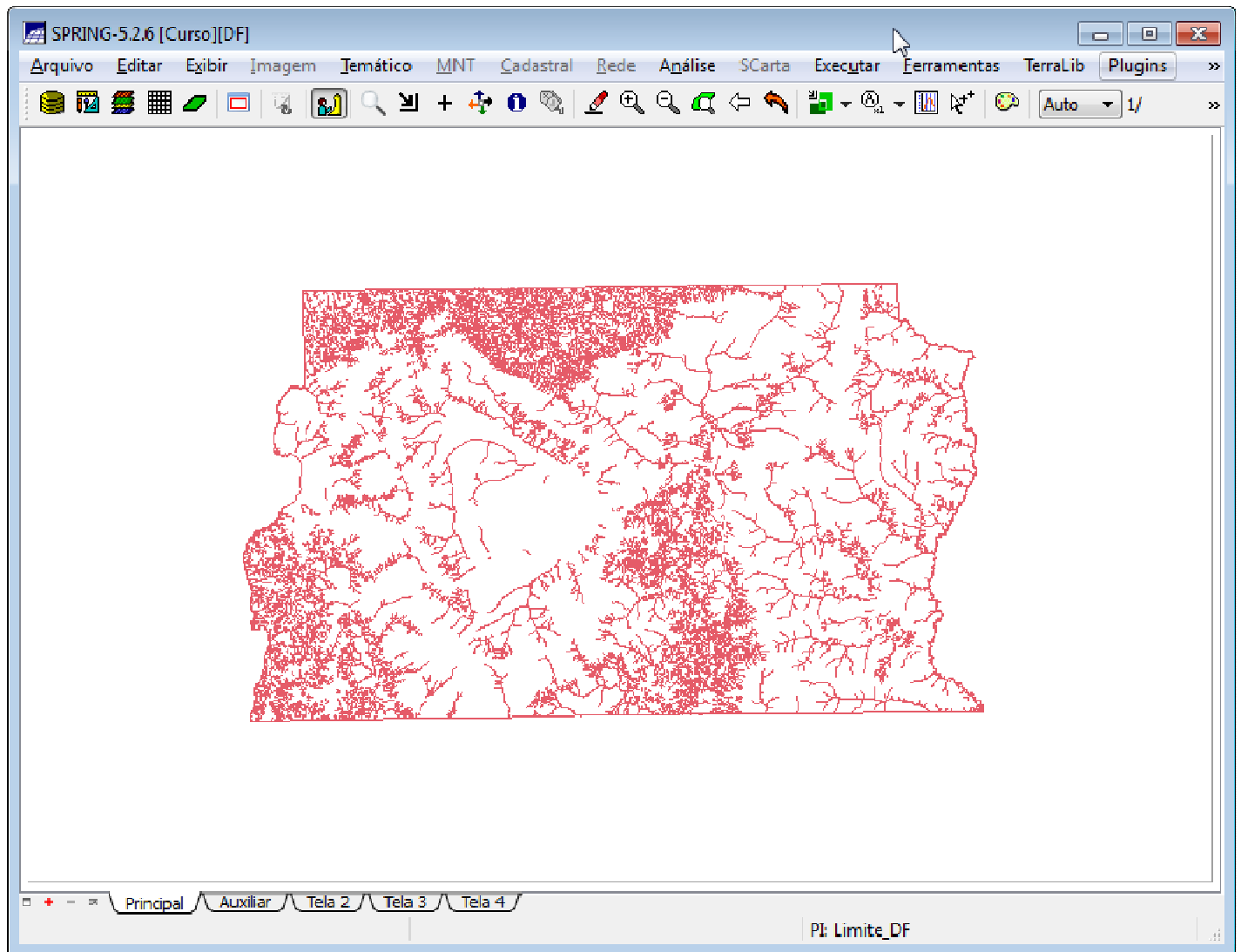




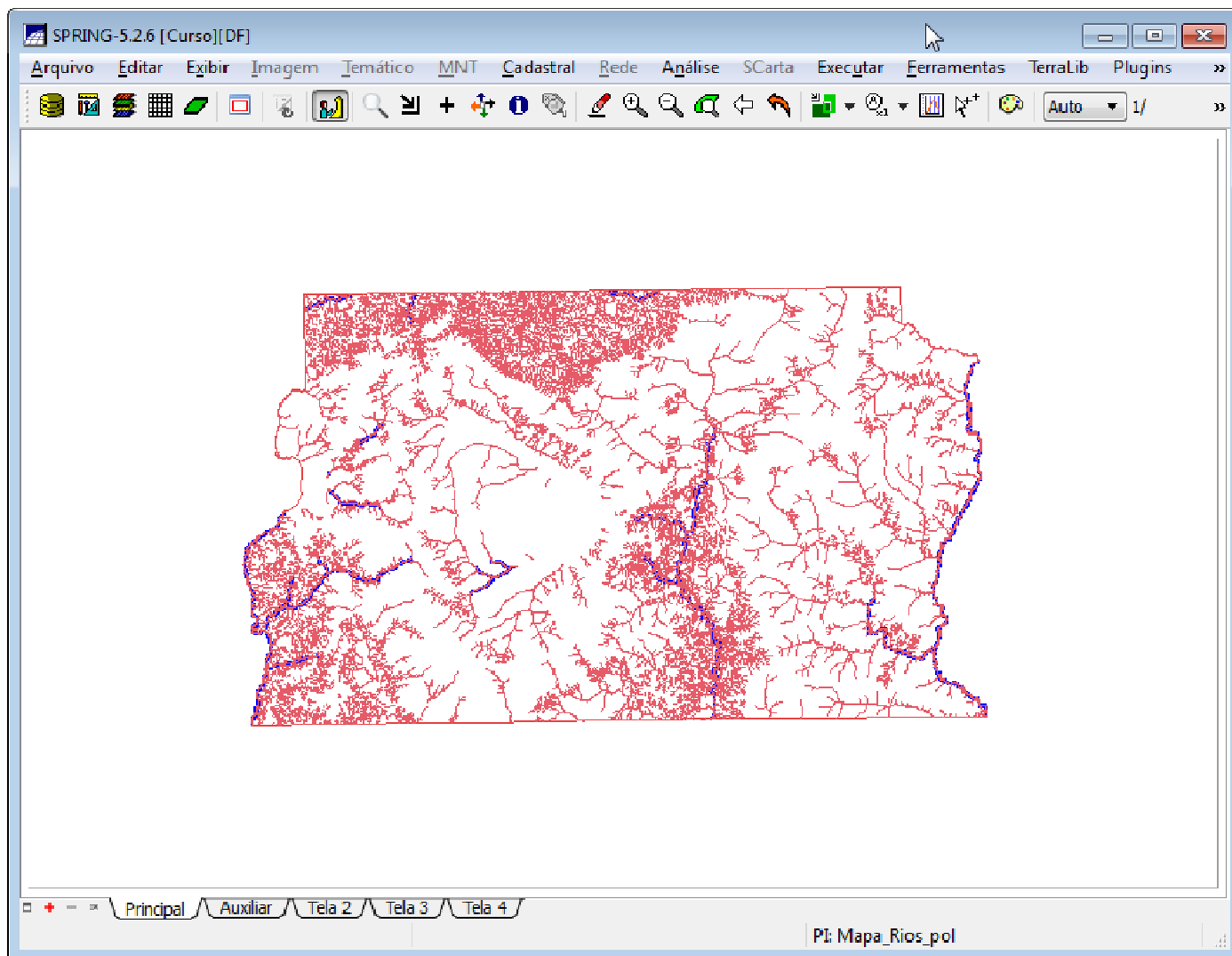


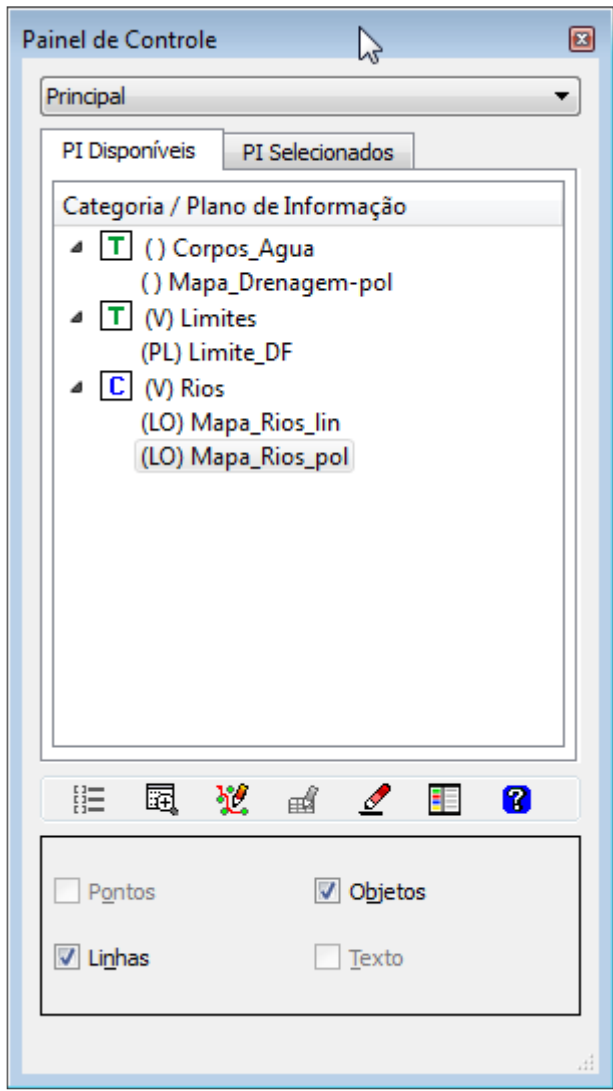


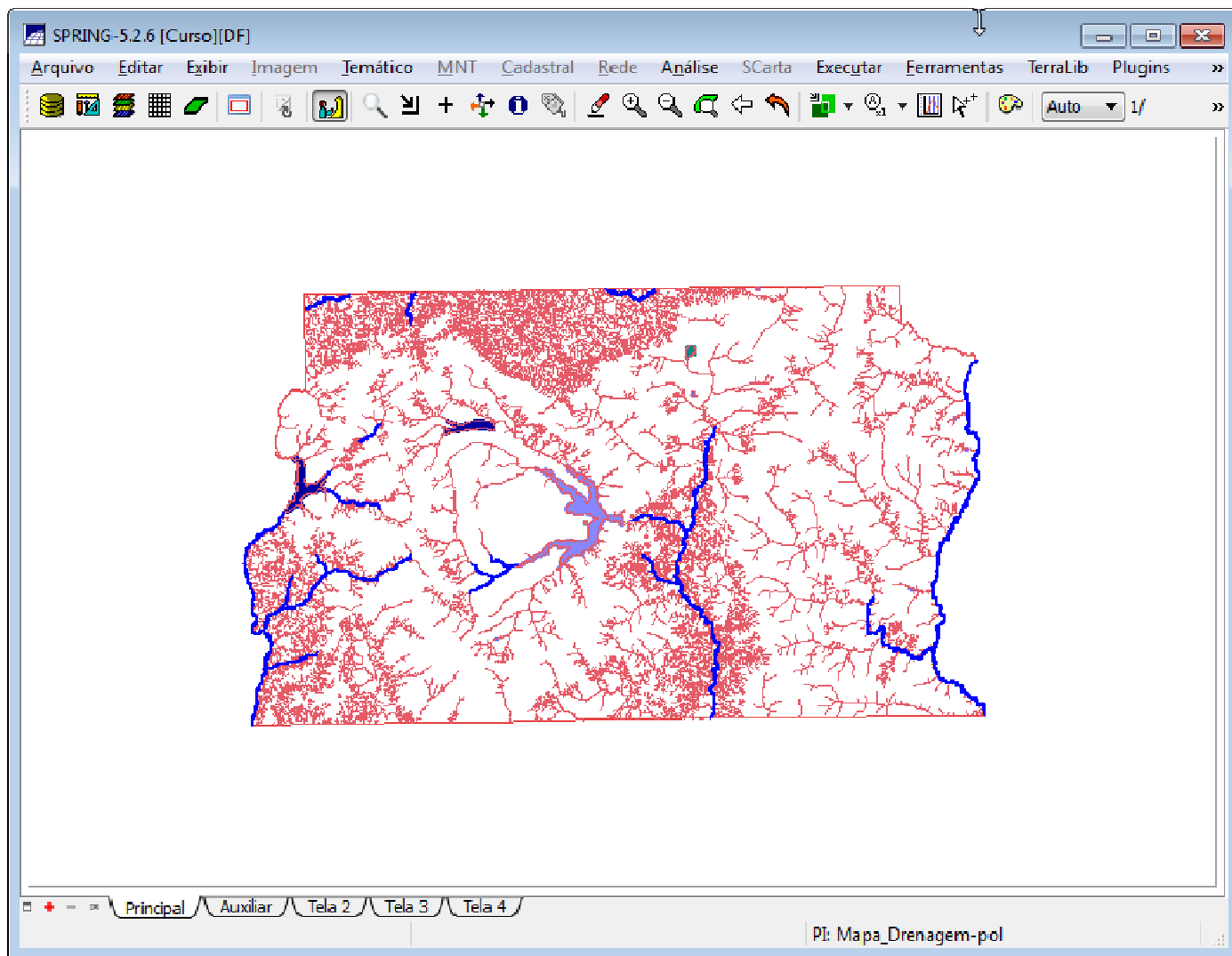


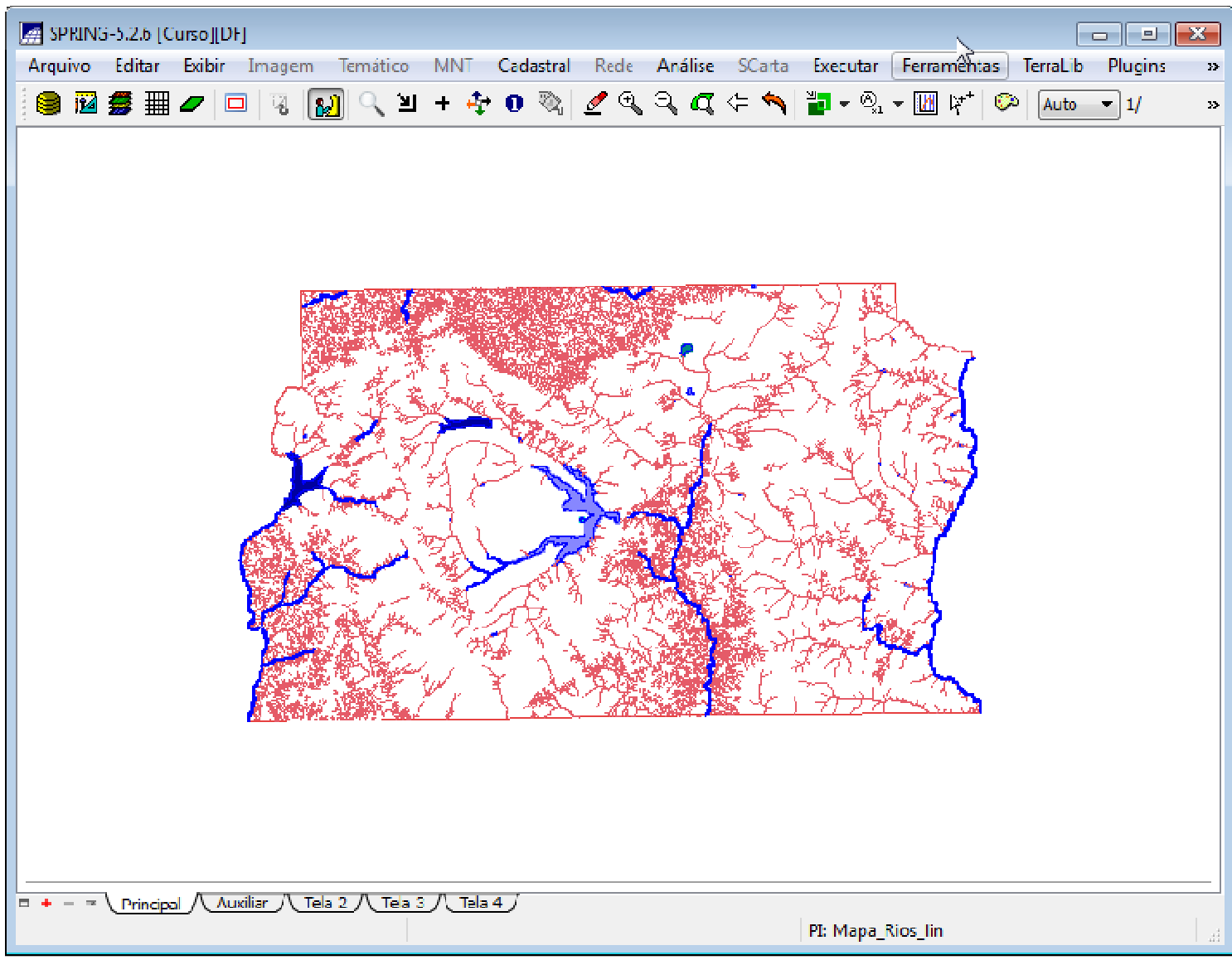


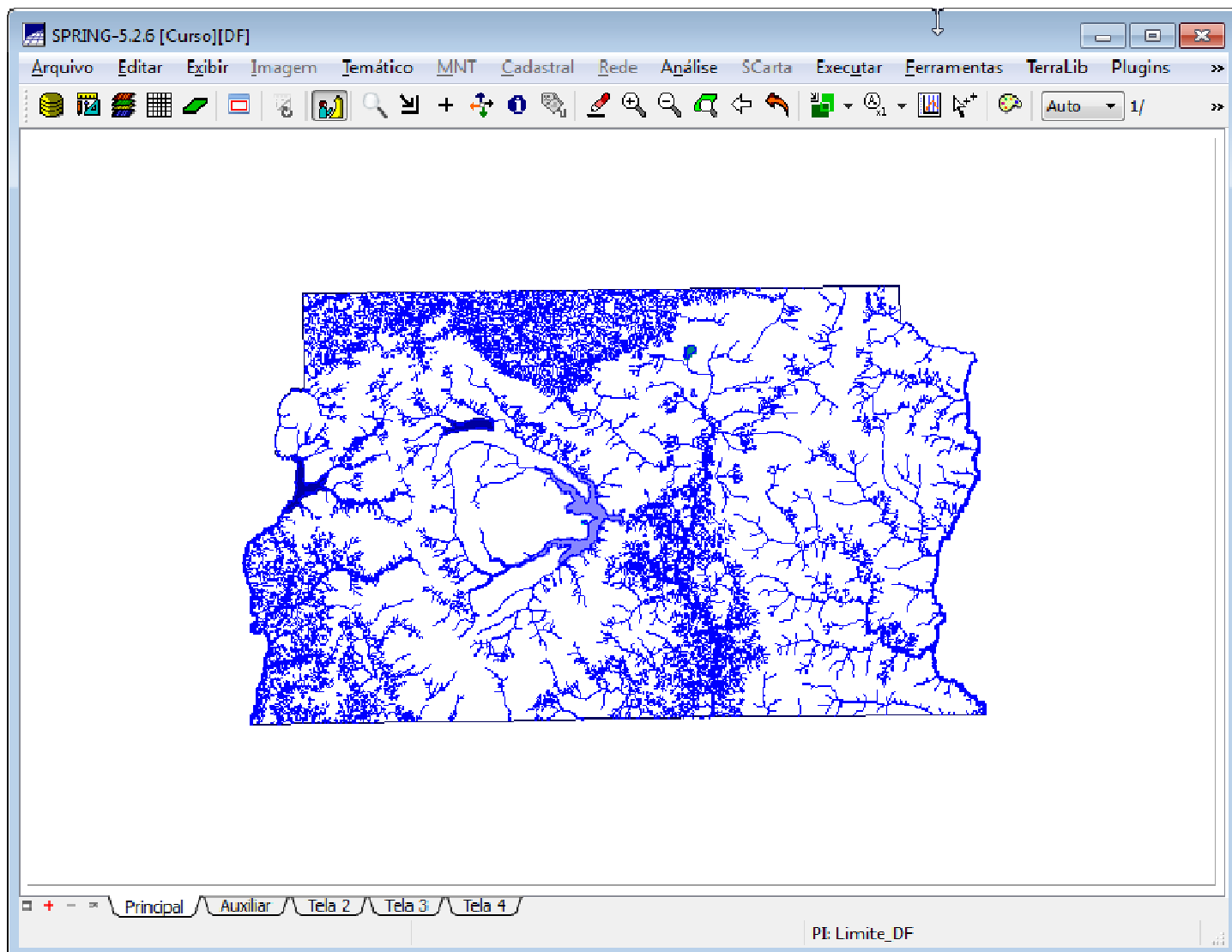


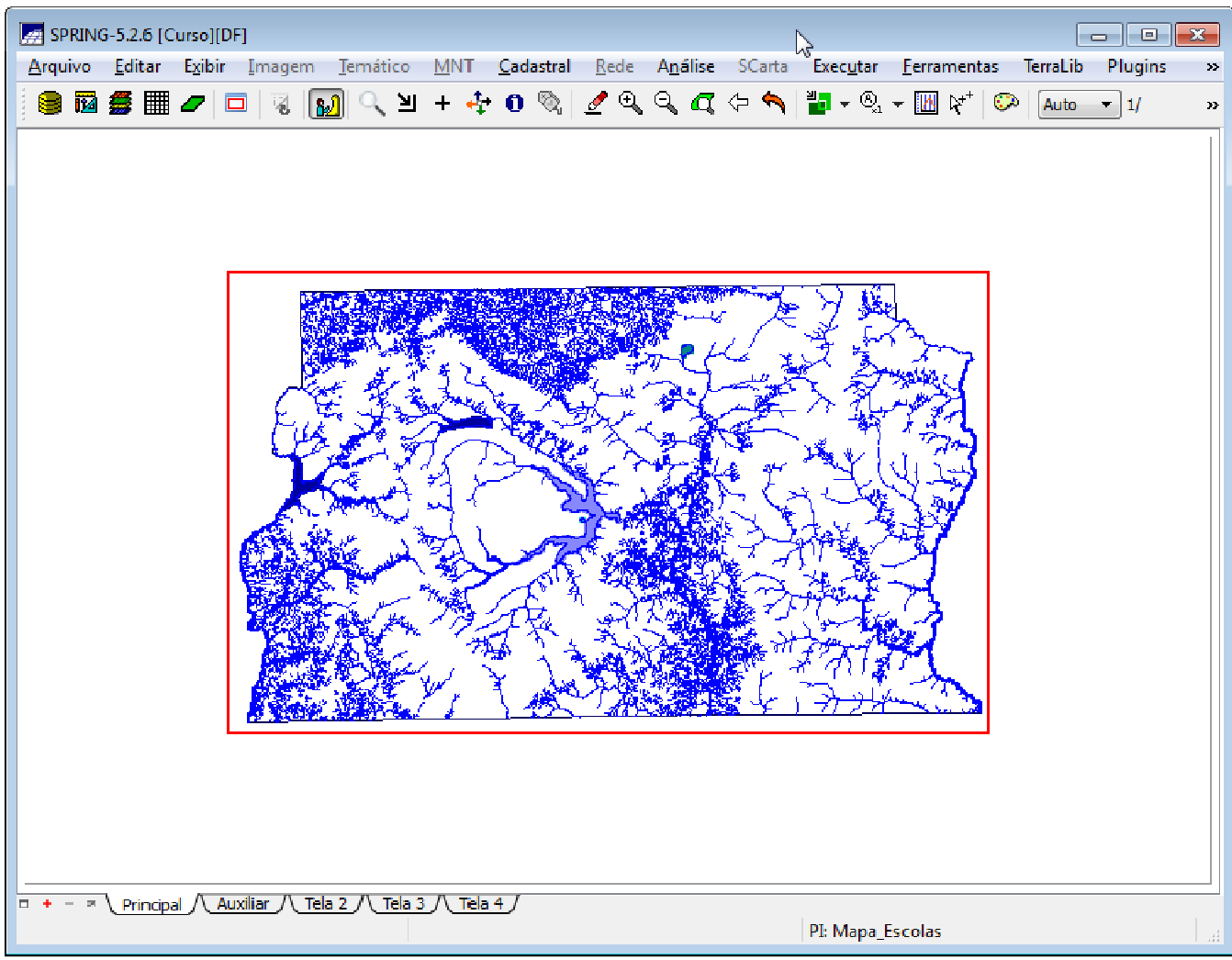


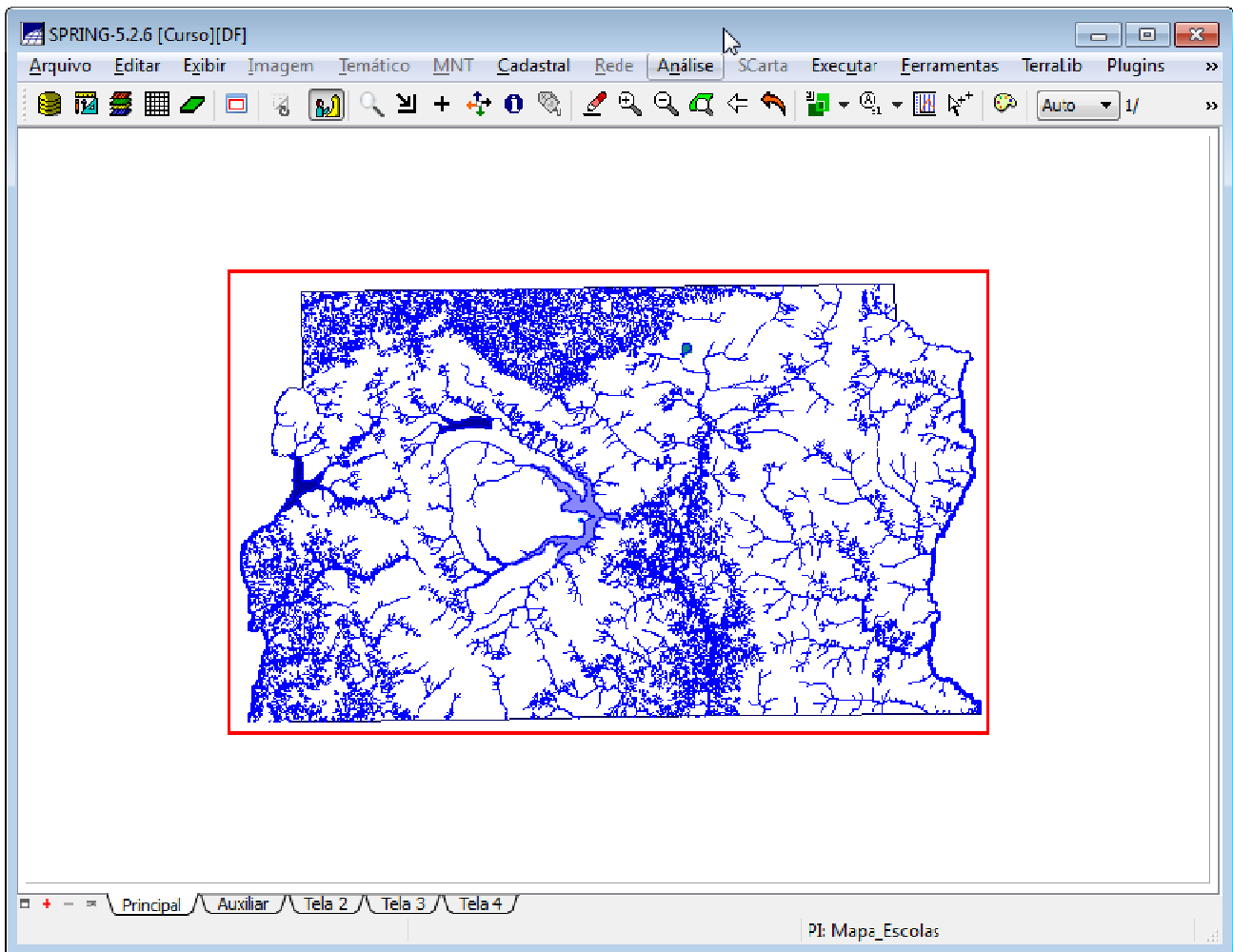


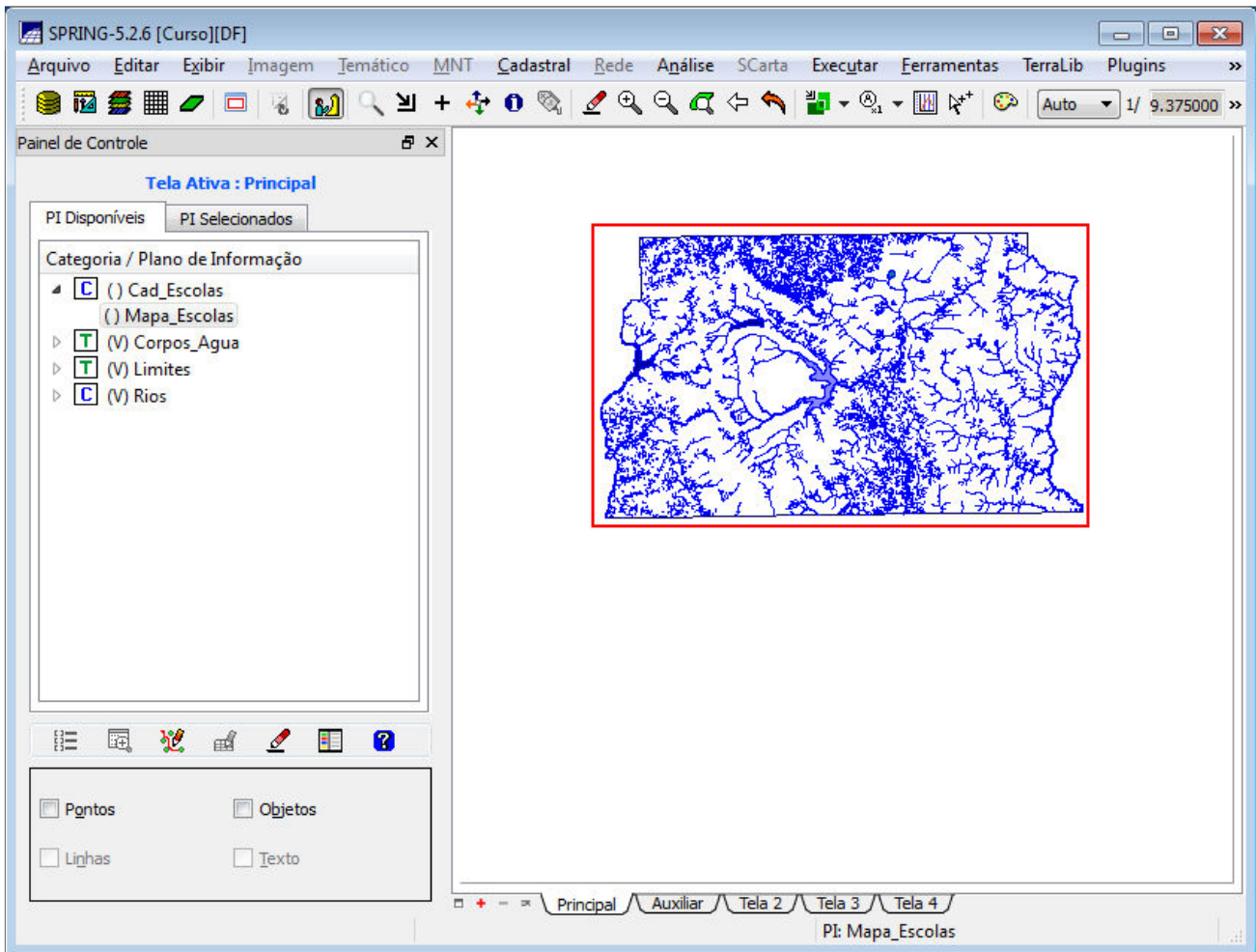




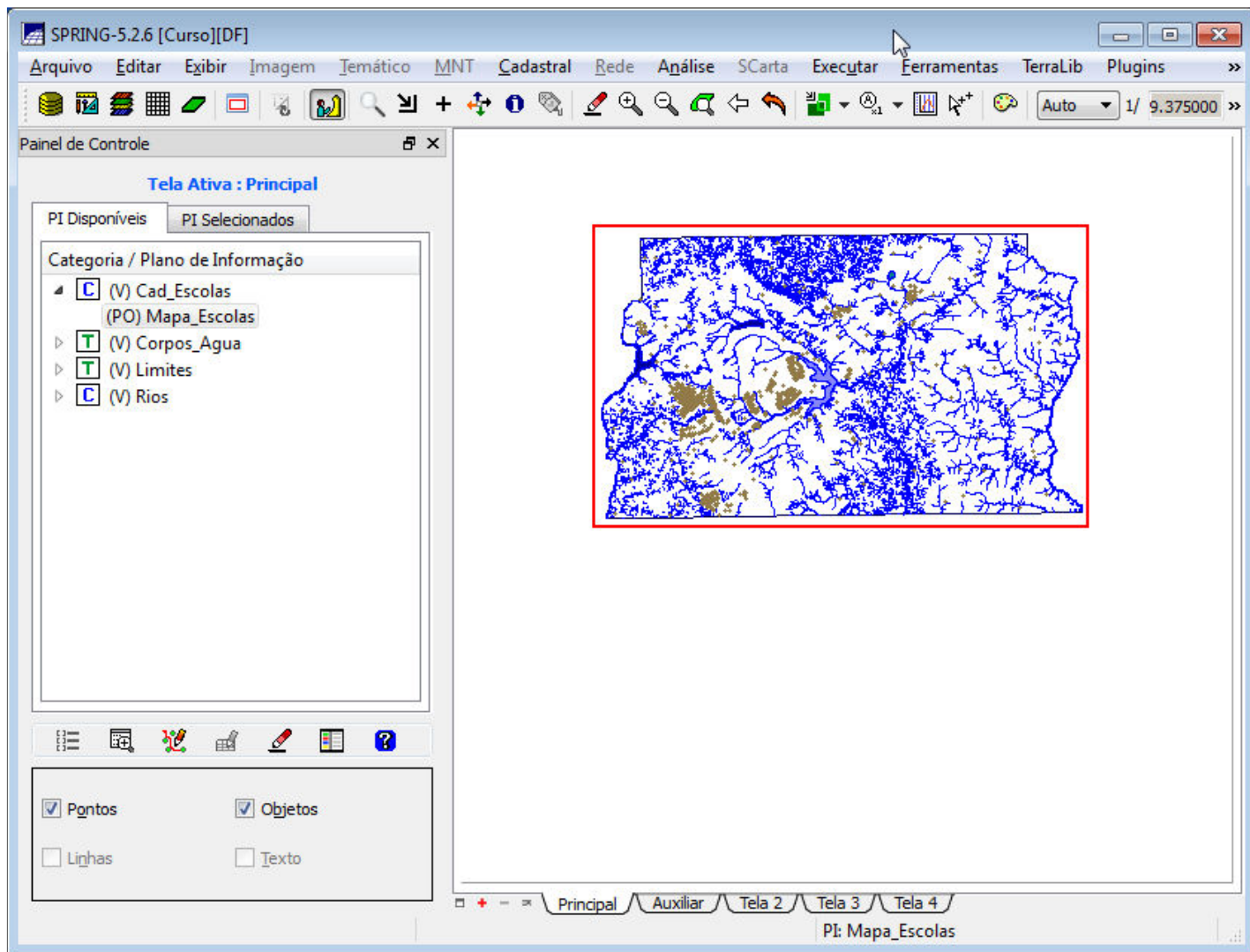


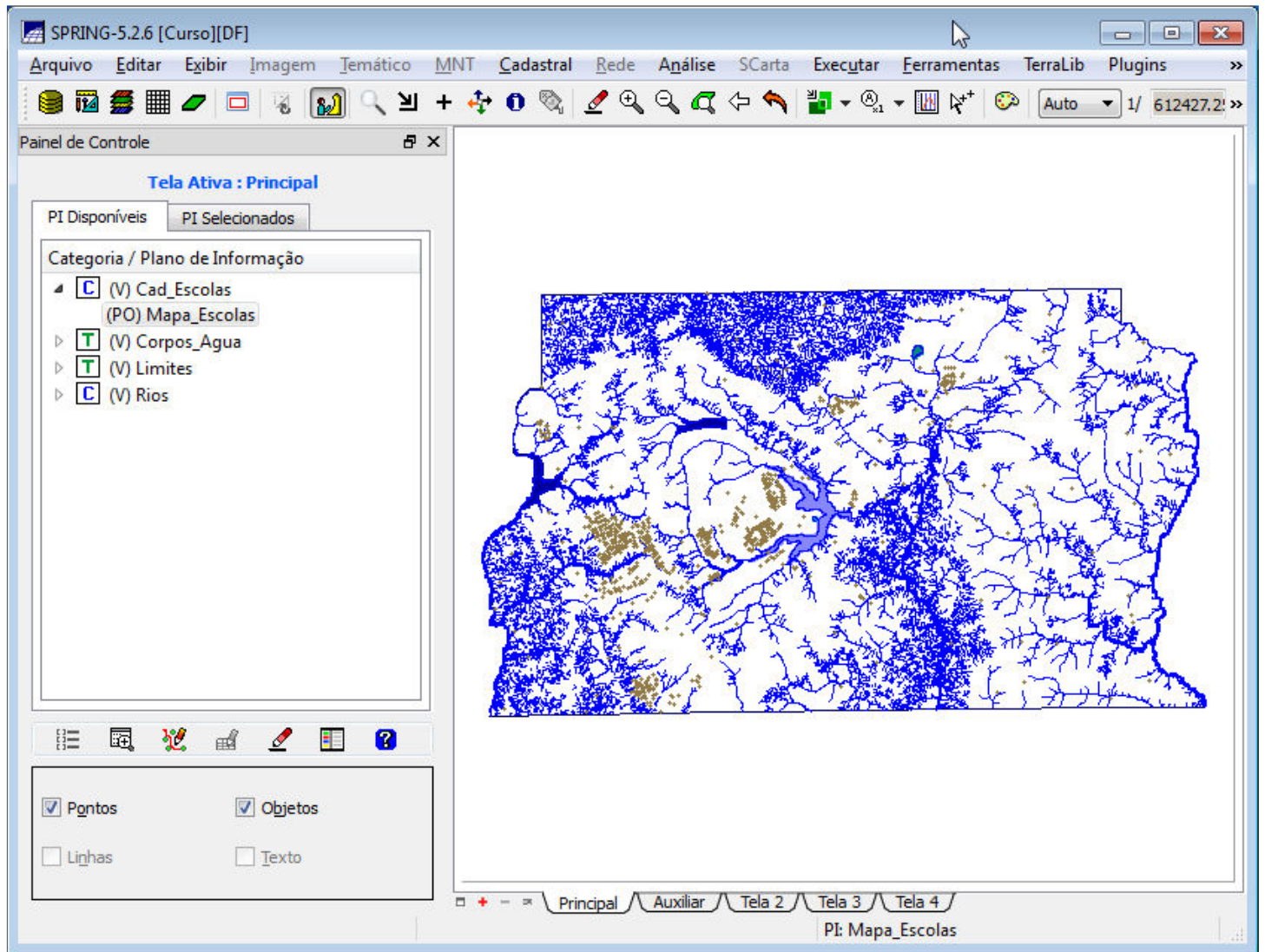


