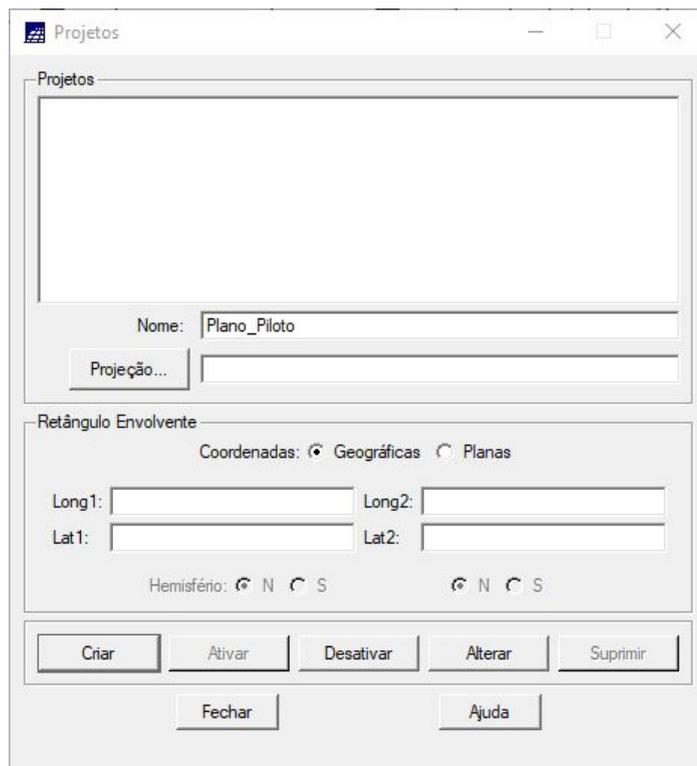
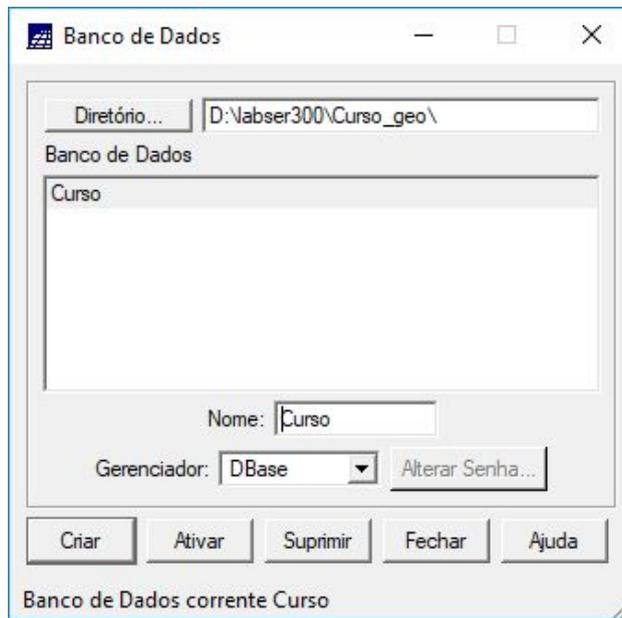


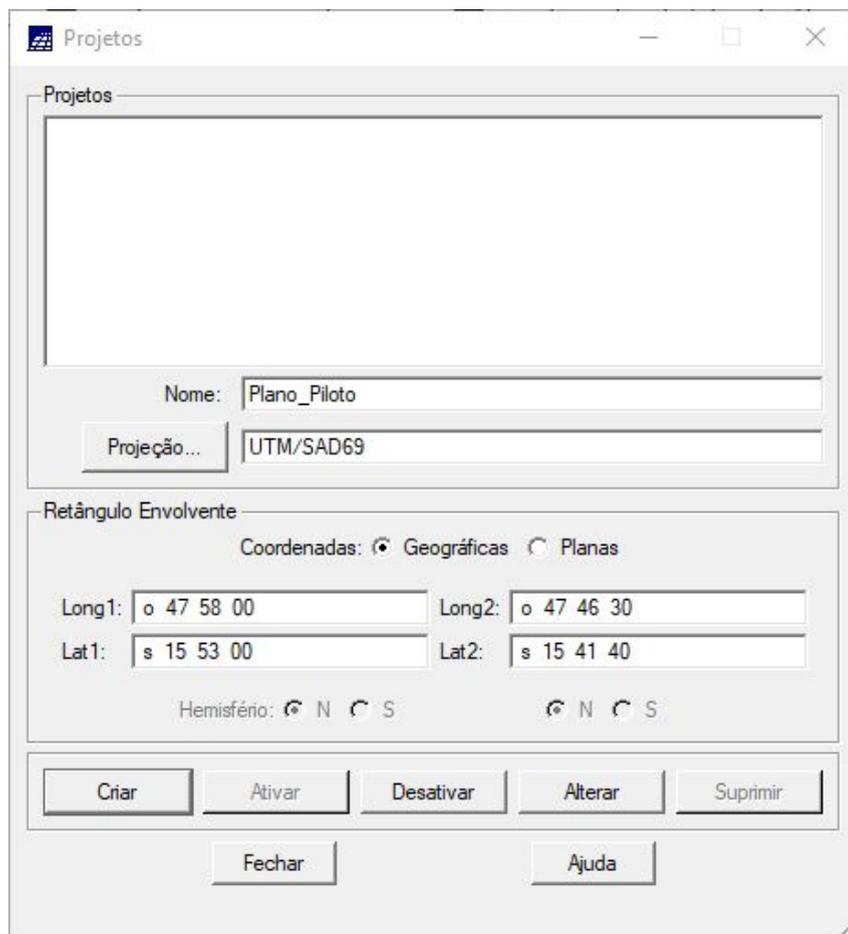
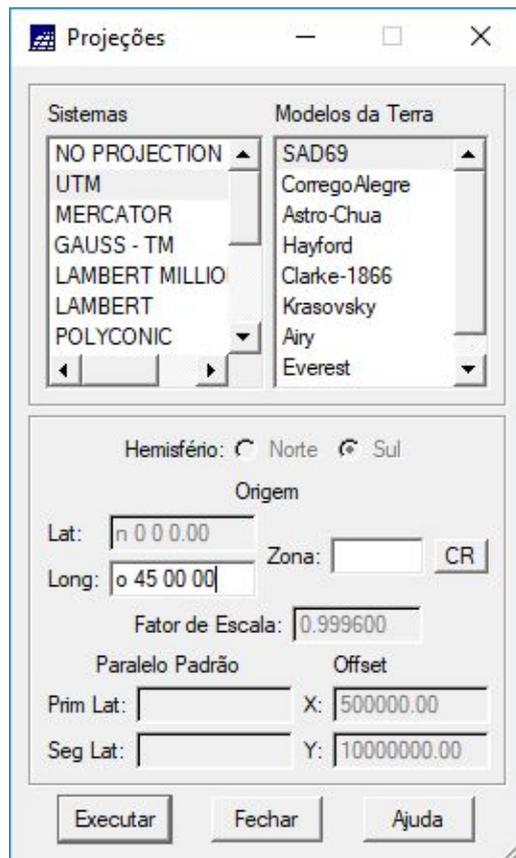
Relatório do Laboratório 3 - SER-300
Aluna: Carolina Galvão dos Santos

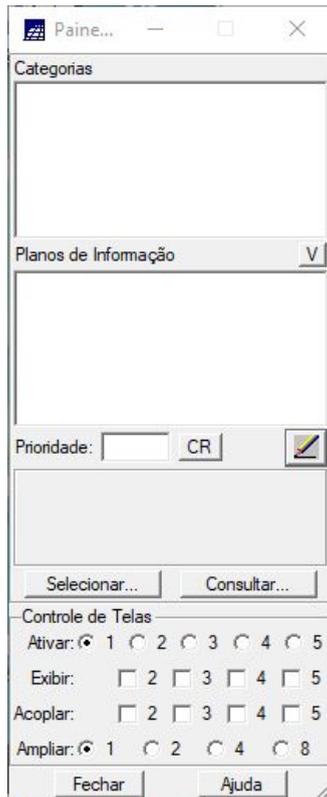
Execução dos passos descritos no terceiro laboratório realizado na aplicação Spring de forma resumida apenas para apresentar o que foi realizado em cada etapa dos exercícios propostos.

Exercício 1 – Definindo o Plano Piloto para o Aplicativo 1

- Criando o Banco Curso e o Projeto Plano Piloto:



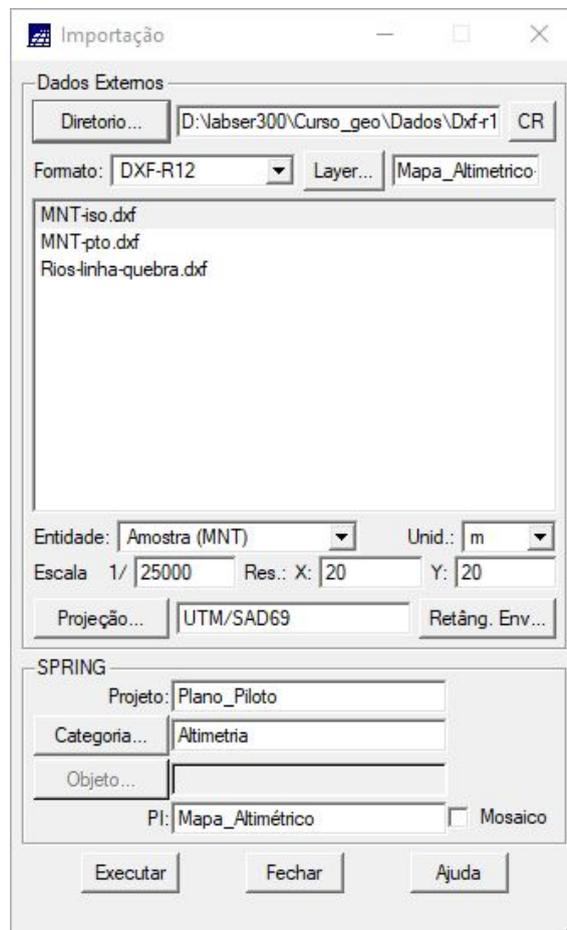
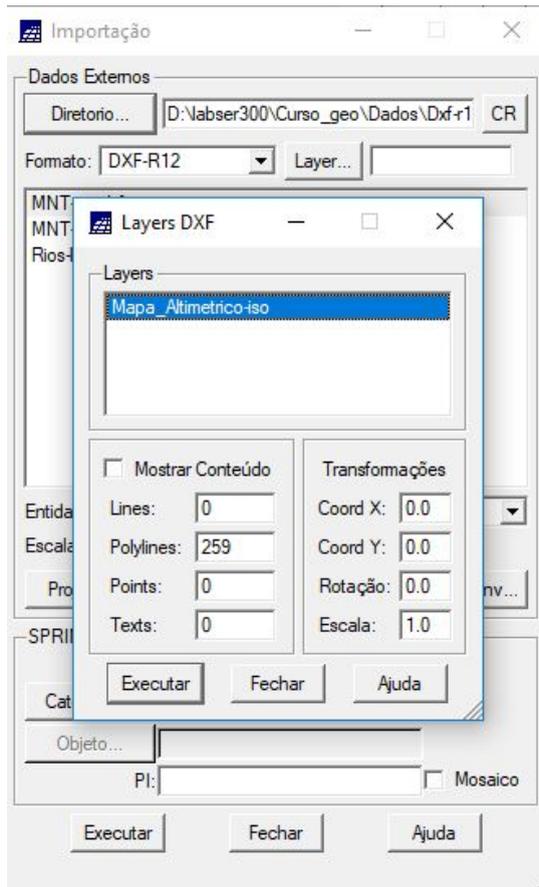


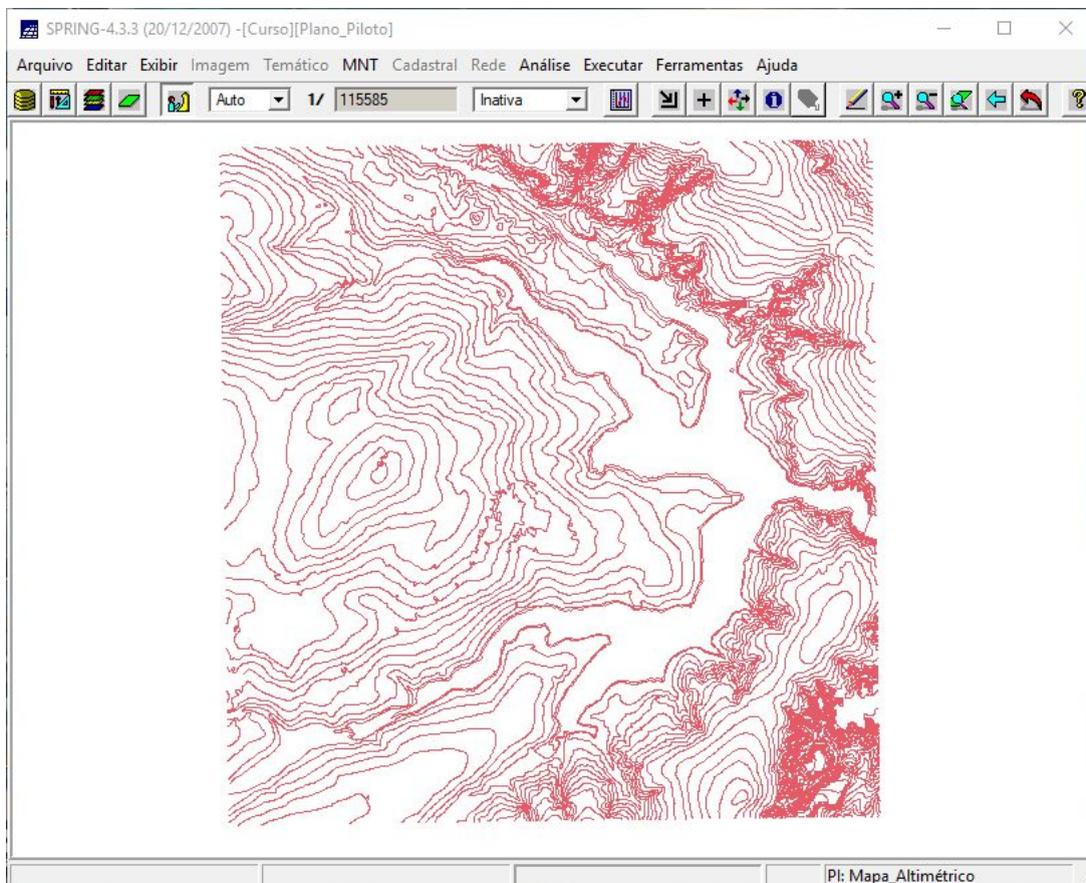
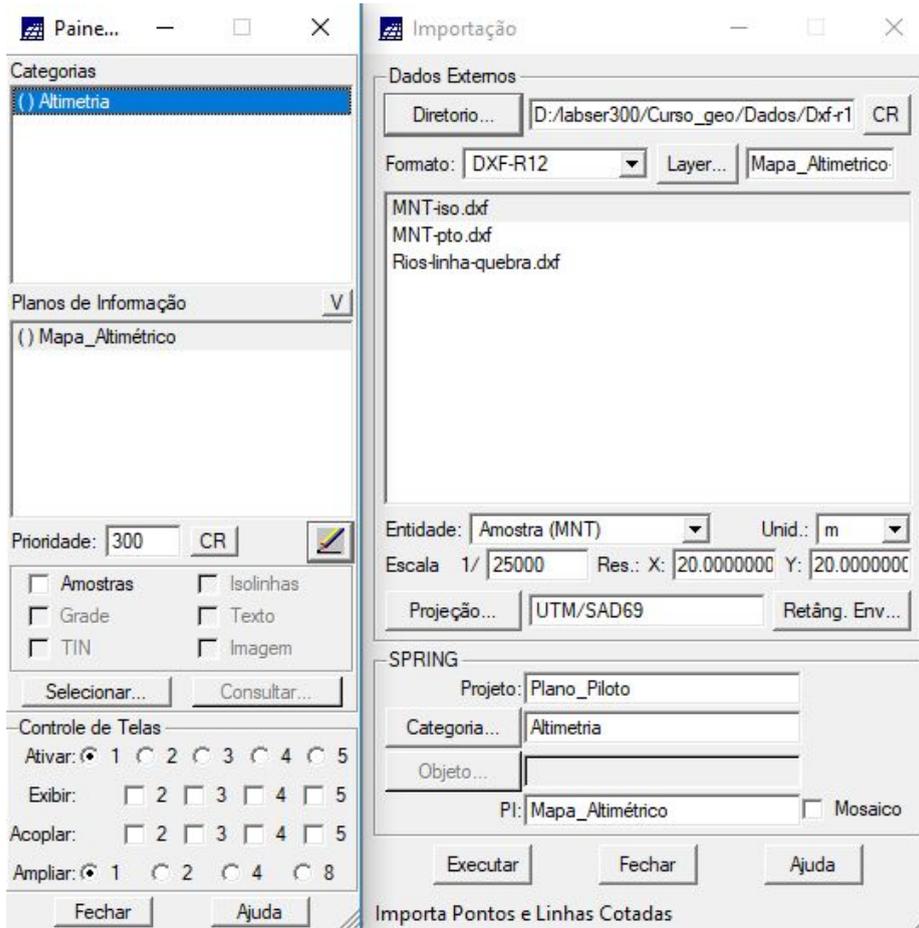