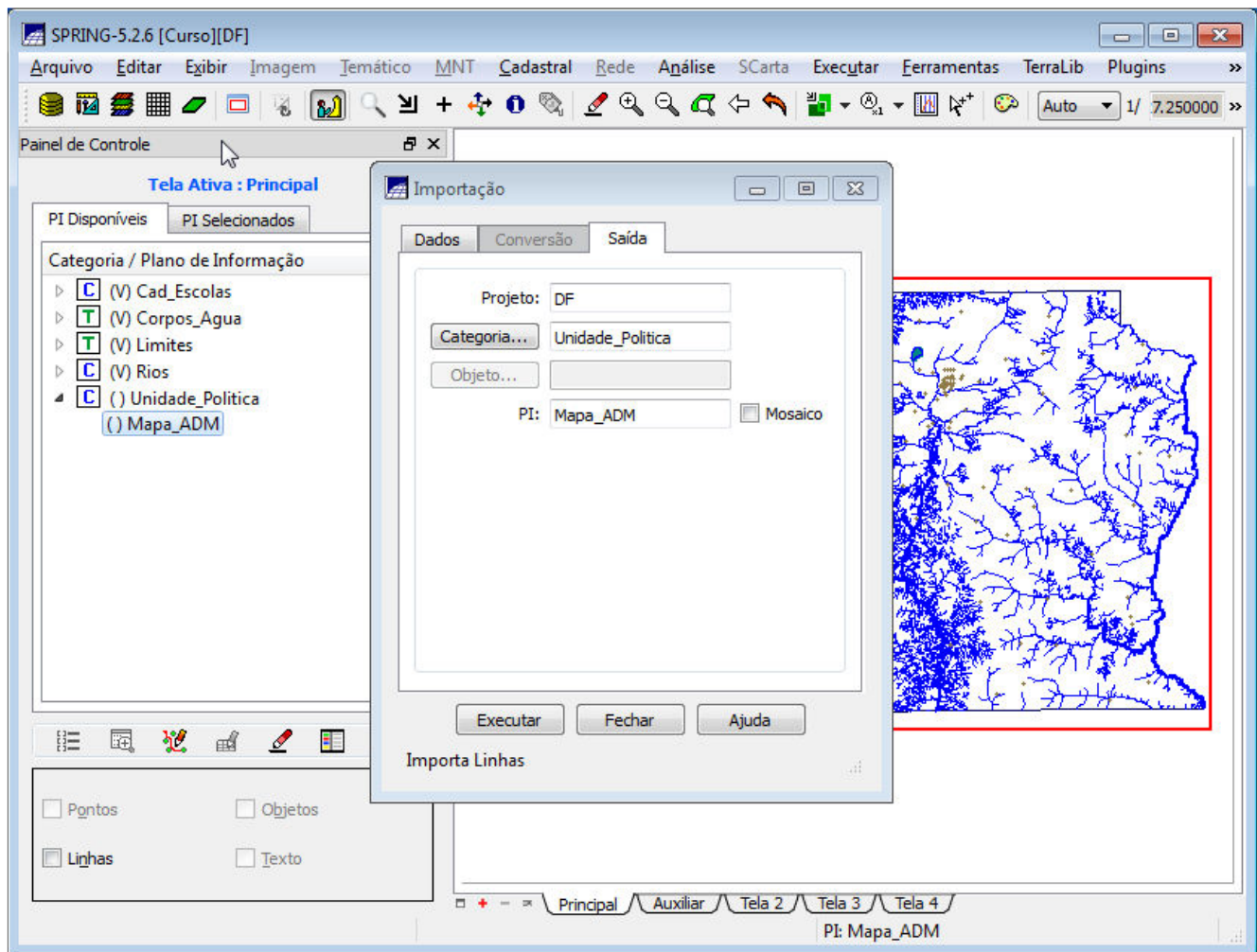


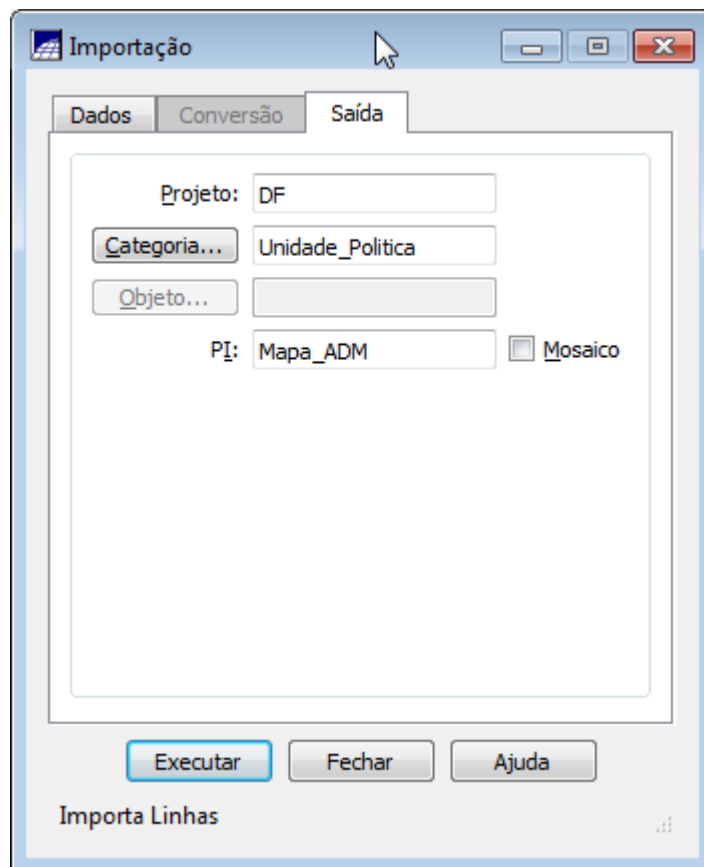
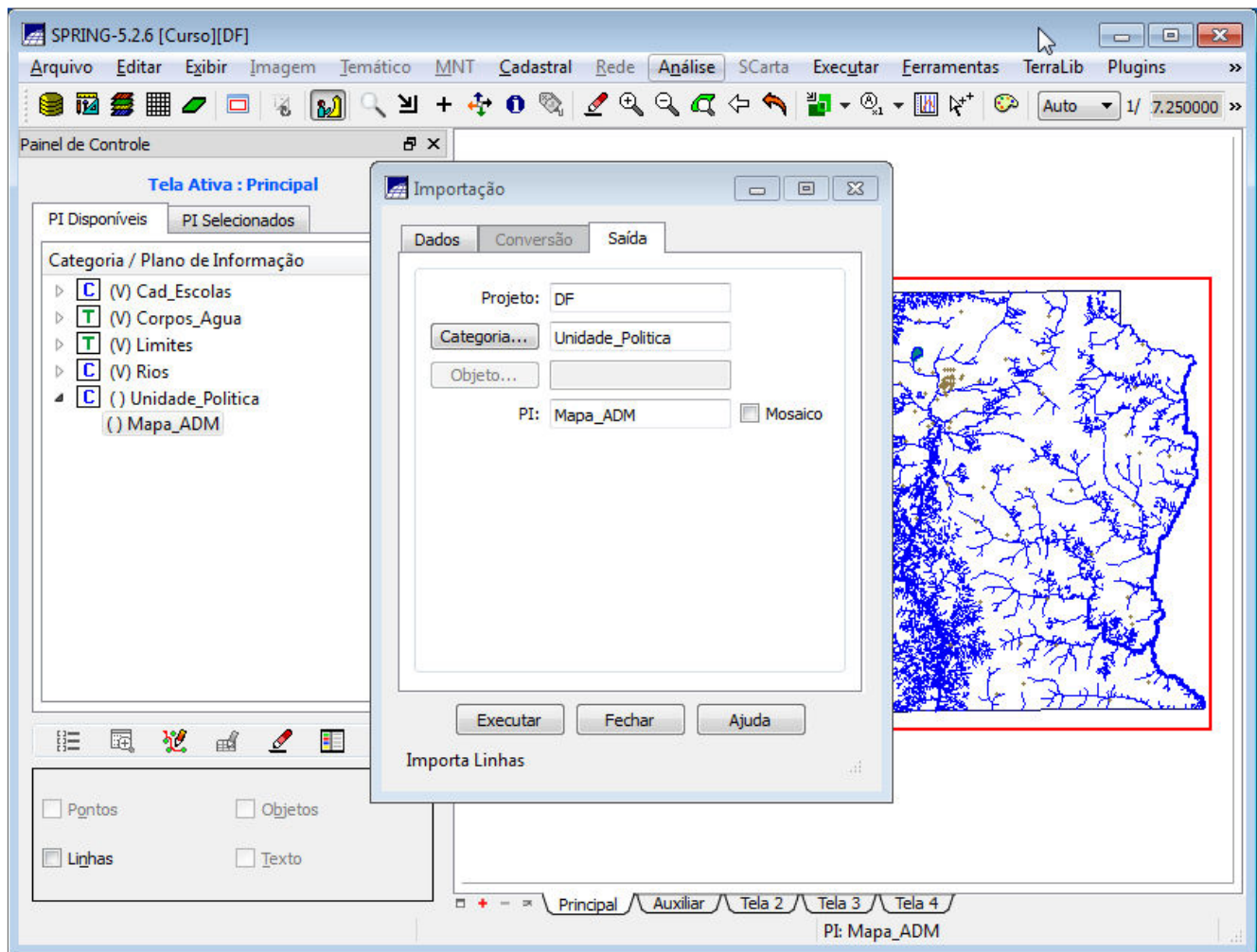


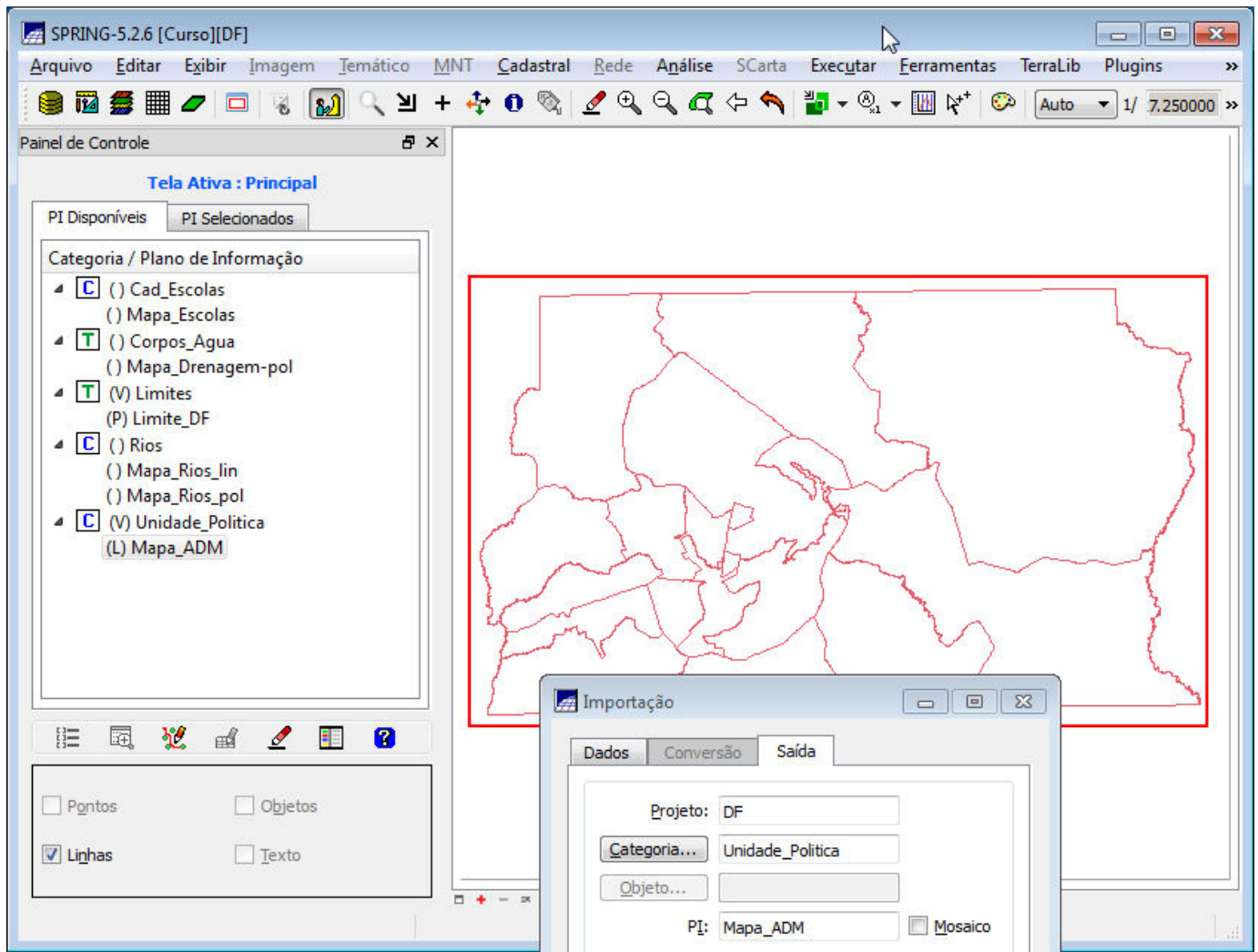




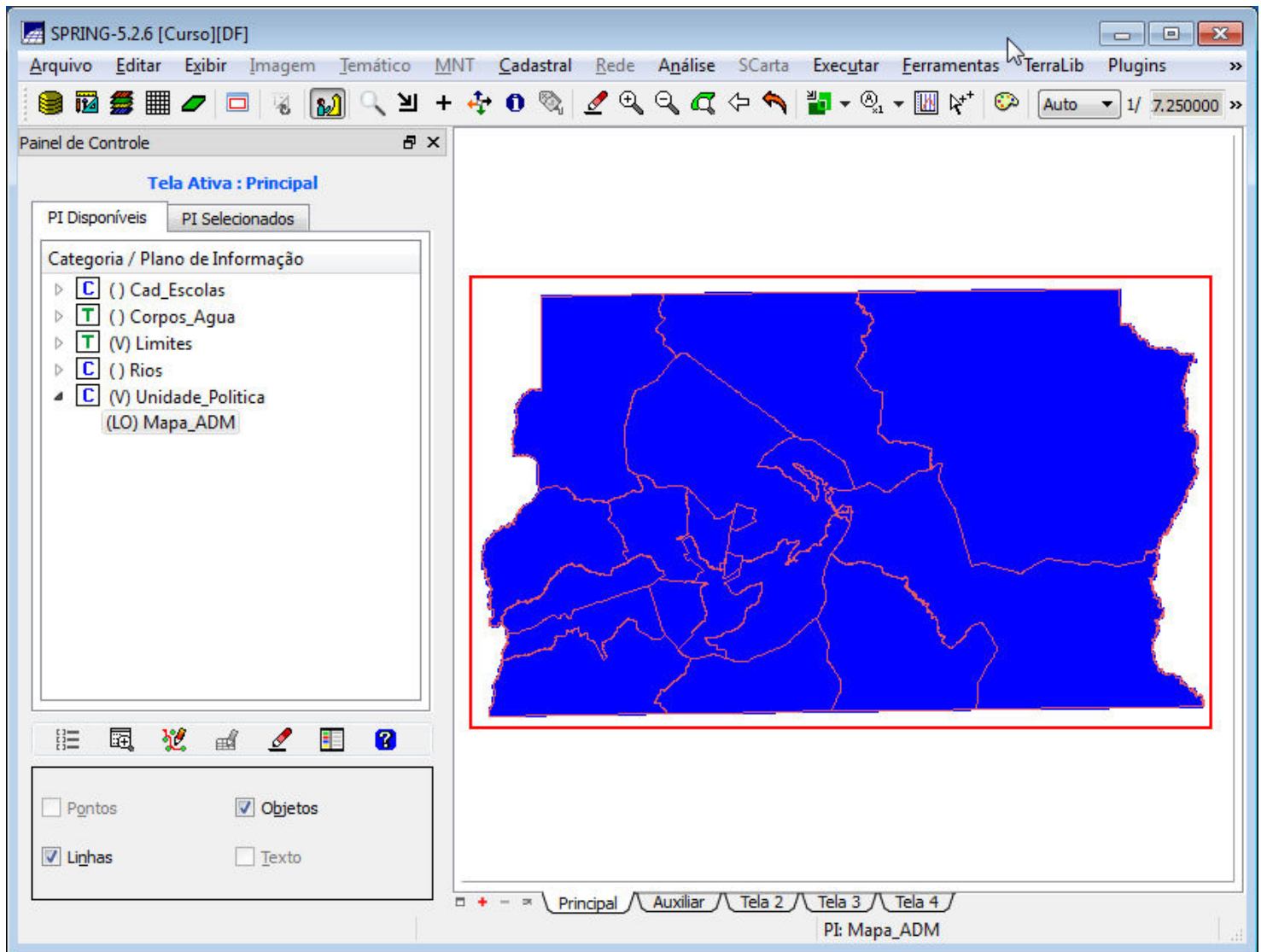


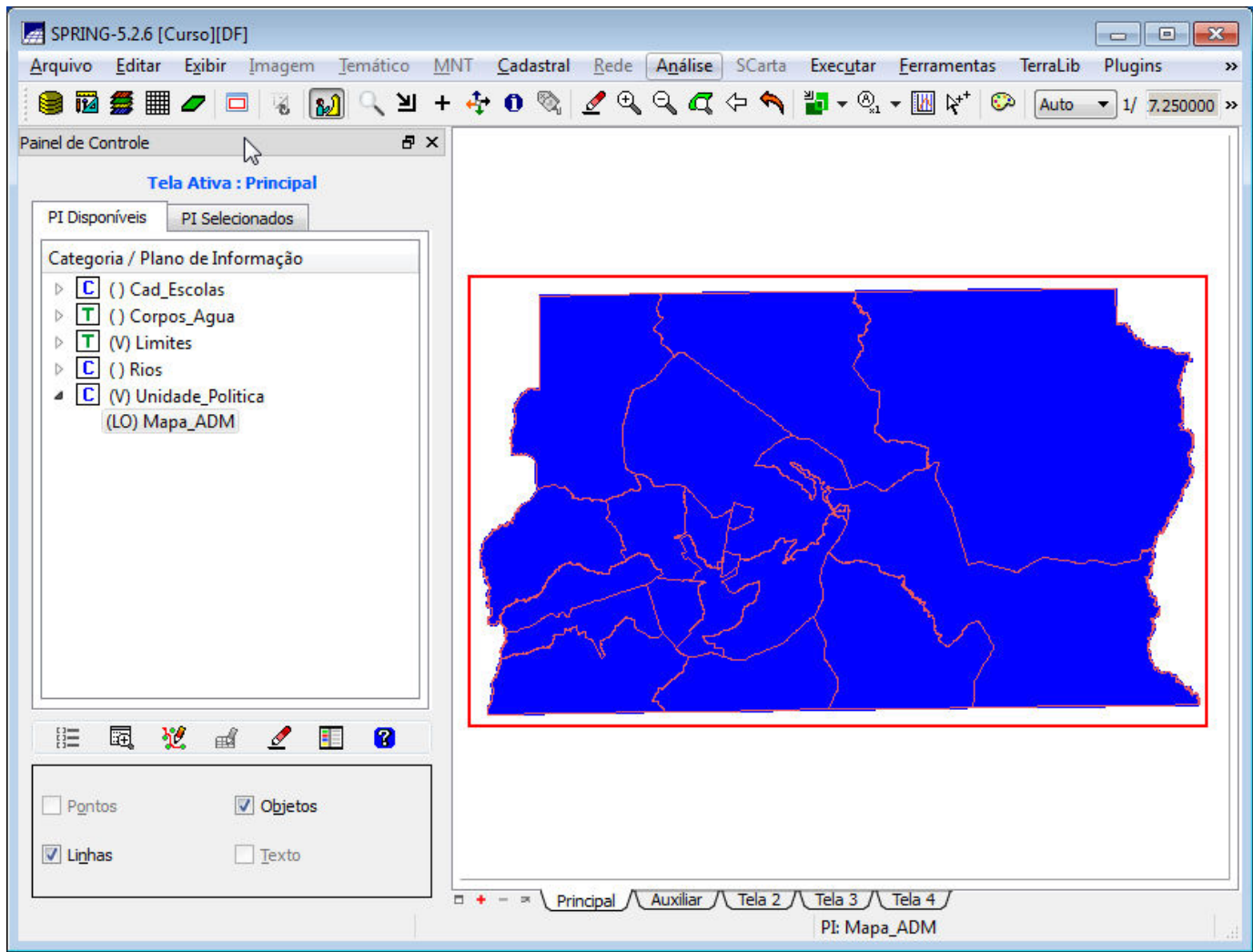


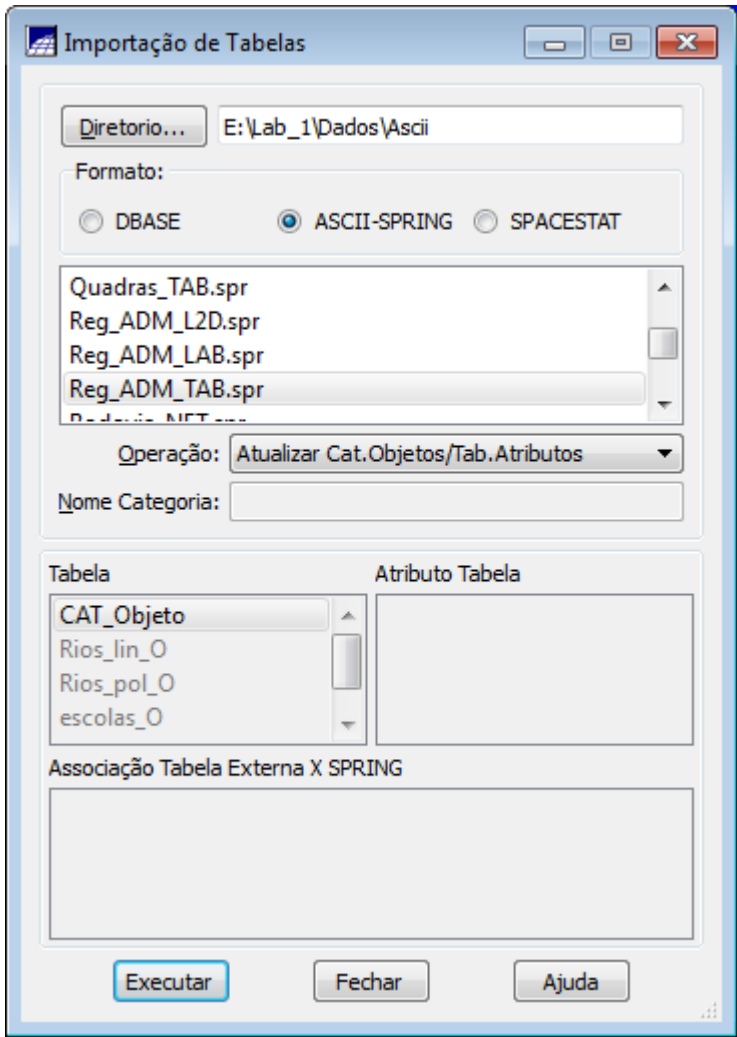




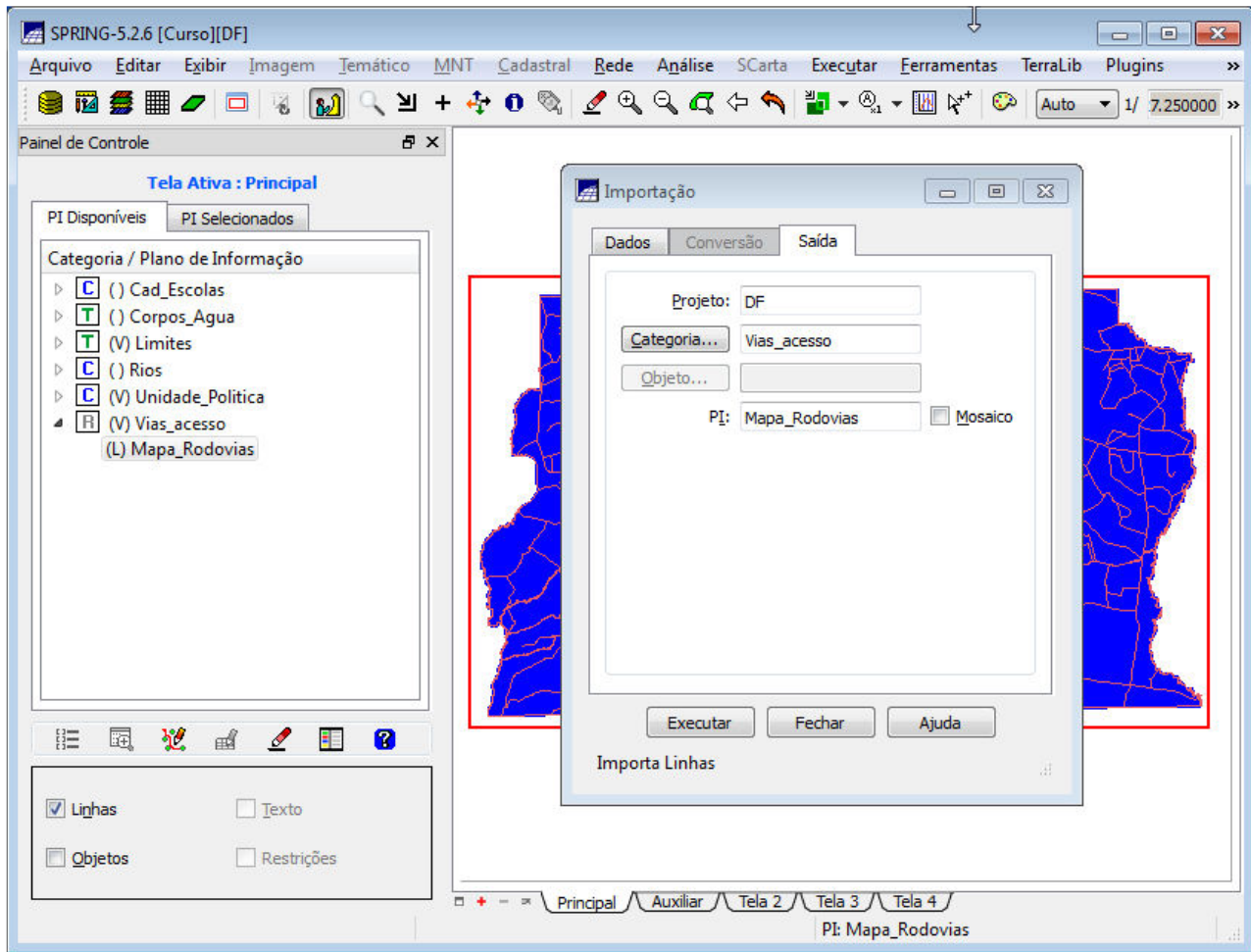


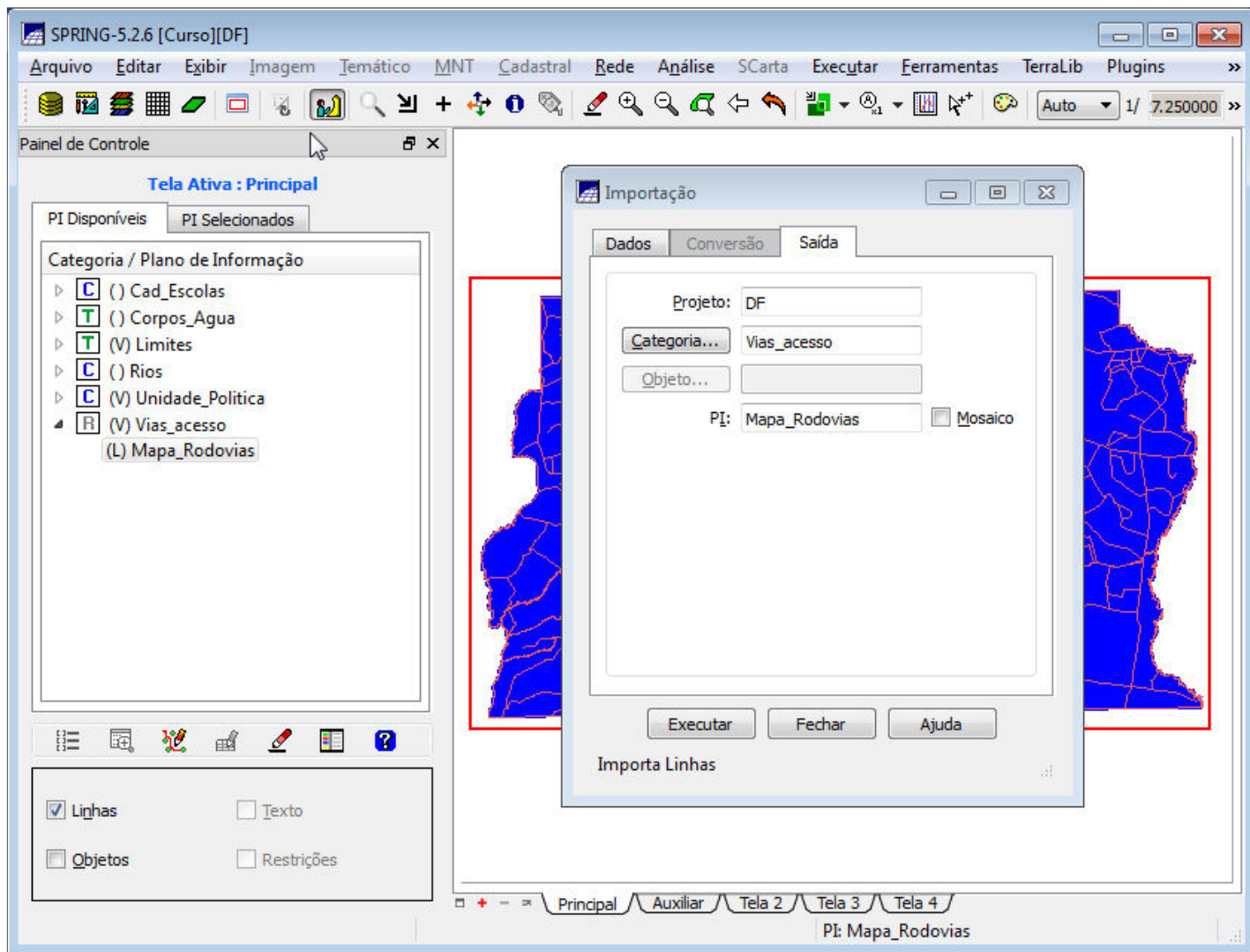


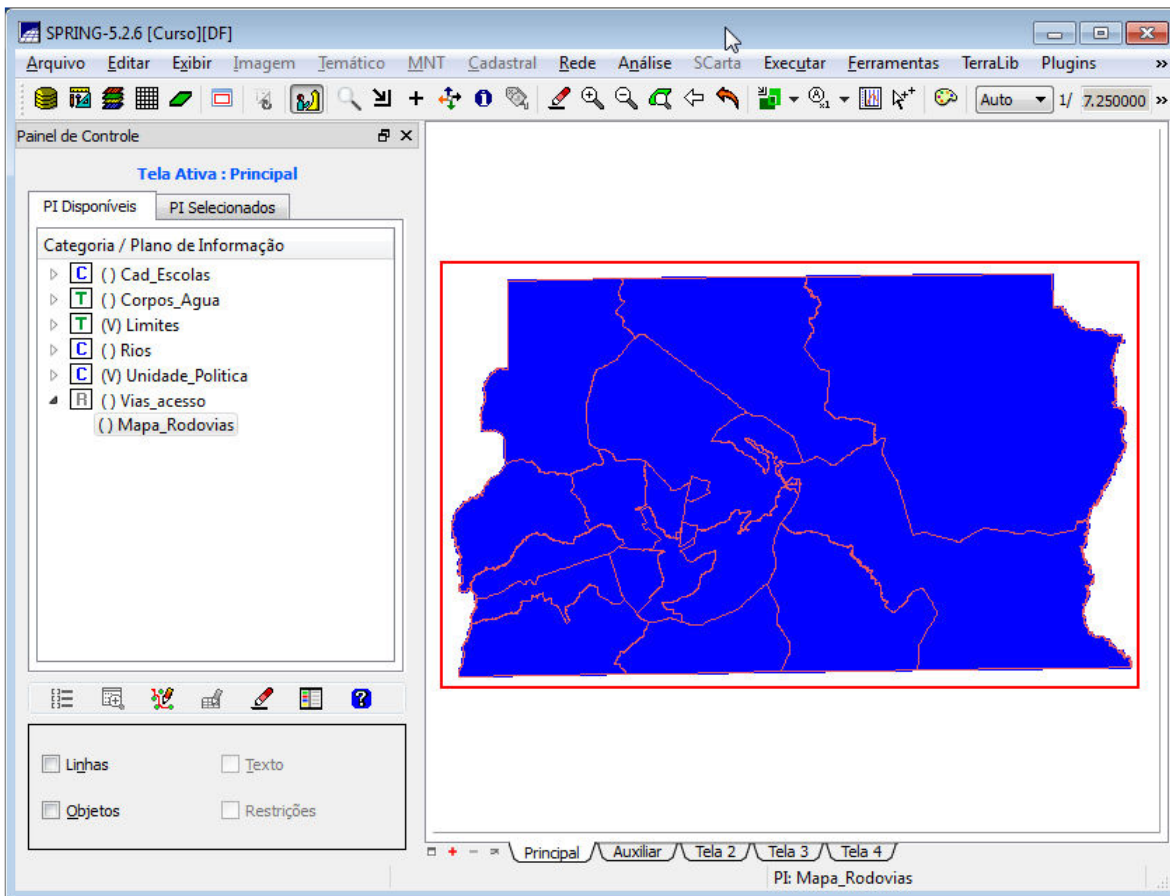
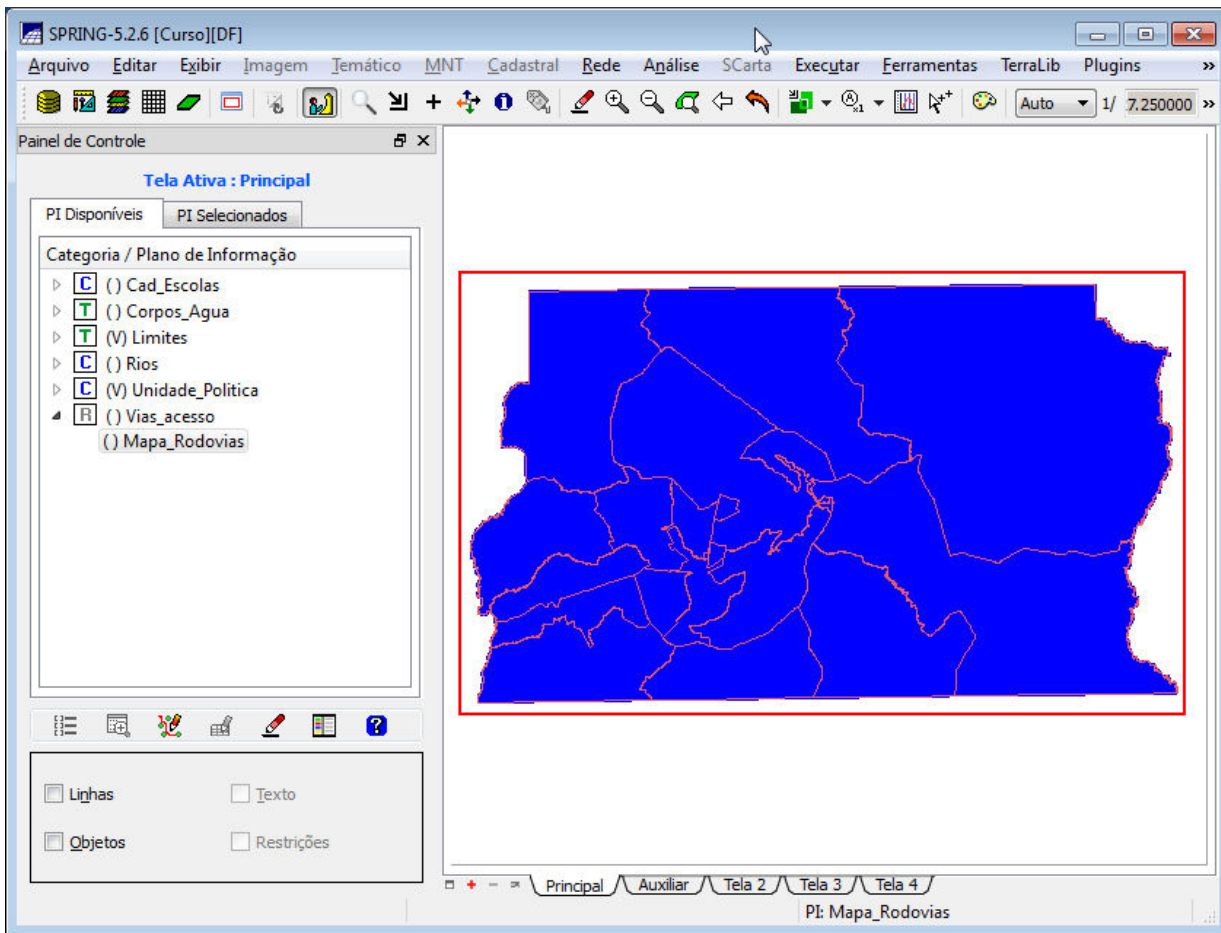


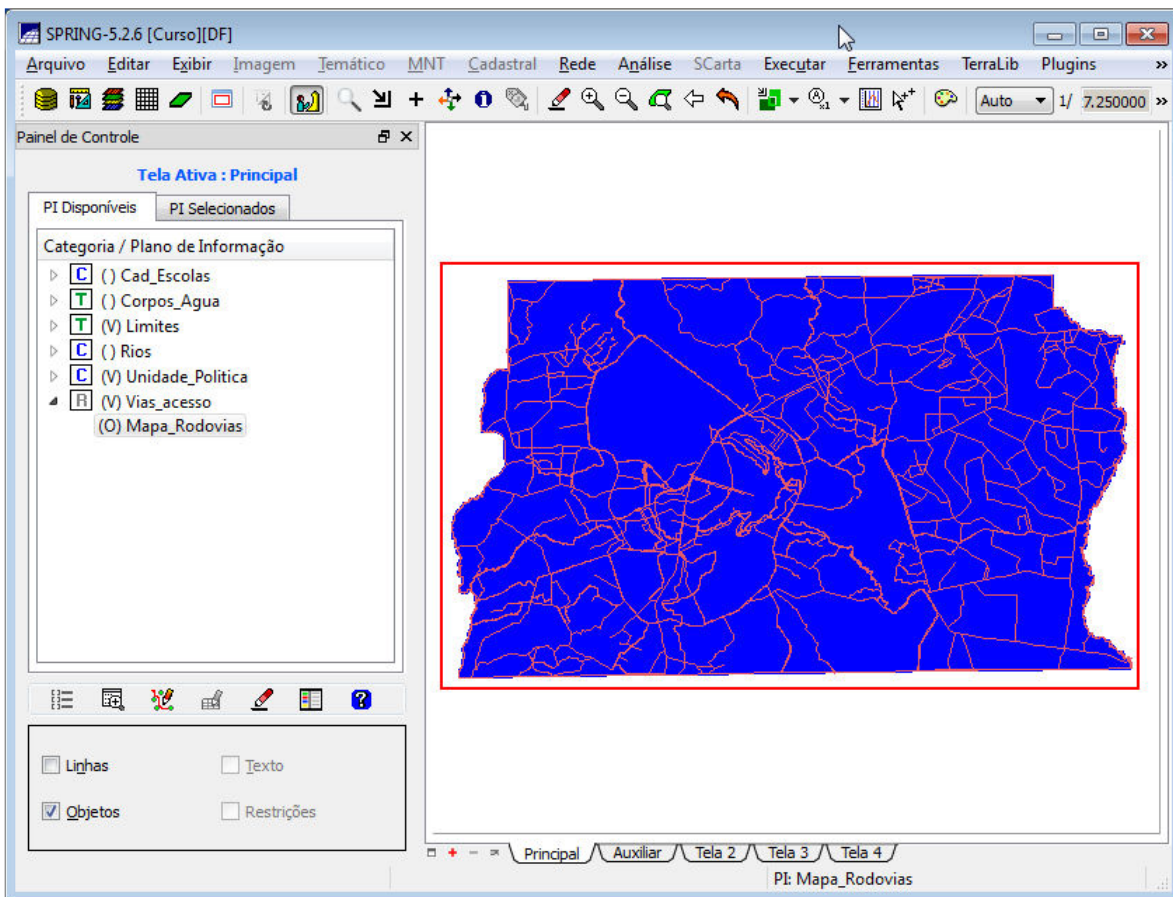


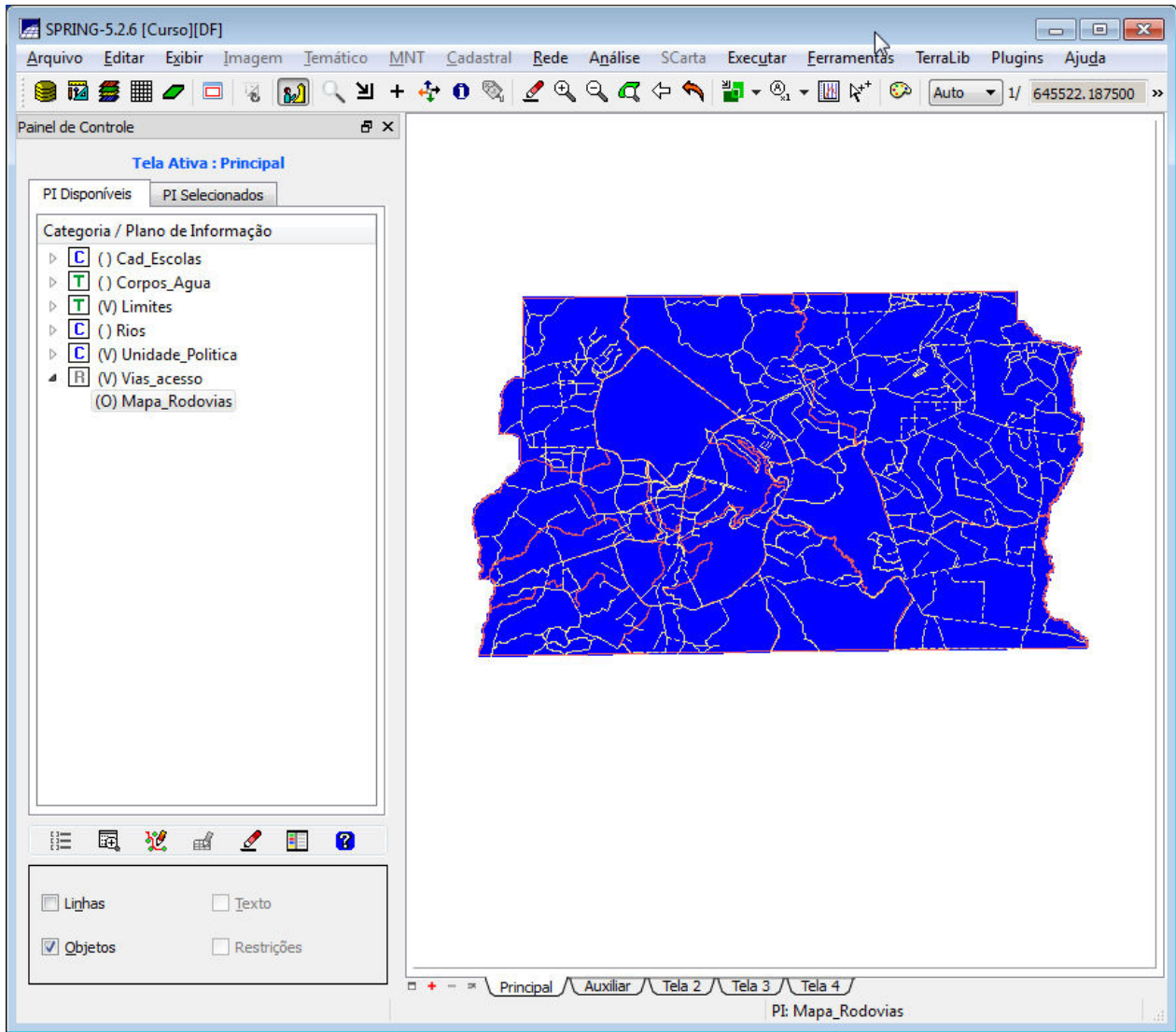




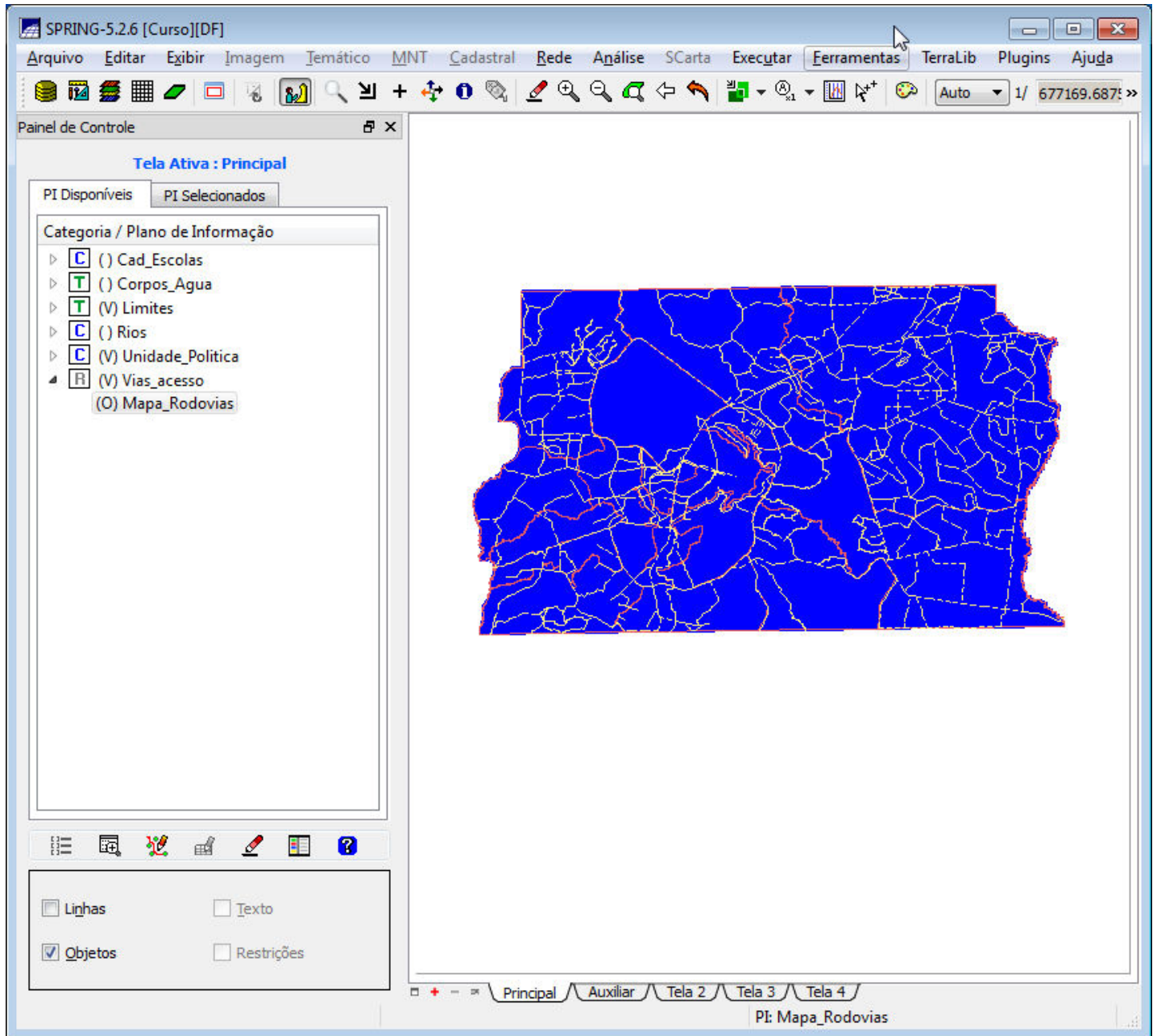


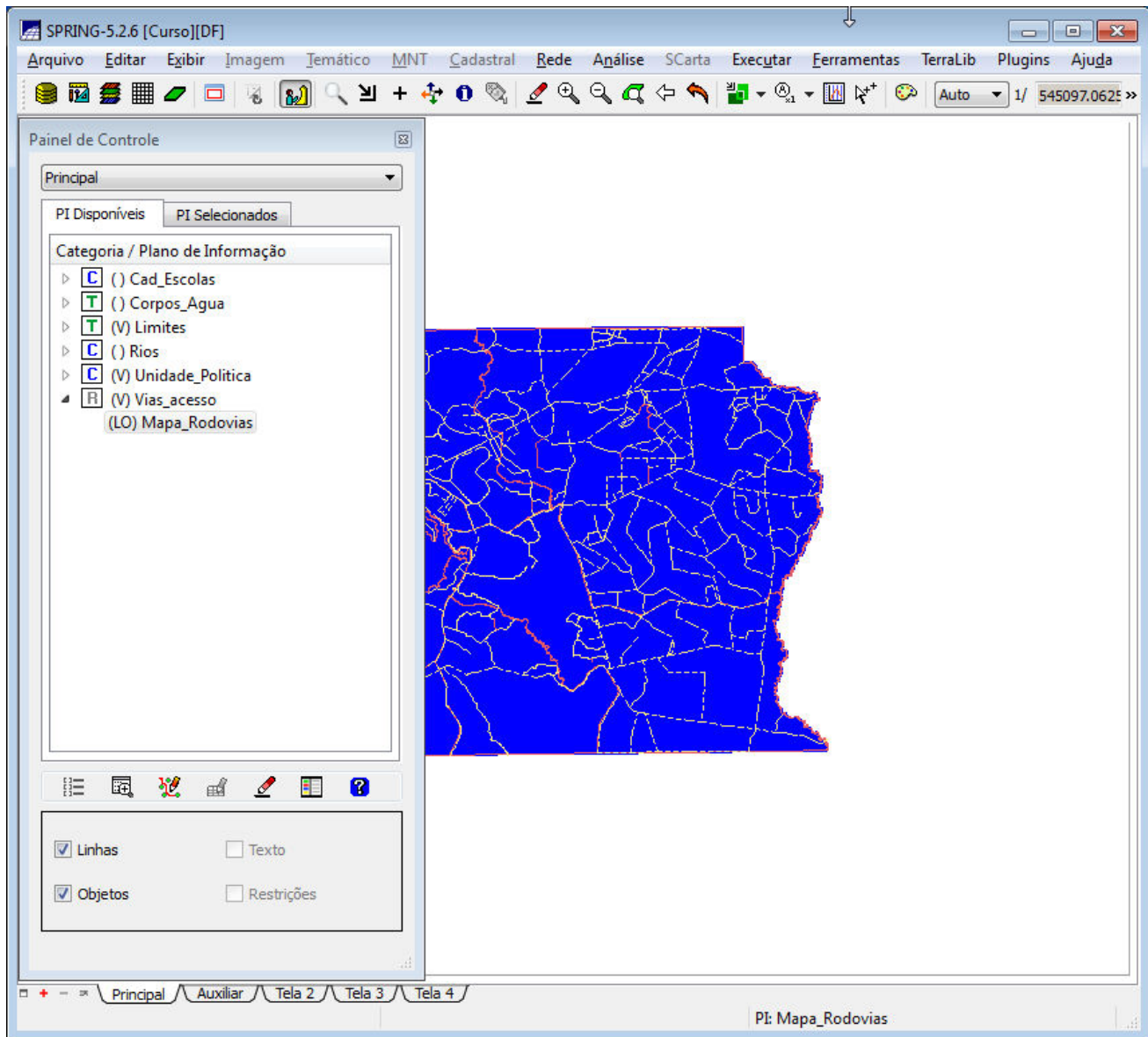


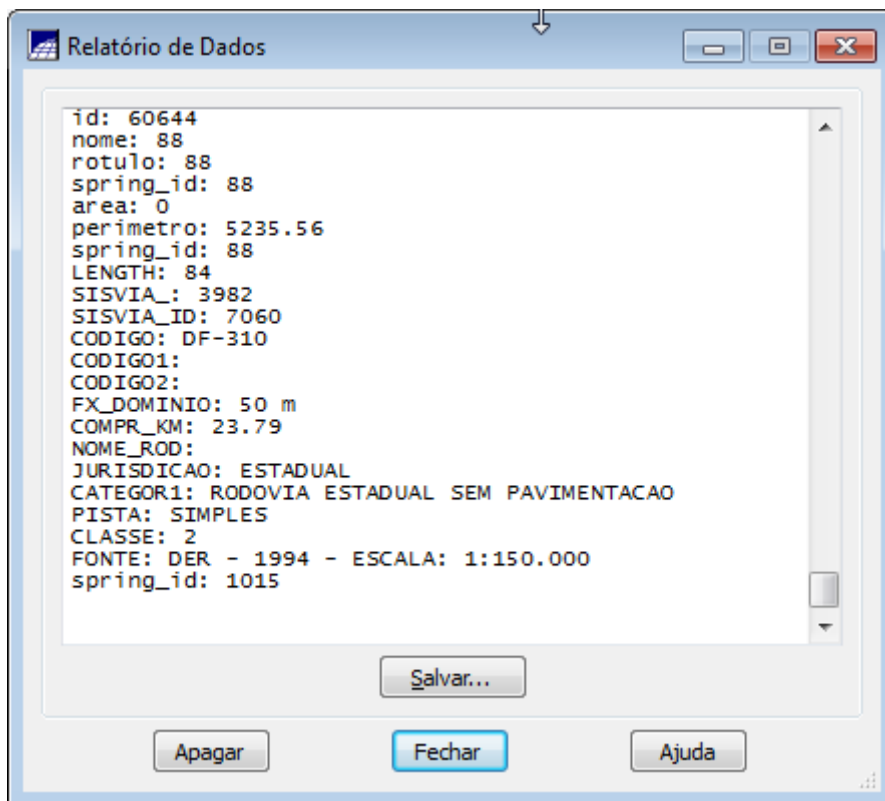
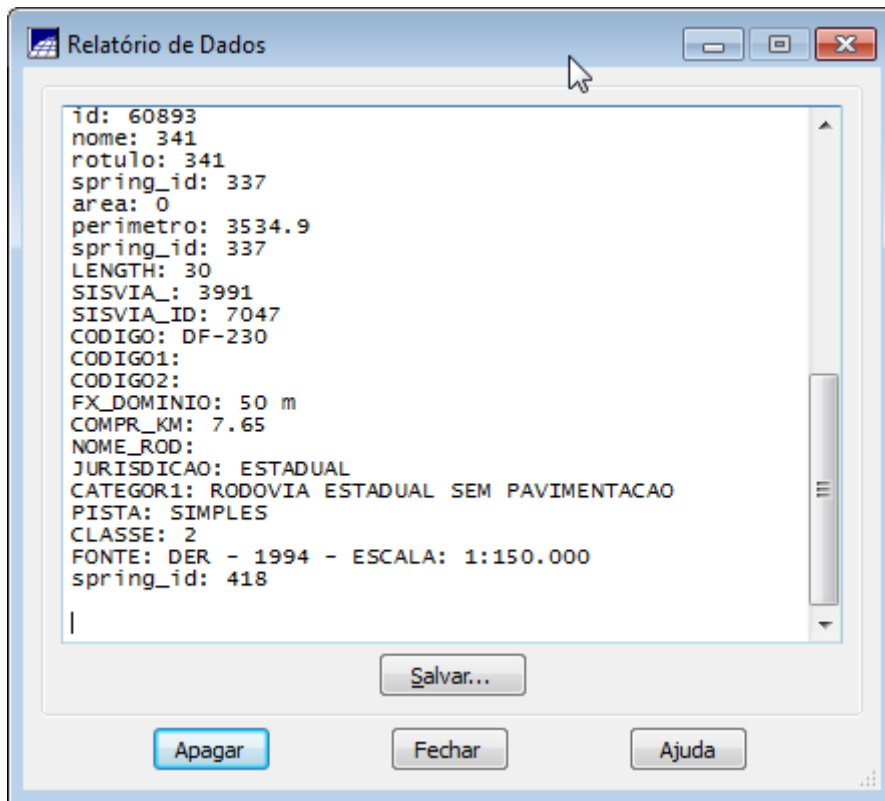