Exercício 2 – Importação amostras de modelo numérico de terreno

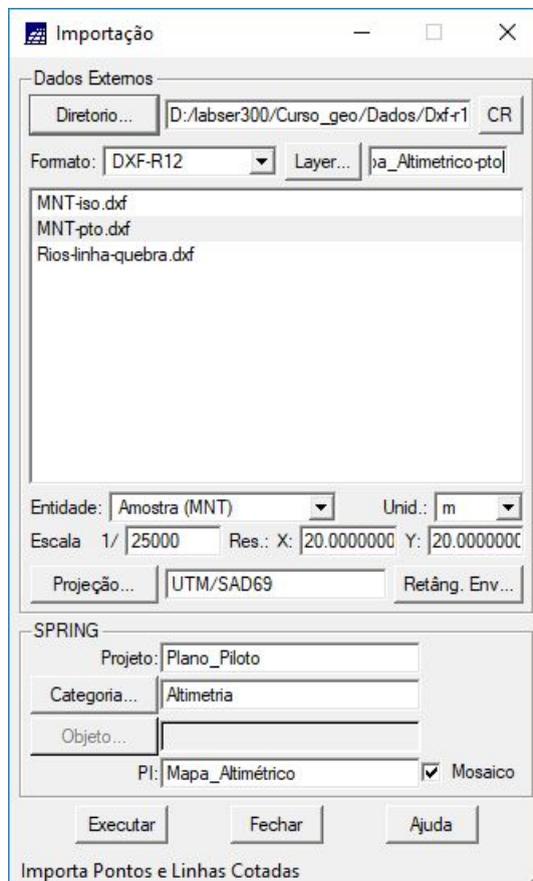
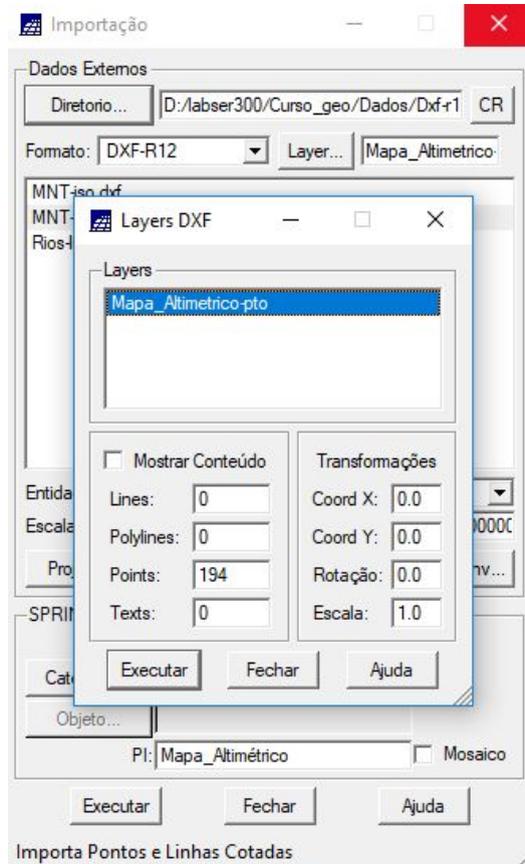
- Importar arquivo DXF com isolinhas num PI numérico:

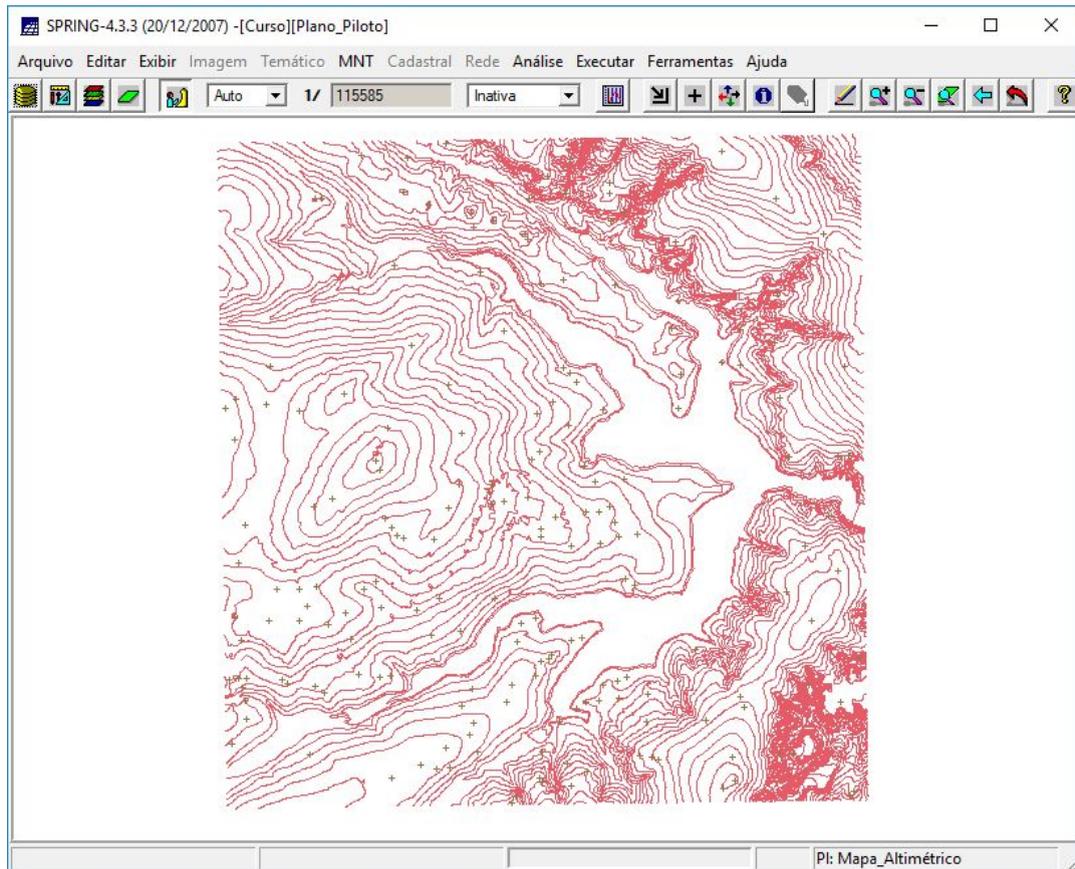






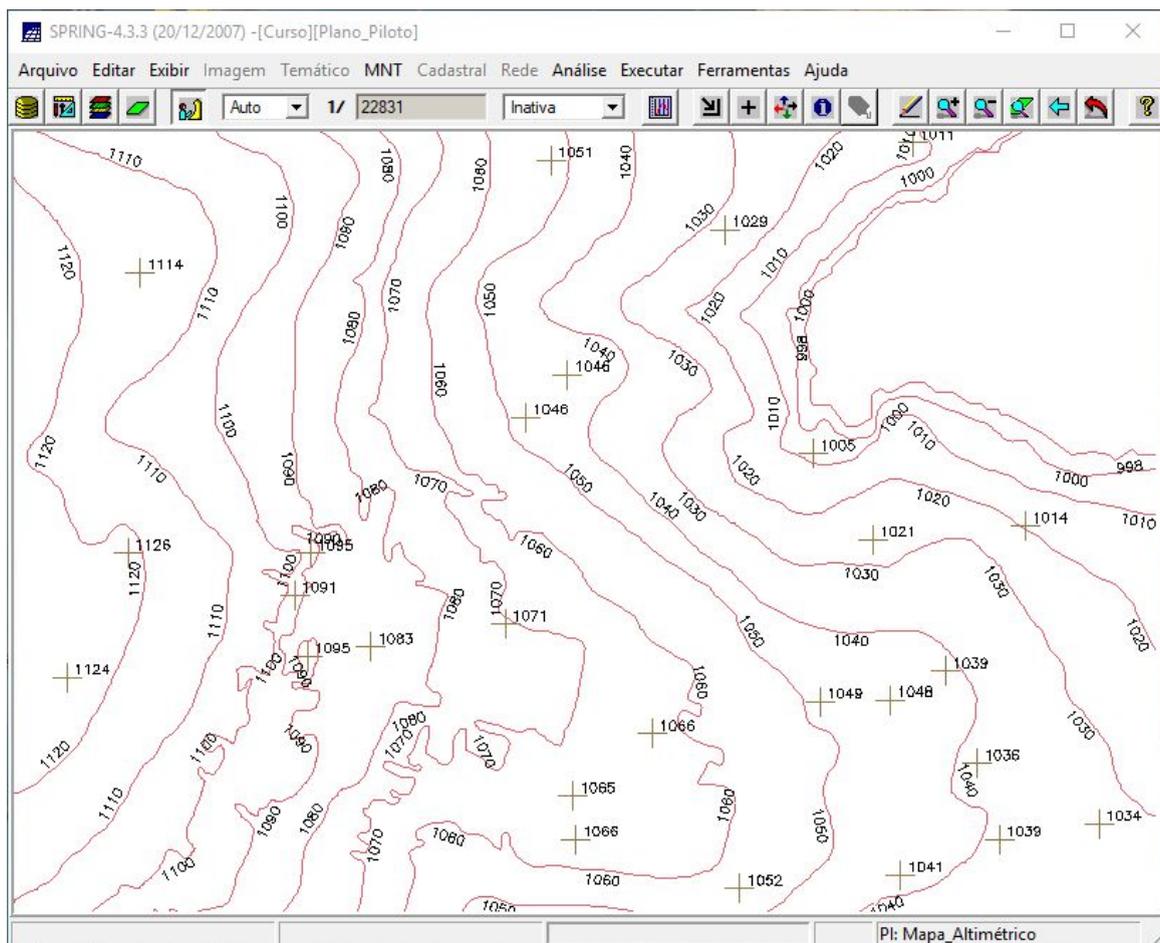
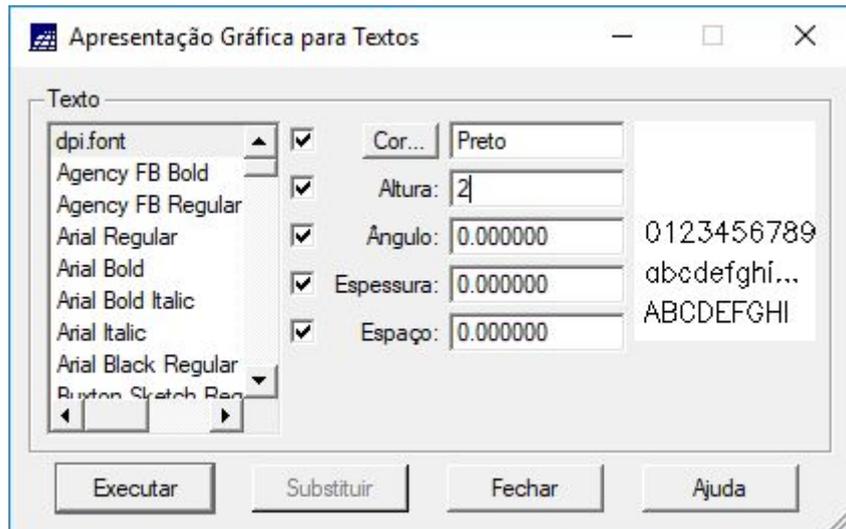
- Importar arquivo DXF com pontos cotados no mesmo PI das isolinhas:





- Gerar toponímia para amostras:





Exercício 3 - Edição de modelo numérico de terreno

- Criar um novo PI numérico e fazer cópia do mapa altimétrico:

Planos de Informação

Categorias

Altimetria

Nome: Modelo:

Resolução X: Y:

Escala: 1/

Data/Hora...

Amostras Grade TIN

Isolinhas Texto

Retângulo Envolvente

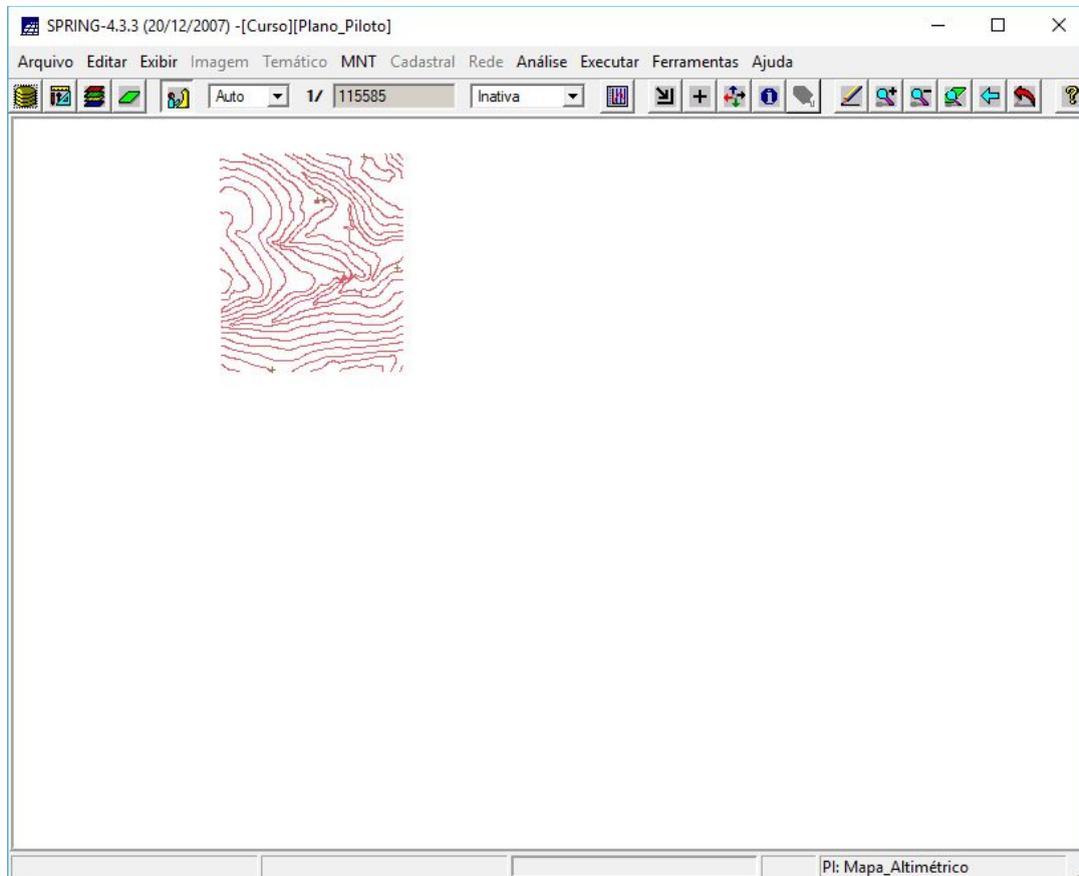
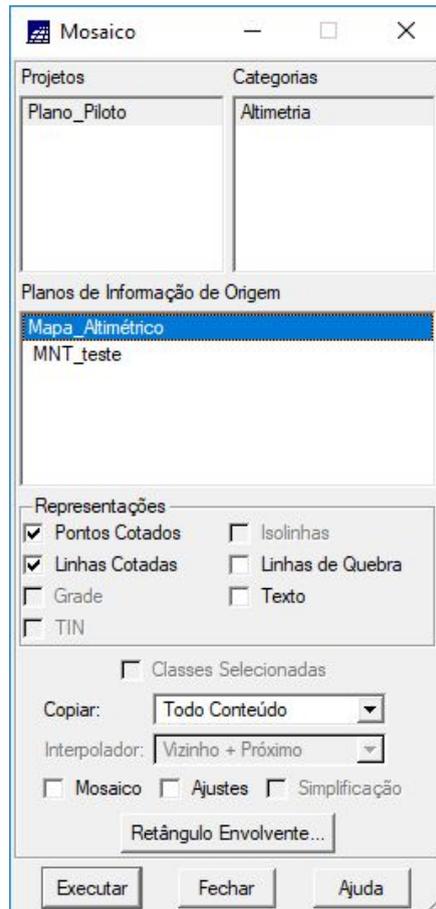
Cursor: Não Sim PI Ativo
 Projeto