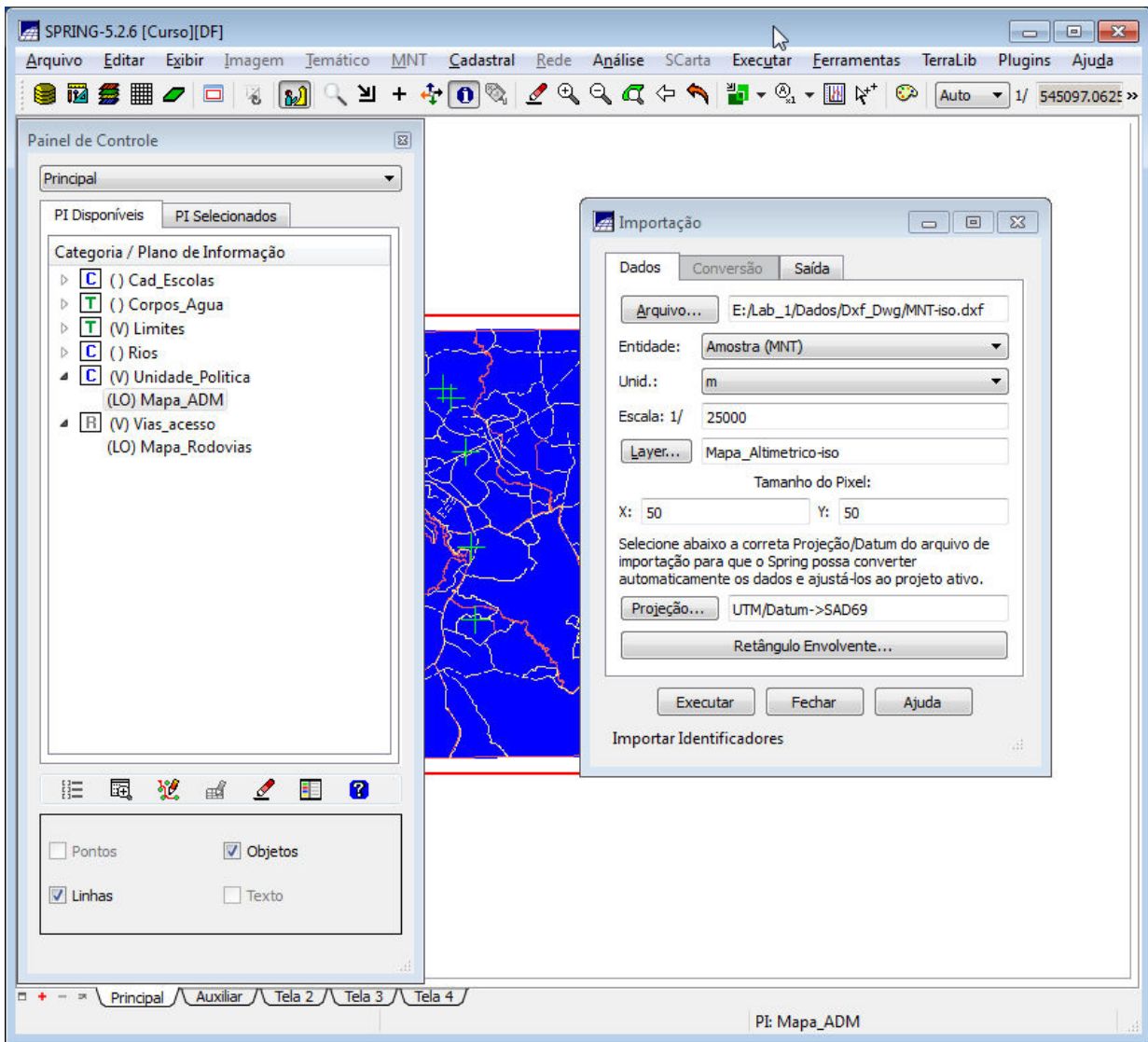


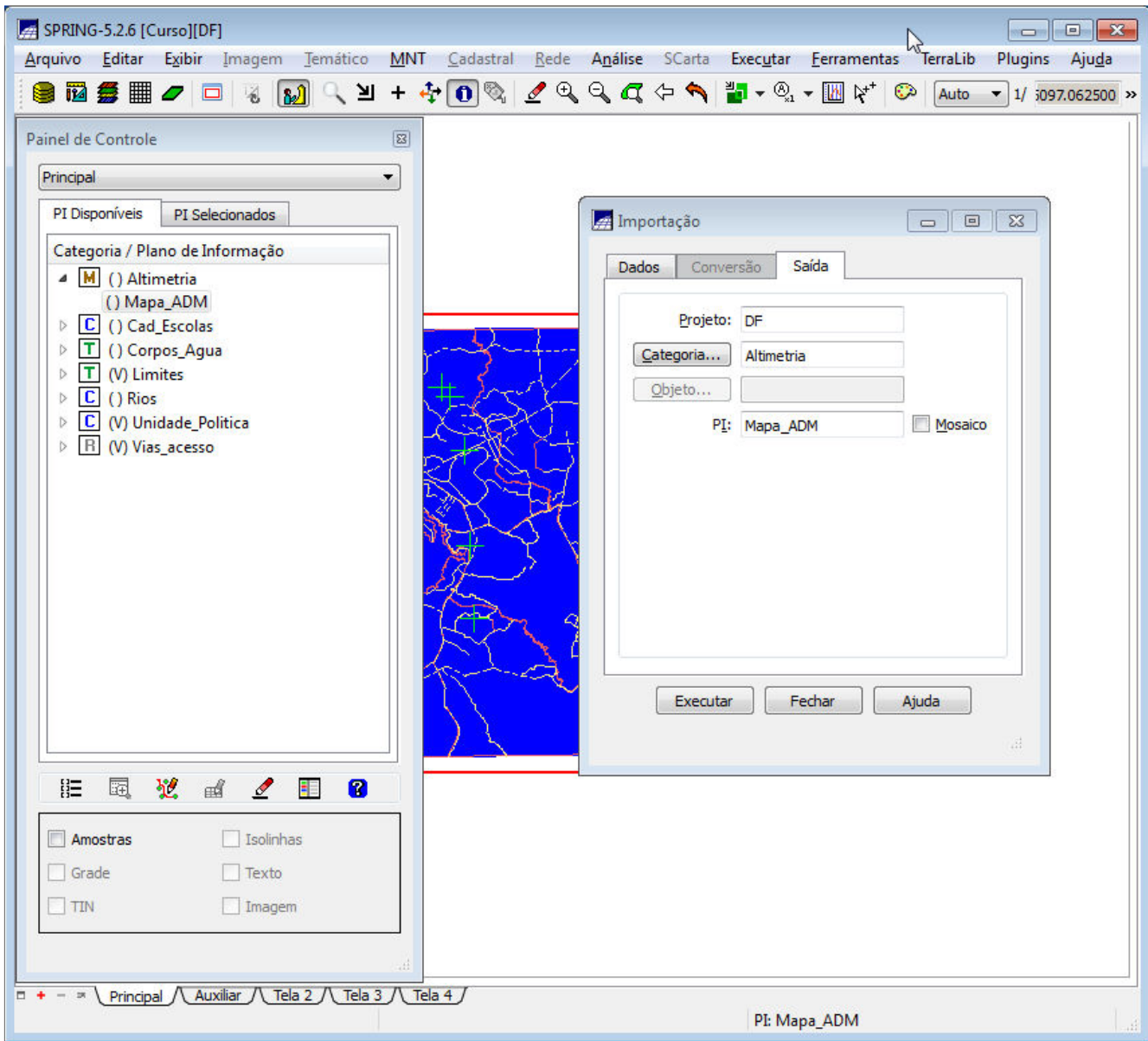


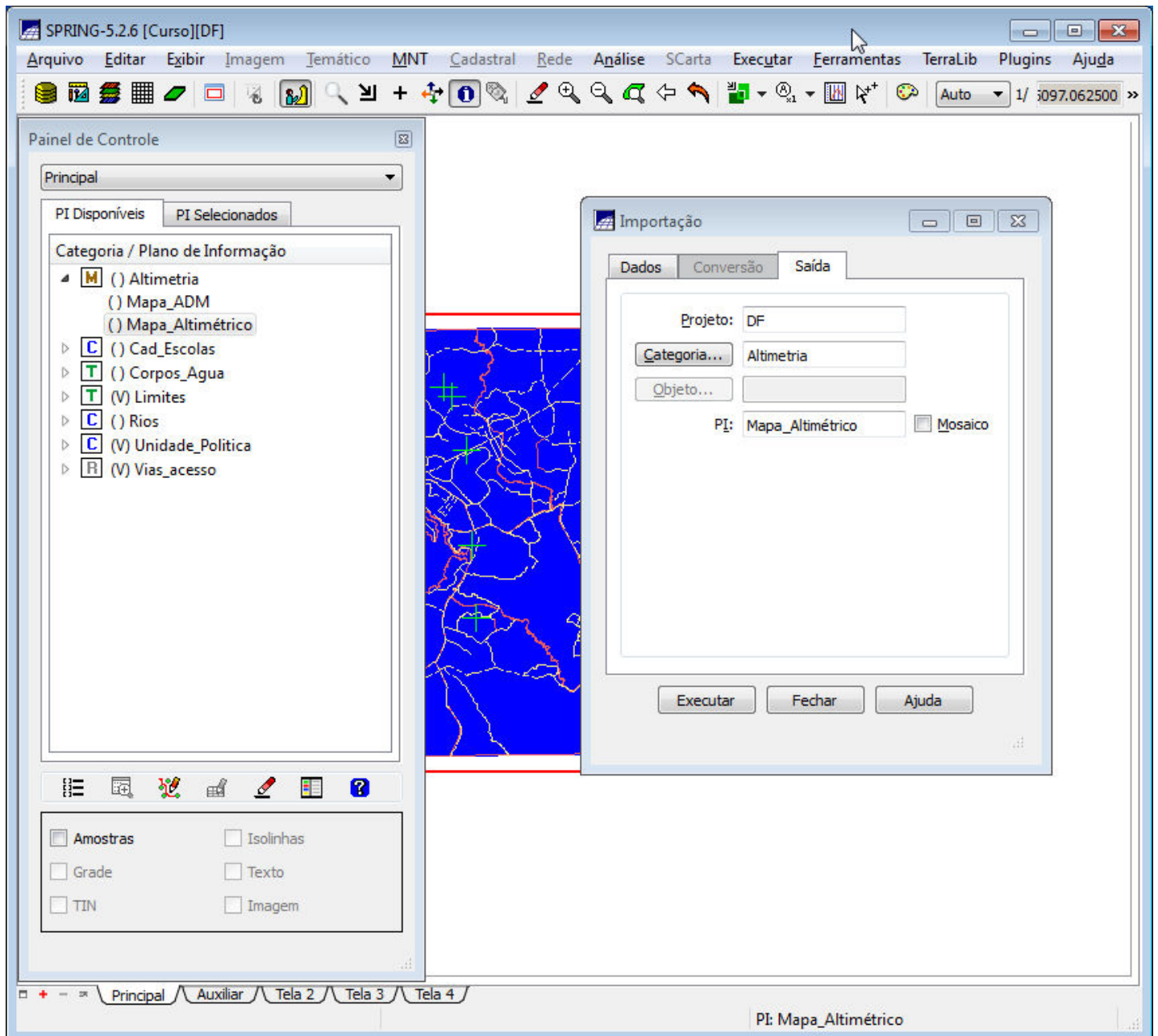


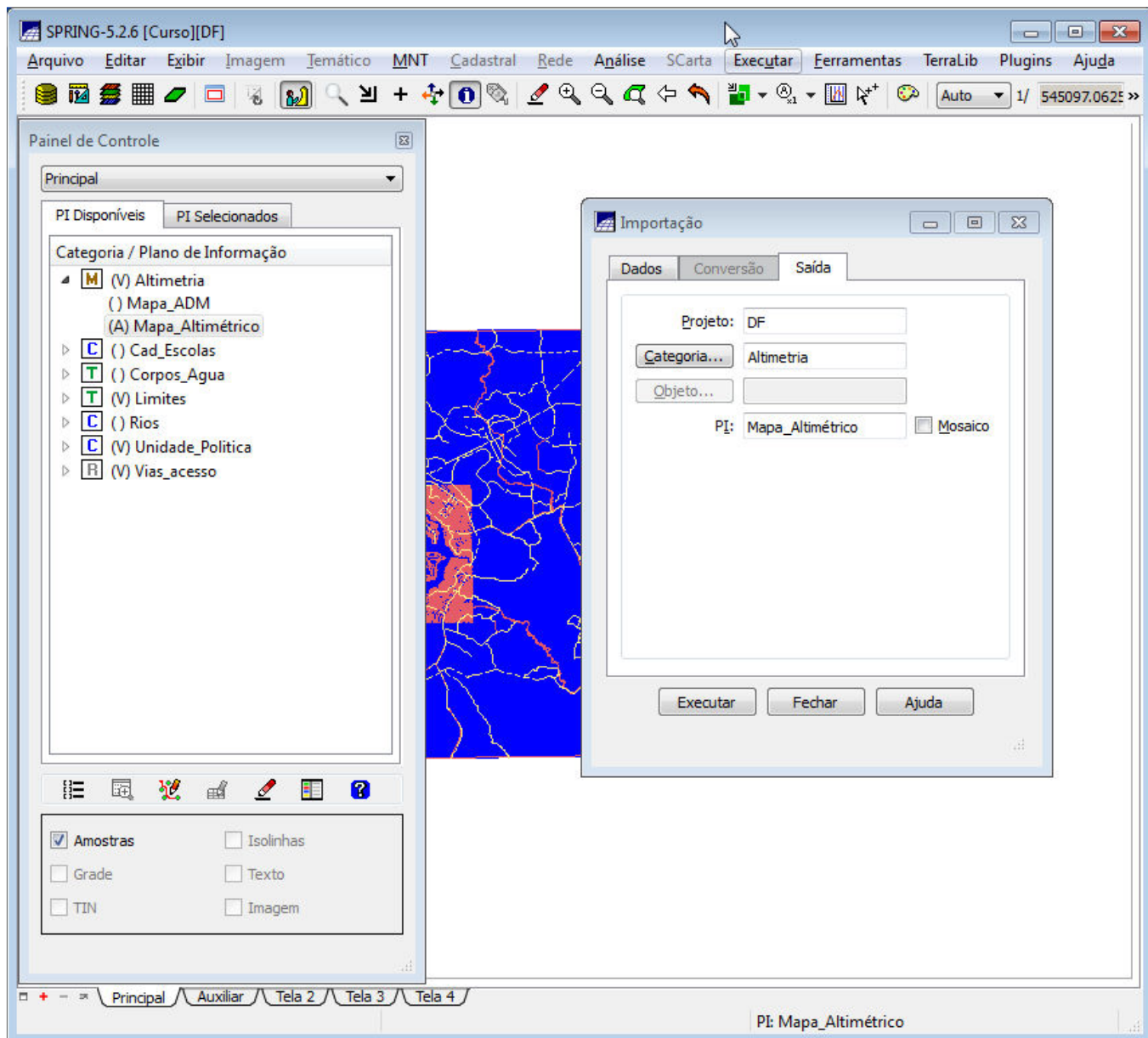


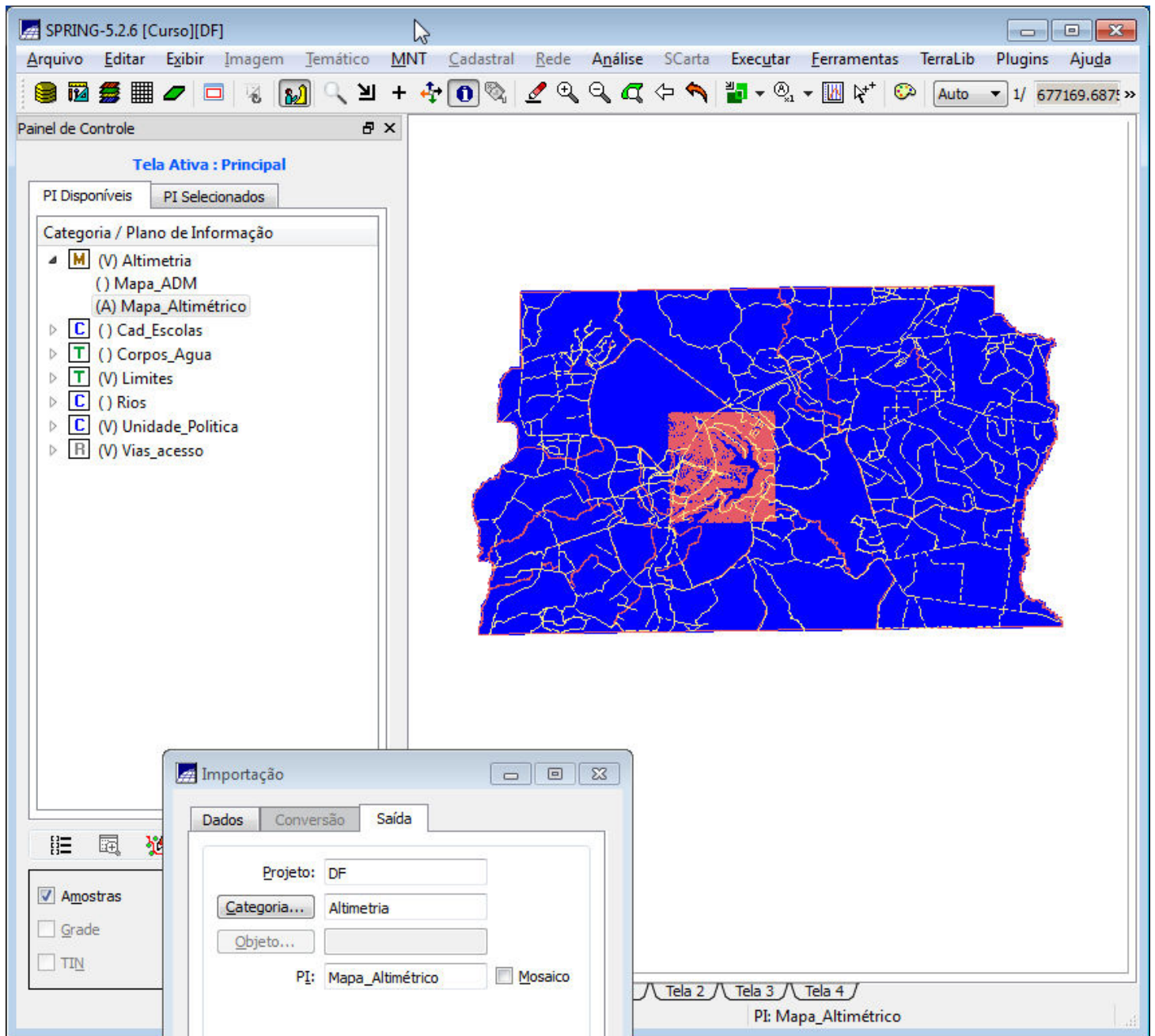




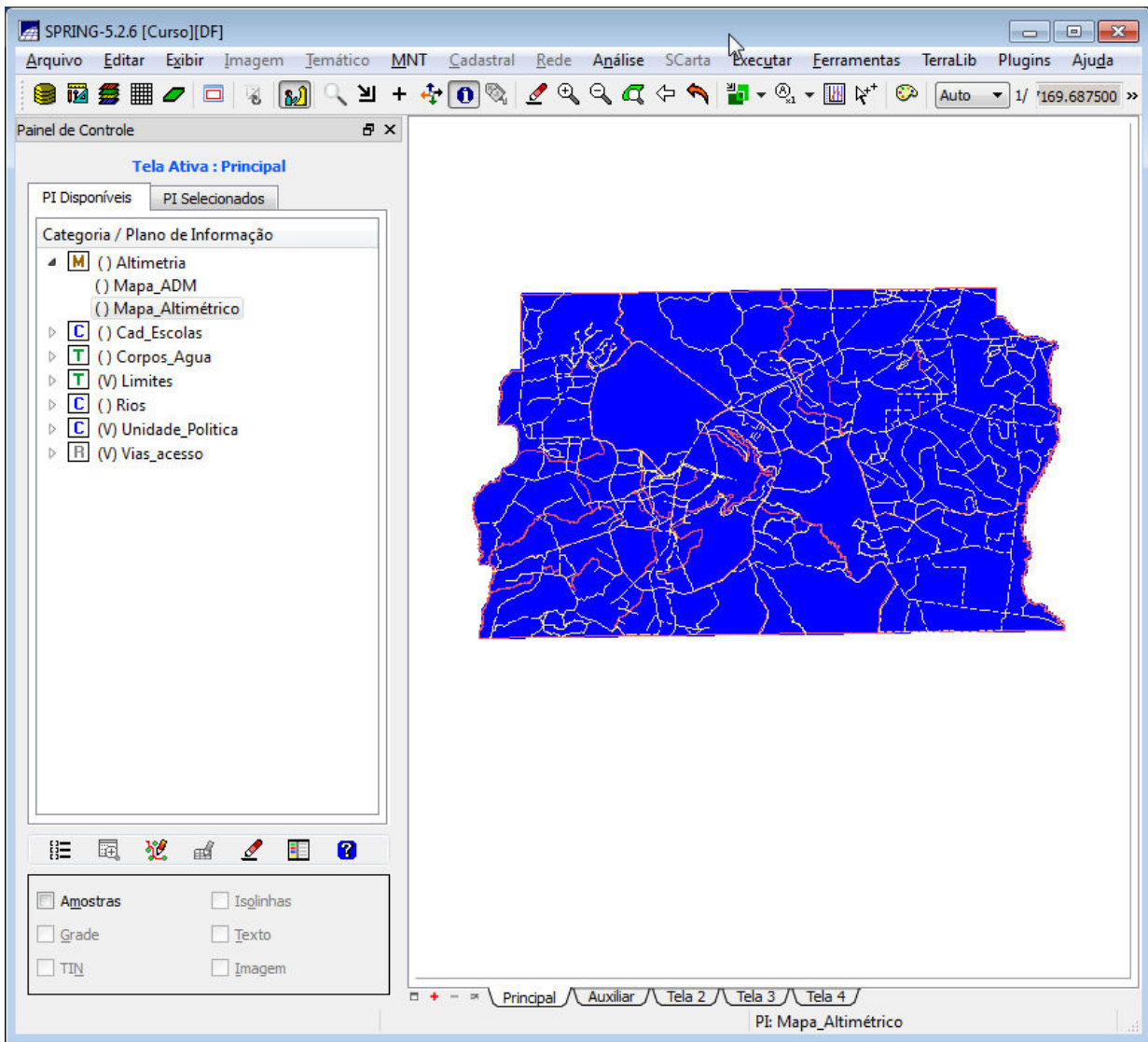


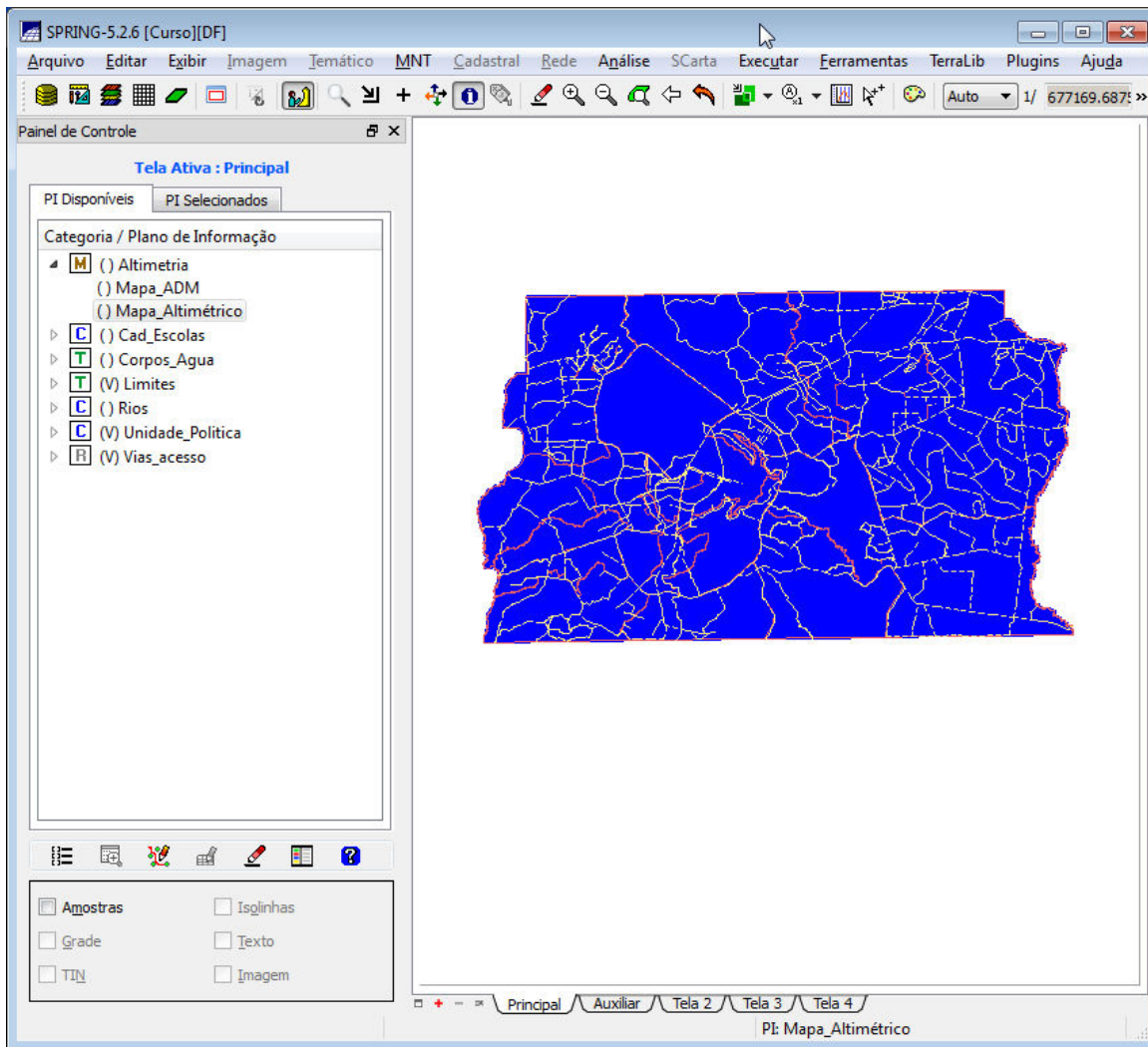


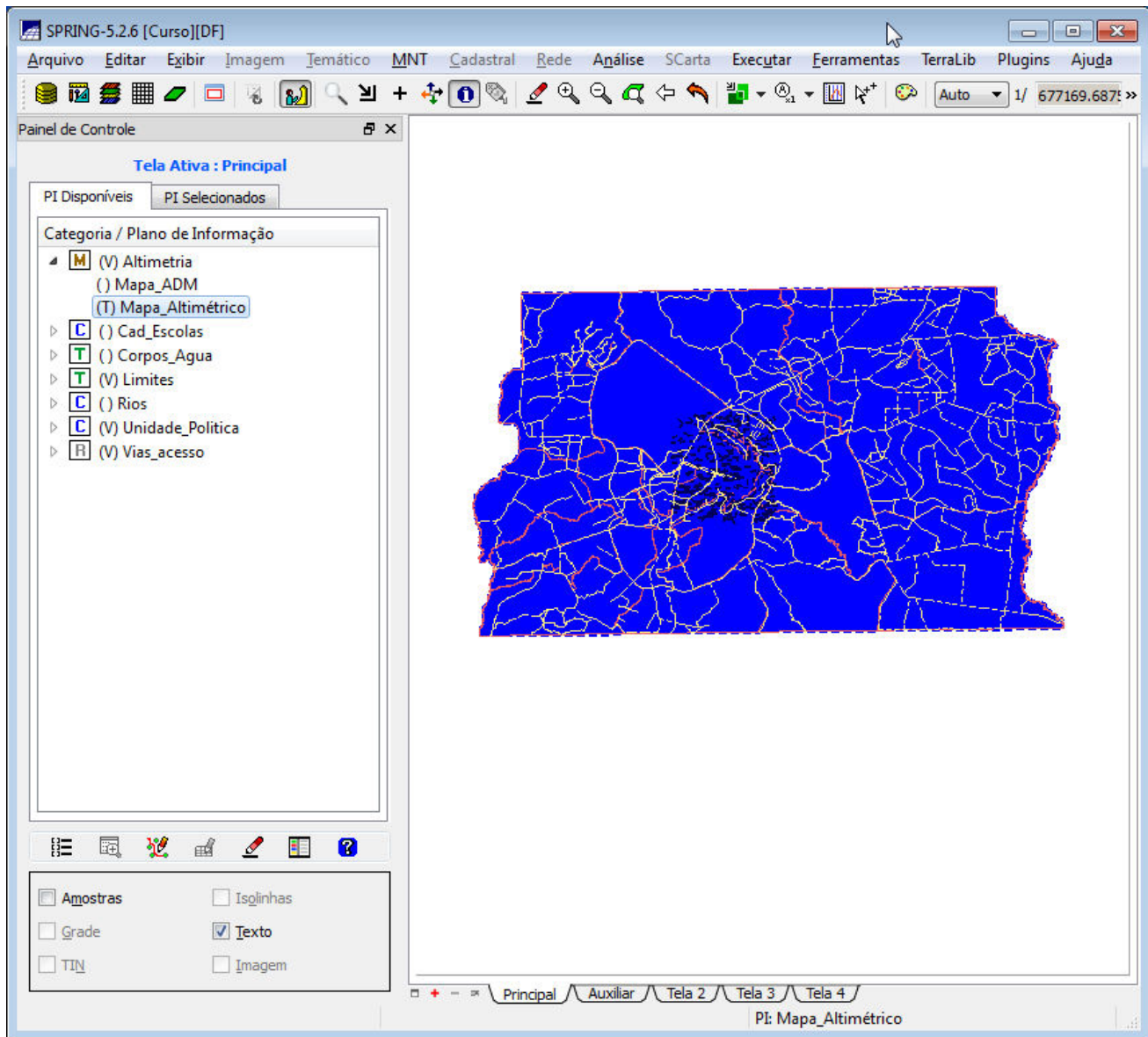




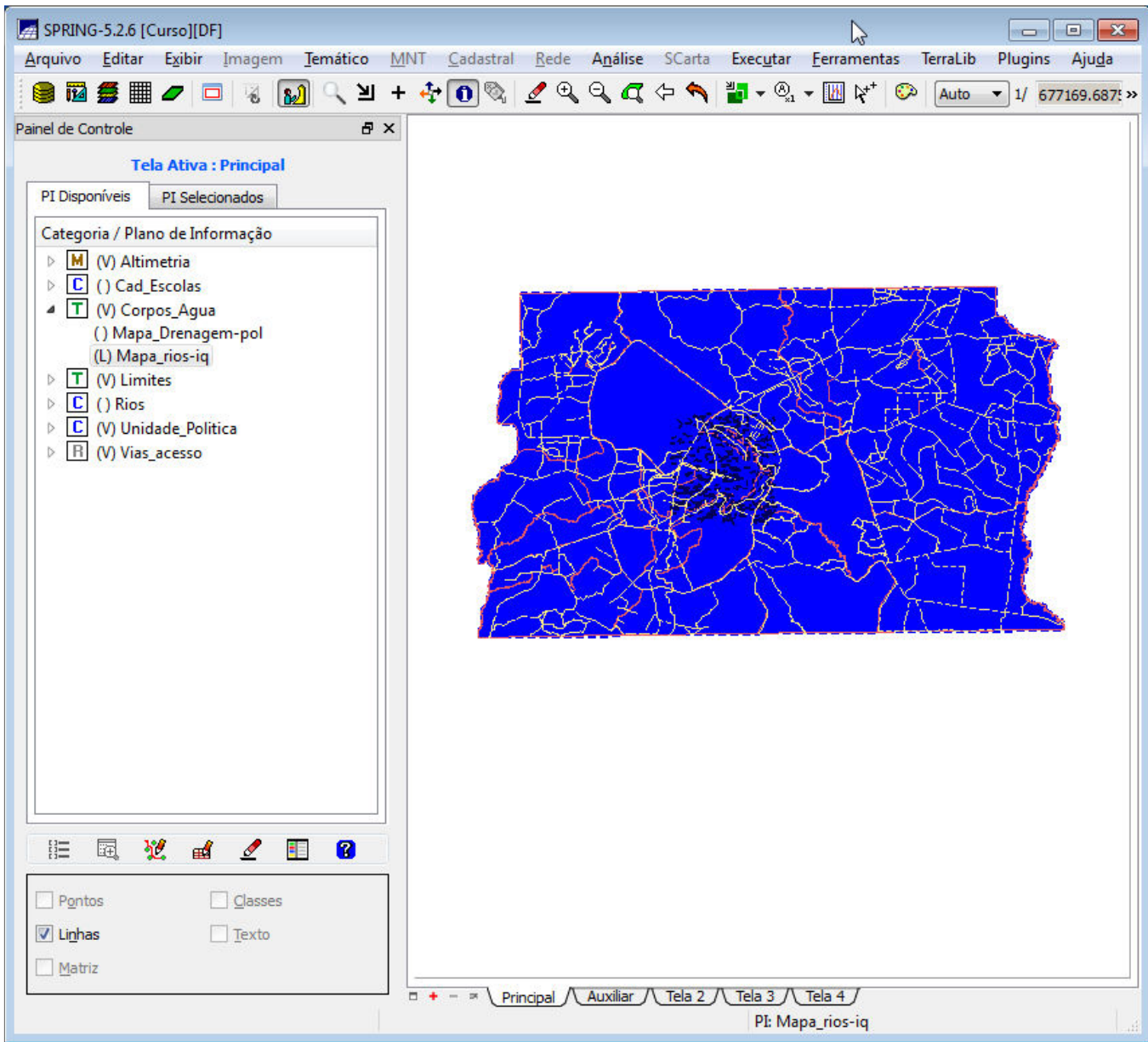


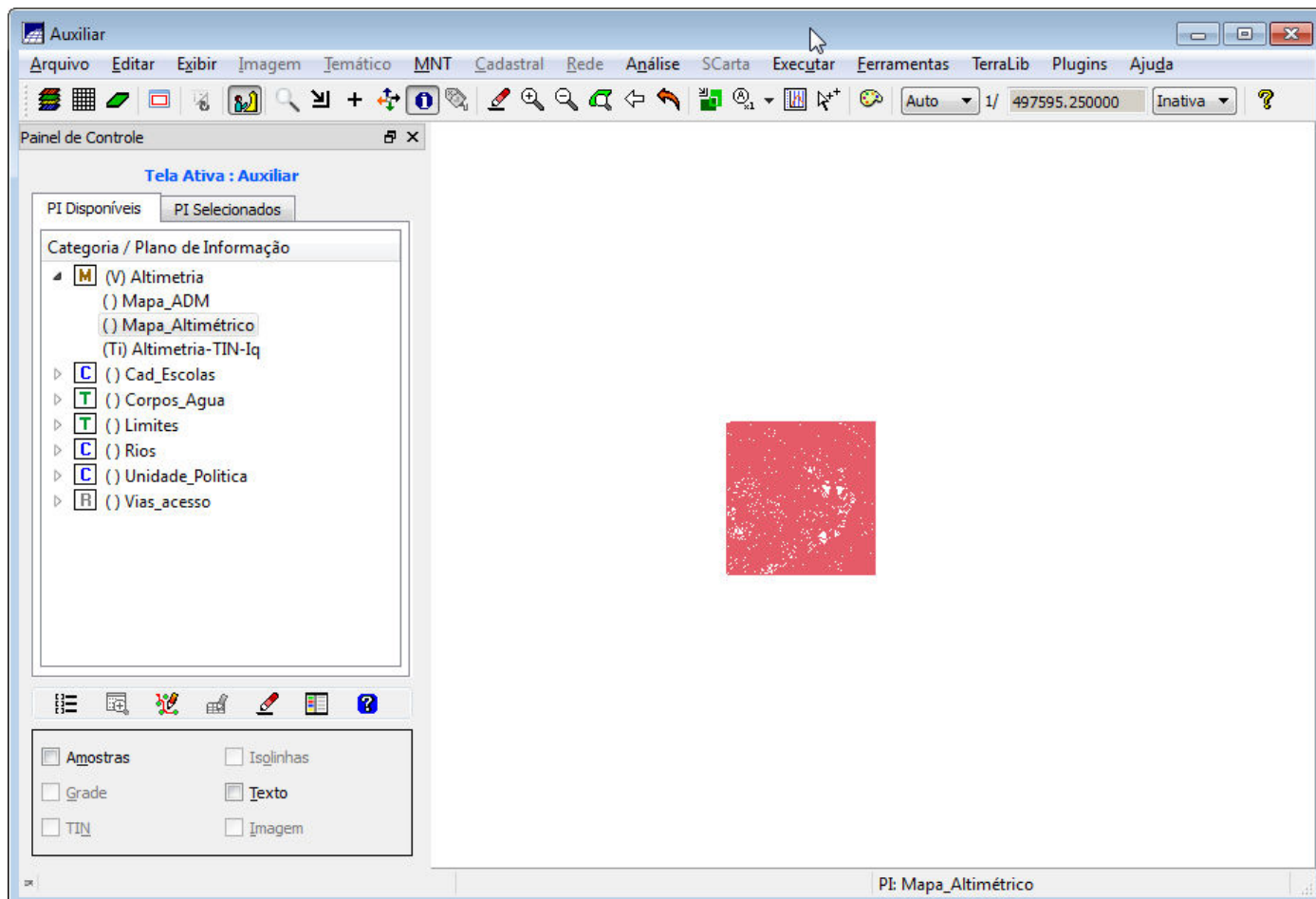
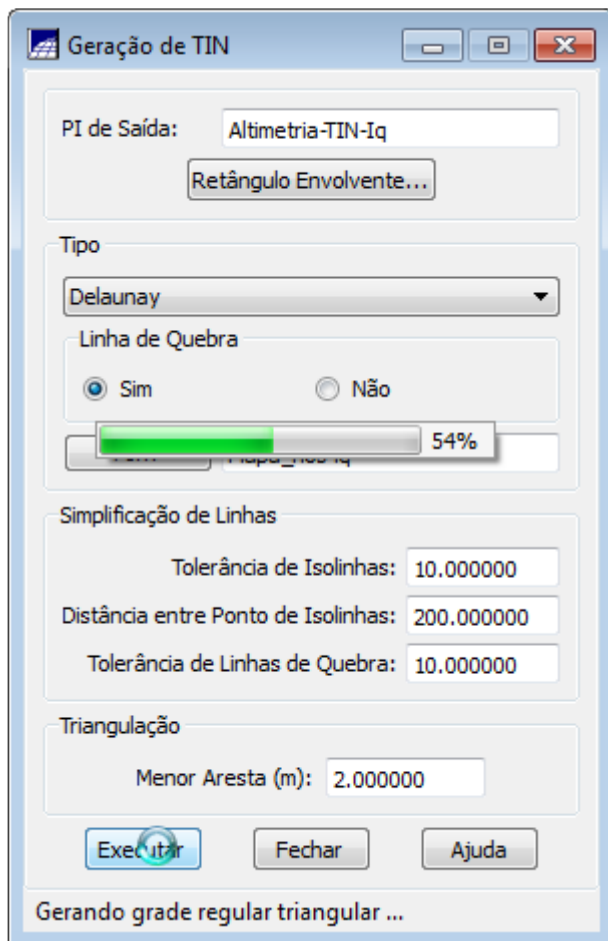


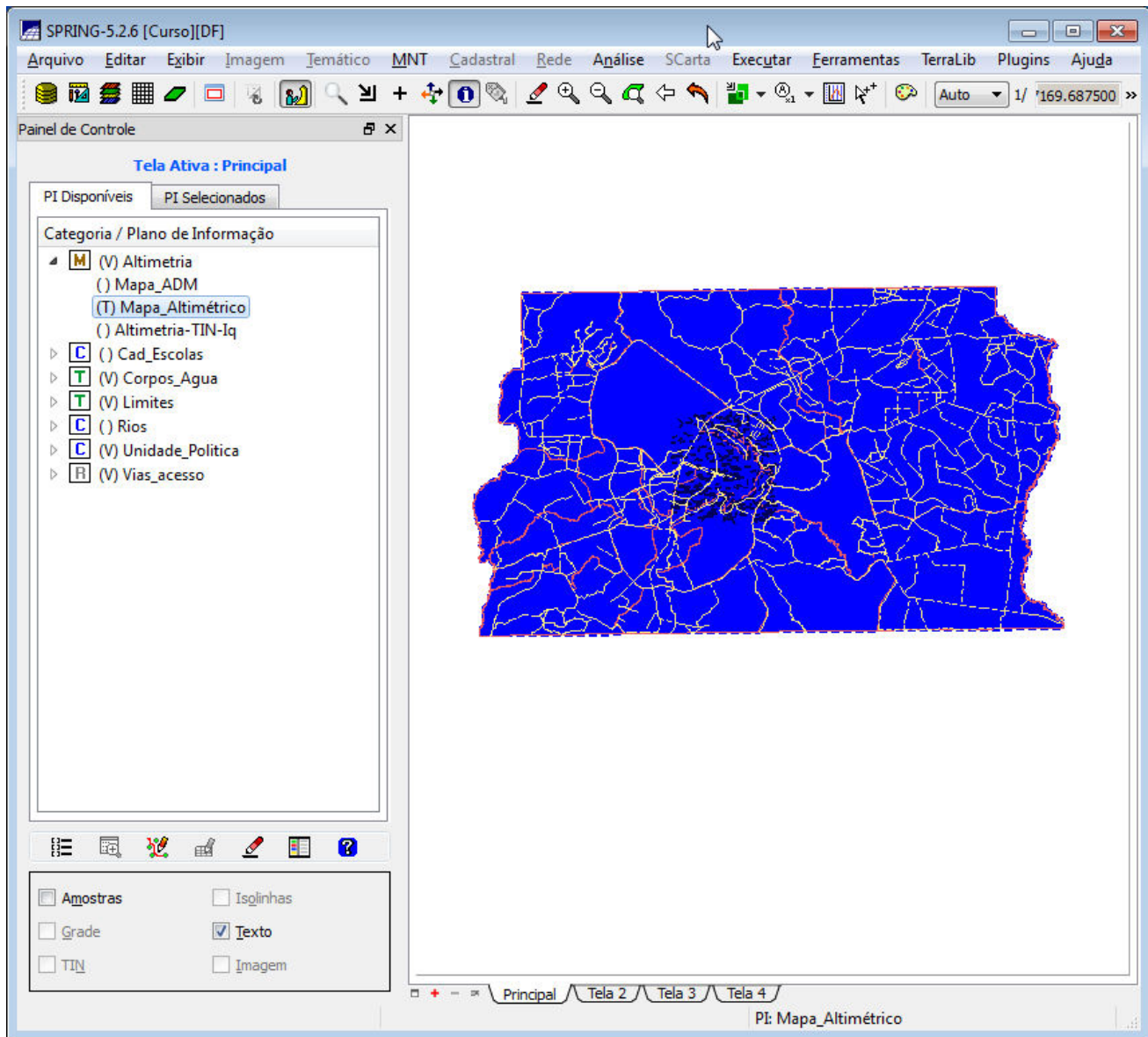


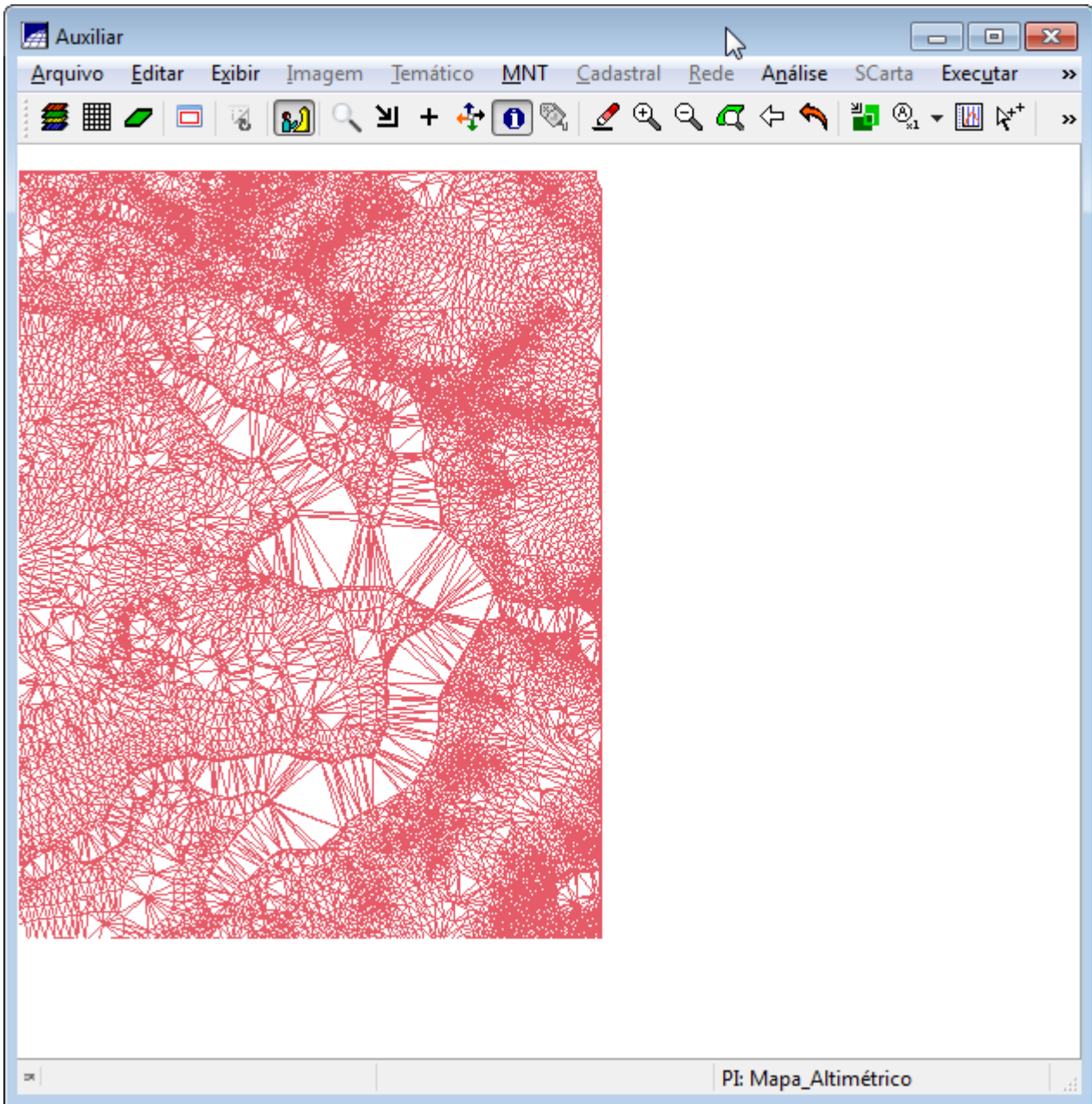


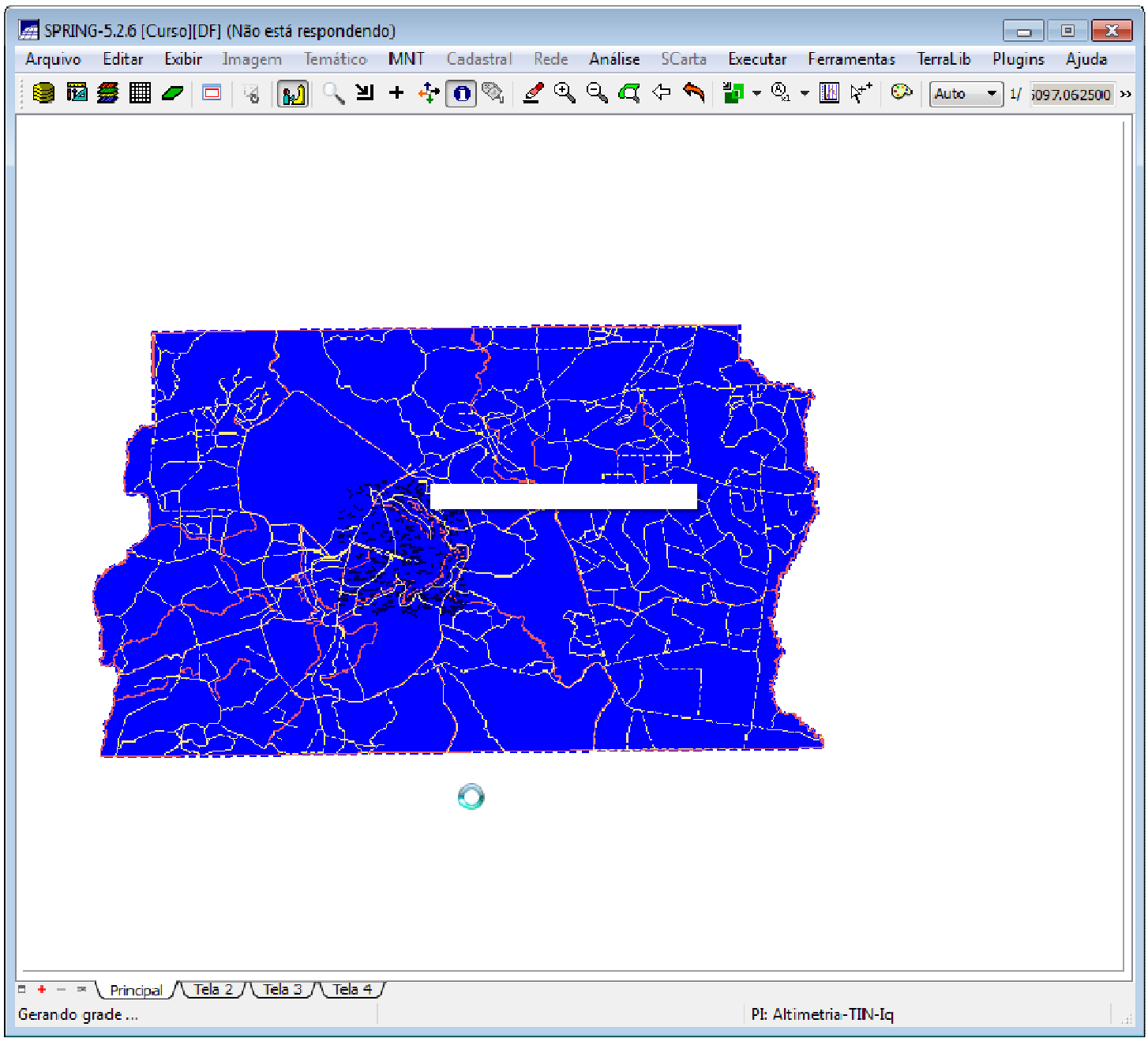


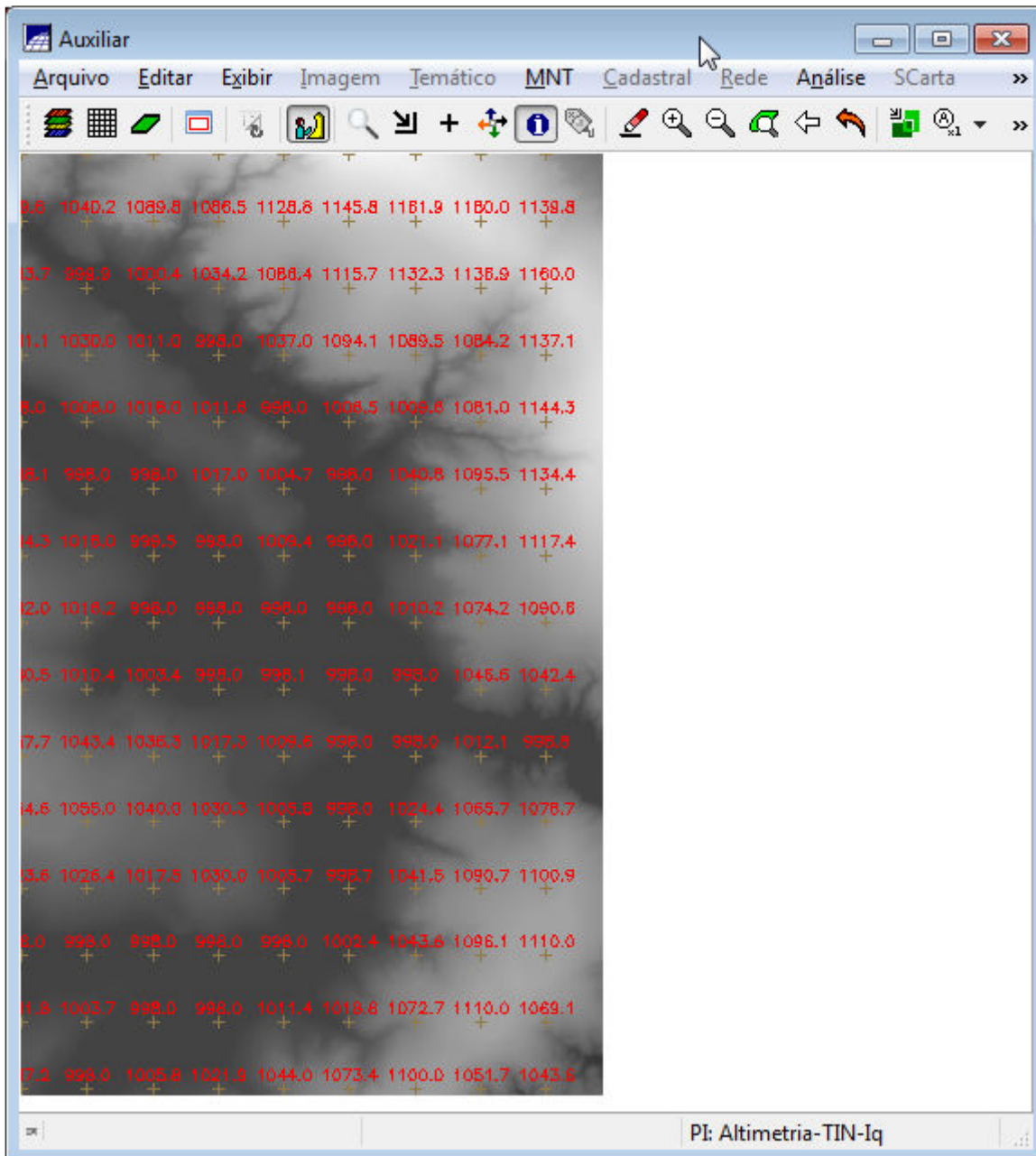




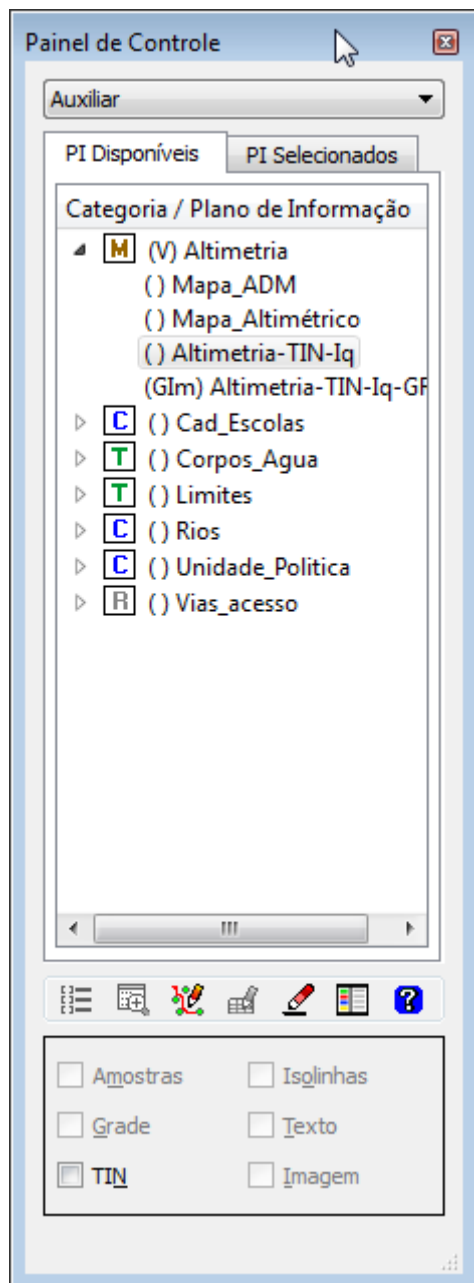


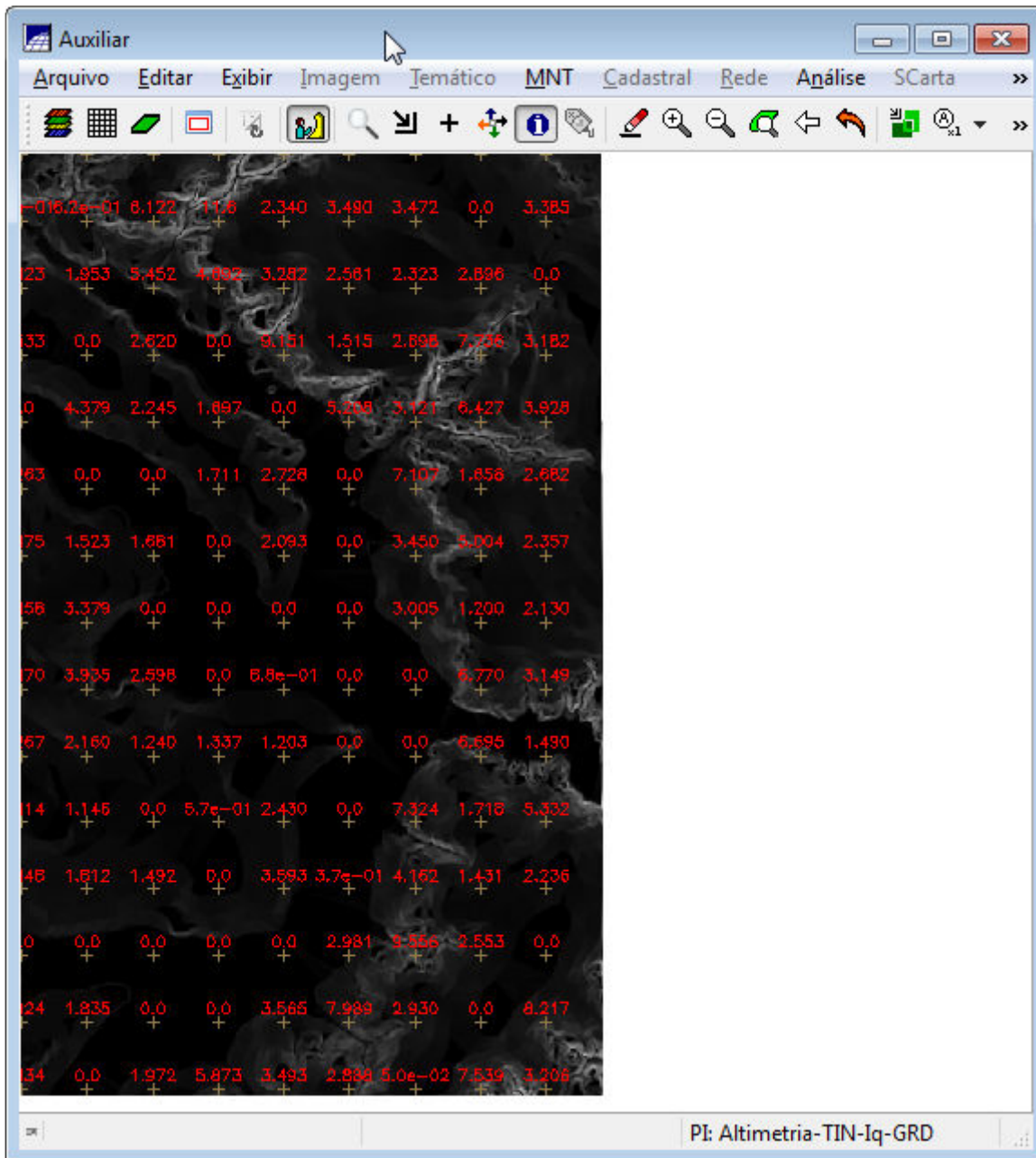




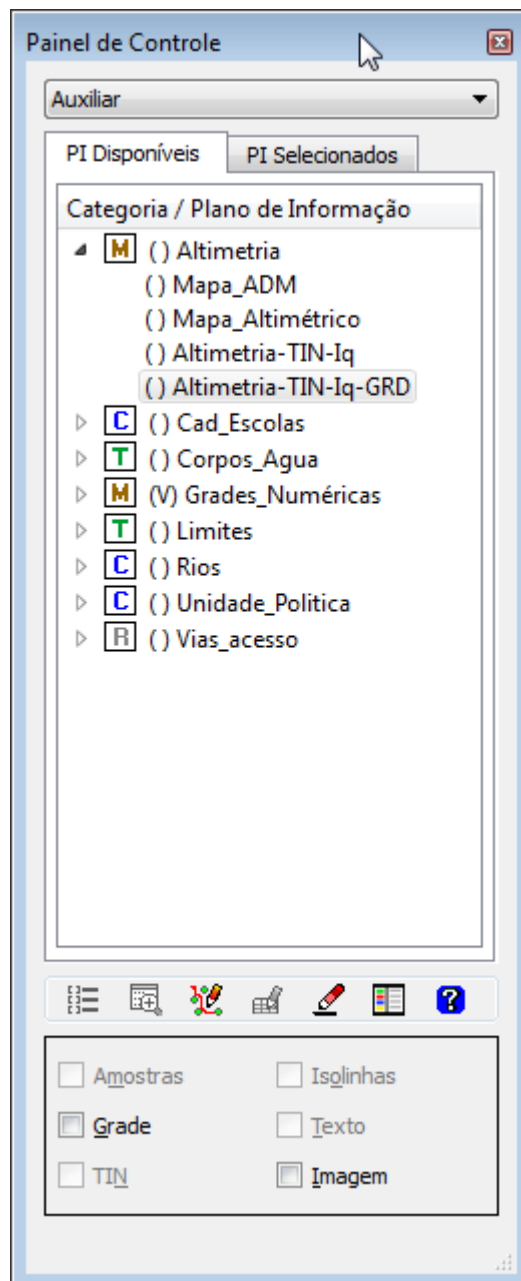


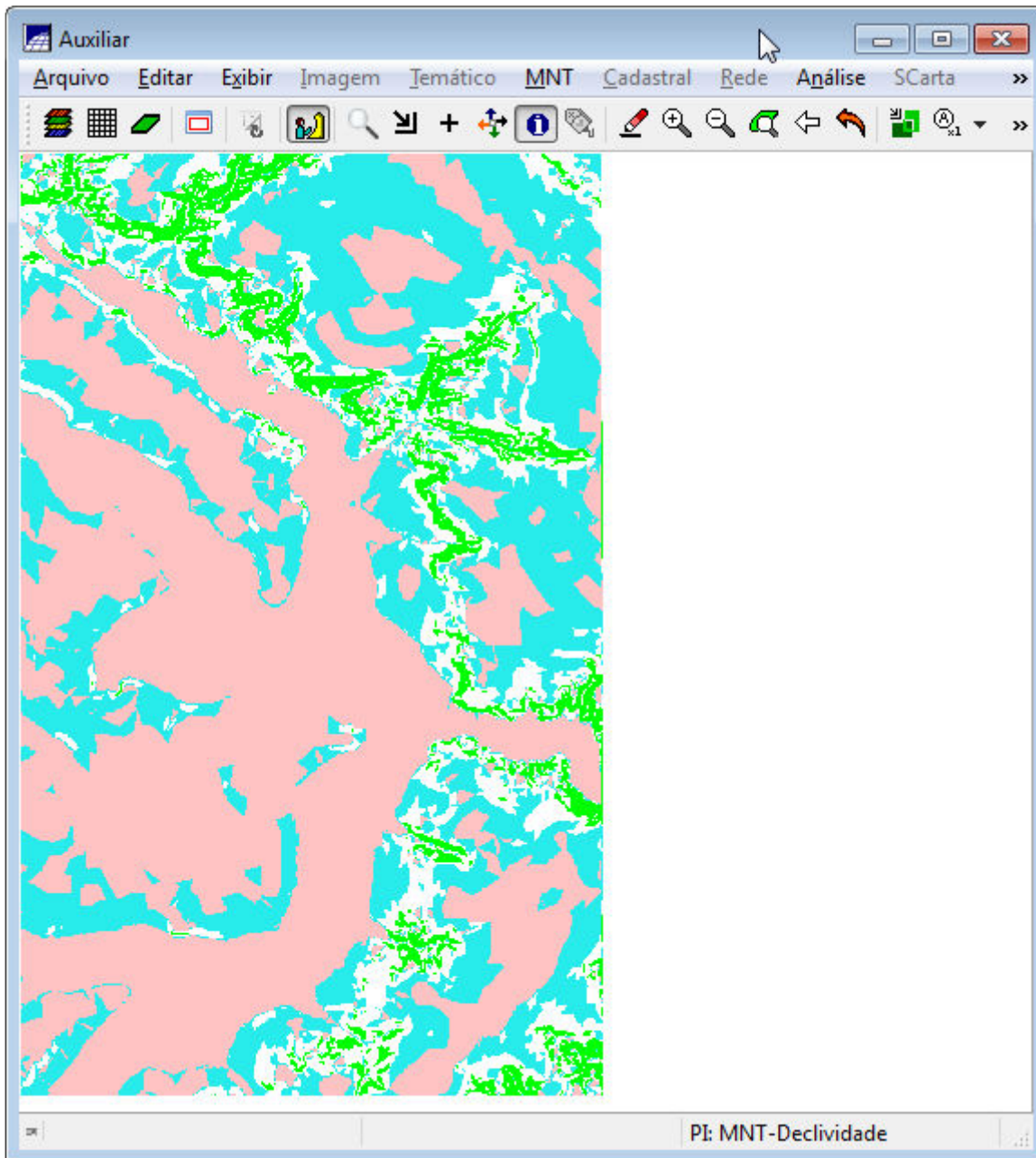


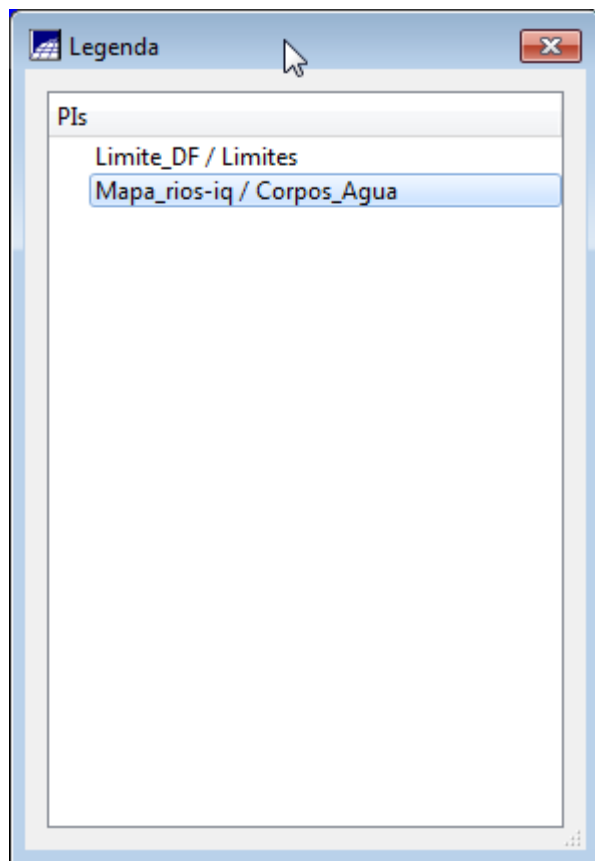


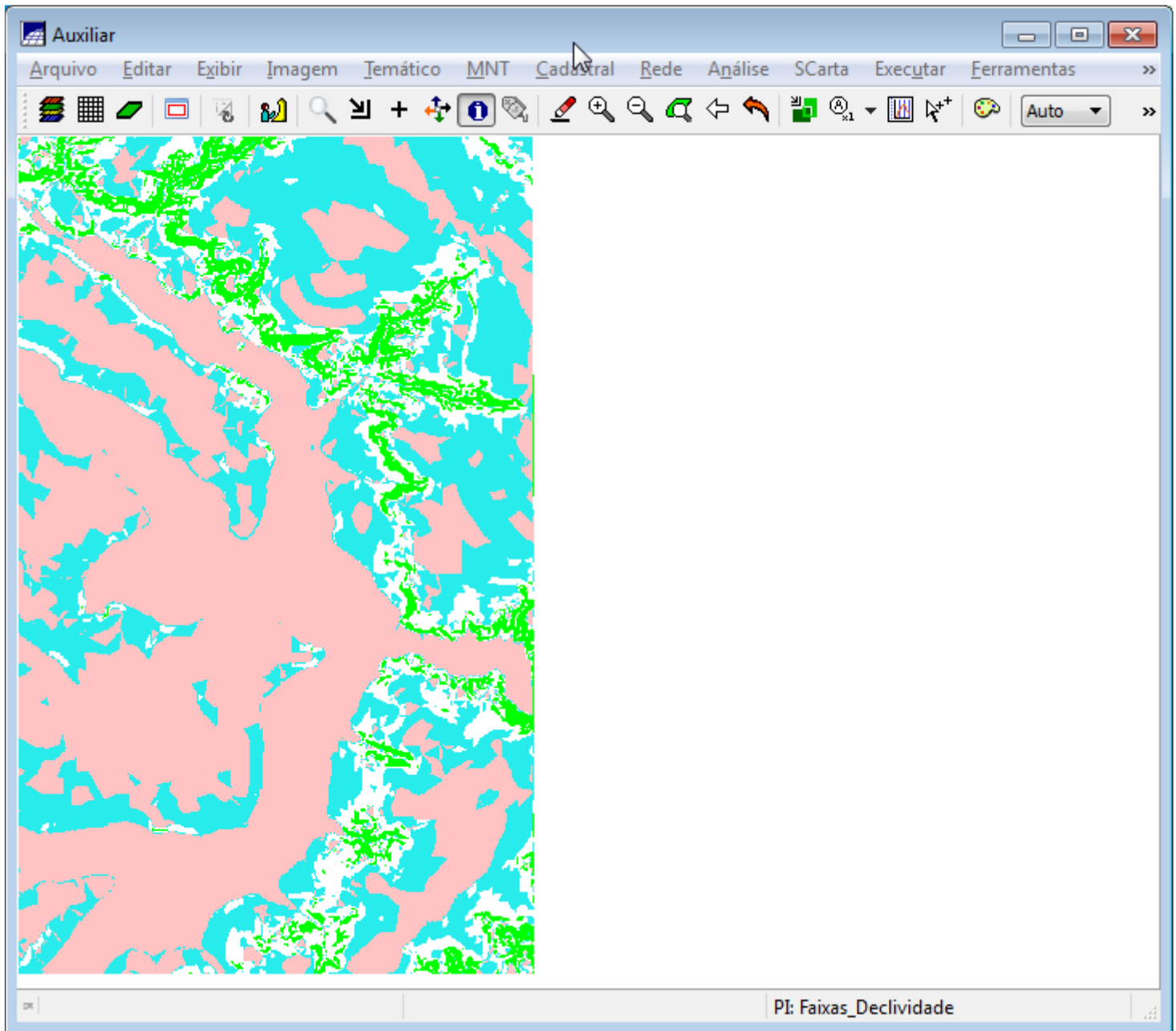


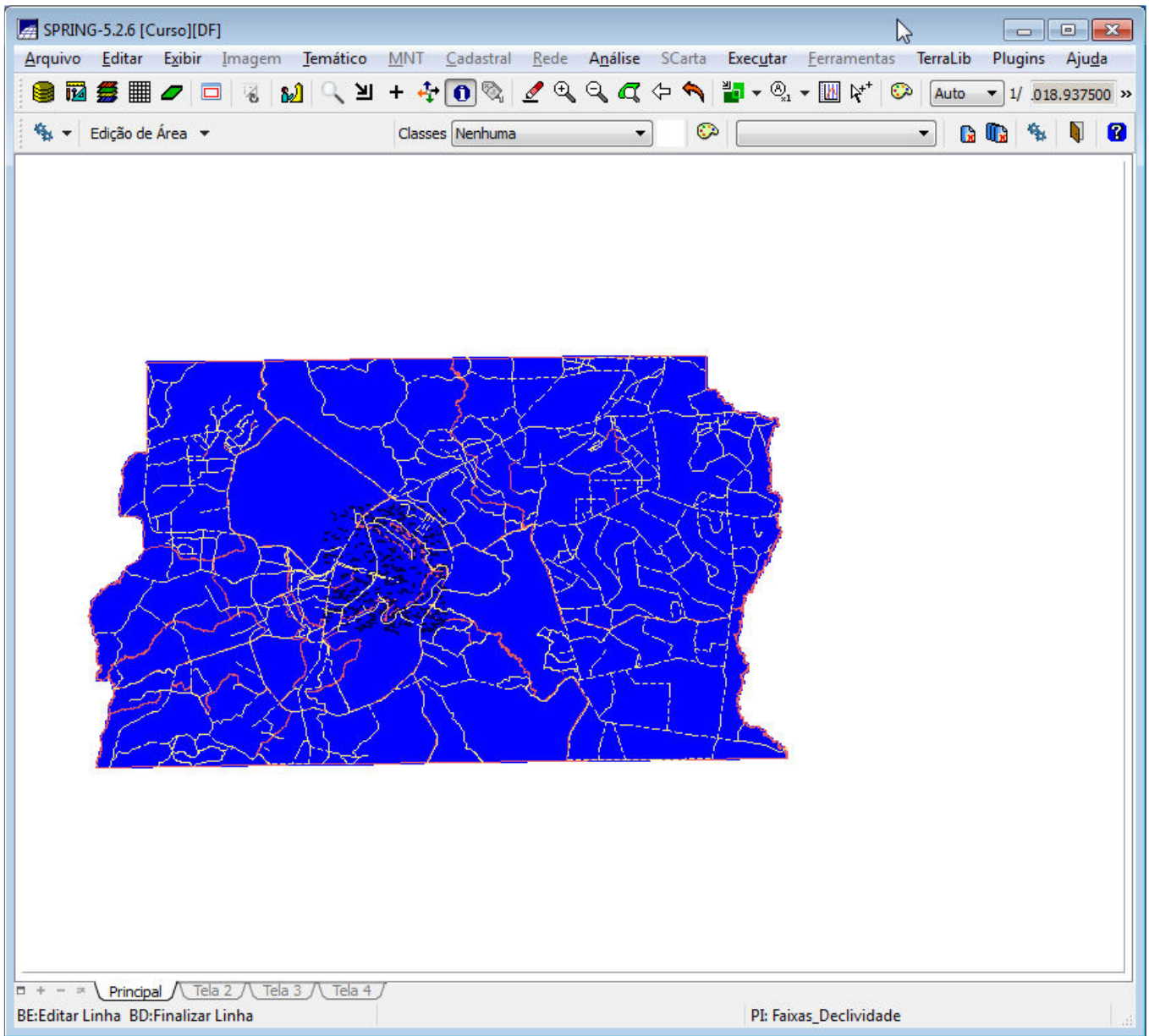


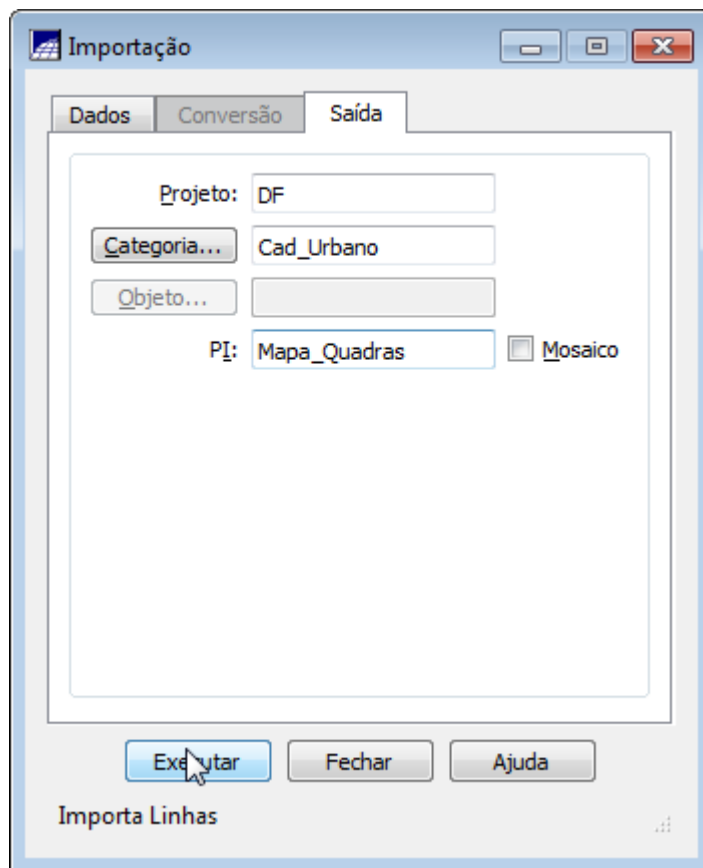


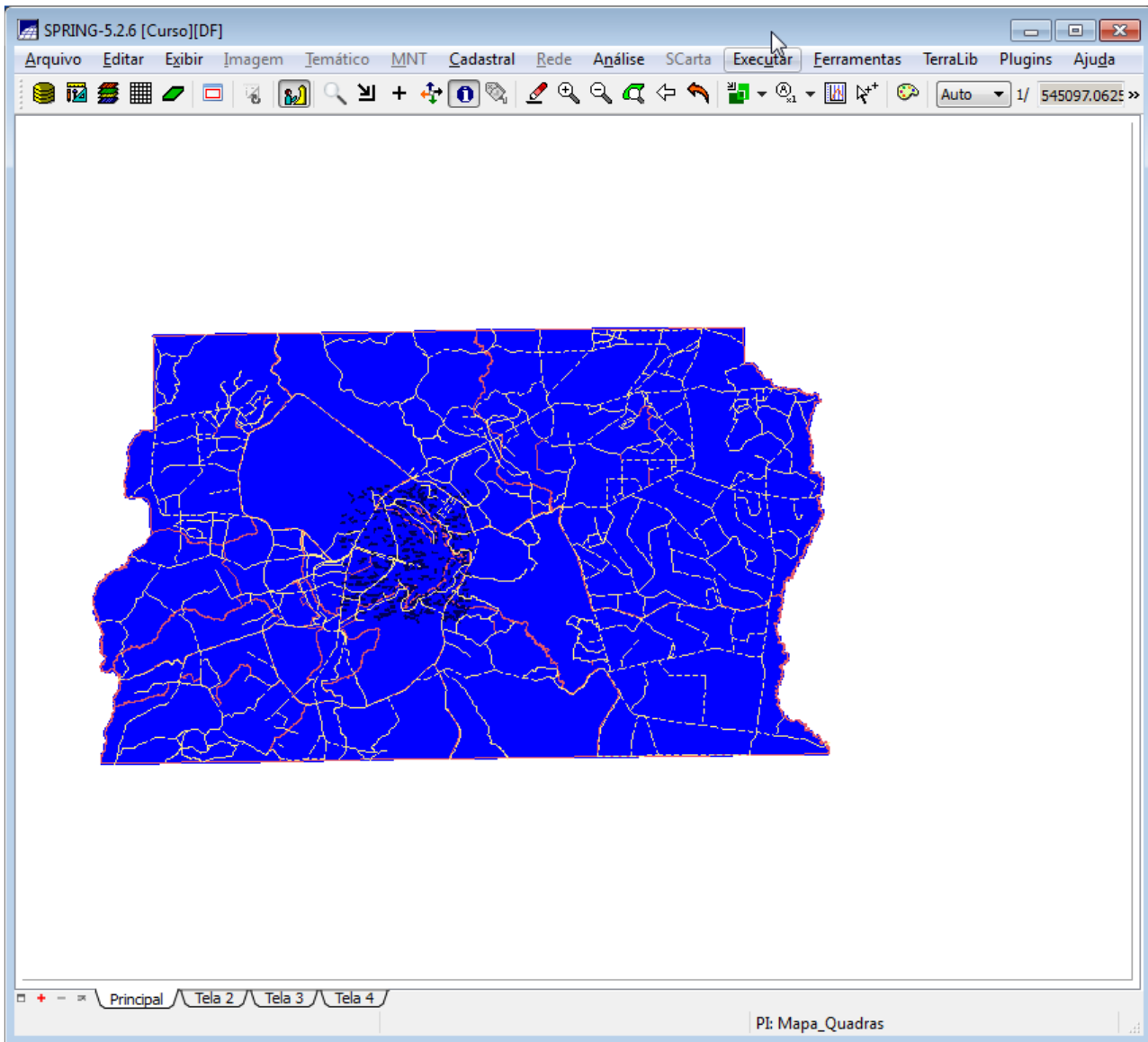


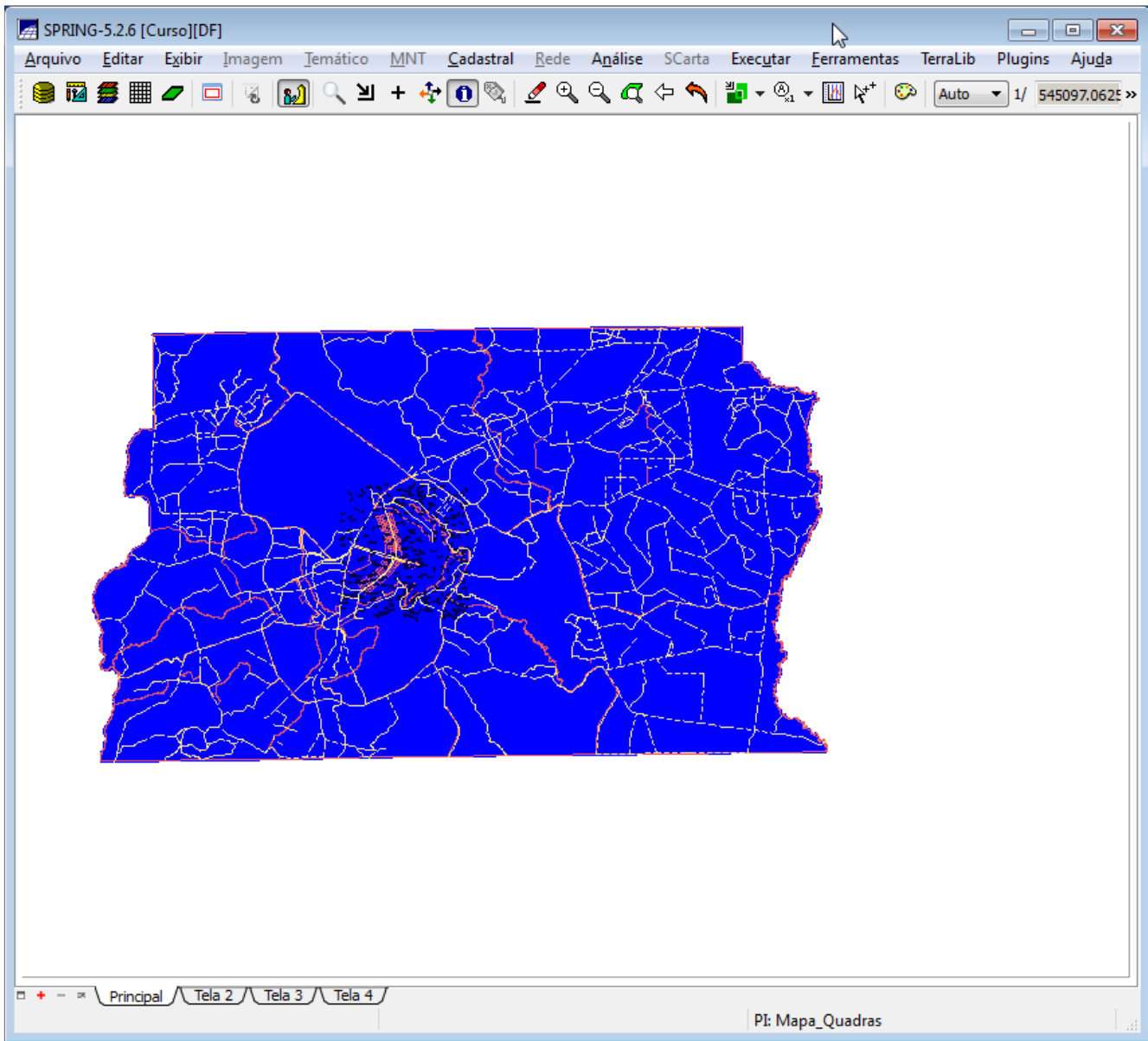




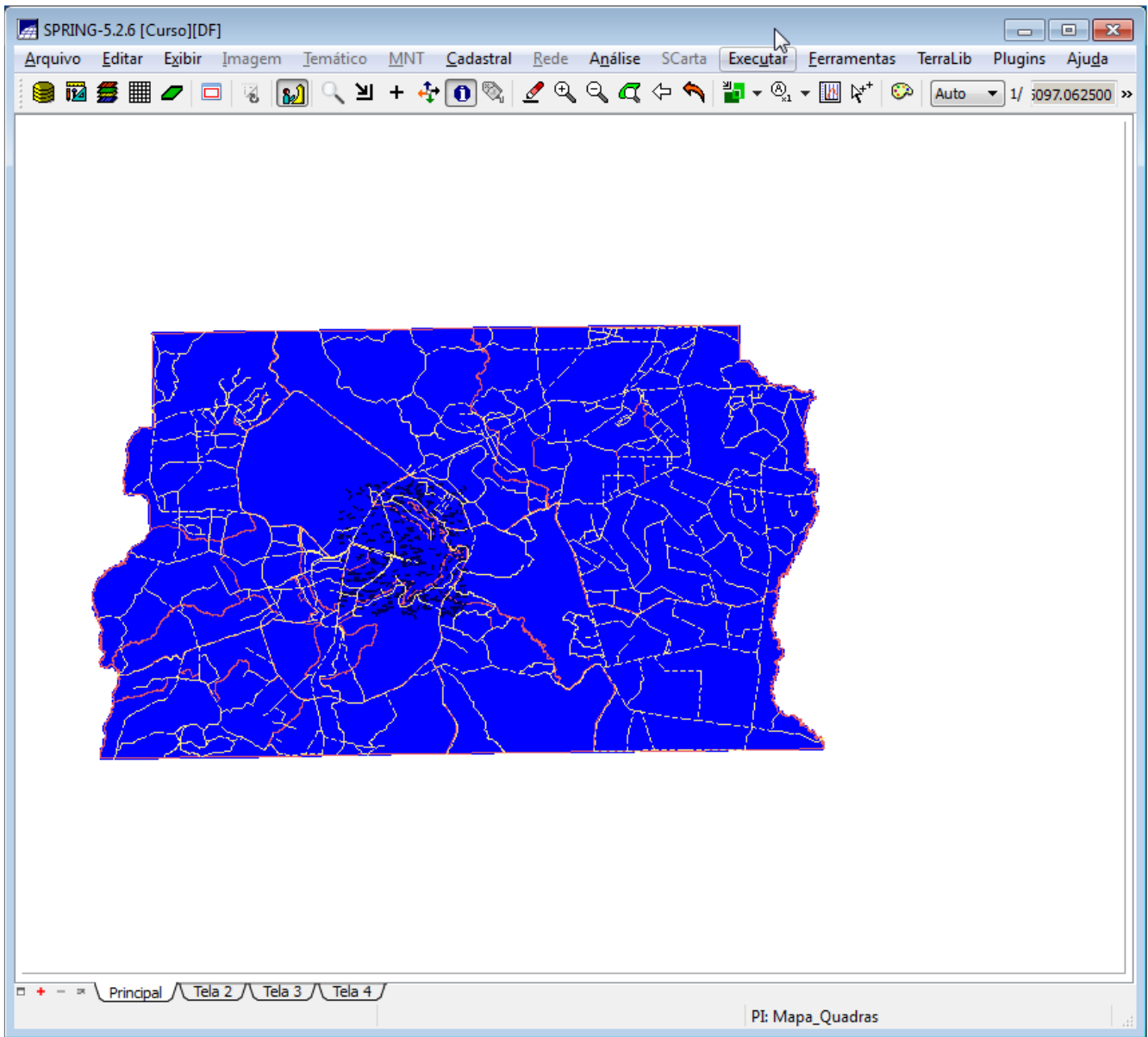


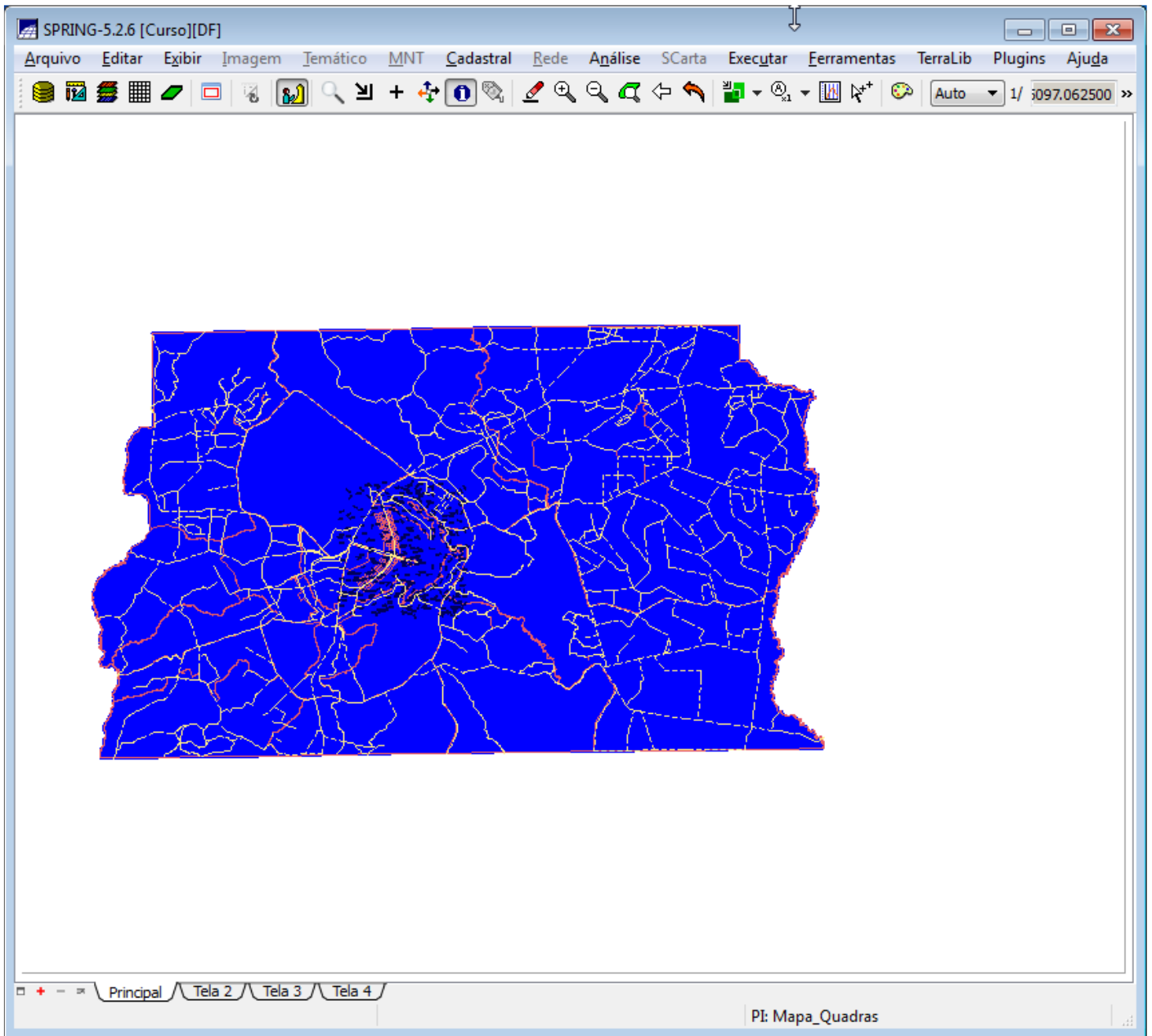


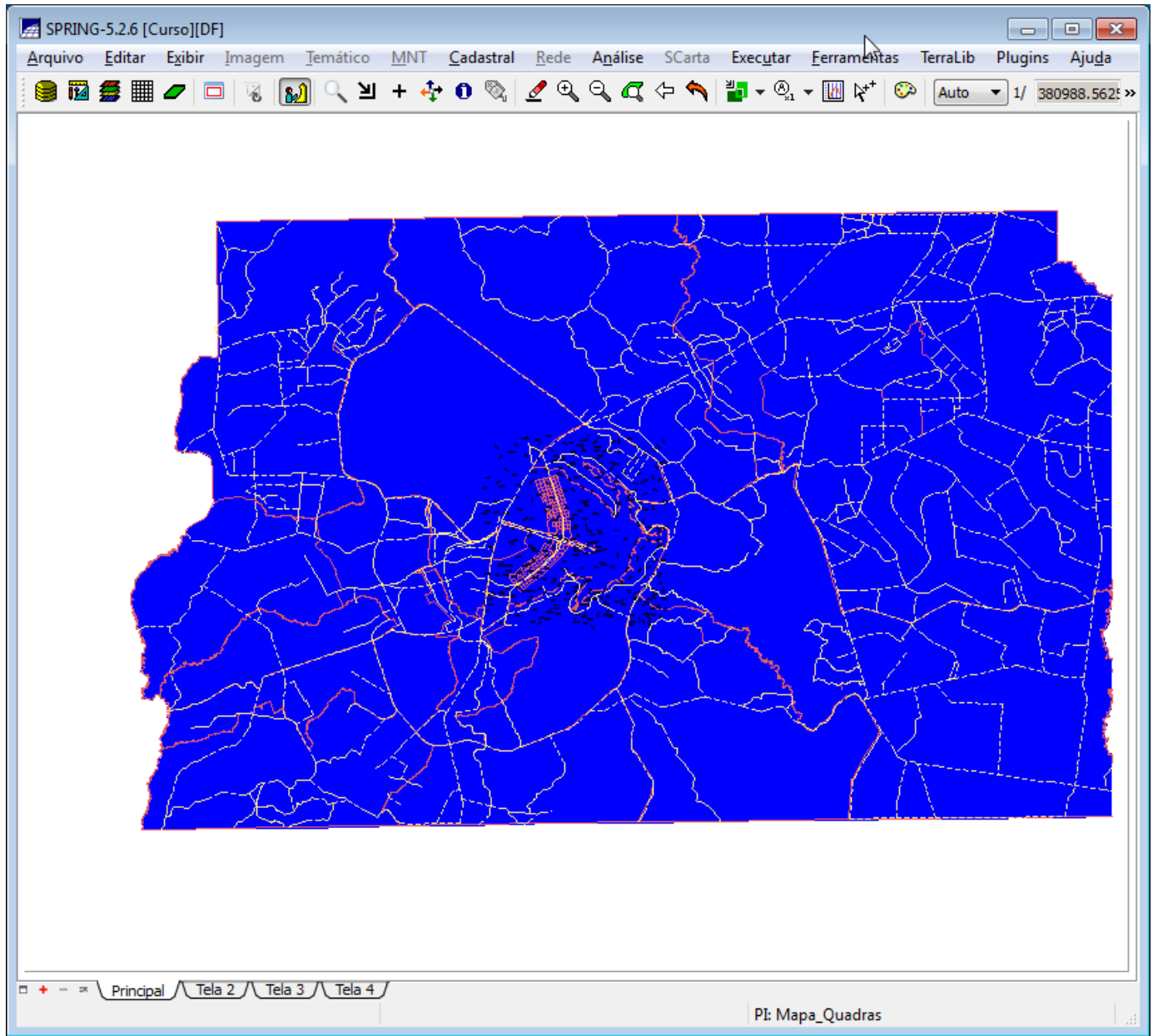


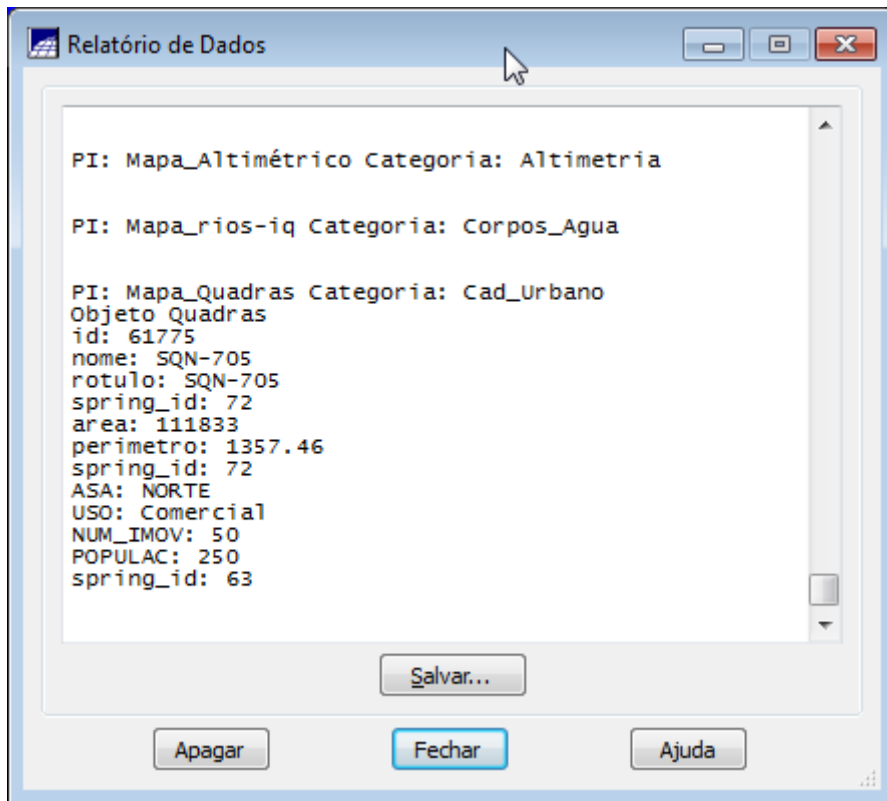


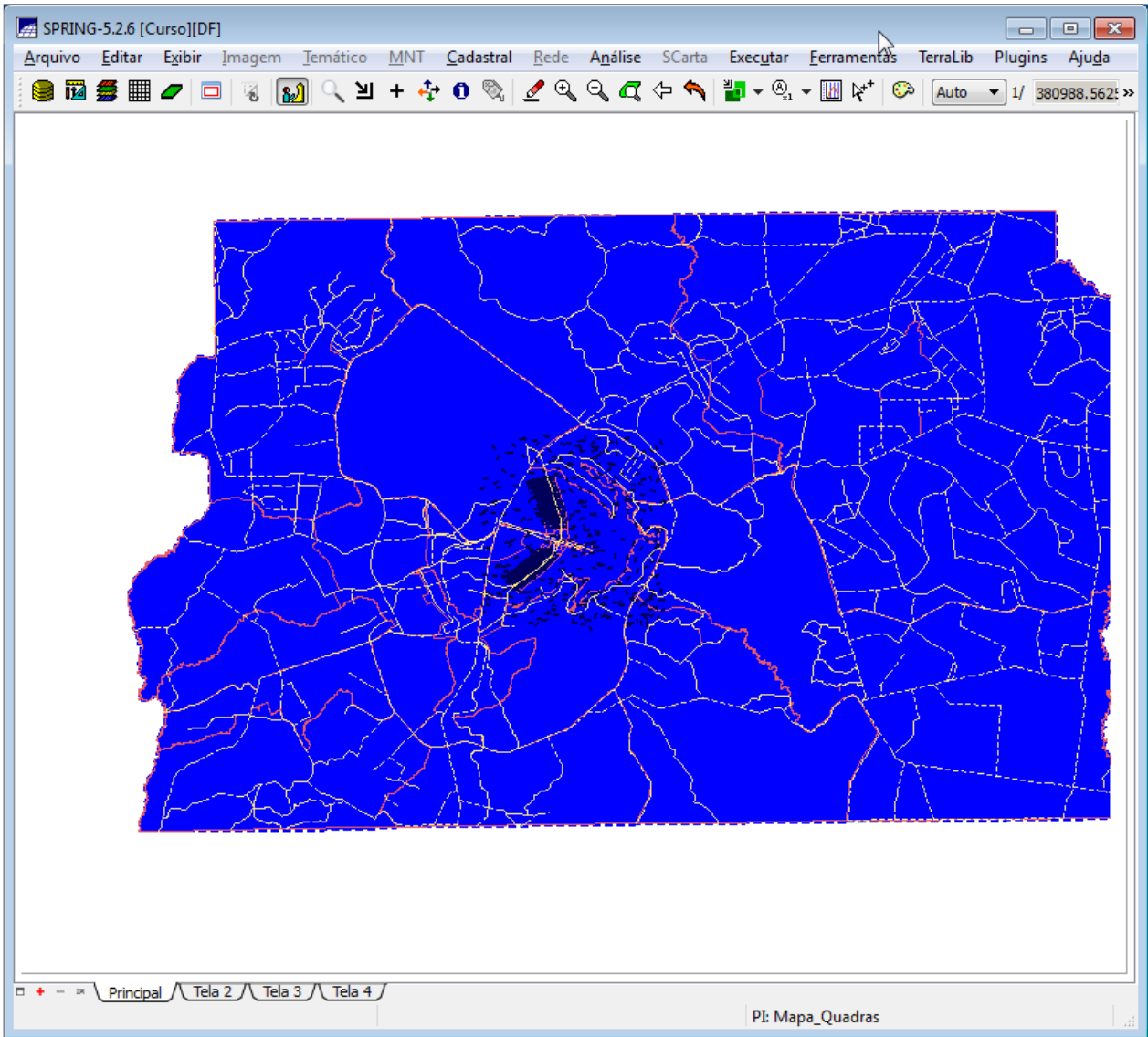


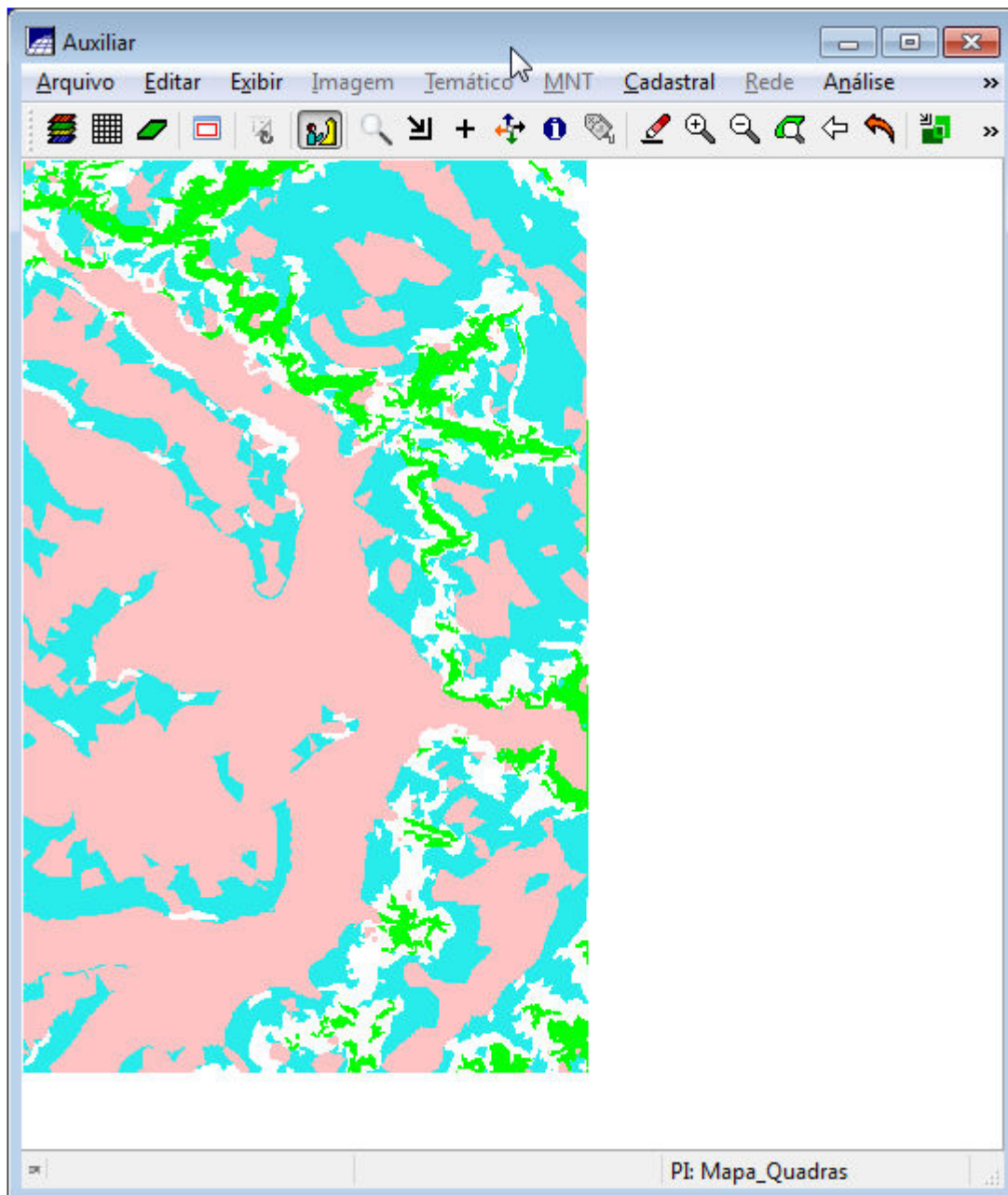


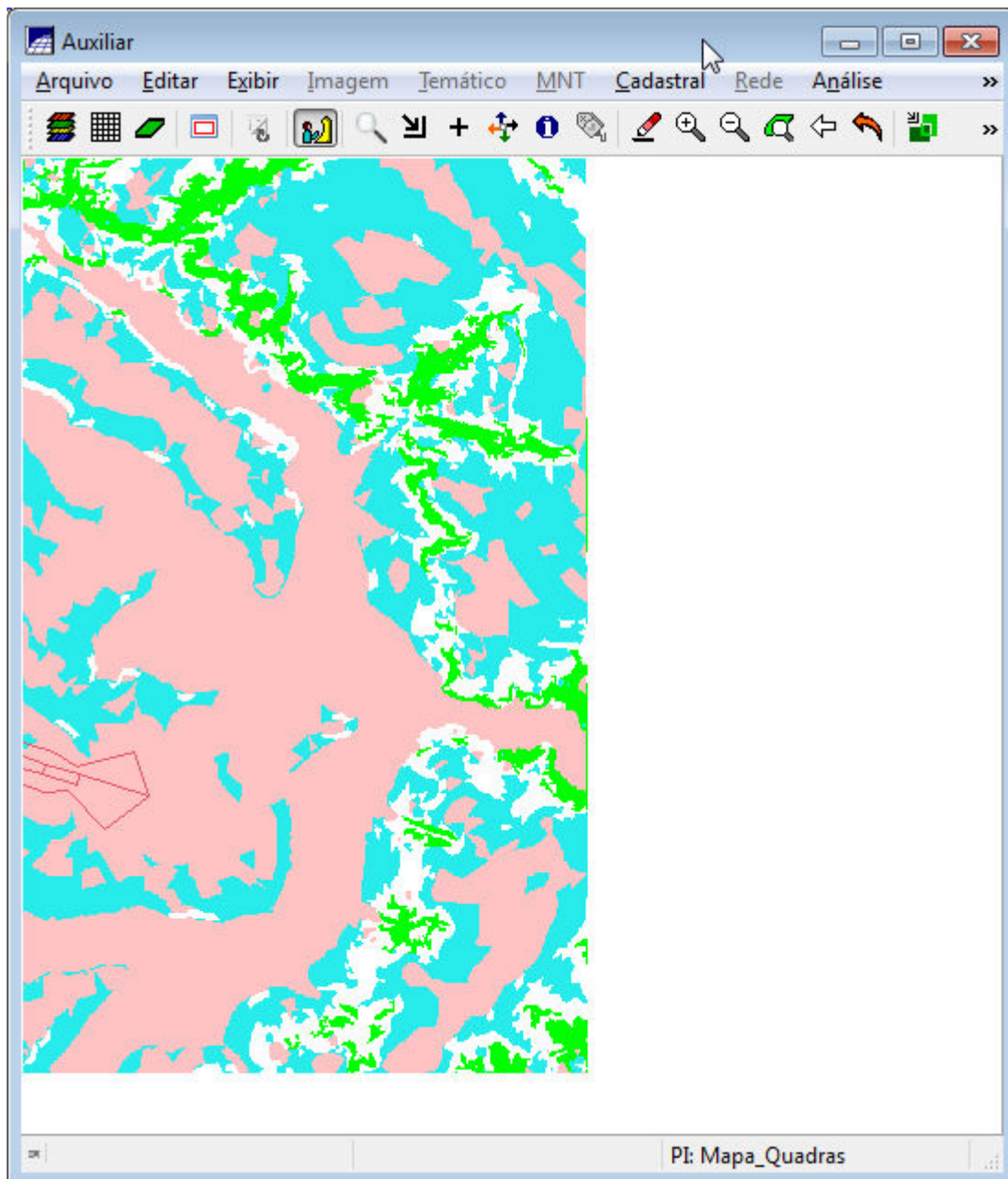


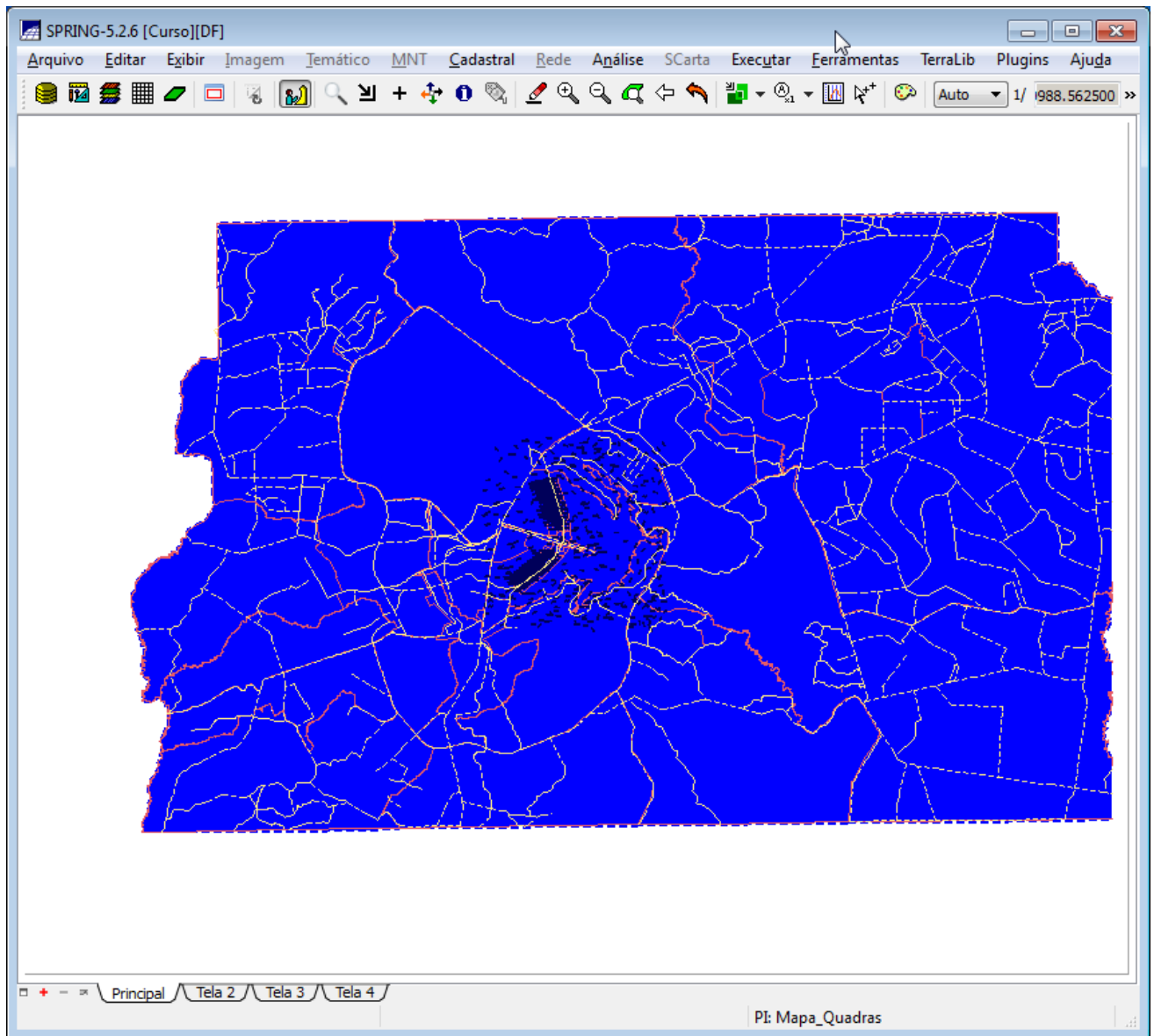














Auxiliar

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise

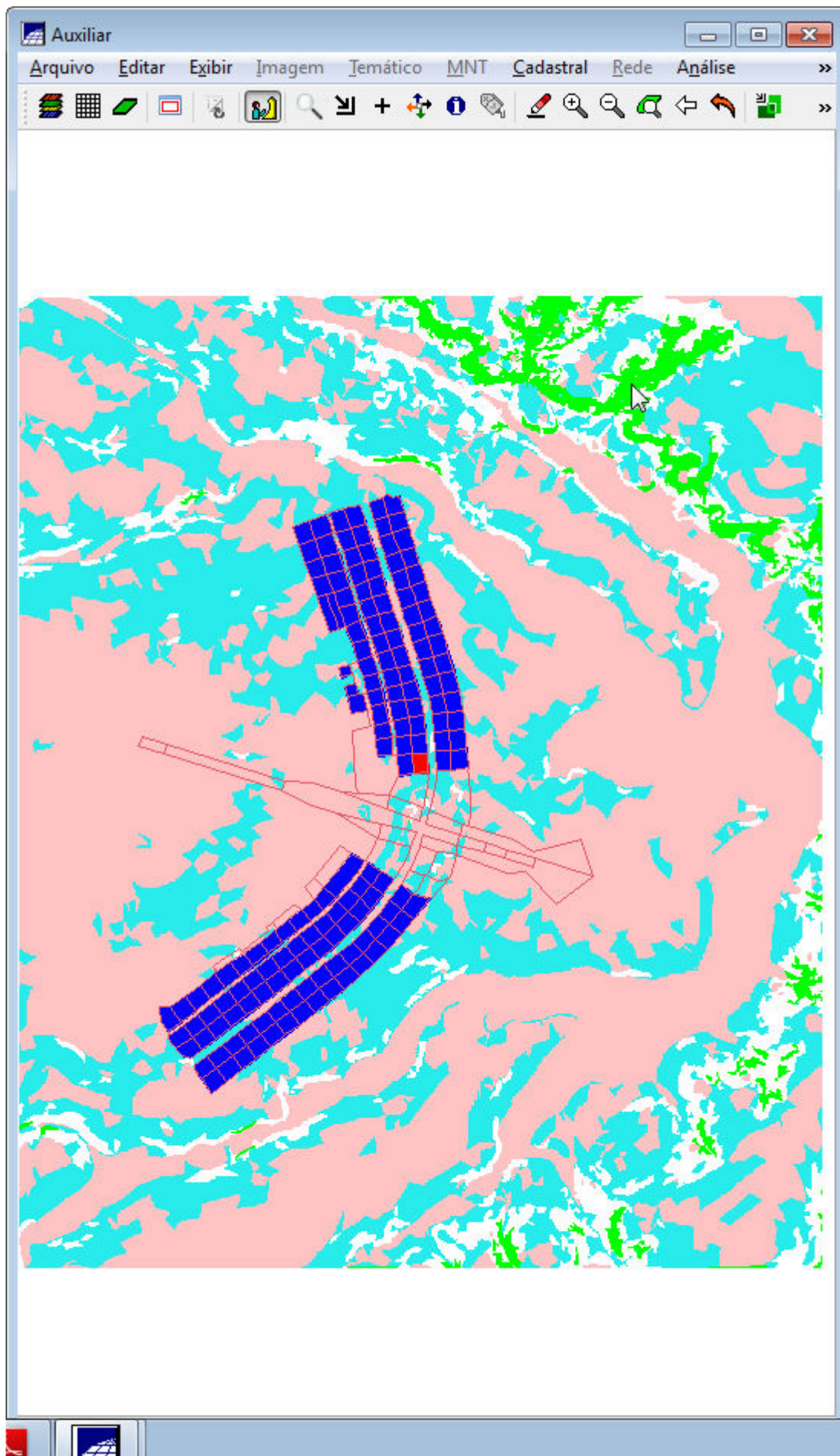
Tabela

	id	nome	rotulo	area	perimetro	ASA	USO	JM_IMC	OPULA
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150

PI: Mapa\_Quadras

	id	nome	rotulo	area	perimetri	ASA	USO	JM_IMC	OPULAÇ
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150
11	61744	SQN-...	SQN-...	109396	1325.76	NORTE	Resid...	30	200
12	61745	SQN-...	SQN-...	103022	1287.3	NORTE	Come...	15	300
13	61746	SQN-...	SQN-...	105360	1300.16	NORTE	Come...	18	400
14	61747	SQN-...	SQN-...	116923	1372.41	NORTE	Resid...	30	180
15	61748	SQN-...	SQN-...	128360	1439.54	NORTE	Lazer	5	100
16	61728	SQN-...	SQN-...	111250	1361.4	NORTE	Come...	120	5400
17	61727	SQN-...	SQN-...	104525	1302.31	NORTE	Resid...	100	450
18	61726	SQN-...	SQN-...	112735	1351.43	NORTE	Resid...	103	530
19	61725	SQN-...	SQN-...	108720	1321.13	NORTE	Hotel...	6	500
20	61724	SQN-...	SQN-...	114243	1358.9	NORTE	Hospi...	1	600
21	61722	SQN-...	SQN-...	112003	1343.5	NORTE	Lazer	1	80
22	61723	SQN-...	SQN-...	115648	1366.45	NORTE	Resid...	100	450
23	61721	SQN-...	SQN-...	106289	1305.46	NORTE	Resid...	105	505
24	61720	SQN-...	SQN-...	118313	1378.83	NORTE	Resid...	135	638