Coordenadas: Geográficas Planas

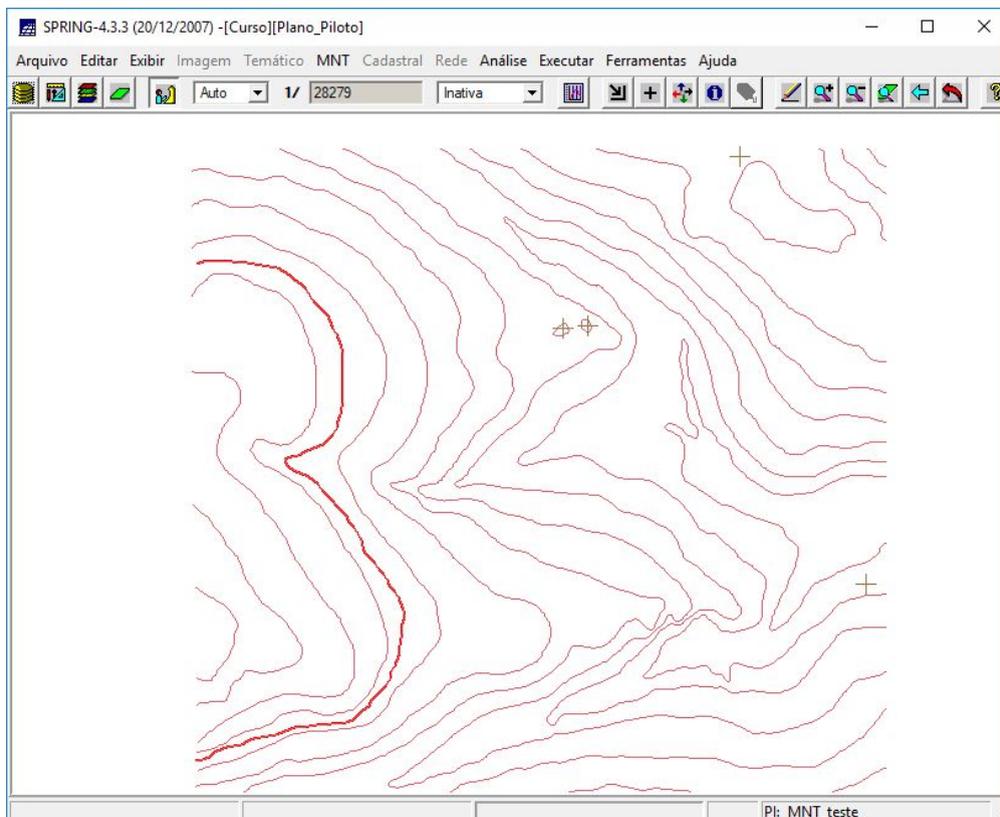
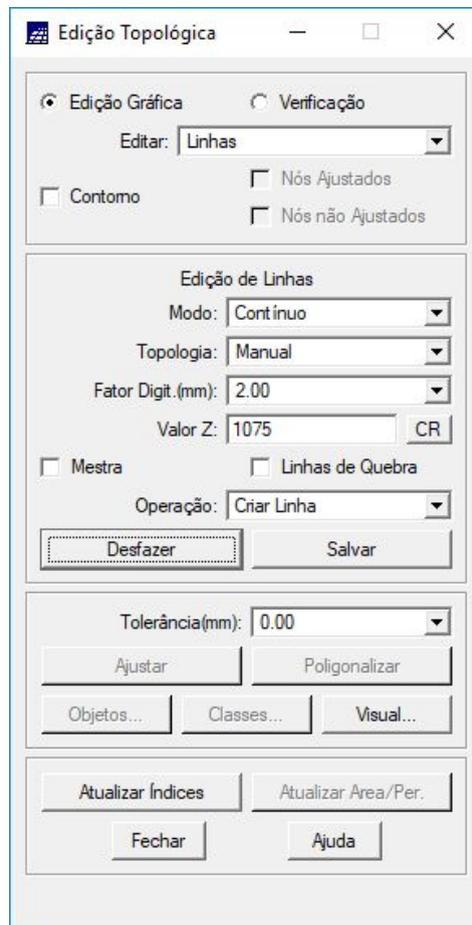
Long1: Long2:

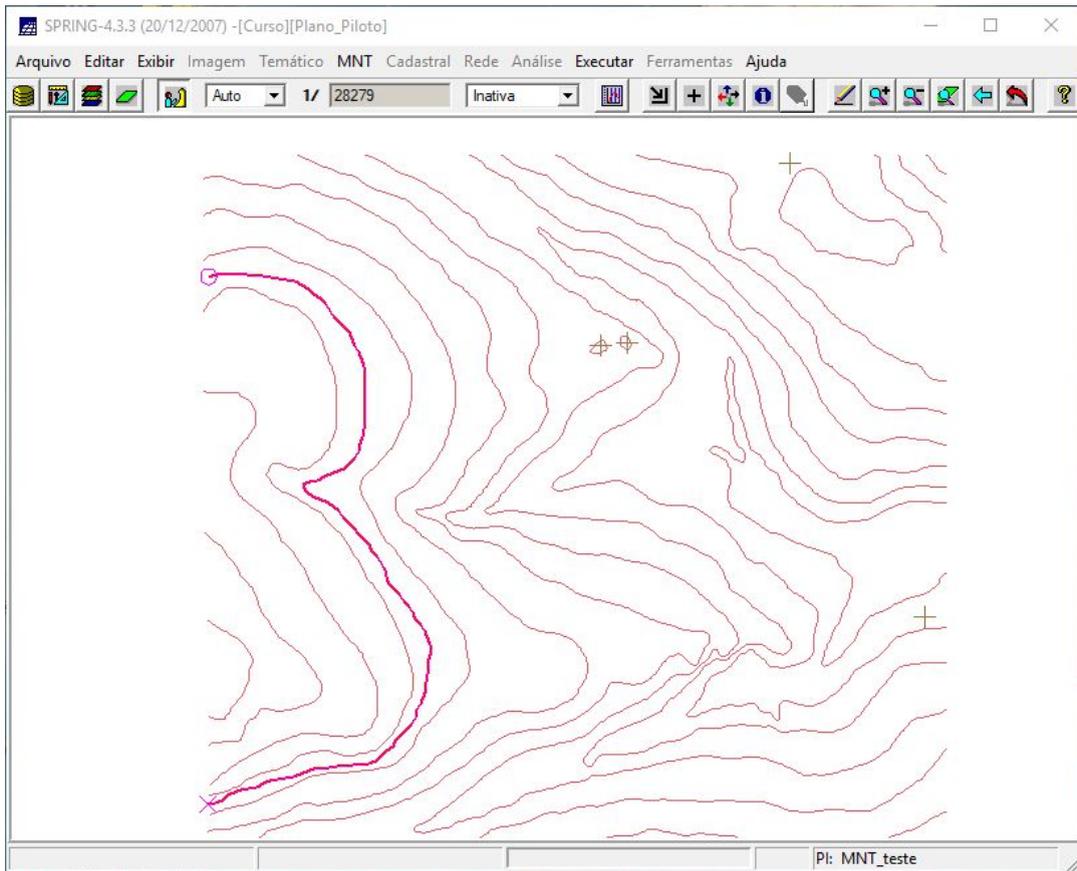
Lat1: Lat2:

Hemisfério: N S N S



- Editar isolinhas e pontos cotados num PI numérico:





The "Verificação de Linhas" dialog box is open, showing the following fields and options:

- Identificador: 0
- Valor Z: 1075.000000
- Demanda: Inválido
- Imp. Positiva: Inválido
- Imp. Negativa: Inválido
- Comprimento (m): 6267.346063
- # de Pontos: 116

Navigation buttons: < > = >

Buttons: Selecionar, Relatório...

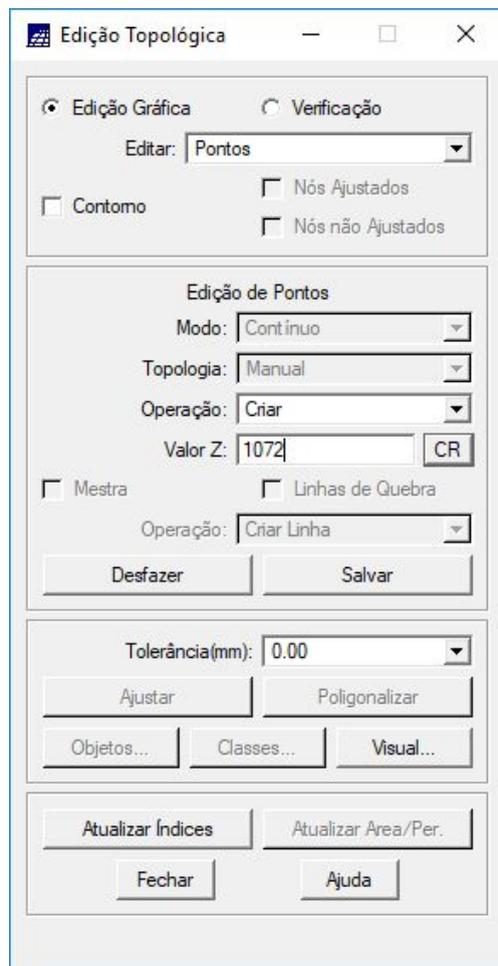
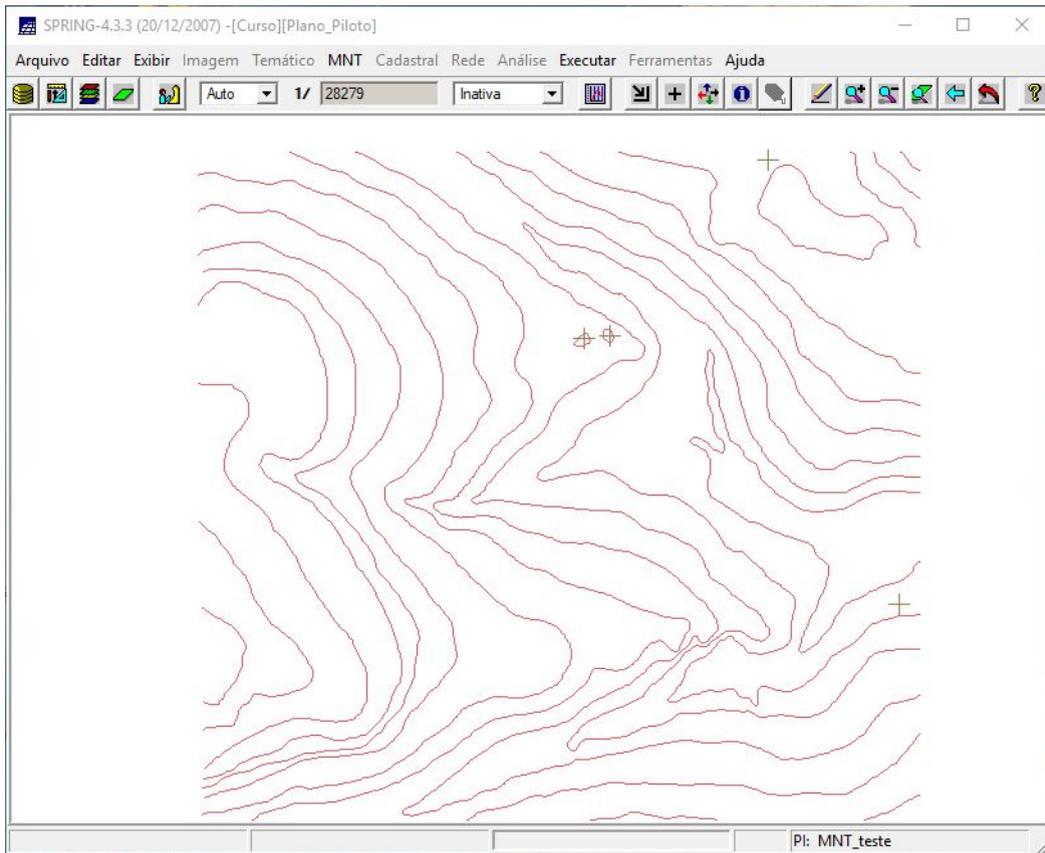
Mudar Orientação da Linha

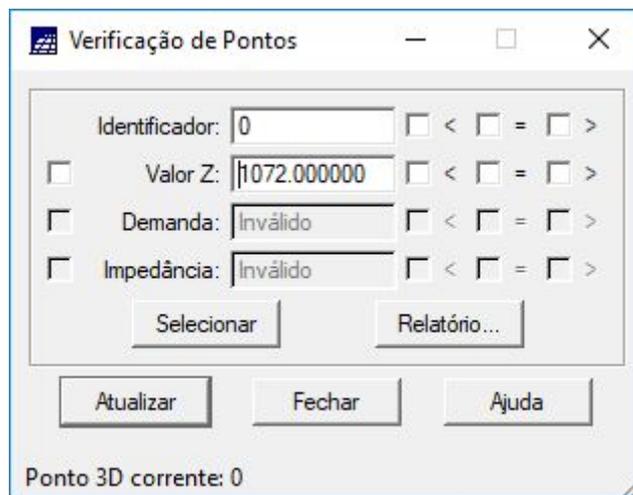
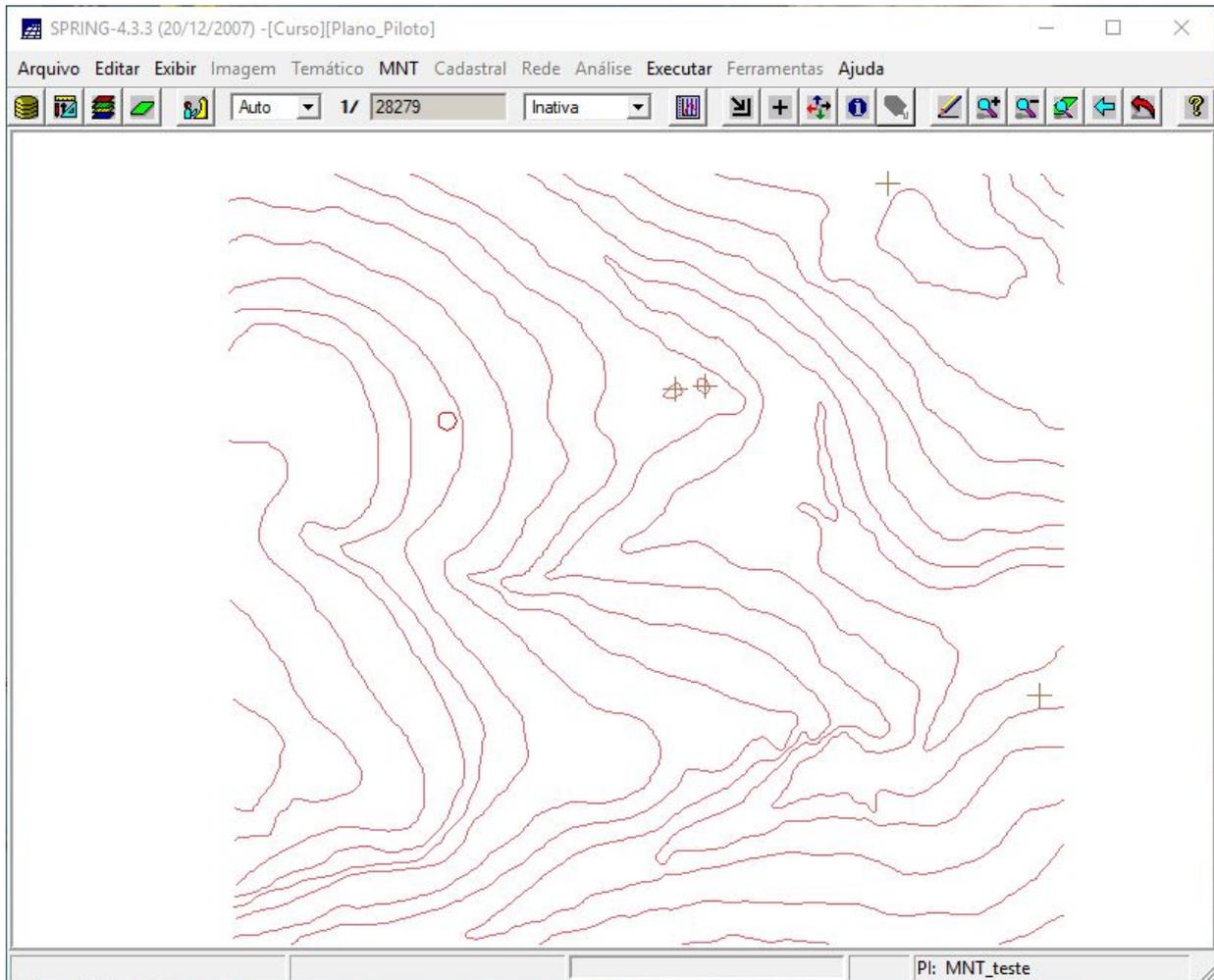
Tipo de Linha:

- Linha de Quebra
- Isolinha
- Mestra

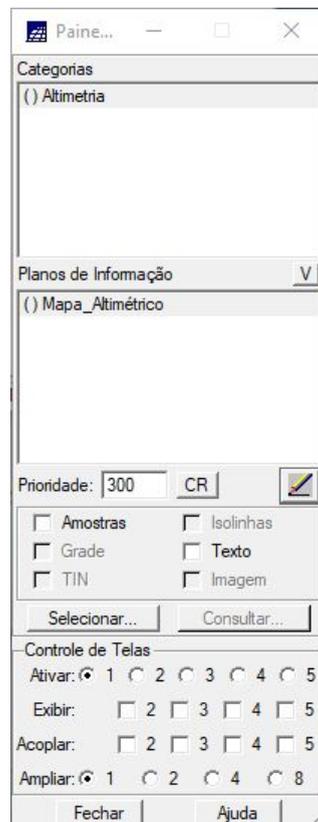
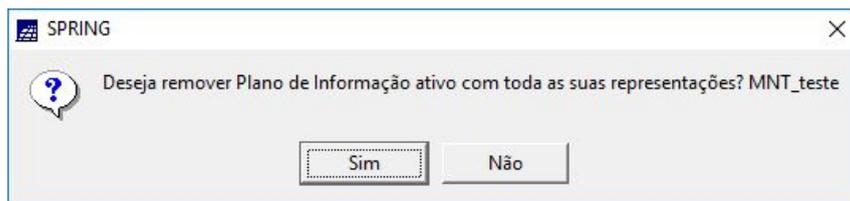
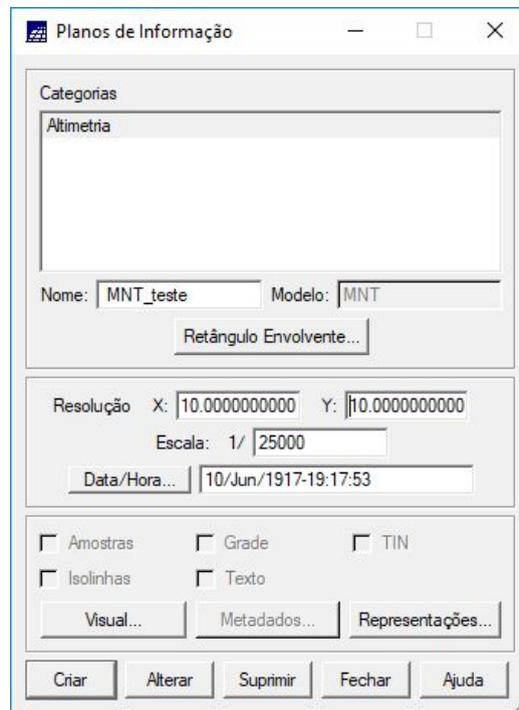
Buttons: Alterar, Fechar, Ajuda

Linha Corrente: 0





- Suprimir o PI MNT_Teste:



Exercício 4 - Gerar grade triangular com e sem linha de quebra

Geração de TIN

Entrada: Amostra Grade TIN

PI de Saída:

Tipo

Linha de Quebra

Sim Não

Simplificação de Linhas

Tolerância de Isolinhas:

Distância entre Ponto de Isolinhas:

Tolerância de Linhas de Quebra:

Triangulação

Menor Aresta (m):

Paine...

Categorias

(V) Altimetria

Planos de Informação

() Mapa_Altimétrico

(T) MNT-tin

Prioridade:

Amostras Isolinhas

Grade Texto

TIN Imagem

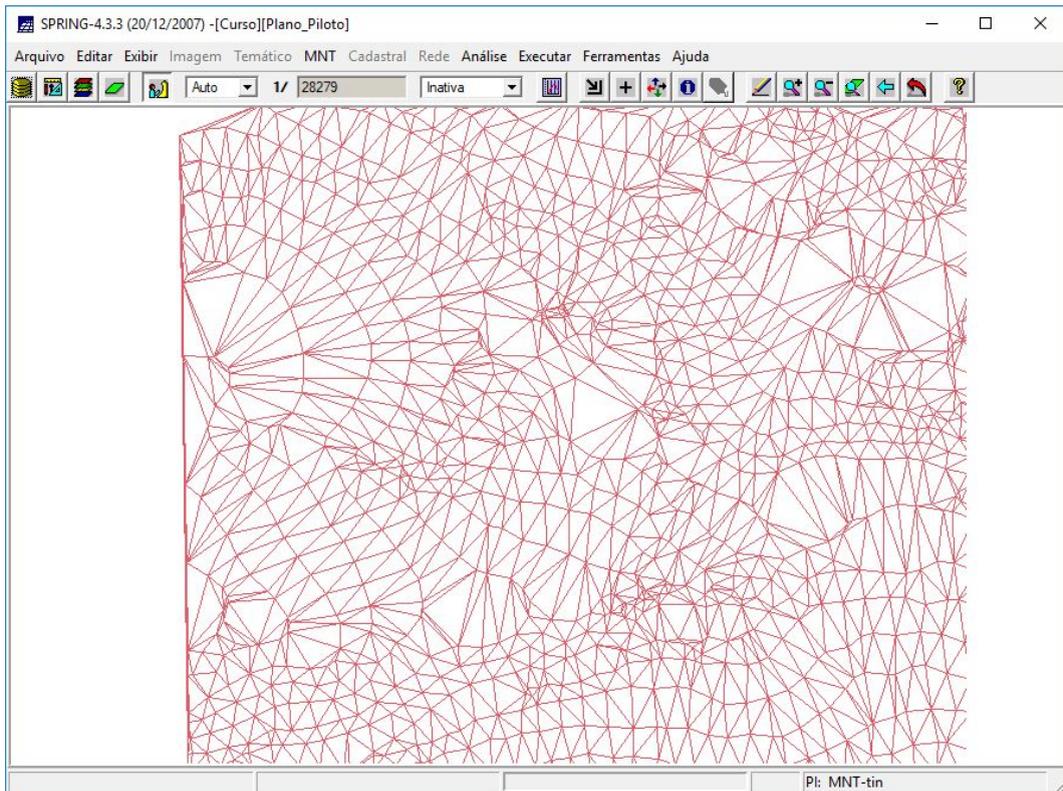
Controle de Telas

Ativar: 1 2 3 4 5

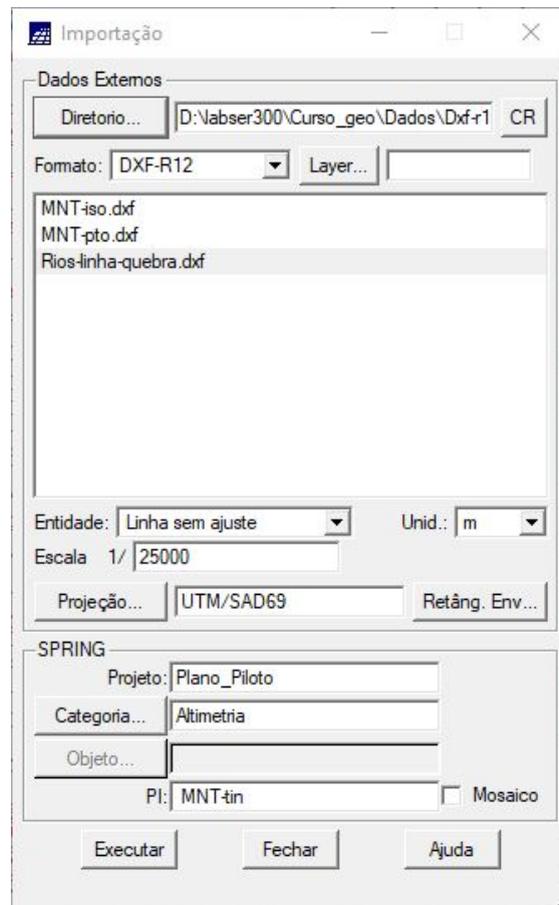
Exibir: 2 3 4 5

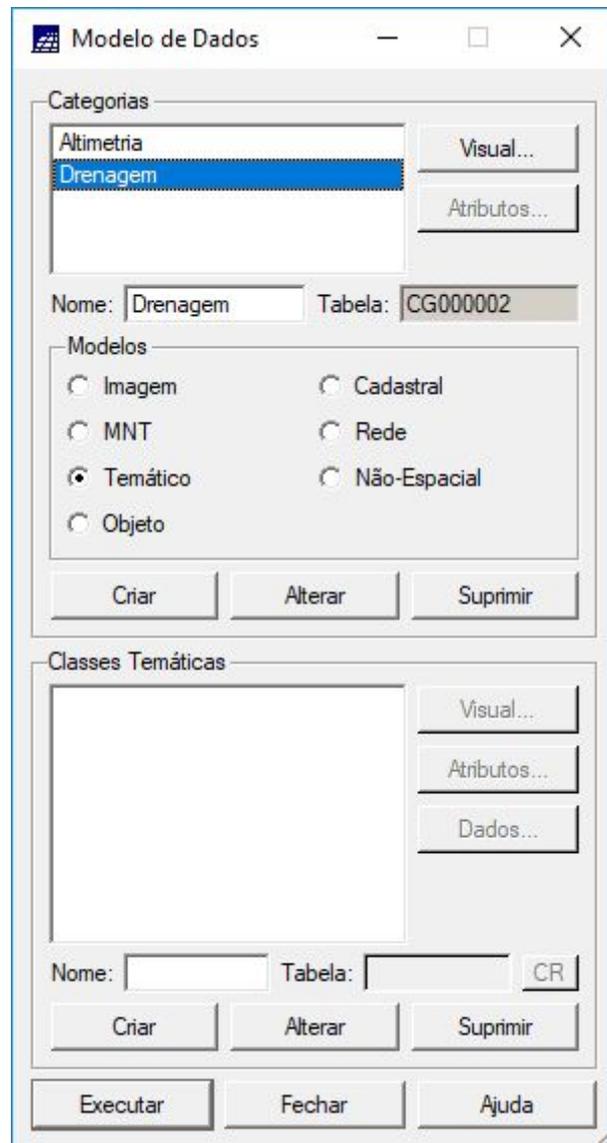
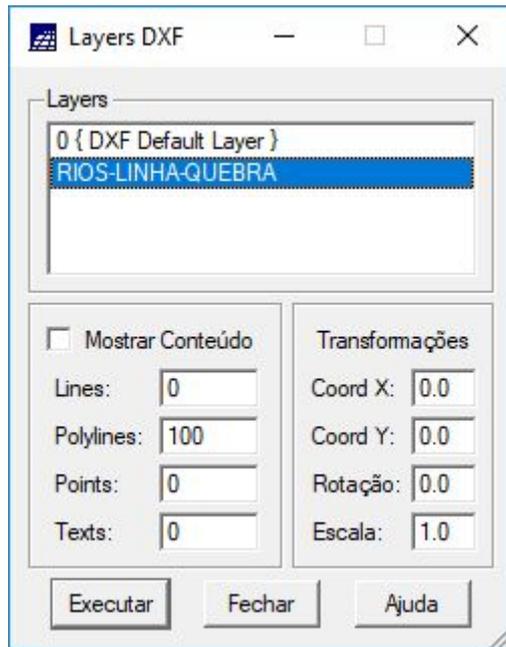
Acoplar: 2 3 4 5

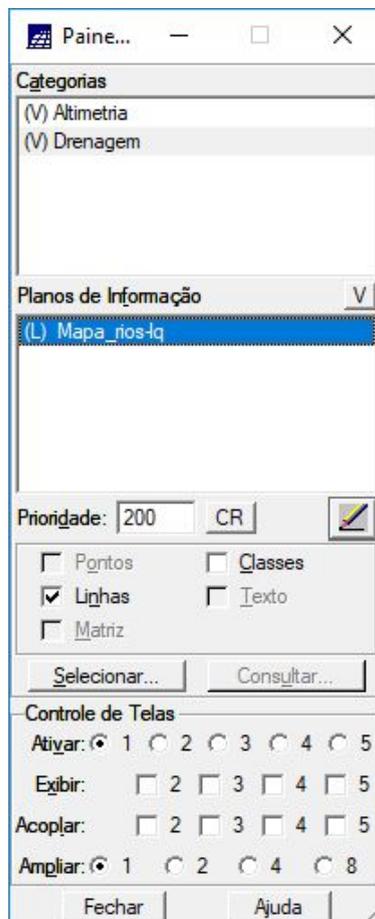
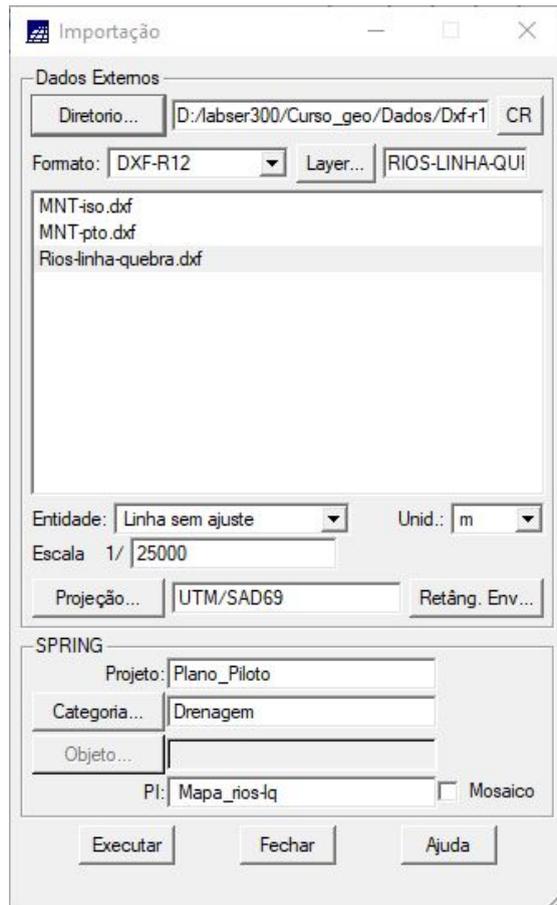
Ampliar: 1 2 4 8