25	61719	SQN-...	SQN-...	115086	1352.47	NORTE	Come...	23	230
26	61718	SQN-...	SQN-...	107016	1306.56	NORTE	Resid...	102	400
27	61717	SQN-...	SQN-...	108839	1319.68	NORTE	Resid...	105	450
28	61716	SQN-...	SQN-...	115333	1369.85	NORTE	Resid...	102	500
29	61715	SQN-...	SQN-...	99270.8	1272.43	NORTE	Resid...	4	16
30	61714	SQN-...	SQN-...	111340	1345.03	NORTE	Lazer	1	85
31	61763	SQN-...	SQN-...	121713	1410.73	NORTE	Come...	23	4569
32	61762	SQN-...	SQN-...	106634	1310.35	NORTE	Come...	50	250
33	61761	SQN-...	SQN-...	107567	1302.47	NORTE	Resid...	100	400
34	61760	SQN-...	SQN-...	114534	1357.37	NORTE	Resid...	120	480
35	61759	SQN-...	SQN-...	98716.2	1262.12	NORTE	Resid...	150	350
36	61758	SQN-...	SQN-...	106588	1308.55	NORTE	Resid...	130	300
37	61757	SQN-...	SQN-...	107576	1316.81	NORTE	Resid...	110	500
38	61756	SQN-...	SQN-...	100576	1273.32	NORTE	Lazer	1	80
39	61755	SQN-...	SQN-...	108030	1328.03	NORTE	Resid...	120	500
40	61754	SQN-...	SQN-...	101502	1279.77	NORTE	Resid...	100	520
41	61753	SQN-...	SQN-...	105364	1303.89	NORTE	Resid...	130	600
42	61752	SQN-...	SQN-...	110243	1333.86	NORTE	Come...	100	400
43	61751	SQN-...	SQN-...	105664	1304.17	NORTE	Resid...	110	450
44	61750	SQN-...	SQN-...	116217	1375.37	NORTE	Resid...	100	400
45	61749	SQN-...	SQN-...	116972	1383.38	NORTE	Resid...	100	450
46	61733	SQN-...	SQN-...	131032	1443.49	NORTE	Hotel...	6	700





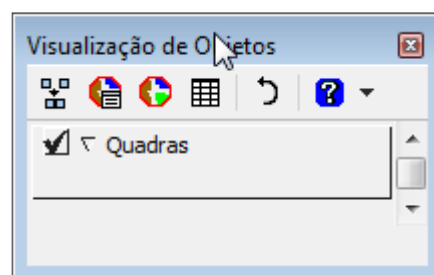
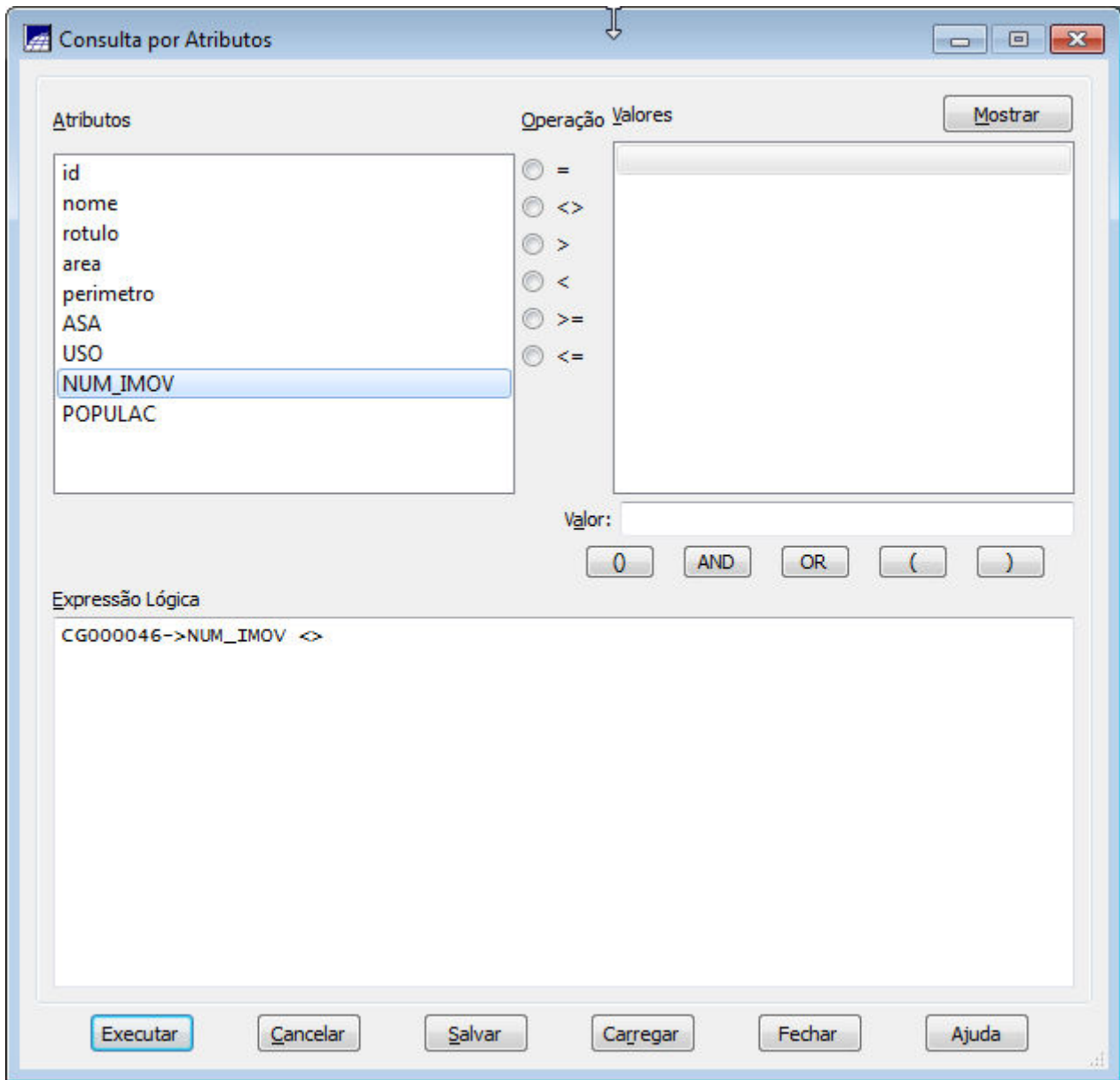
	id	nome	rotulo	area	perimetro	ASA	USO	JM_IMC	OPULAÇ
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150

Auxiliar

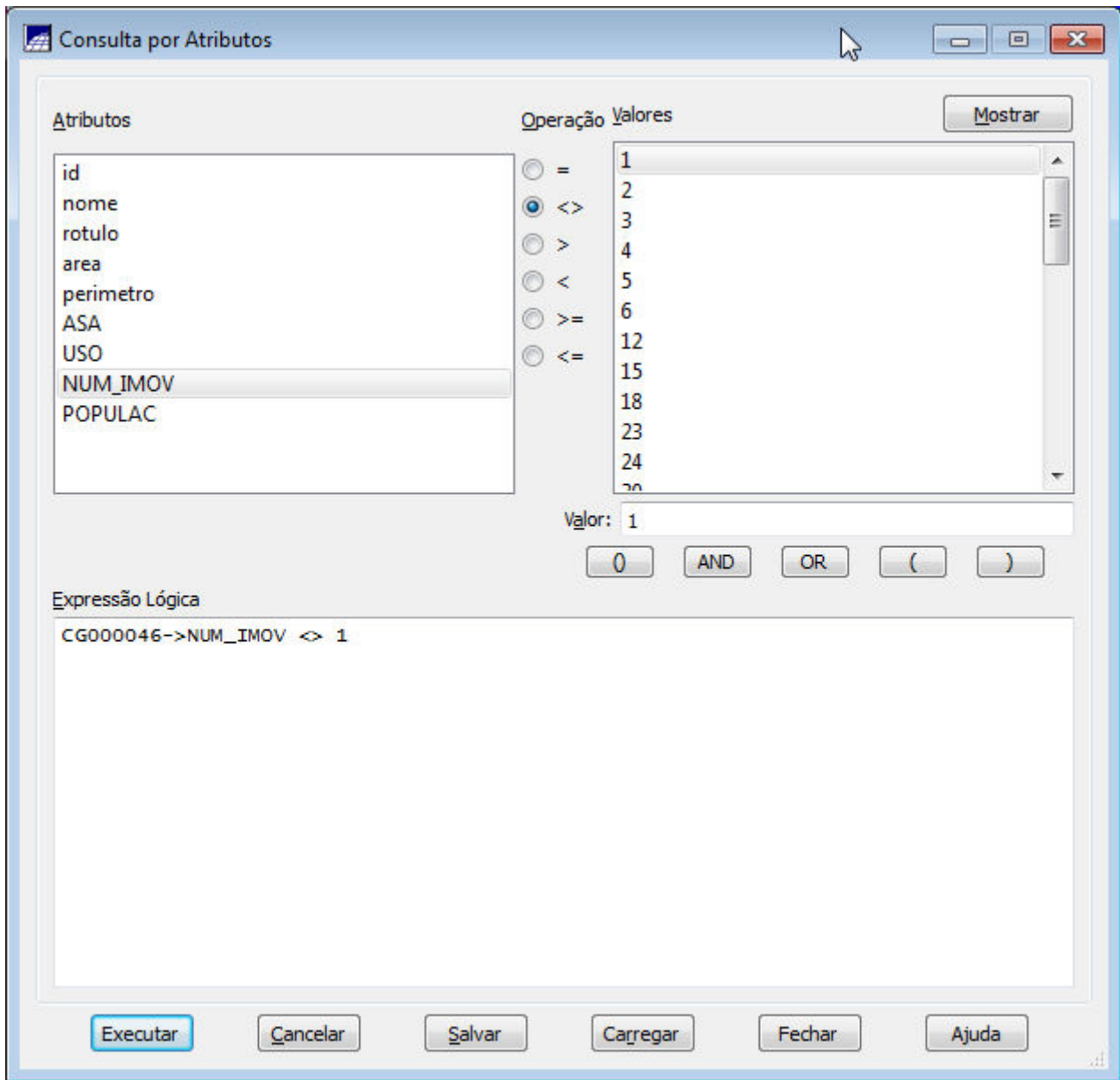
Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise

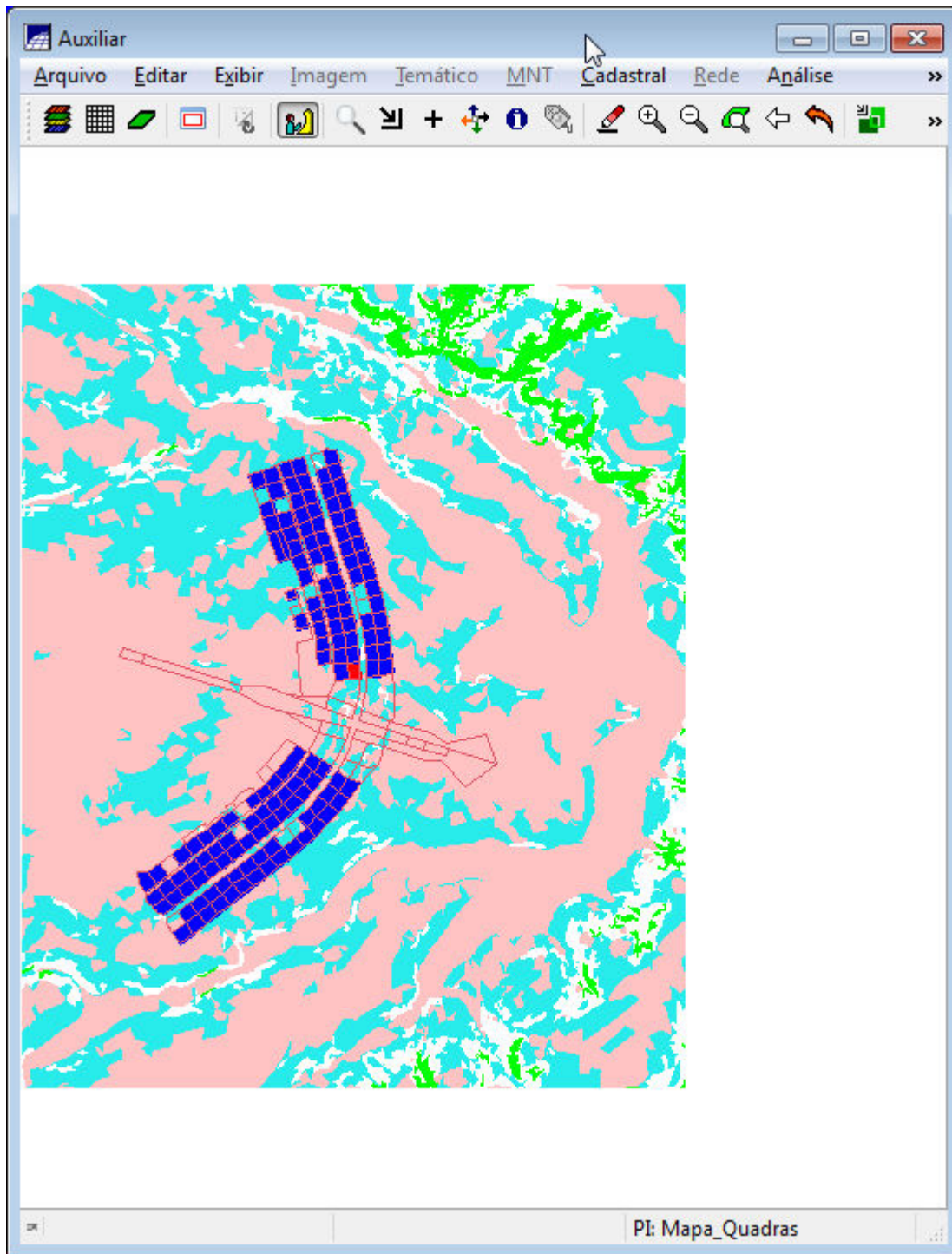
ASA USO JM\_IMC OPULAC

ASA	USO	JM_IMC	OPULAC
ORTE	Hotel...	12	3500
ORTE	Publico	15	250
ORTE	Publico	18	300
ORTE	Publico	100	400
ORTE	Resid...	120	500
ORTE	Resid...	35	140
ORTE	Resid...	24	100
ORTE	Resid...	24	120
ORTE	Resid...	30	120
ORTE	Resid...	30	150

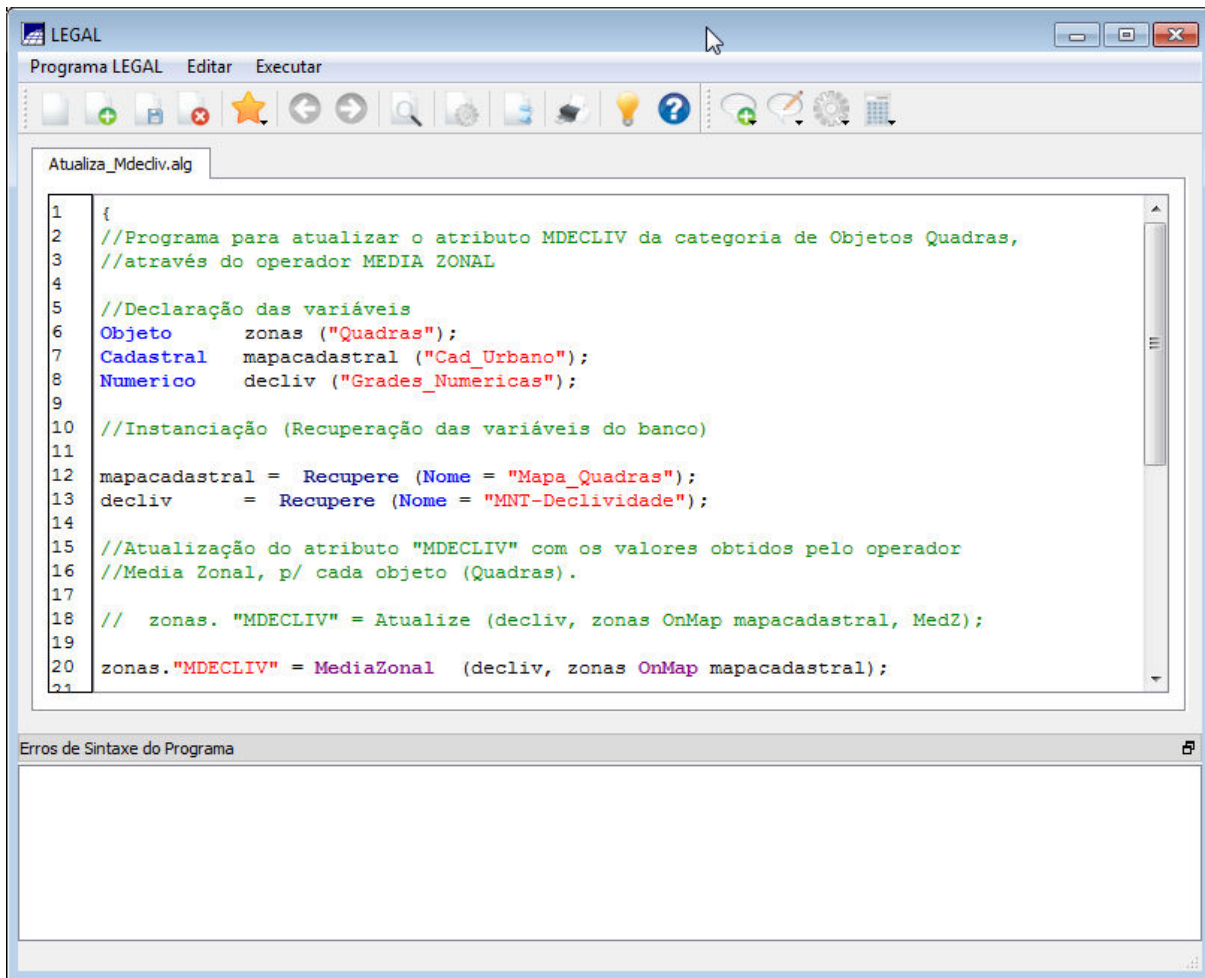


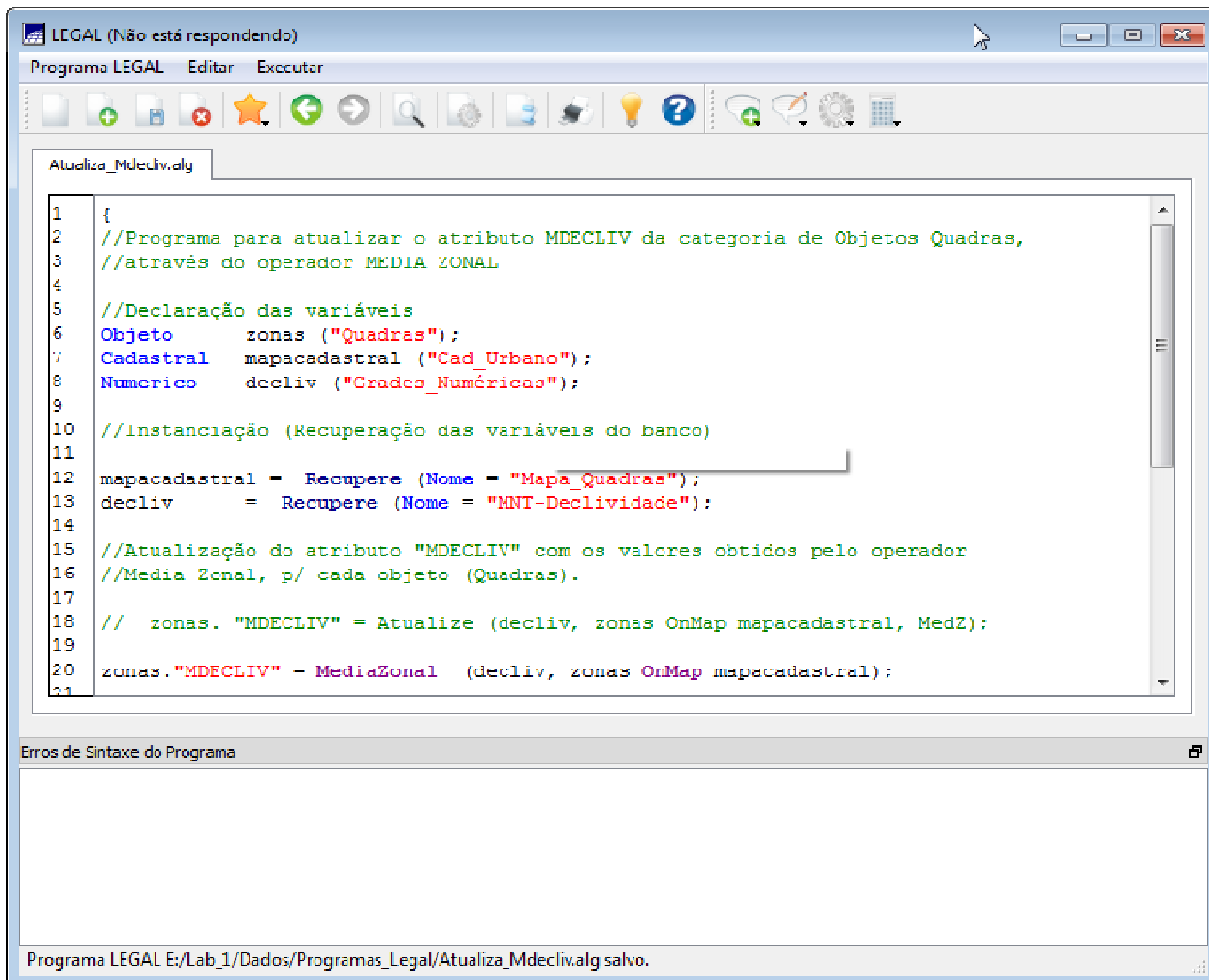












SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar Ferramentas TerraLib Plugins Ajuda

1/ 382725.037500 Inativa ?

LEGAL (Não está respondendo)

Programa LEGAL Editar Executar

Atualiza\_Mdecliv.alg

```
1 {
2 //Programa para atualizar o atributo MDECLIV da categoria de Objetos Quadras,
3 //através do operador MEDIA ZONAL
4
5 //Declaração das variáveis
6 Objeto zonas ("Quadras");
7 Cadastral mapacadastral ("Cad_Urbano");
8 Numerico decliv ("Grades_Numéricas");
9
10 //Instanciação (Recuperação das variáveis do banco)
11
12 mapacadastral = Recupere (Nome = "Mapa_Quadras");
13 decliv = Recupere (Nome = "MNT-Declividade");
14
15 //Atualização do atributo "MDECLIV" com os valores obtidos pelo operador
16 //Media Zonal, p/ cada objeto (Quadras).
17
18 // zonas. "MDECLIV" = Atualize (decliv, zonas OnMap mapacadastral, MedZ);
19
20 zonas."MDECLIV" = MediaZonal (decliv, zonas OnMap mapacadastral);
21
```

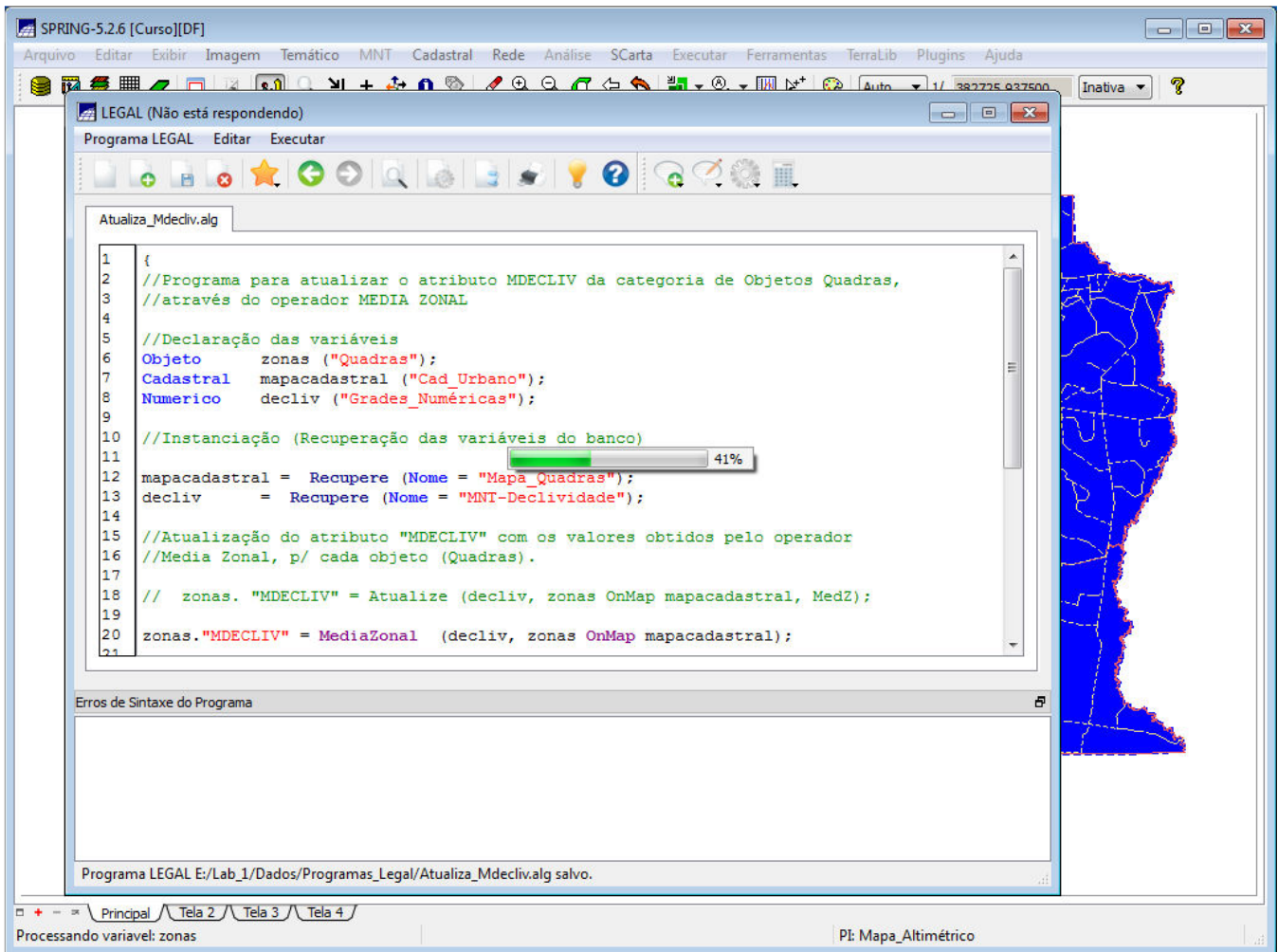
Erros de Sintaxe do Programa

Programa LEGAL E:/Lab\_1/Dados/Programas\_Legal/Atualiza\_Mdecliv.alg salvo.

Principal Tela 2 Tela 3 Tela 4


Processando variável: zonas

PI: Mapa\_Altimétrico



SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar



Principal Tela 2 Tela 3 Tela 4

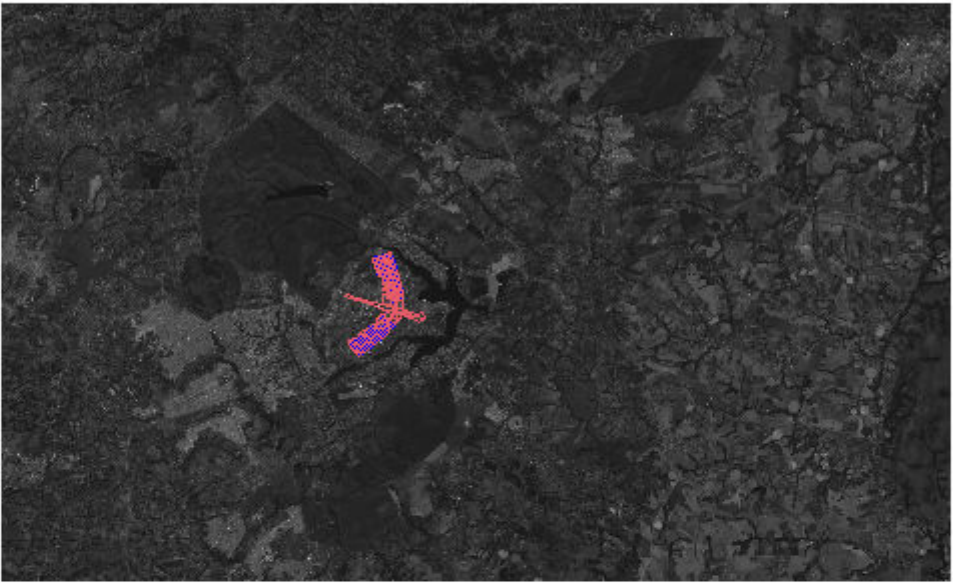
Tabela

	id	nome	rotulo	area	perimetr	ASA	USO	UM_IMC	OPULAç	MDECLIN
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

PI: Mapa\_Quadras

SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar



Principal Tela 2 Tela 3 Tela 4

Tabela

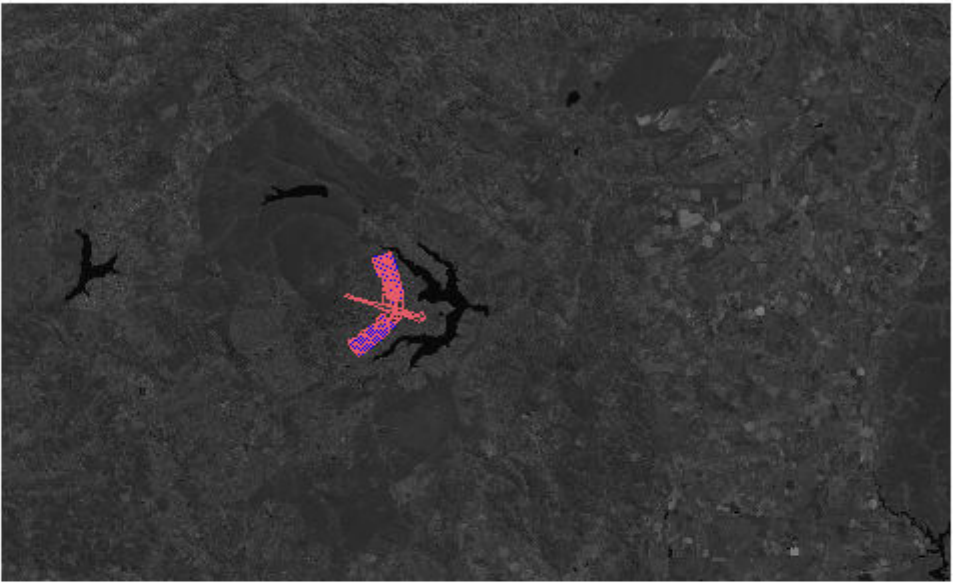
	id	nome	rotulo	area	perimetr	ASA	USO	UM_IMC	OPULA	MDECLI
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

PI: B3



SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar



Principal Tela 2 Tela 3 Tela 4

Tabela

	id	nome	rotulo	area	perimetr	ASA	USO	UM_IMC	OPULA	MDECLI
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

PI: B4

SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar

Imagem

Importação

Dados Conversão Saída

Projeto: DF

Categoria... Imagem\_ETM

PI: B5  Mosaico

Executar Fechar Ajuda

Importar Identificadores

Principal

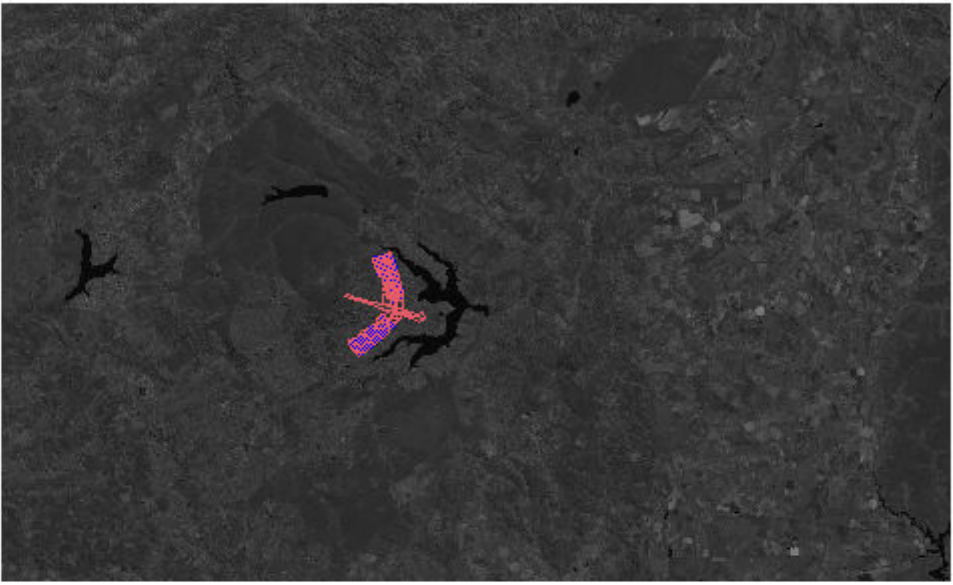
Tabela

	id	nome									
1	61734	SQN-...	SQN-...								
2	61735	SQN-...	SQN-...								
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...	
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...	
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...	
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...	
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...	
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...	
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...	
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...	

PI: B5

SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar



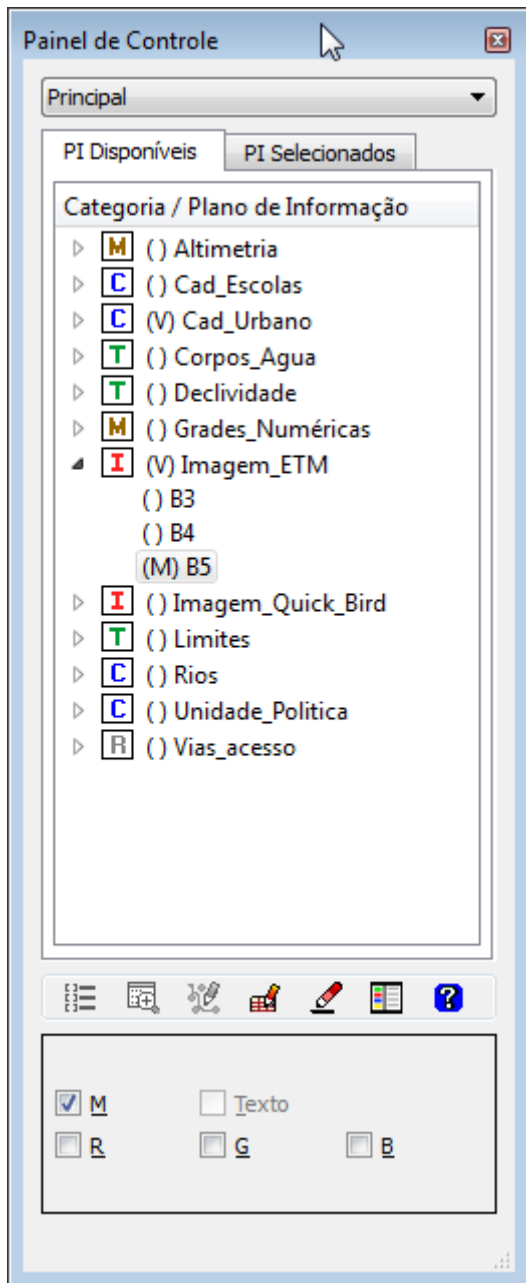
Principal Tela 2 Tela 3 Tela 4

Tabela

	id	nome	rotulo	area	perimetr	ASA	USO	UM_IMC	OPULA	MDECLI
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

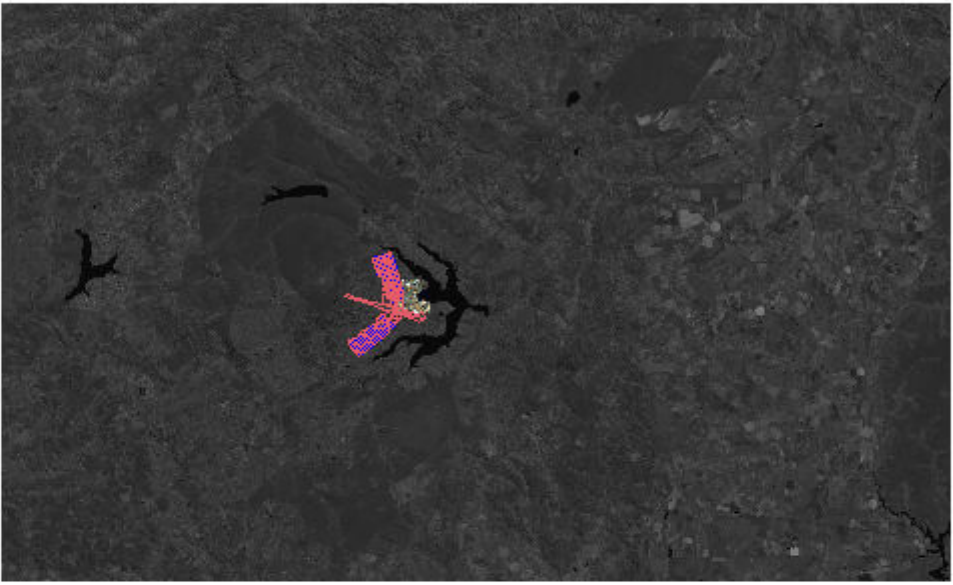
PI: B5





SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar

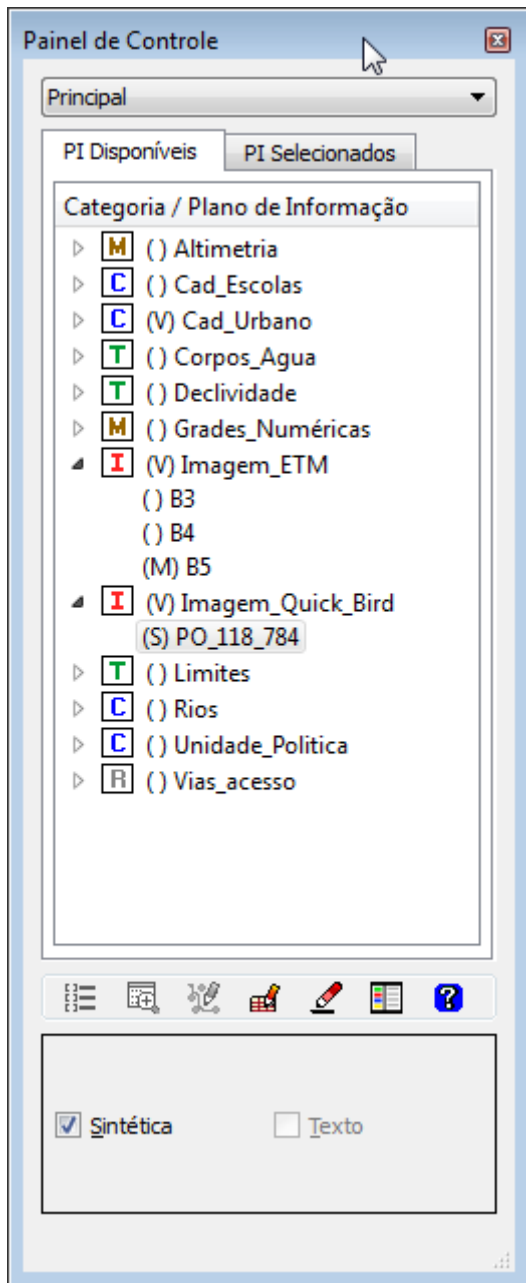


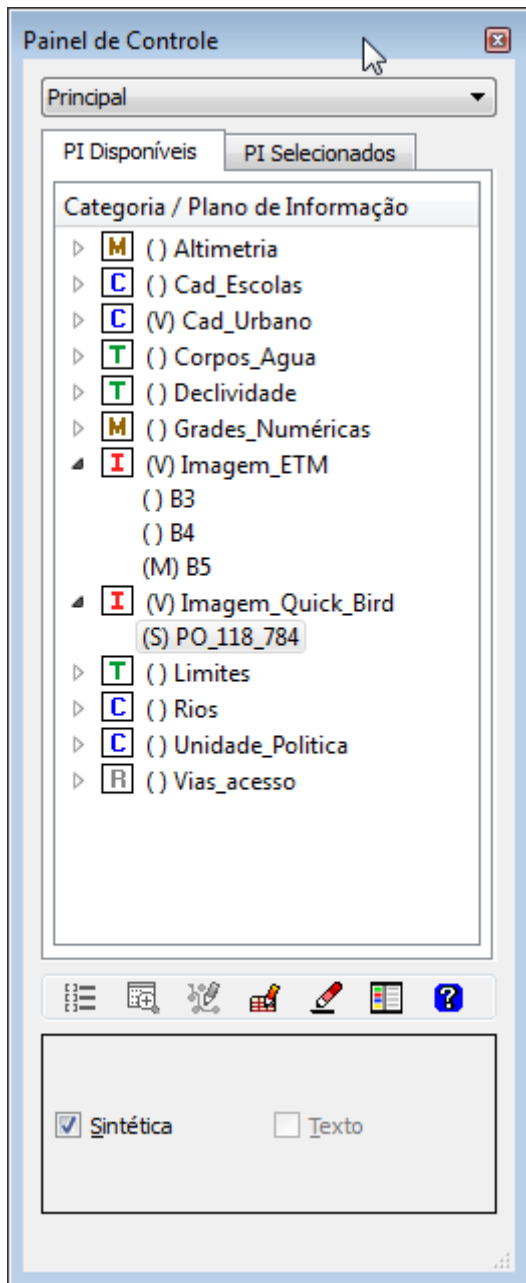
Principal Tela 2 Tela 3 Tela 4

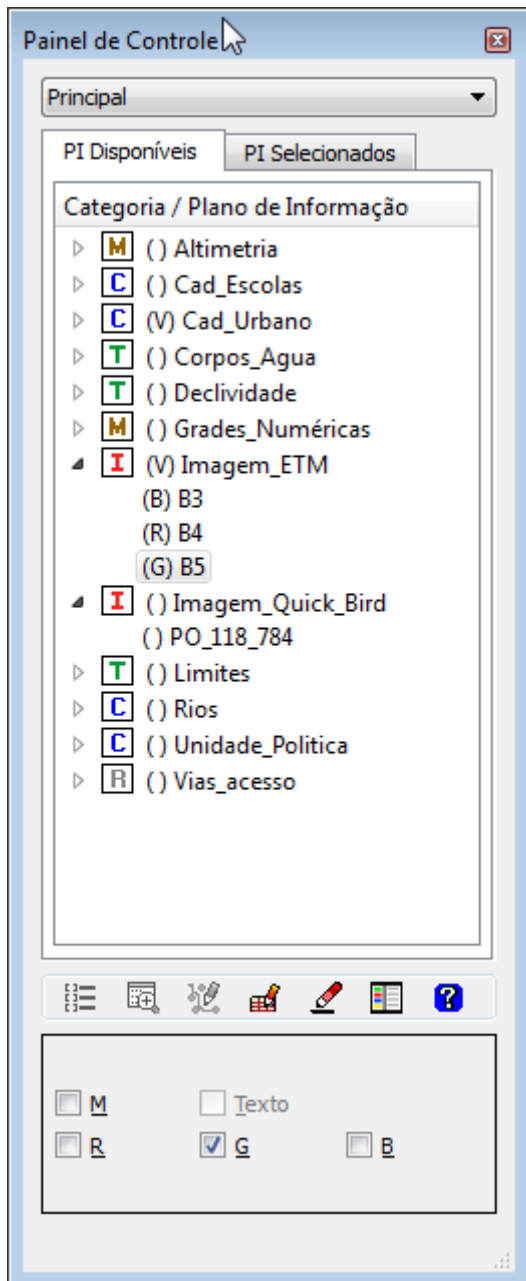
Tabela

	id	nome	rotulo	area	perimetr	ASA	USO	UM_IMC	OPULA	MDECLI
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

PI: PO\_118\_784

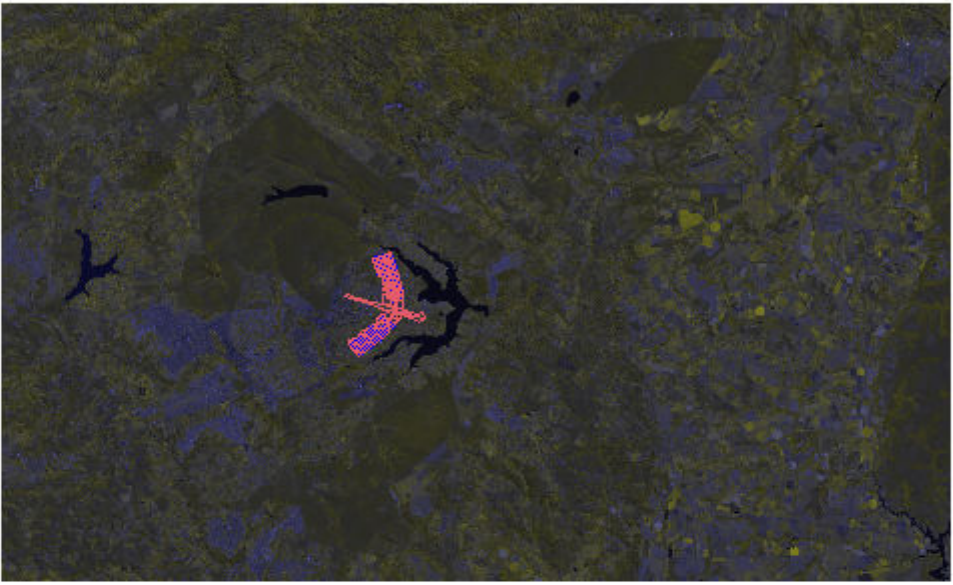






SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar

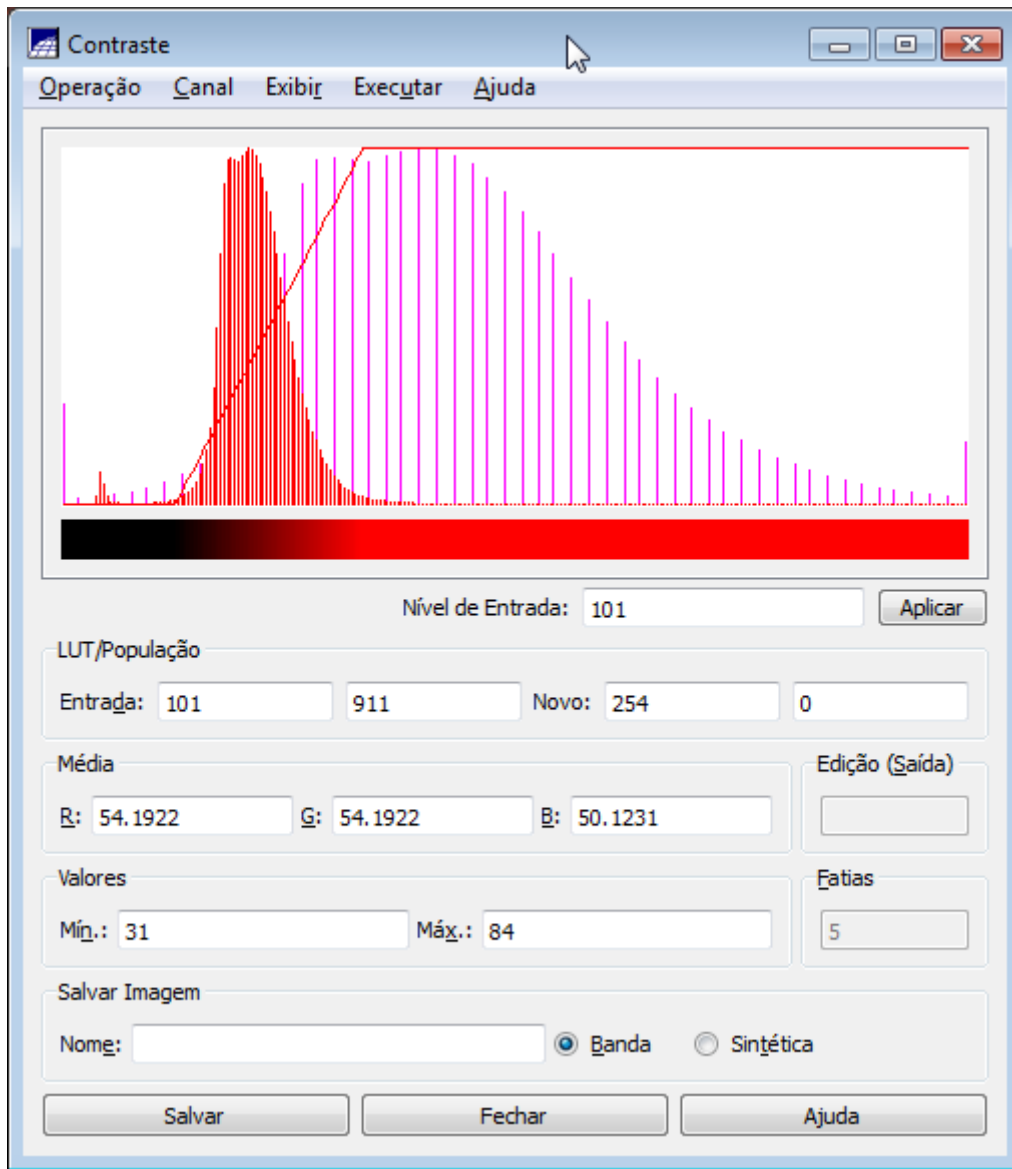


Principal Tela 2 Tela 3 Tela 4

Tabela

	id	nome	rotulo	area	perimetr	ASA	USO	UM_IMC	OPULA	MDECLI
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

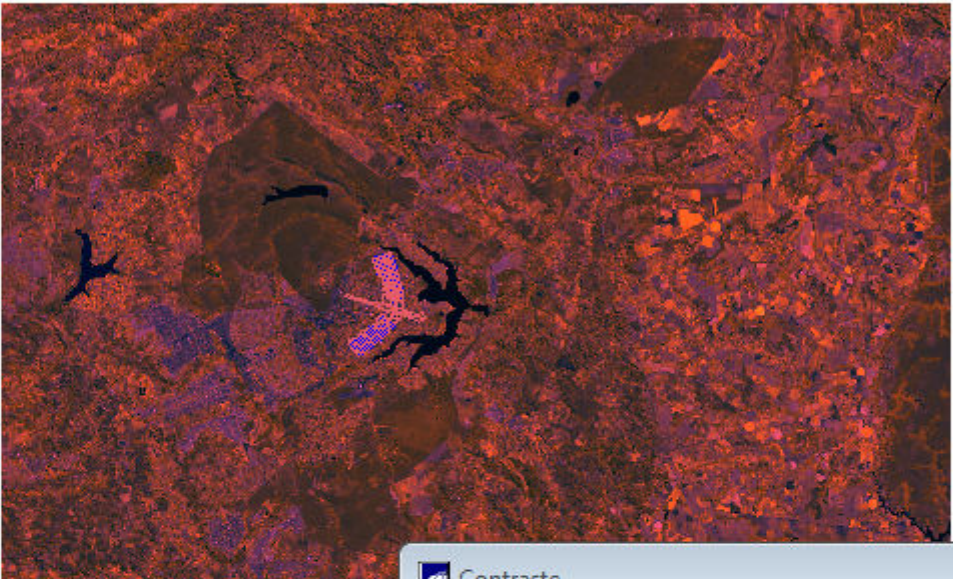
PI: B5





SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar



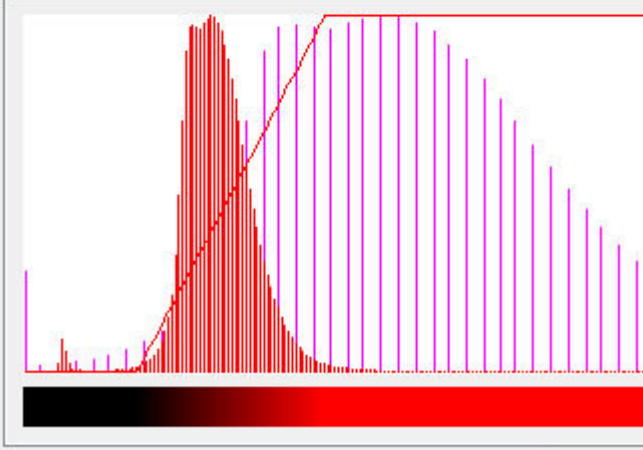
Principal Tela 2 Tela 3 Tela 4

Tabela

	id	nome	rotulo	area	perimetr	
1	61734	SQN-...	SQN-...	110770	1345.51	NO
2	61735	SQN-...	SQN-...	110082	1336.19	NO
3	61736	SQN-...	SQN-...	104903	1310.89	NO
4	61737	SQN-...	SQN-...	106524	1305.89	NO
5	61738	SQN-...	SQN-...	101699	1279.4	NO
6	61739	SQN-...	SQN-...	95459	1248.97	NO
7	61740	SQN-...	SQN-...	108359	1323.46	NO
8	61741	SQN-...	SQN-...	104378	1301.07	NO
9	61742	SQN-...	SQN-...	113198	1351.42	NO
10	61743	SQN-...	SQN-...	112457	1340.52	NO

Contraste

Operação Canal Exibir Executar Ajuda



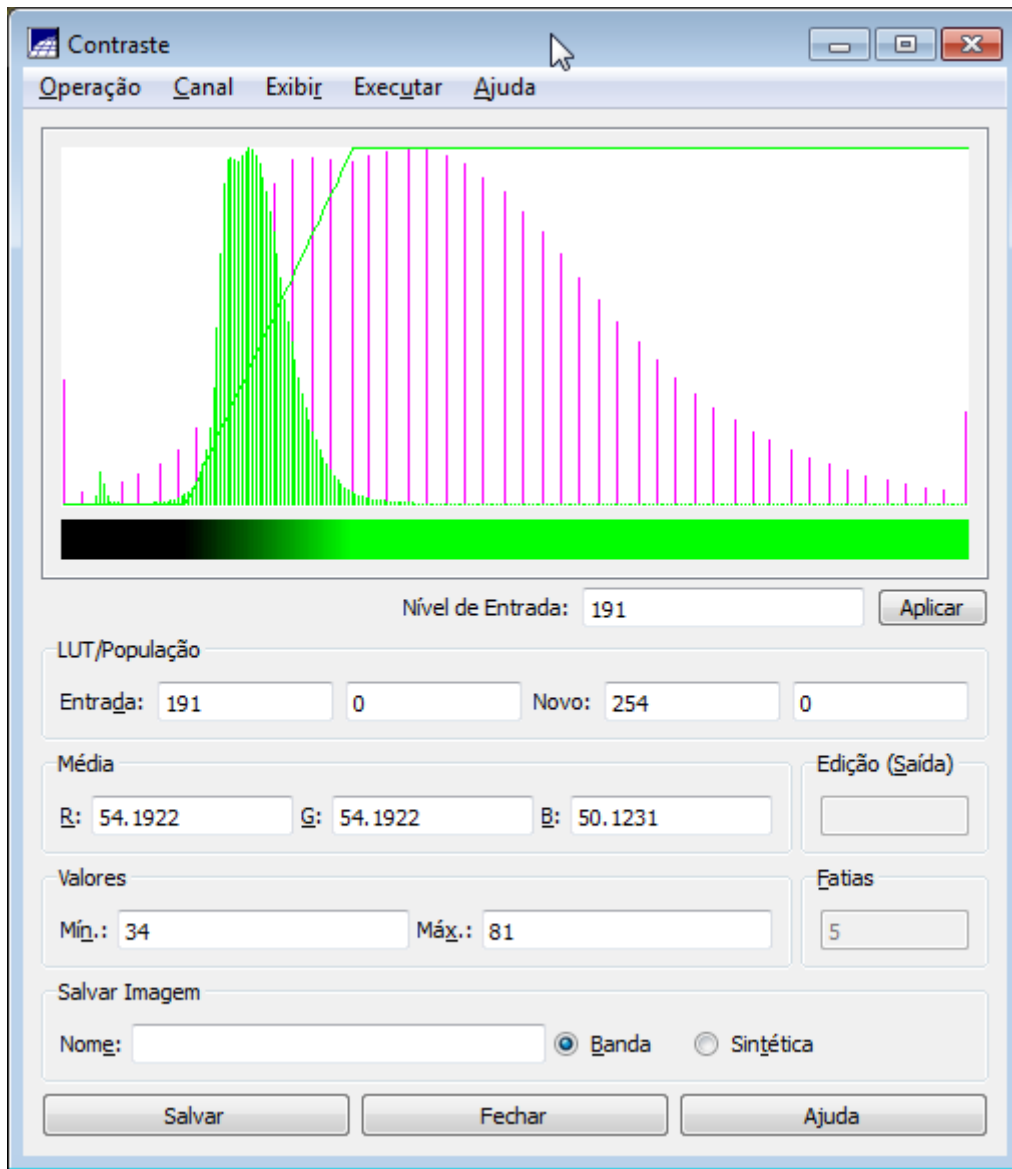
Nível de Entrada: 101

LUT/População

Entrada: 101 911 Novo: 254

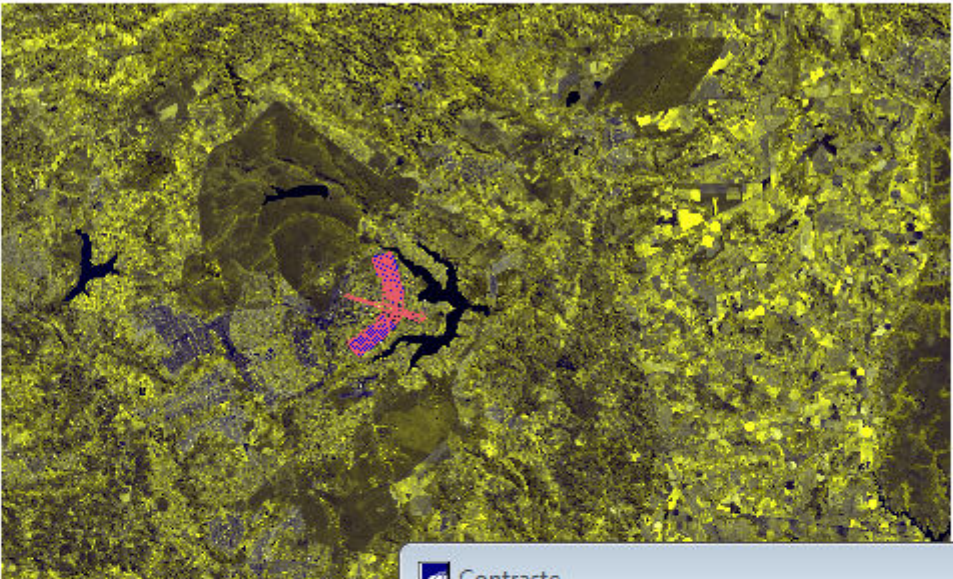
Média





SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar



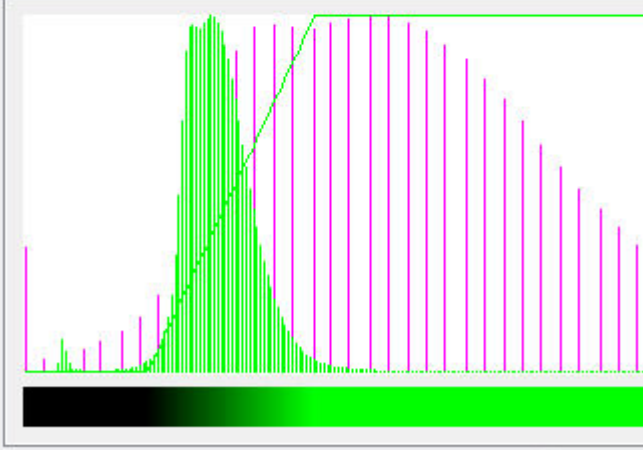
Principal Tela 2 Tela 3 Tela 4

Tabela

	id	nome	rotulo	area	perimetr	
1	61734	SQN-...	SQN-...	110770	1345.51	NO
2	61735	SQN-...	SQN-...	110082	1336.19	NO
3	61736	SQN-...	SQN-...	104903	1310.89	NO
4	61737	SQN-...	SQN-...	106524	1305.89	NO
5	61738	SQN-...	SQN-...	101699	1279.4	NO
6	61739	SQN-...	SQN-...	95459	1248.97	NO
7	61740	SQN-...	SQN-...	108359	1323.46	NO
8	61741	SQN-...	SQN-...	104378	1301.07	NO
9	61742	SQN-...	SQN-...	113198	1351.42	NO
10	61743	SQN-...	SQN-...	112457	1340.52	NO