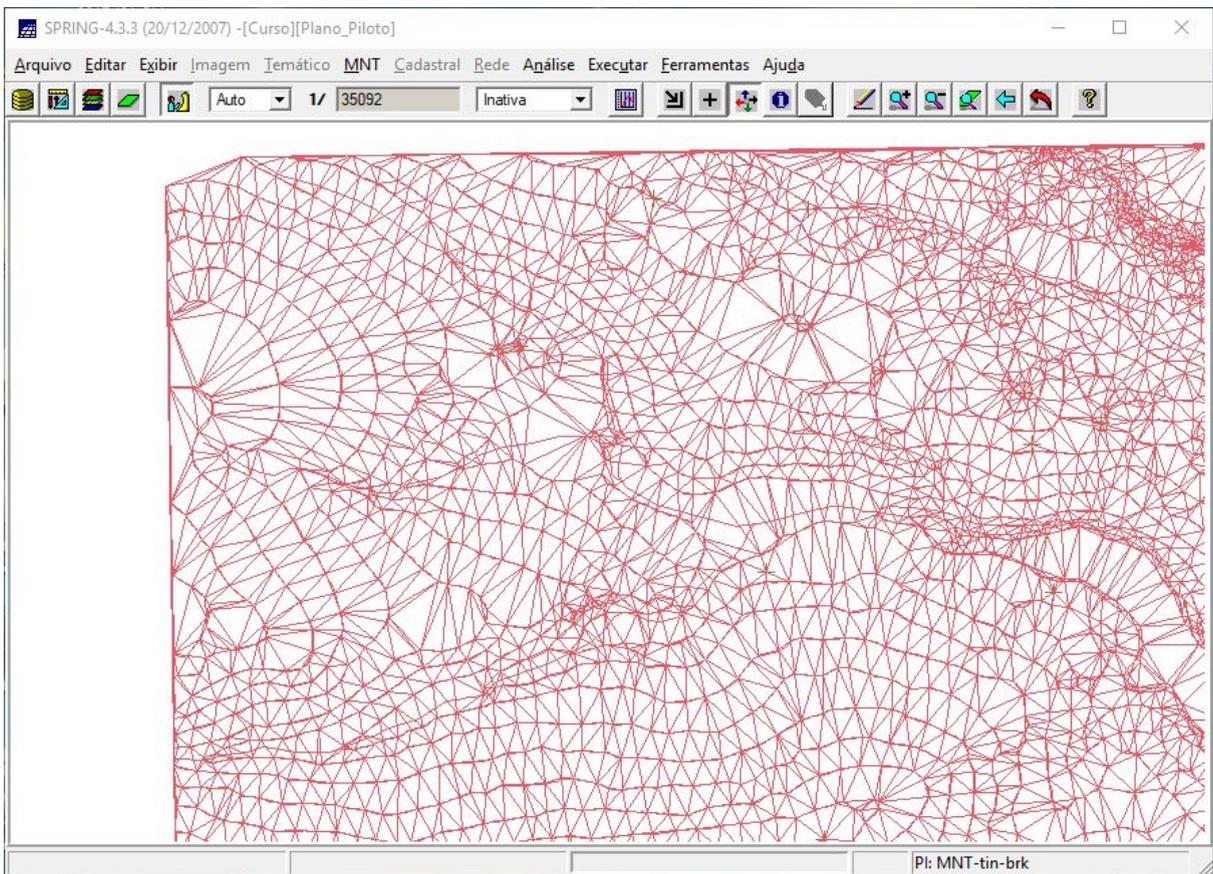
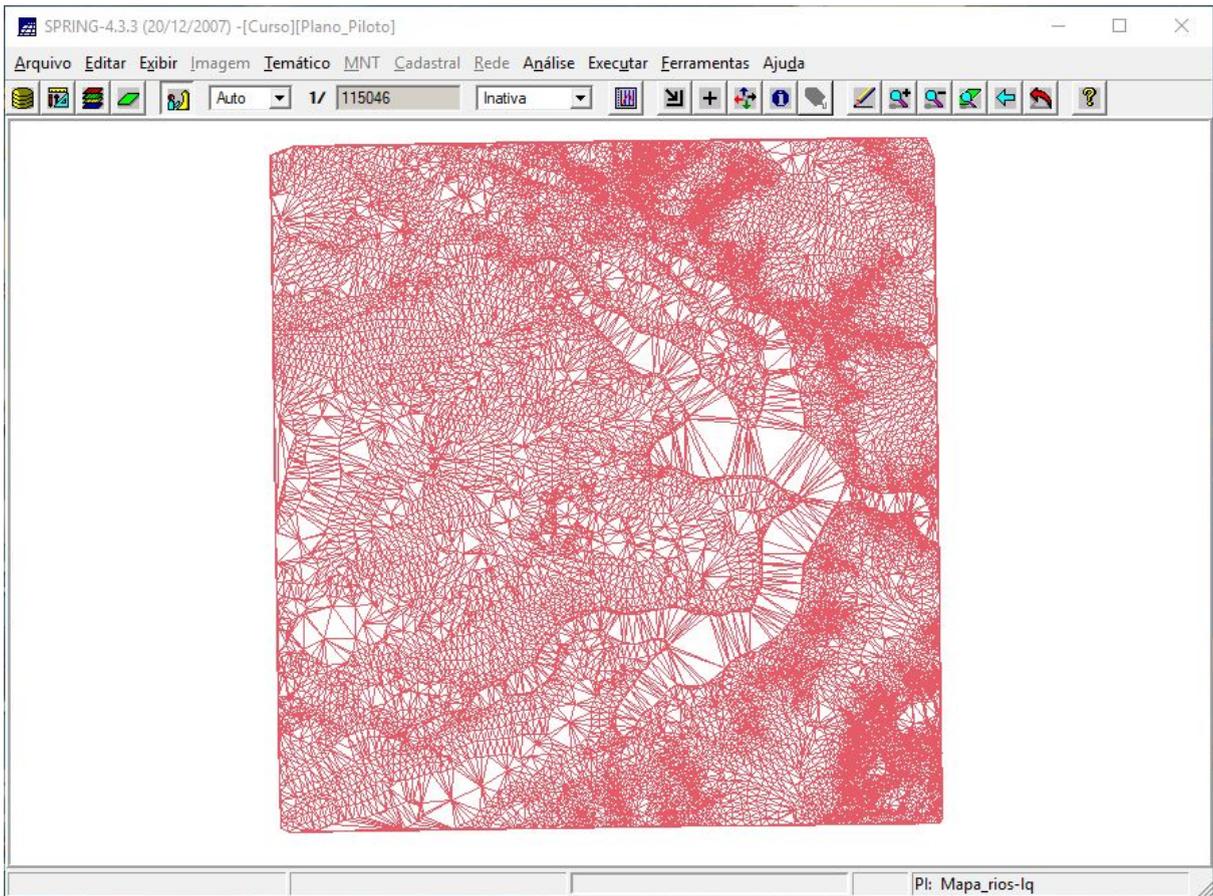


- Importar a drenagem de arquivo DXF para PI temático:

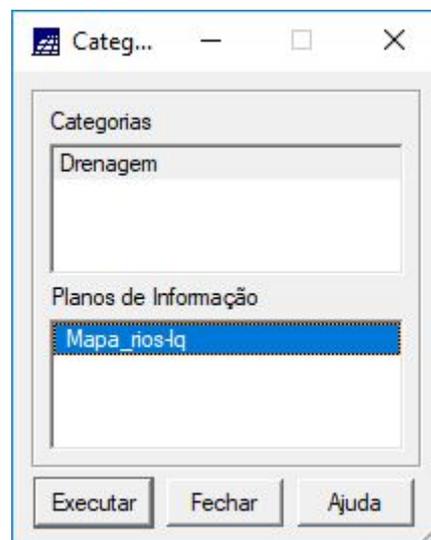
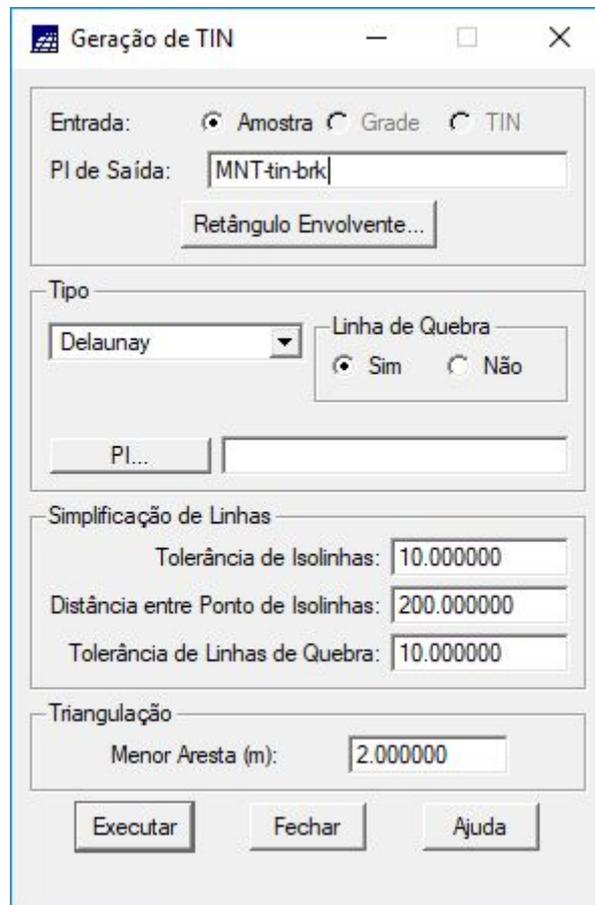


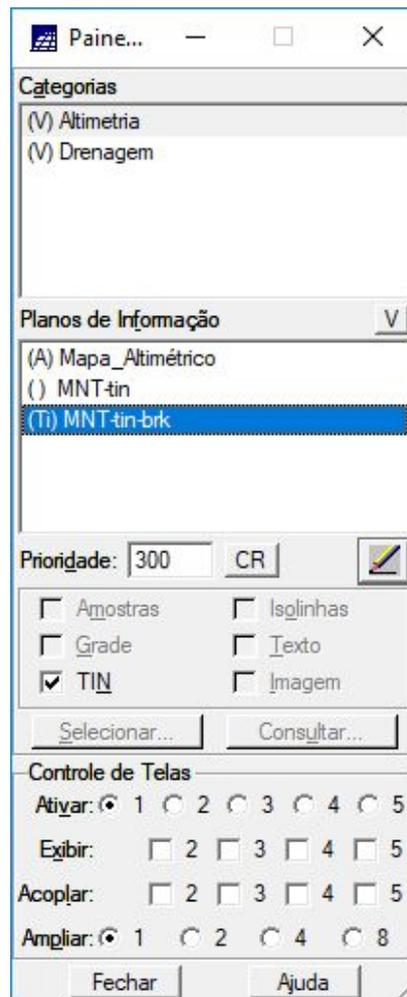
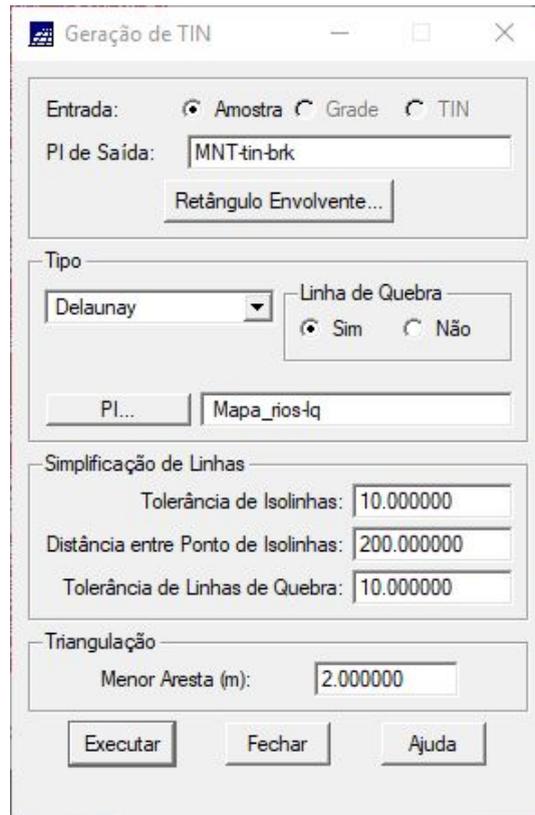


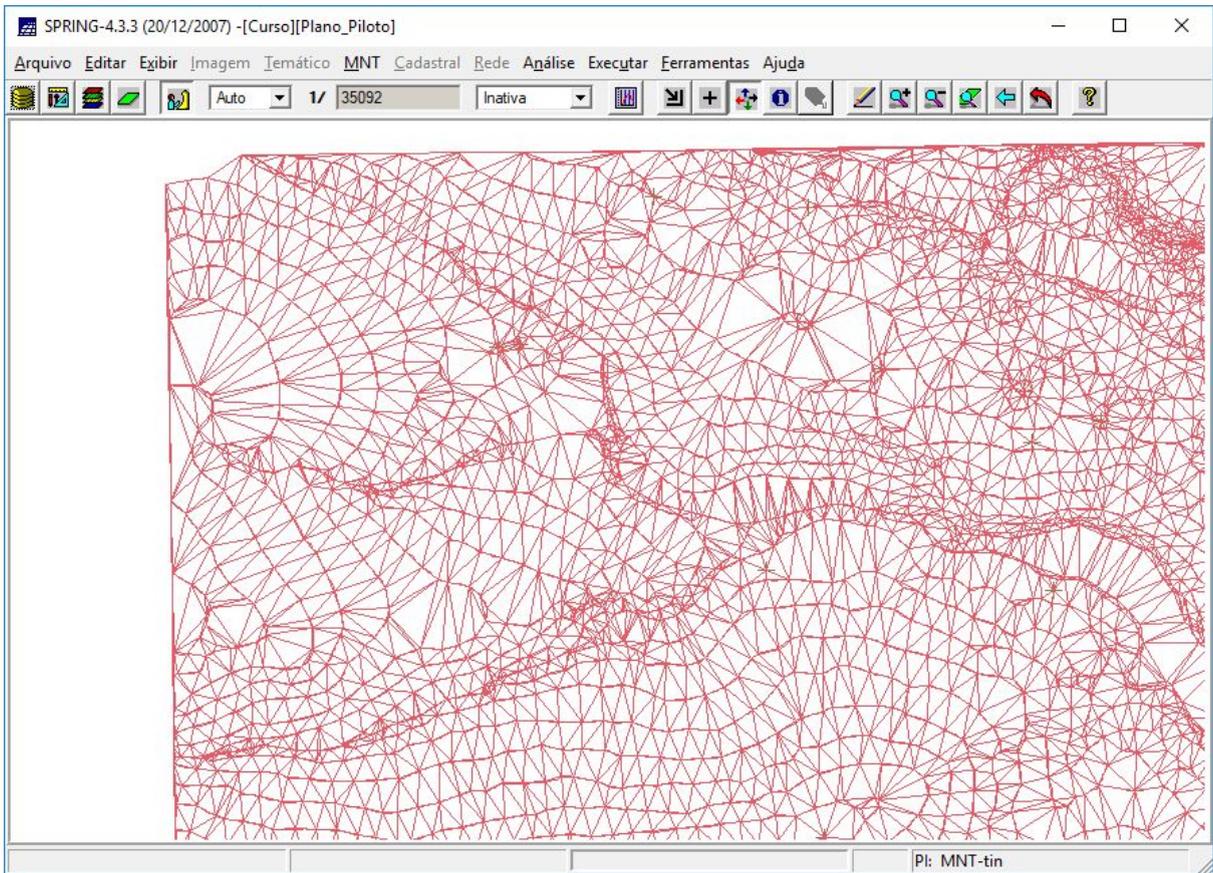
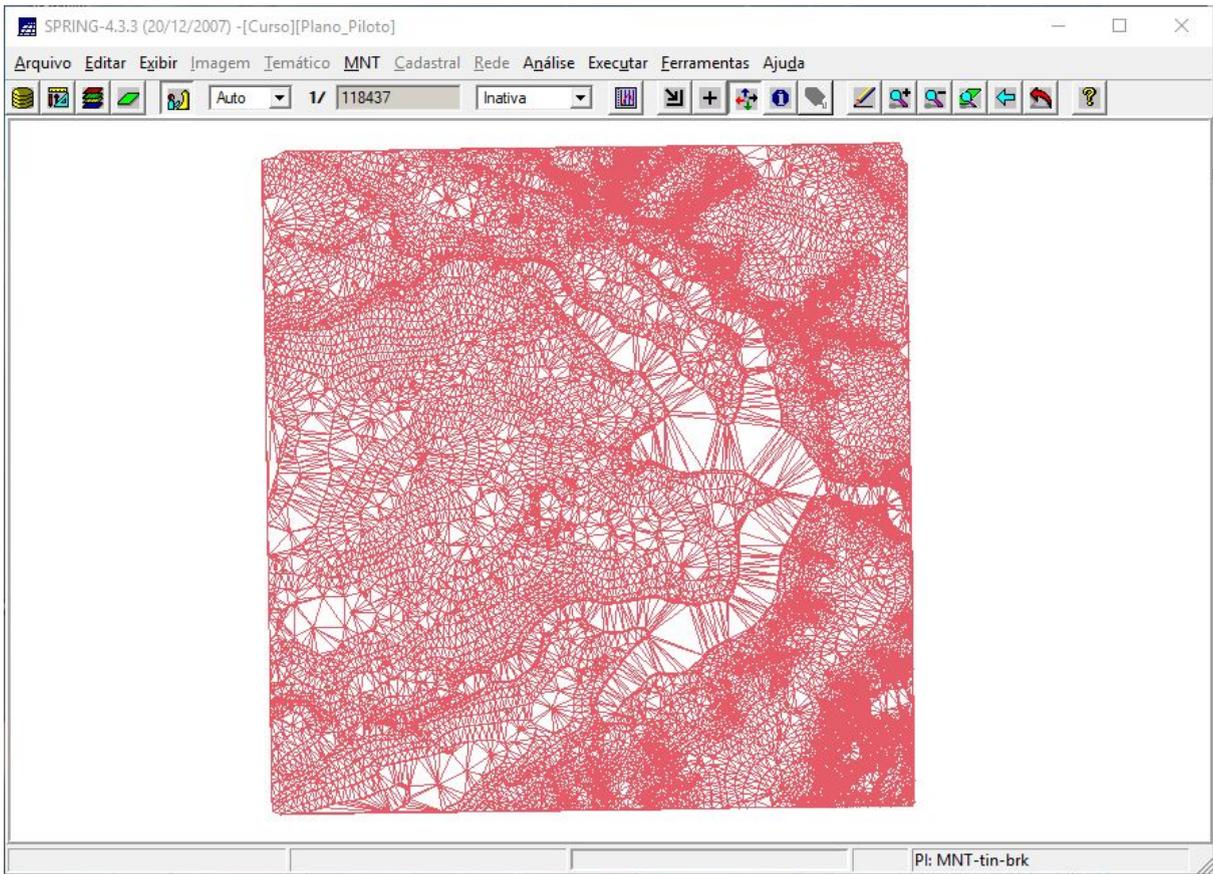




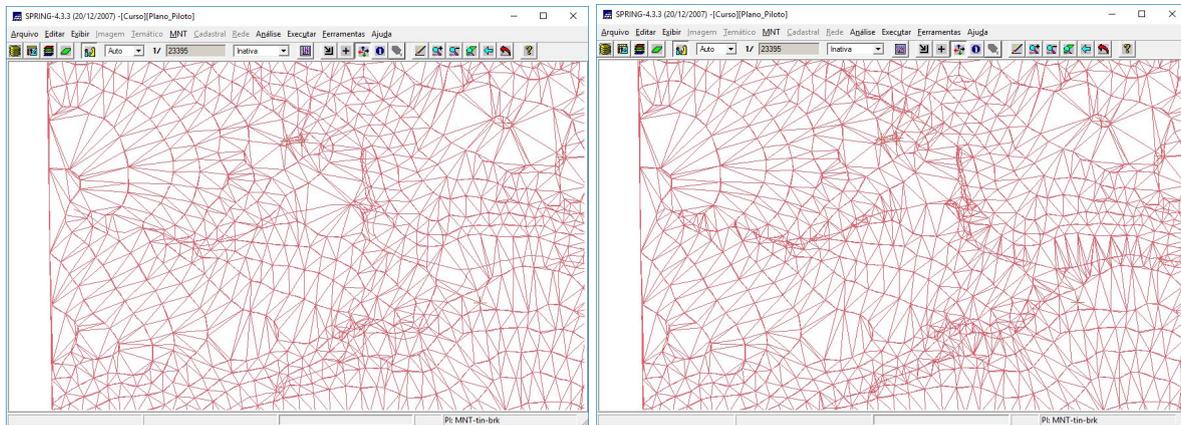
- Gerar grade triangular utilizando o PI drenagem como linha de quebra:





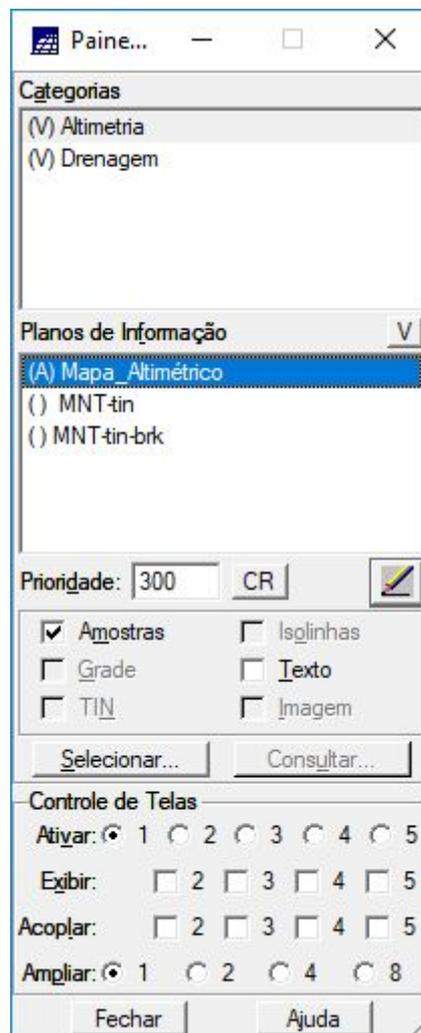


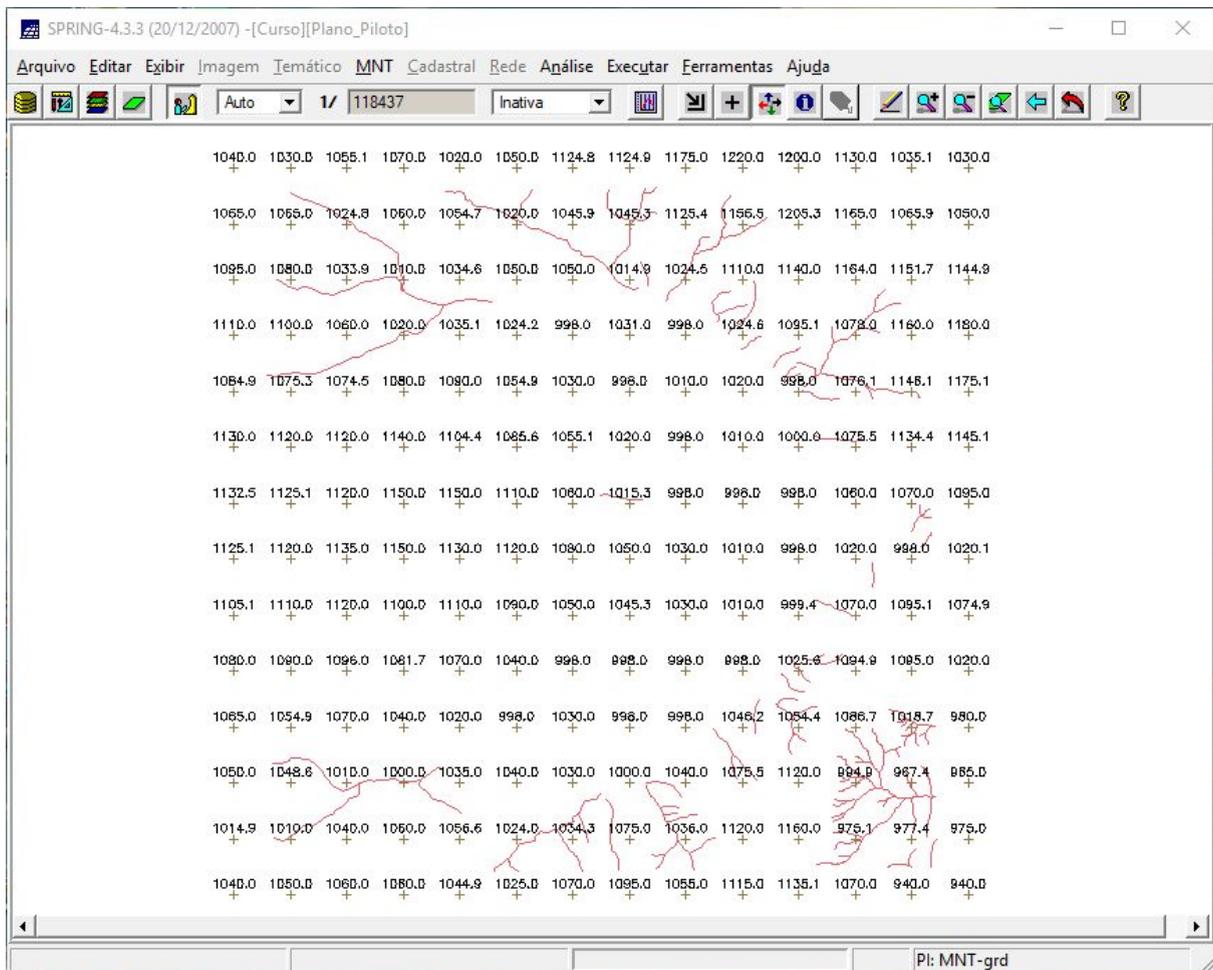
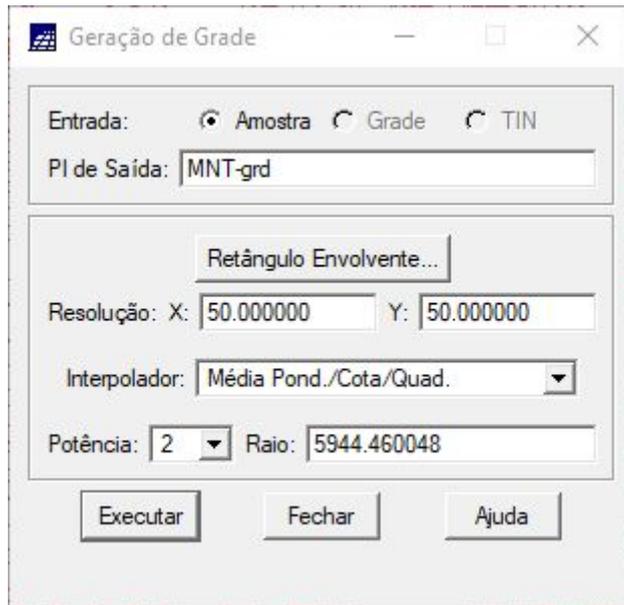
- Comparação MNT-tin e MNT-tin-brk:

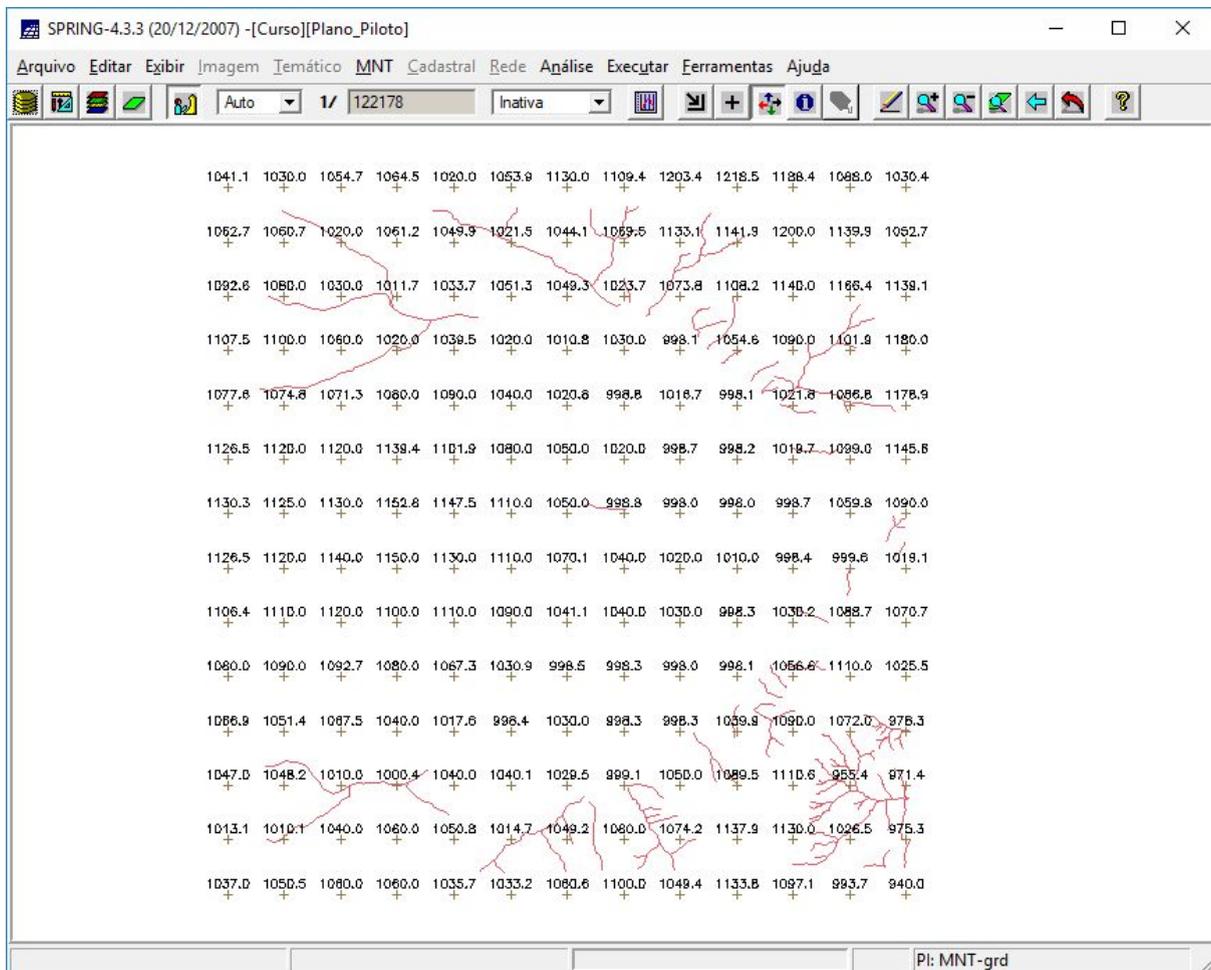
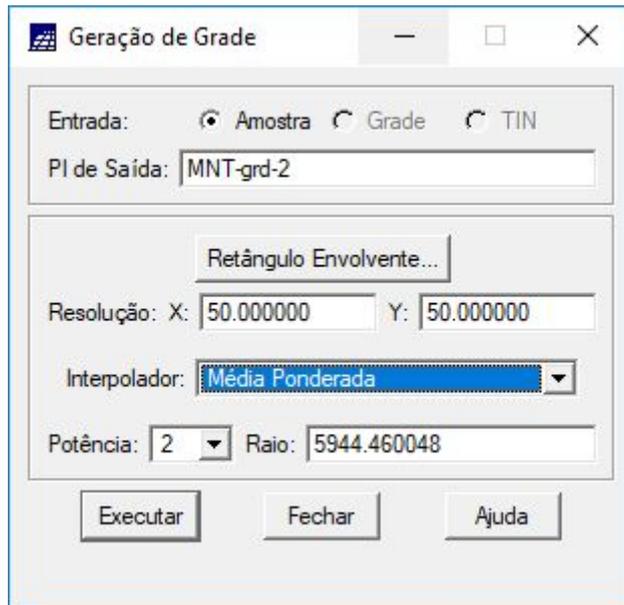