Contraste

Operação Canal Exibir Executar Ajuda

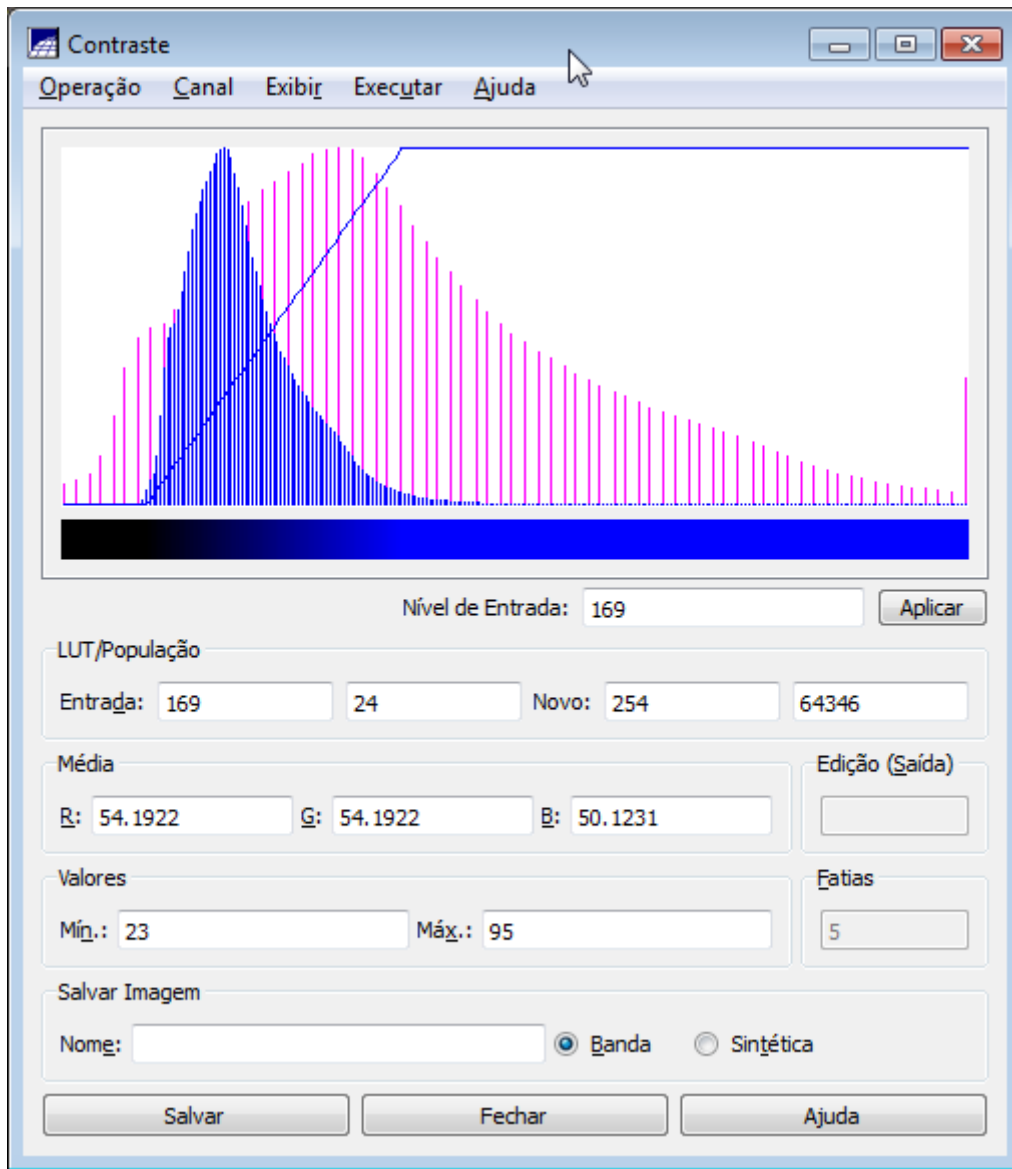


Nível de Entrada: 191

LUT/População

Entrada: 191 0 Novo: 254

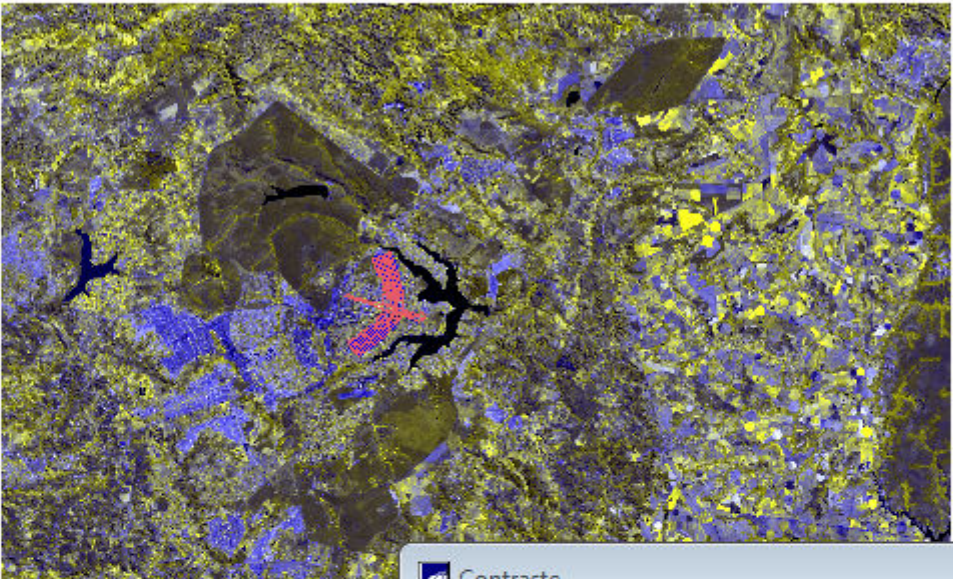
Média





SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar



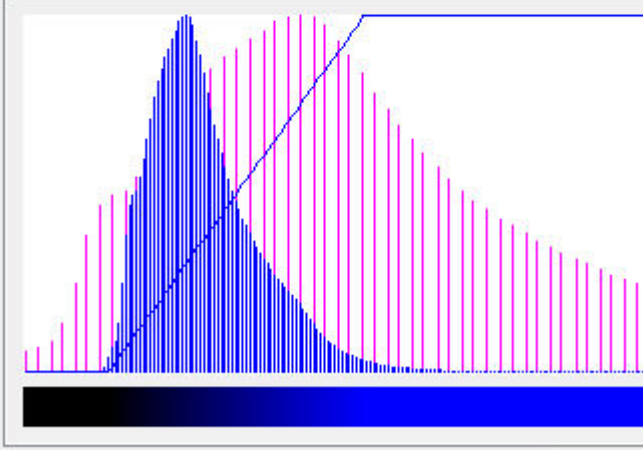
Principal Tela 2 Tela 3 Tela 4

Tabela

	id	nome	rotulo	area	perimetr	
1	61734	SQN-...	SQN-...	110770	1345.51	NO
2	61735	SQN-...	SQN-...	110082	1336.19	NO
3	61736	SQN-...	SQN-...	104903	1310.89	NO
4	61737	SQN-...	SQN-...	106524	1305.89	NO
5	61738	SQN-...	SQN-...	101699	1279.4	NO
6	61739	SQN-...	SQN-...	95459	1248.97	NO
7	61740	SQN-...	SQN-...	108359	1323.46	NO
8	61741	SQN-...	SQN-...	104378	1301.07	NO
9	61742	SQN-...	SQN-...	113198	1351.42	NO
10	61743	SQN-...	SQN-...	112457	1340.52	NO

Contraste

Operação Canal Exibir Executar Ajuda

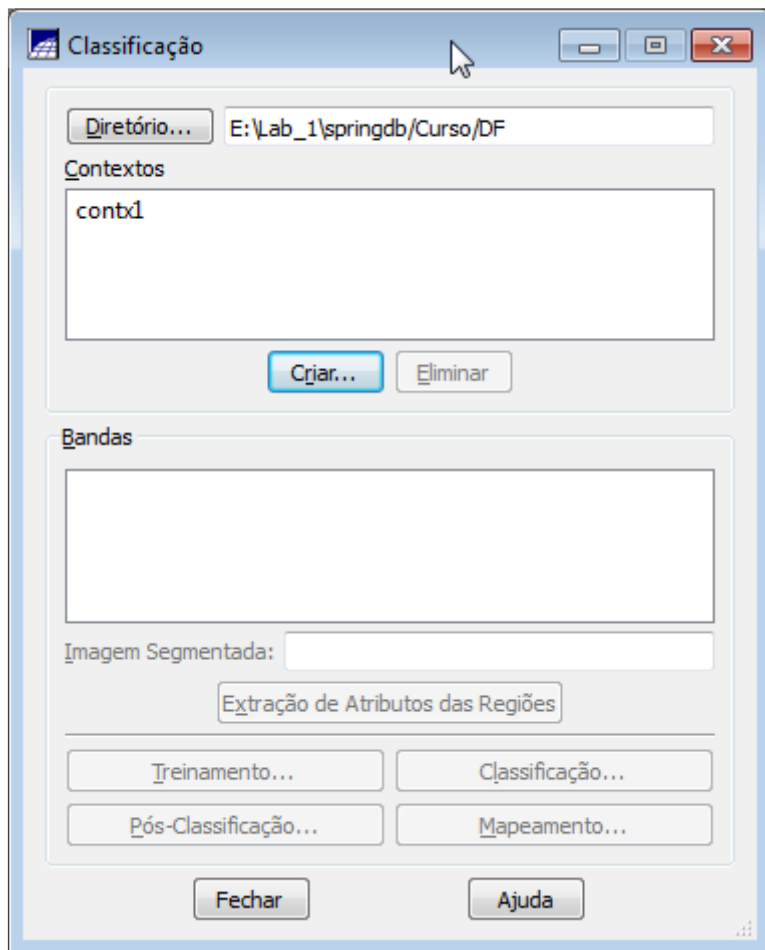


Nível de Entrada: 169

LUT/População

Entrada: 169 24 Novo: 254

Média



SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar

**Classificação**

Diretório... E:\Lab\_1\springdb/Curso/DF

Contextos  
contd

Criar... Eliminar

Bandas

Imagem Segmentada:

Extração de Atributos das Regiões

Treinamento... Classificação...

Pós-Classificação... Mapeamento...

Fechar Ajuda

Principal

Tabela

	id	nome	rotulo	area	perimetr	ASA	USO	JM_IMC	OPULA	MDECLI
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-	SQN-	112457	1340.52	NORTE	Resid	30	150	1.6222

PI: Comp\_453



SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar

Classificação

Diretório... E:\Lab\_1\springdb/Curso/DF

Contextos

contx1

Crjar... Eliminar

Bandas

B3  
B4  
B5

Imagem Segmentada:

Extração de Atributos das Regiões

Treinamento... Classificação...


Pós-Classificação... Mapeamento...

Fechar Ajuda

PULA	MDECLI
00	2.4337...
0	1.9993...
0	2.4962...
0	1.8826...
0	2.6127...
0	1.9825...
0	1.7747...
0	1.9133...
0	1.9677...
0	1.6222

np\_453

Treinamento

Nome:   

Temas

mata	Núm.Total de Pixels:15169149
------	------------------------------

Modo:  Normal  Agrupar  Desagrupar  Exibe todas

Tipo:  Aquisição  Teste

Contorno:  Poligonal  Retangular  Região

Amostras

1 Aquisição.	Núm.de Pixels:1950078
2 Aquisição.	Núm.de Pixels:2830919
3 Aquisição.	Núm.de Pixels:2639234
4 Aquisição.	Núm.de Pixels:7748918

Exportar Arquivo de Redes Neurais (SRN)

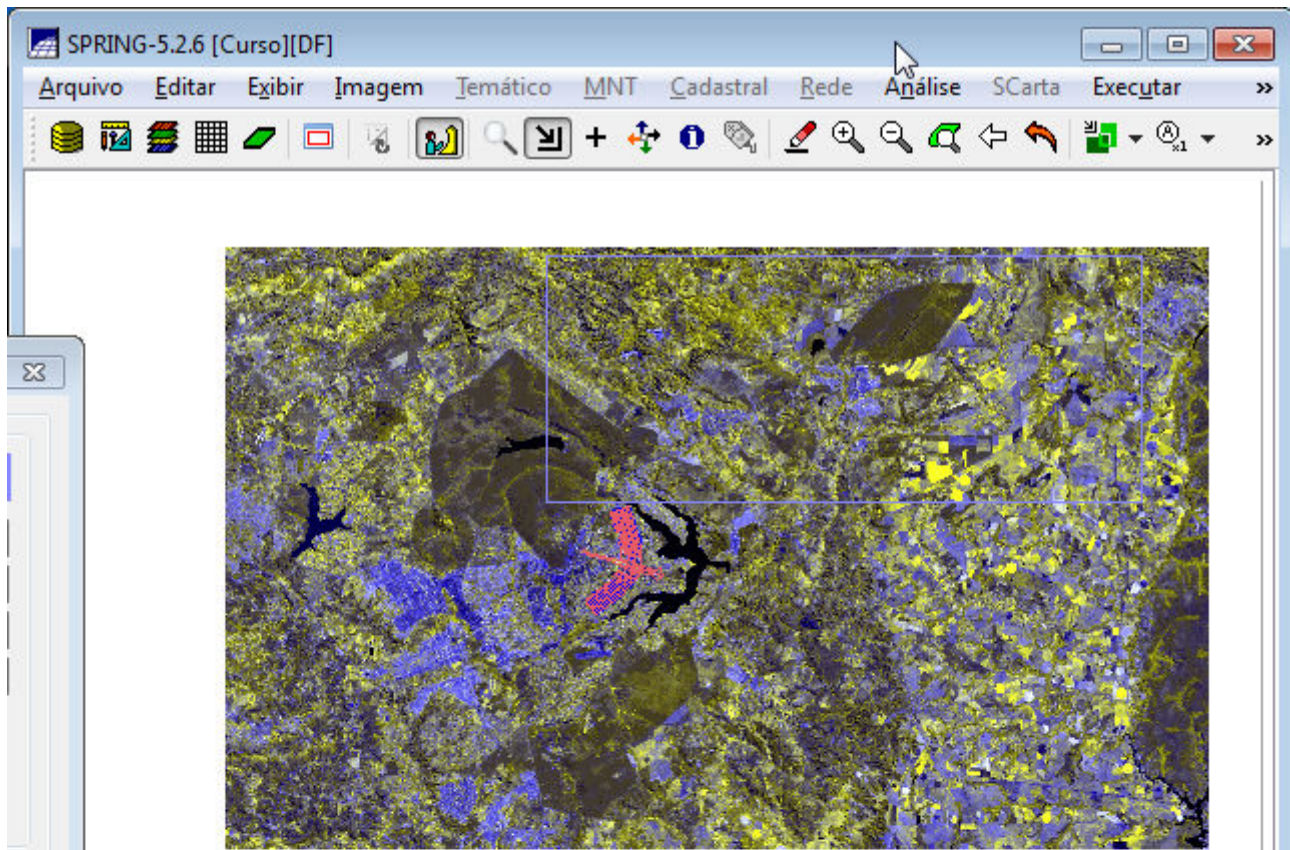
Edição Poligonal

- Criar LF
- Adicionar P
- Mover P
- Remover P

Exportar Temas

PI:





**Classificação**

Diretório... E:\Lab\_1\springdb/Curso/DF

Contextos

contx1

Crjar... Eliminar

Bandas

B3  
B4  
B5

Imagem Segmentada:

Extração de Atributos das Regiões

Treinamento... Classificação...

Pós-Classificação... Mapeamento...


Fechar Ajuda

PULA	MDECLI
00	2.4337...
0	1.9993...
0	2.4962...
0	1.8826...
0	2.6127...
0	1.9825...
0	1.7747...
0	1.9133...
0	1.9677...
0	1.6222...

np\_453

id	
61734	
61735	
61736	
61737	
61738	
61739	
7	61740
8	61741
9	61742
10	61743

Treinamento

Nome:   

Temas

mata Núm.Total de Pixels:1950078
----------------------------------

Modo:  Normal  Agrupar  Desagrupar  Exibe todas

Tipo:  Aquisição  Teste

Contorno:  Poligonal  Retangular  Região

Amostras

1 Aquisição. Núm.de Pixels:1950078
------------------------------------

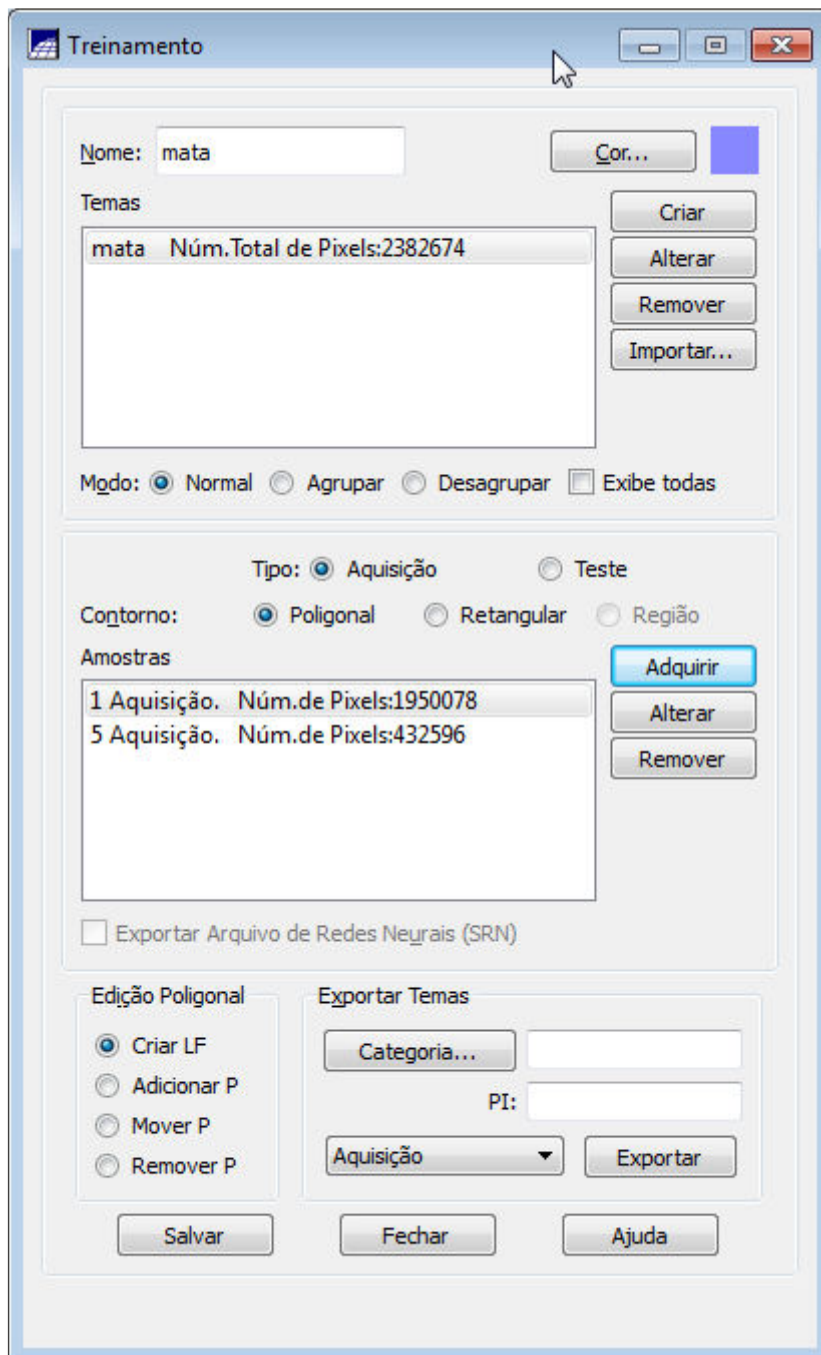
Exportar Arquivo de Redes Neurais (SRN)

Edição Poligonal

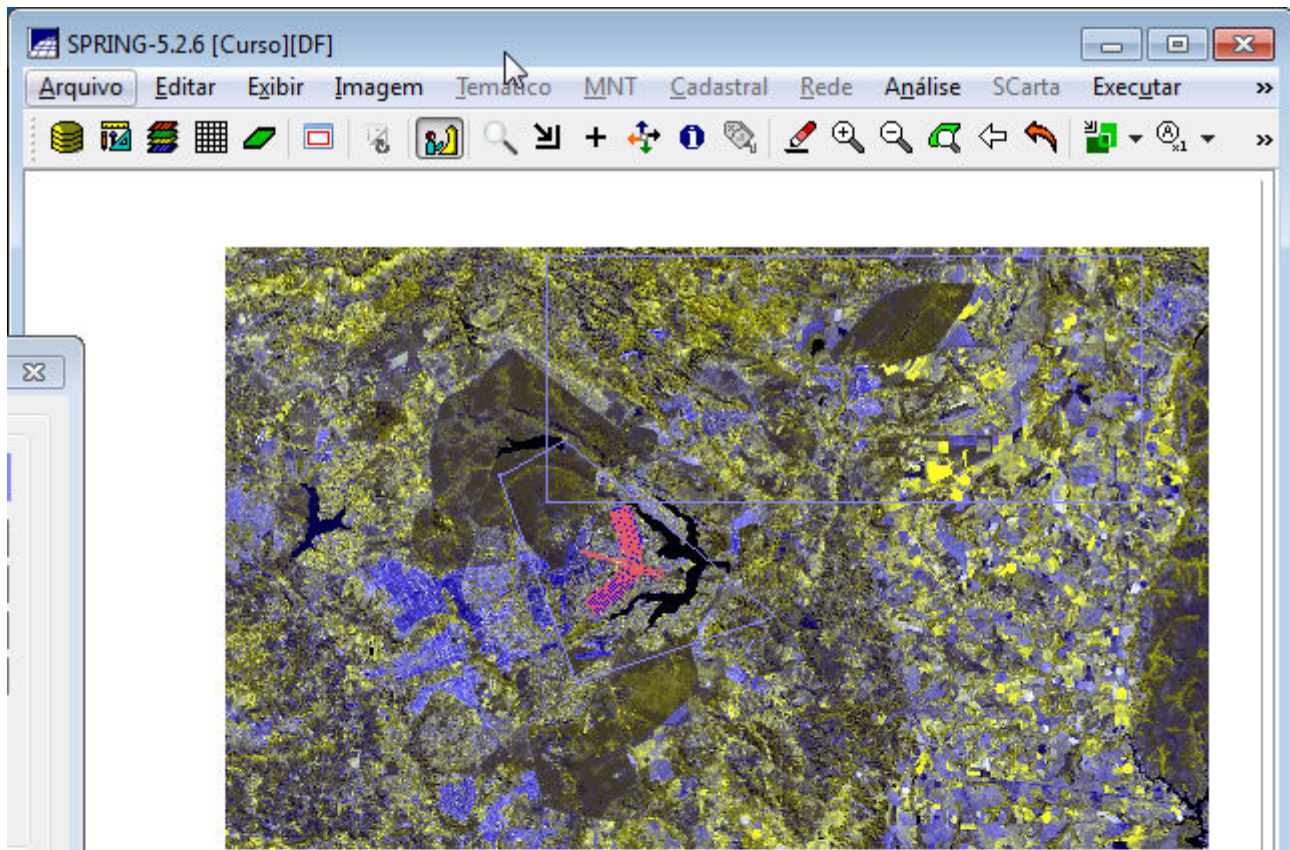
- Criar LF
- Adicionar P
- Mover P
- Remover P

Exportar Temas

PI:







**Classificação**

Diretório... E:\Lab\_1\springdb/Curso/DF

Contextos

contx1

Crjar... Eliminar

Bandas

B3  
B4  
B5

Imagem Segmentada:

Extração de Atributos das Regiões

Treinamento... Classificação...

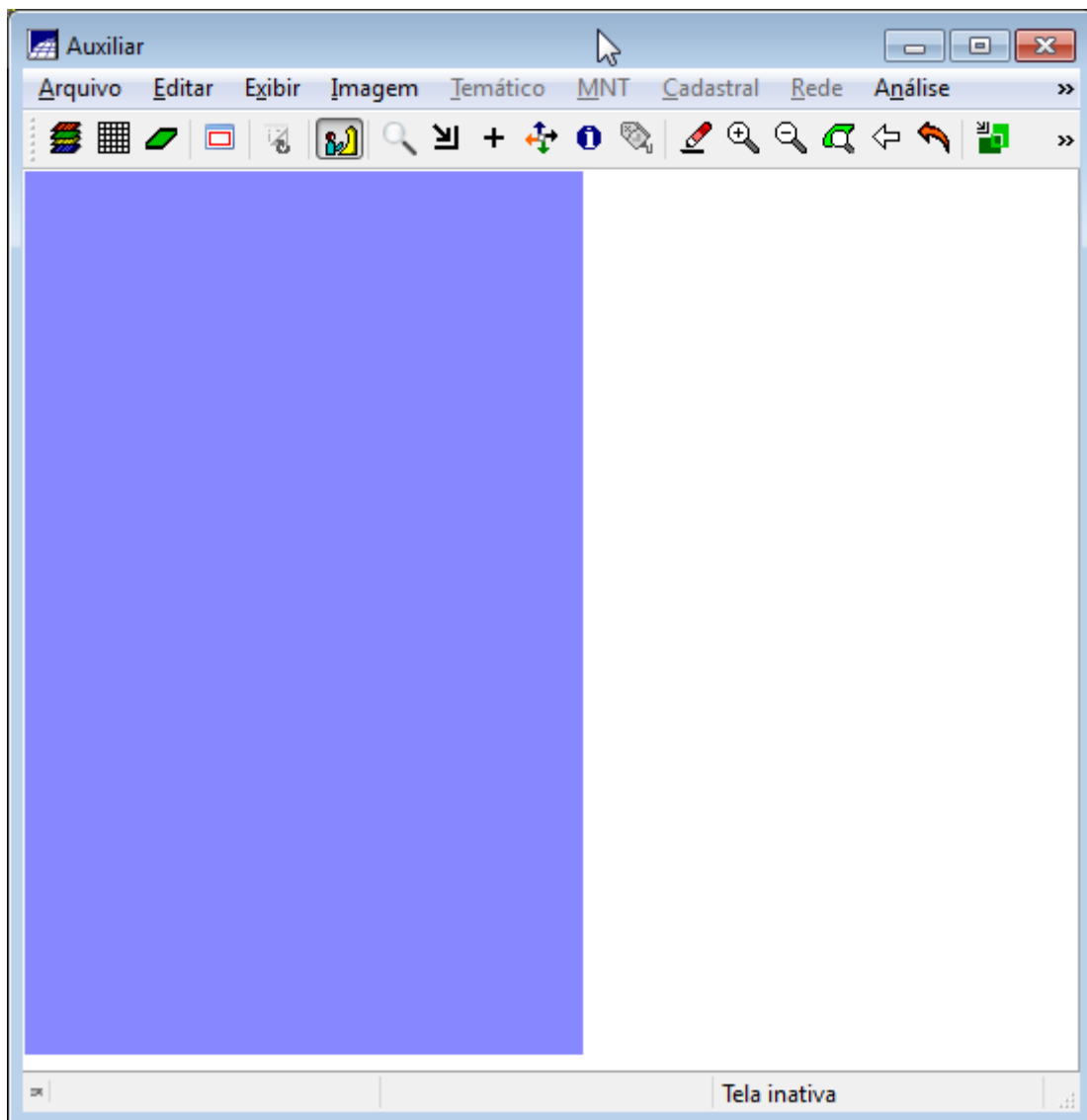
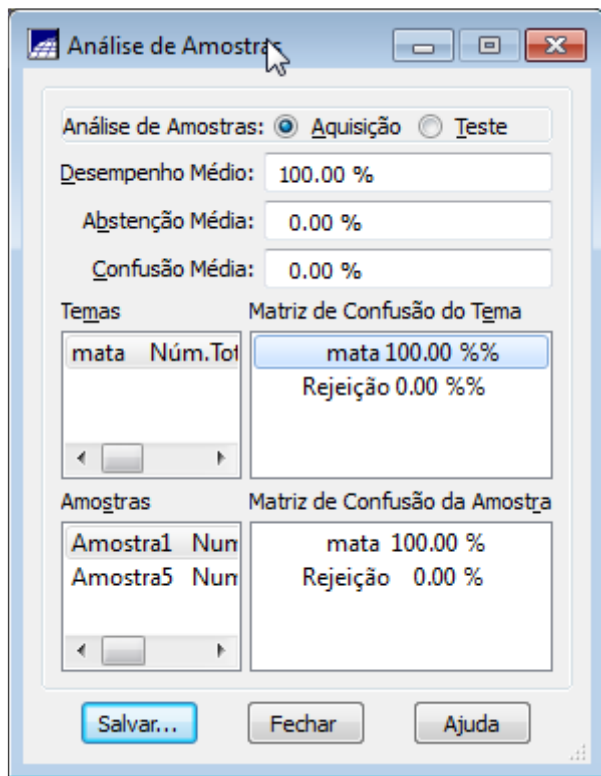
Pós-Classificação... Mapeamento...

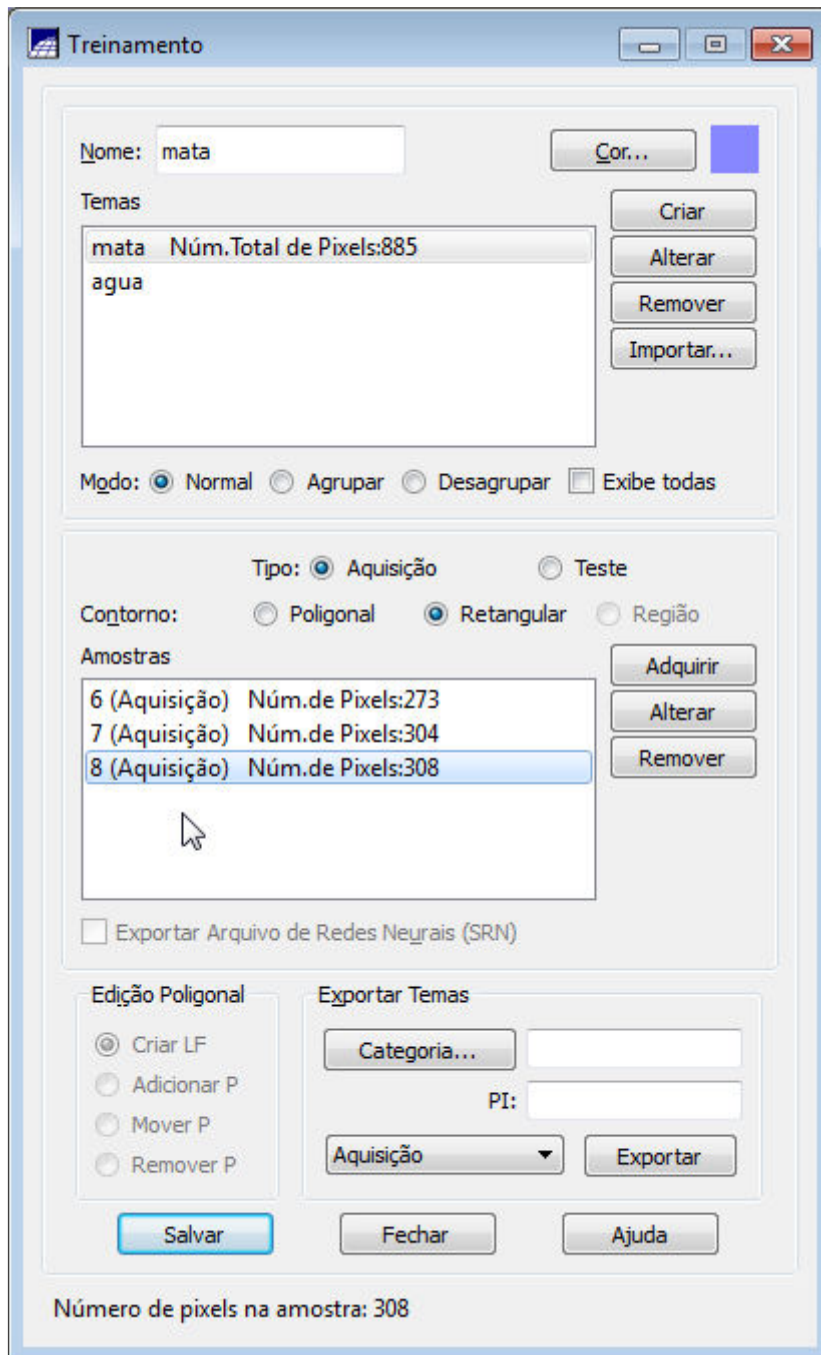
Fechar Ajuda

PULA	MDECLI
00	2.4337...
0	1.9993...
0	2.4962...
0	1.8826...
0	2.6127...
0	1.9825...
0	1.7747...
0	1.9133...
0	1.9677...
0	1.6222

np\_453

id
61734
61735
61736
61737
61738
61739
7 61740
8 61741
9 61742
10 61743







SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar Ferramentas TerraLib

Principal Tela 2 Tela 3 Tela 4

id	nome	rotulo	area	perimetro	ASA	USO	JM_IMC	OPULA	MDECLIN	
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

Pl: Comp\_453

SPRING-5.2.6 [Curso][DF]

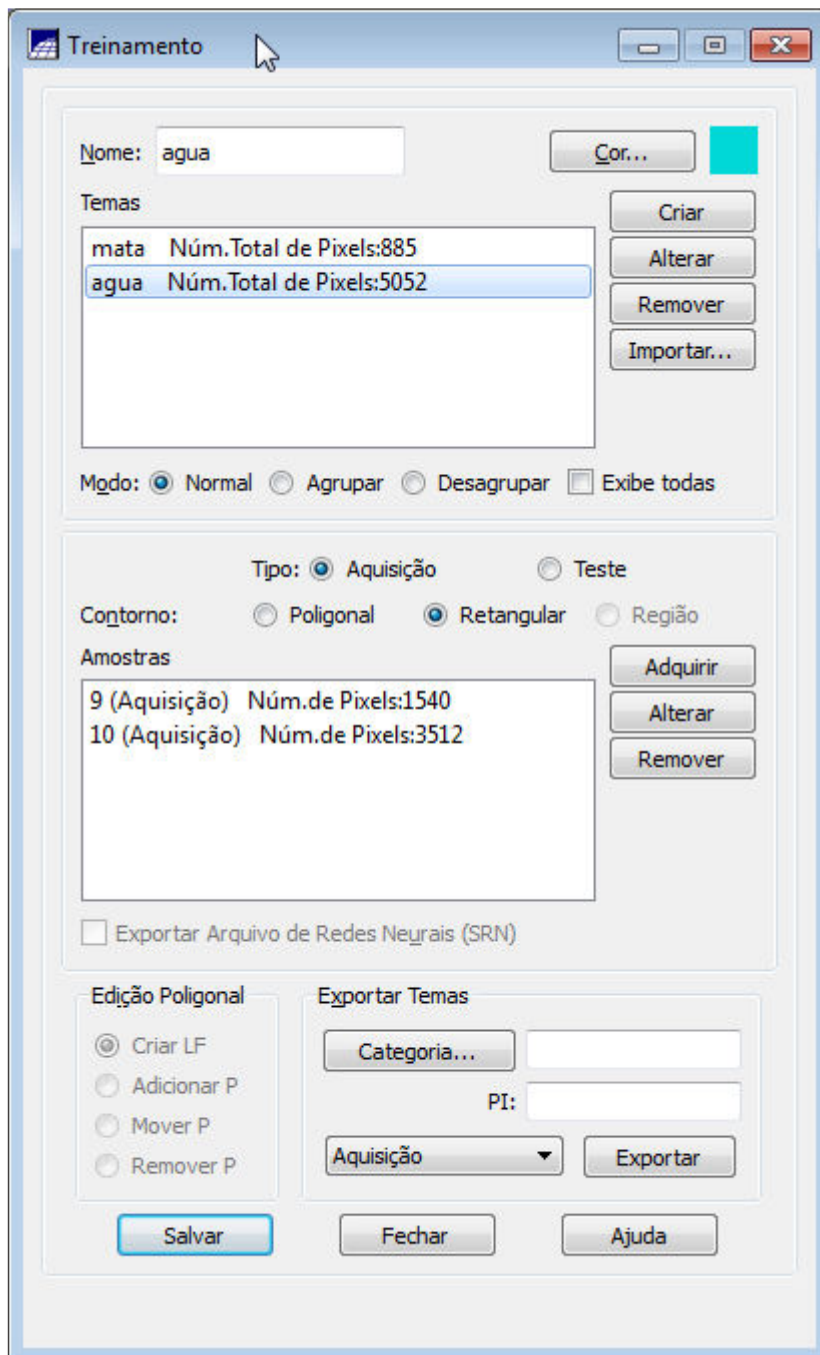
Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar Ferramentas TerraLib

id	nome	rotulo	area	perimetr	ASA	USO	JM_IMC	OPULA	MDECLI	
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

Principal Tela 2 Tela 3 Tela 4

PI: Comp\_453





Análise de Amostras

Análise de Amostras:  Aquisição  Teste

Desempenho Médio: 100.00 %

Abstenção Média: 0.00 %

Confusão Média: 0.00 %

Temas

tema	Núm.Tot
mata	
agua	

Matriz de Confusão do Tema

mata	0.00 %
agua	100.00 %
Rejeição	0.00 %

Amostras

Amostra	Núm
Amostra9	
Amostra10	

Matriz de Confusão da Amostra

mata	0.00 %
agua	100.00 %
Rejeição	0.00 %

Salvar... Fechar Ajuda

SPRING-5.2.6 [Curso][DF]

Arquivo Editar Exibir Imagem Temático MNT Cadastral Rede Análise SCarta Executar Ferramentas

Diretório... E:\...  
Contextos  
contd

Classificação de Imagem

Atributos do Classificador

Tipo do Classificador

Limiar de Aceitação: 100%

% Mudança

#Temas: #

Área de Aquisição...

Imagem de Saída

Categoria... Imagem

Nome: Mapa\_Uso

Executar Fechar

46%

Principal Tela 2 Tela 3 Tela 4

Tabela

	id	nome	rotulo	area	perimetri	ASA	USO	JM_IMC	OPULA	MDECLI
1	61734	SQN-...	SQN-...	110770	1345.51	NORTE	Hotel...	12	3500	2.4337...
2	61735	SQN-...	SQN-...	110082	1336.19	NORTE	Publico	15	250	1.9993...
3	61736	SQN-...	SQN-...	104903	1310.89	NORTE	Publico	18	300	2.4962...
4	61737	SQN-...	SQN-...	106524	1305.89	NORTE	Publico	100	400	1.8826...
5	61738	SQN-...	SQN-...	101699	1279.4	NORTE	Resid...	120	500	2.6127...
6	61739	SQN-...	SQN-...	95459	1248.97	NORTE	Resid...	35	140	1.9825...
7	61740	SQN-...	SQN-...	108359	1323.46	NORTE	Resid...	24	100	1.7747...
8	61741	SQN-...	SQN-...	104378	1301.07	NORTE	Resid...	24	120	1.9133...
9	61742	SQN-...	SQN-...	113198	1351.42	NORTE	Resid...	30	120	1.9677...
10	61743	SQN-...	SQN-...	112457	1340.52	NORTE	Resid...	30	150	1.6222...

Gerando imagem classificada ...

PI: Comp\_453