Exercício 5 - Gerar grades retangulares de amostras e de outras grades

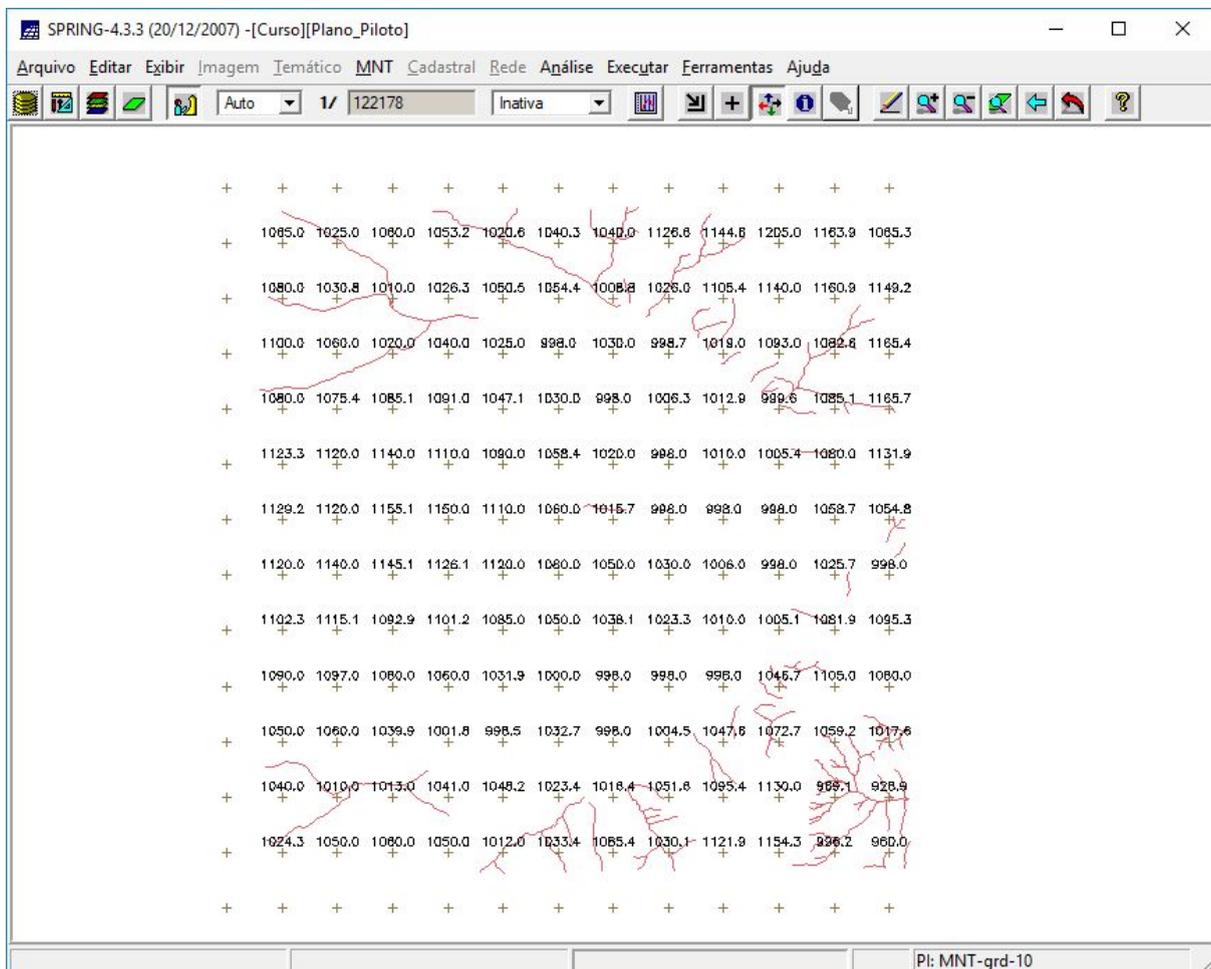
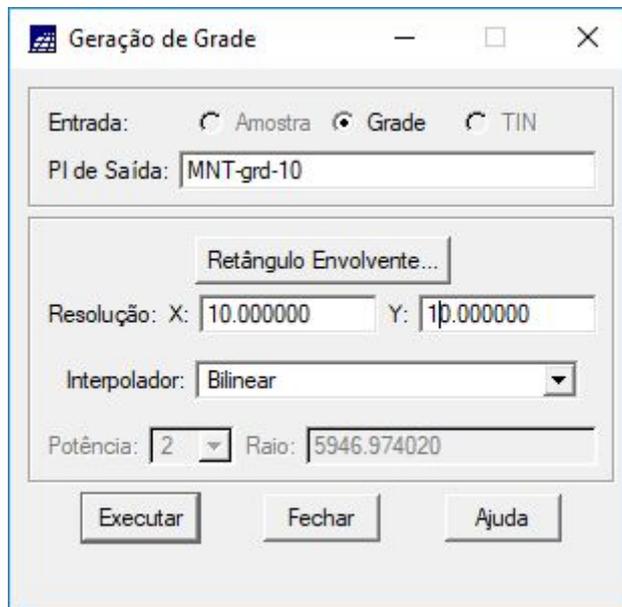
- Gerando grade retangular a partir das amostras:

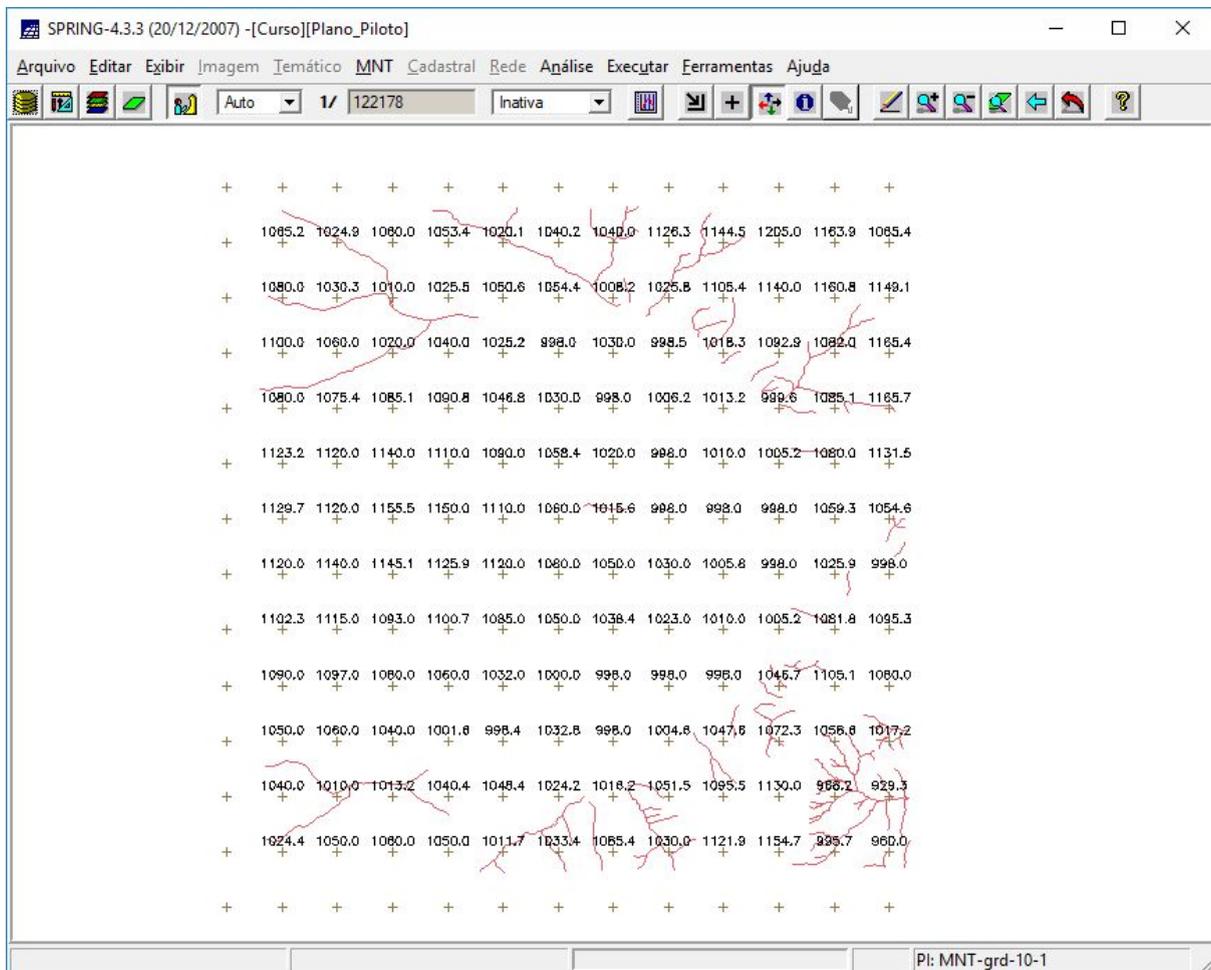
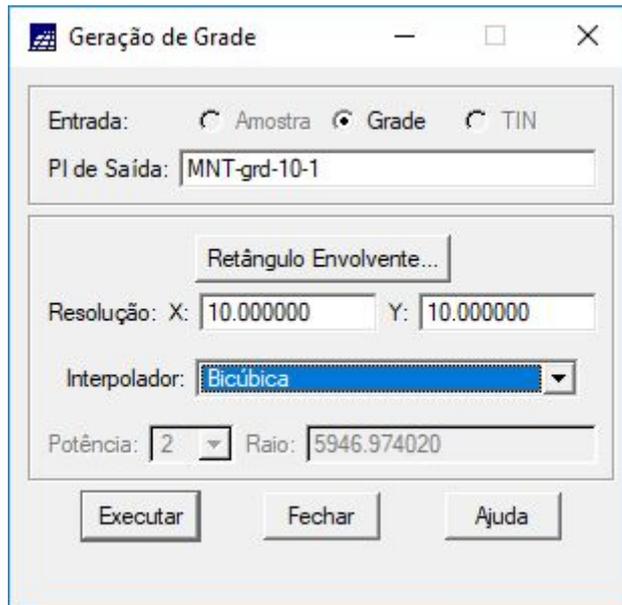


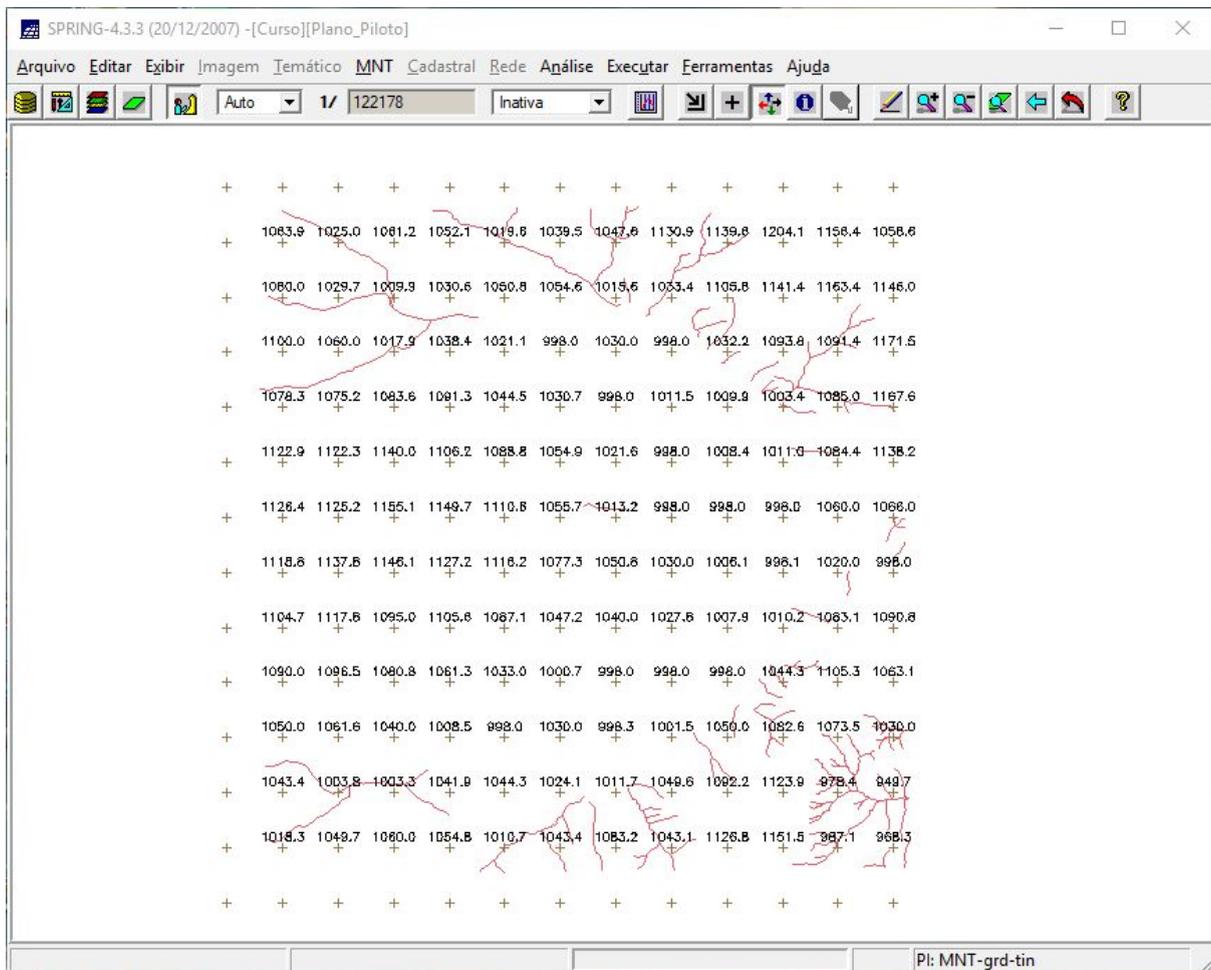
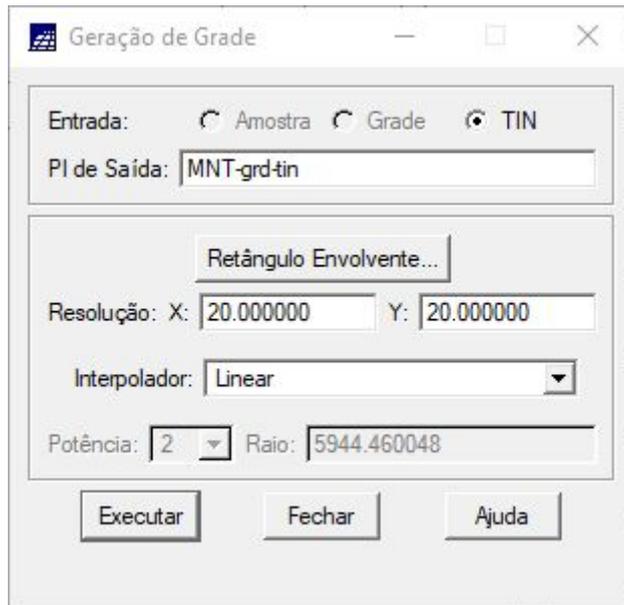




- Refinar grade retangular a partir de outra grade retangular:

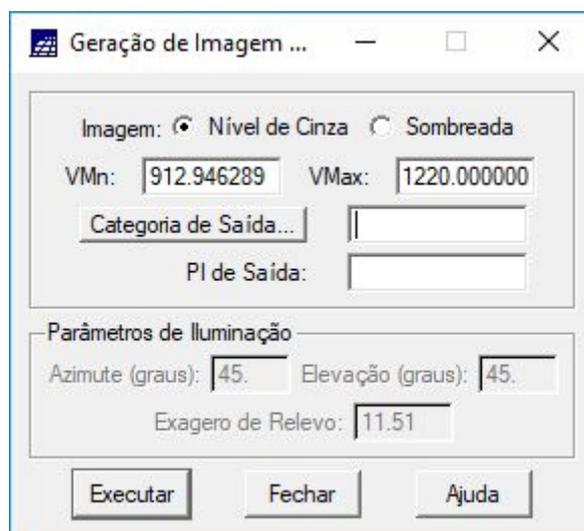
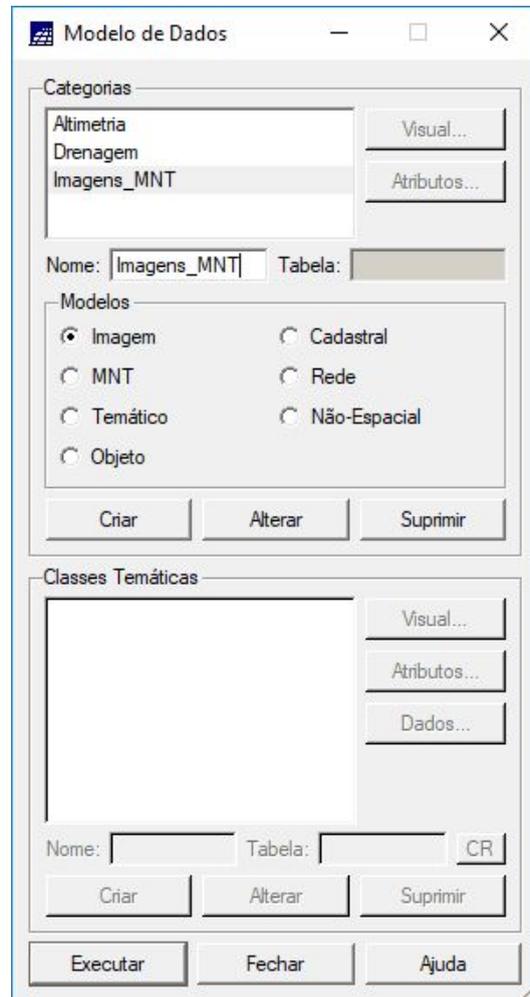


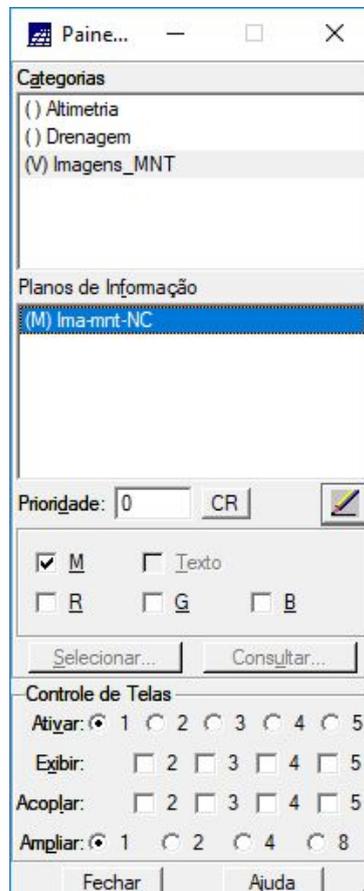
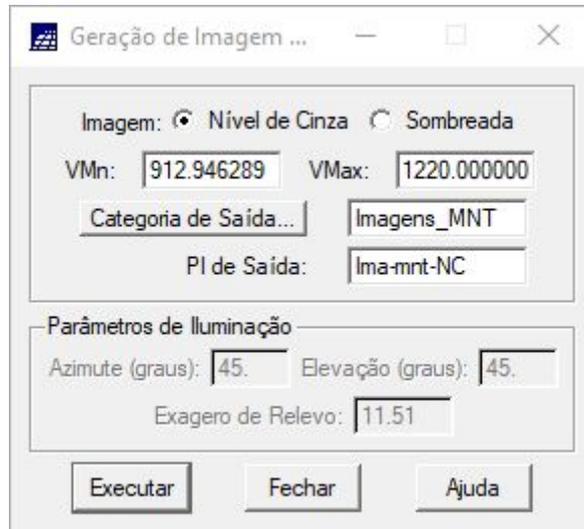
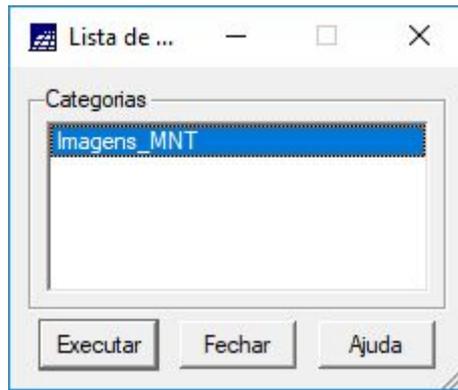


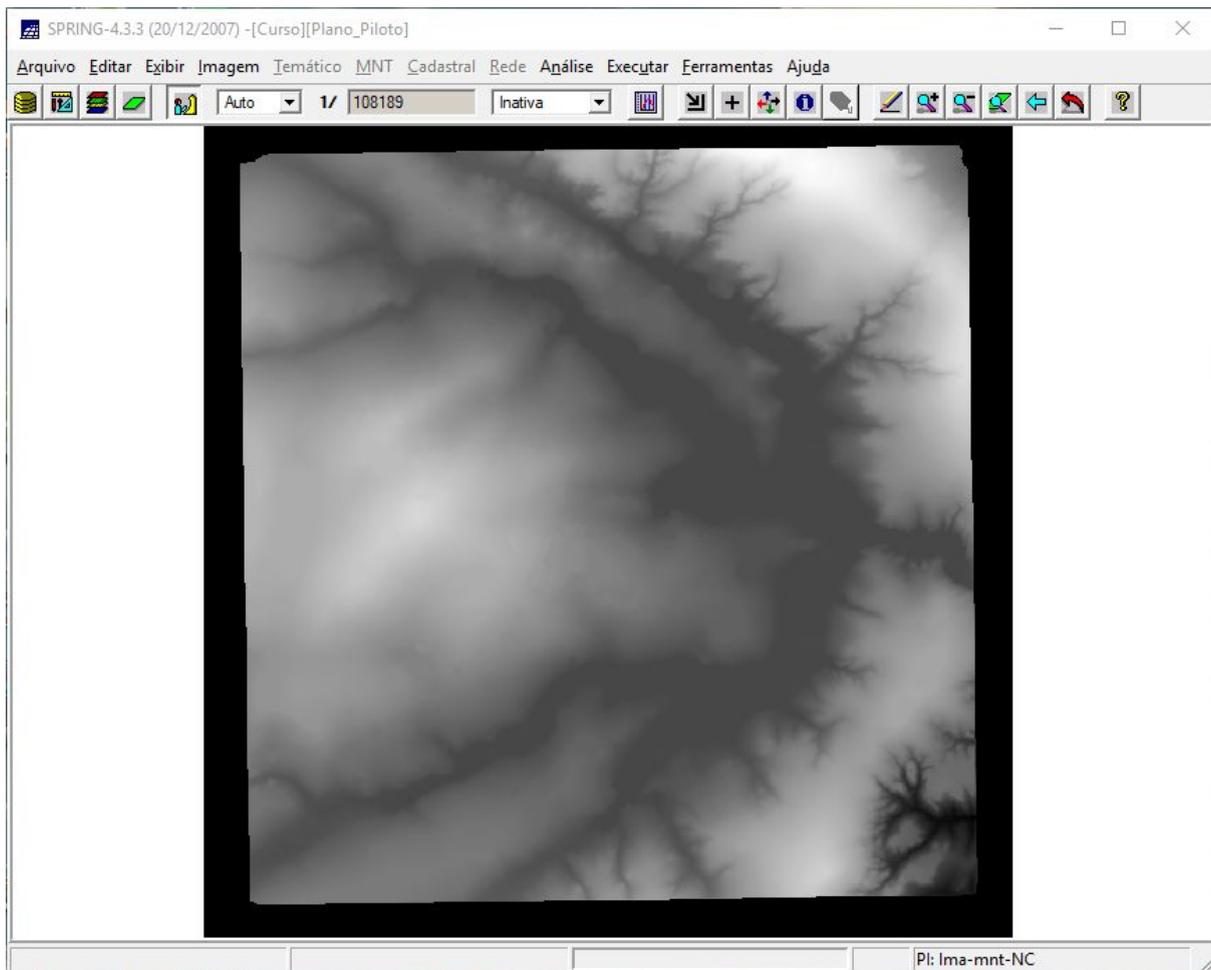


Exercício 6 - Geração de Imagem para Modelo Numérico

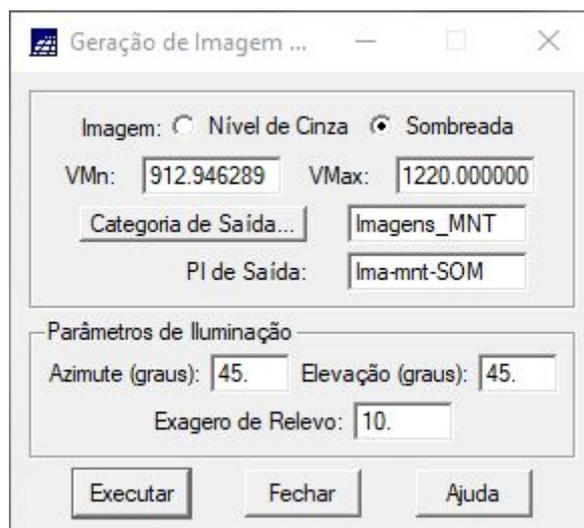
- Gerando imagem em nível de cinza:

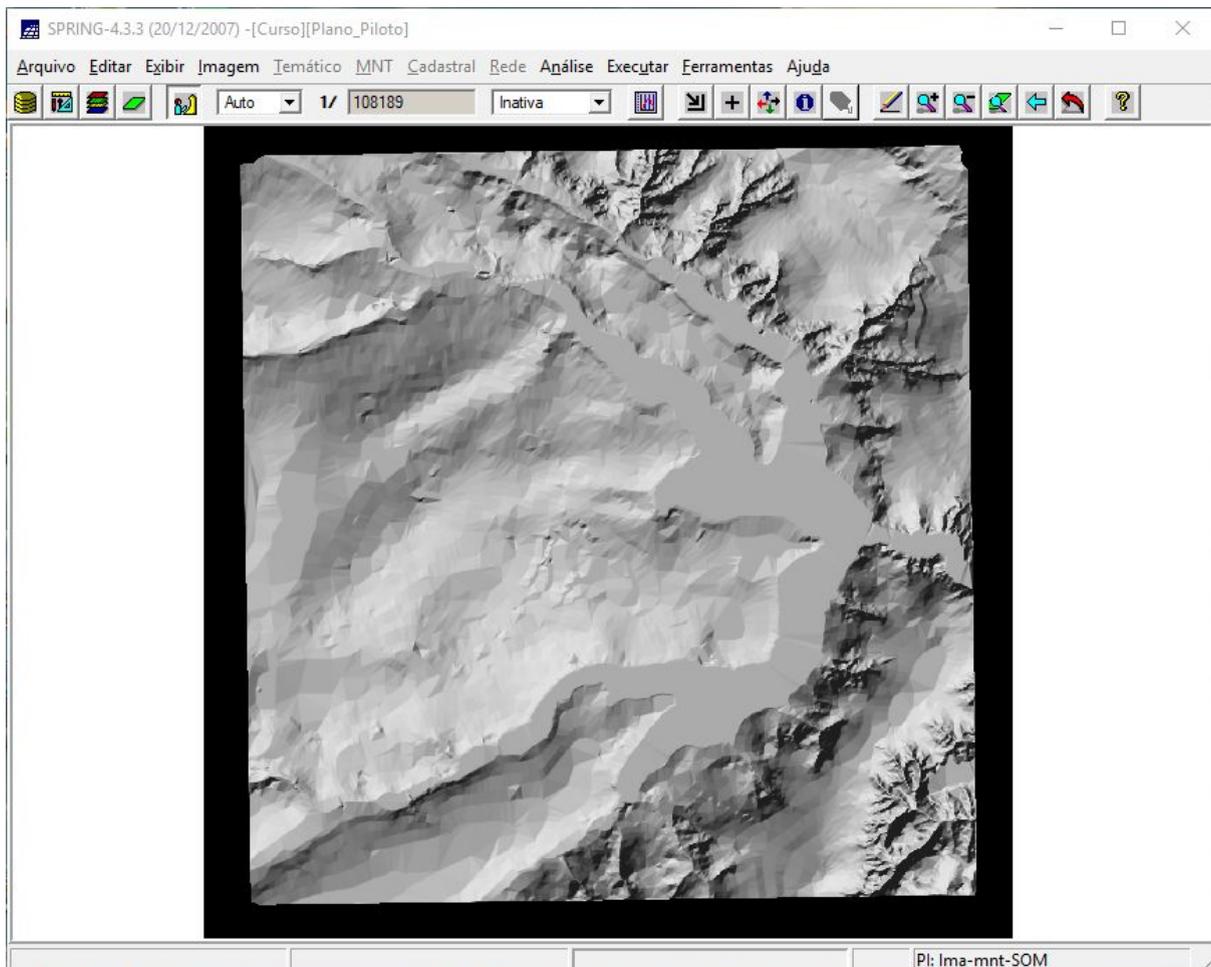
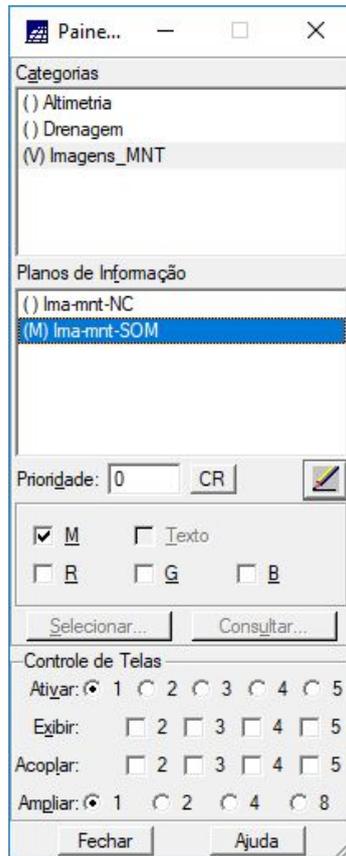






- Gerando imagem sombreada:





Exercício 7 - Geração de Grade Declividade

Modelo de Dados

Categorias

- Altimetria
- Drenagem
- Grades Numéricas**
- Imagens_MNT

Visual...
Atributos...

Nome: Grades_Numérica Tabela: CG000004

Modelos

- Imagem
- Cadastral
- MNT
- Rede
- Temático
- Não-Espacial
- Objeto

Criar Alterar Suprimir

Classes Temáticas

Visual...
Atributos...
Dados...

Nome: Tabela: CR

Criar Alterar Suprimir

Executar Fechar Ajuda

Declividade

Entrada: Grade TIN

Saída: Declividade Exposição

Unidade: Porcentagem Graus

Categoria de Saída...

PI de Saída:

Retângulo Envolvente...

Resolução

X: Y:

Executar Fechar Ajuda

Exercício 8 - Fatiamento de Grade Numérica – Mapa de Declividade

Modelo de Dados

Categorias

- Altimetria
- Declividade
- Drenagem
- Grades_Numéricas
- Imagens_MNT

Nome: Declividade Tabela: CG000005

Modelos

- Imagem
- Cadastral
- MNT
- Rede
- Temático
- Não-Espacial
- Objeto

Criar Alterar Suprimir

Classes Temáticas

- 1. 0-2 graus
- 2. 2-4 graus
- 3. 4-8 graus
- 4. >8 graus

Nome: >8|graus Tabela: CL000005 CR

Criar Alterar Suprimir

Executar Fechar Ajuda

Fatiamento MNT

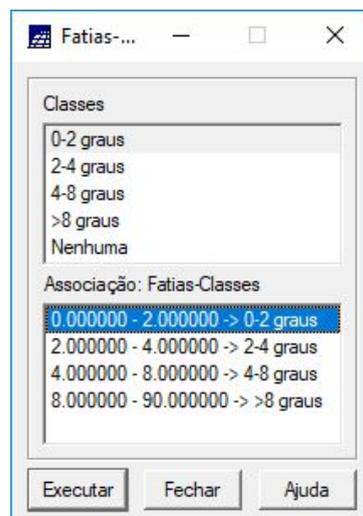
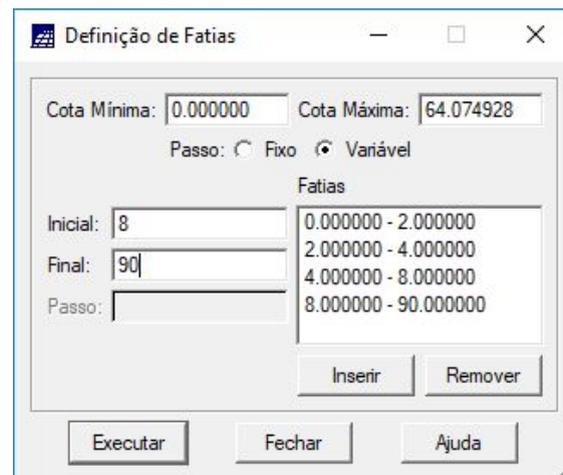
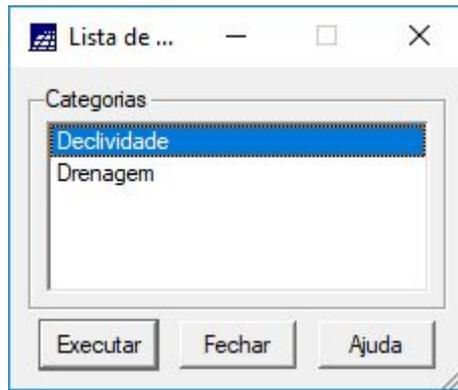
Categoria de Saída...

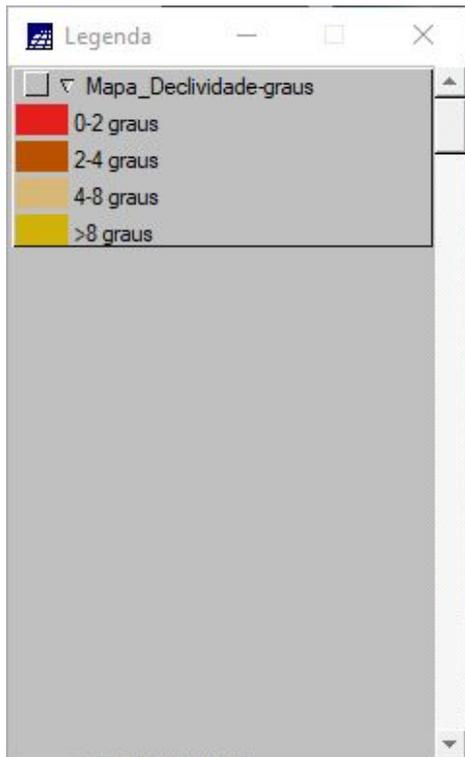
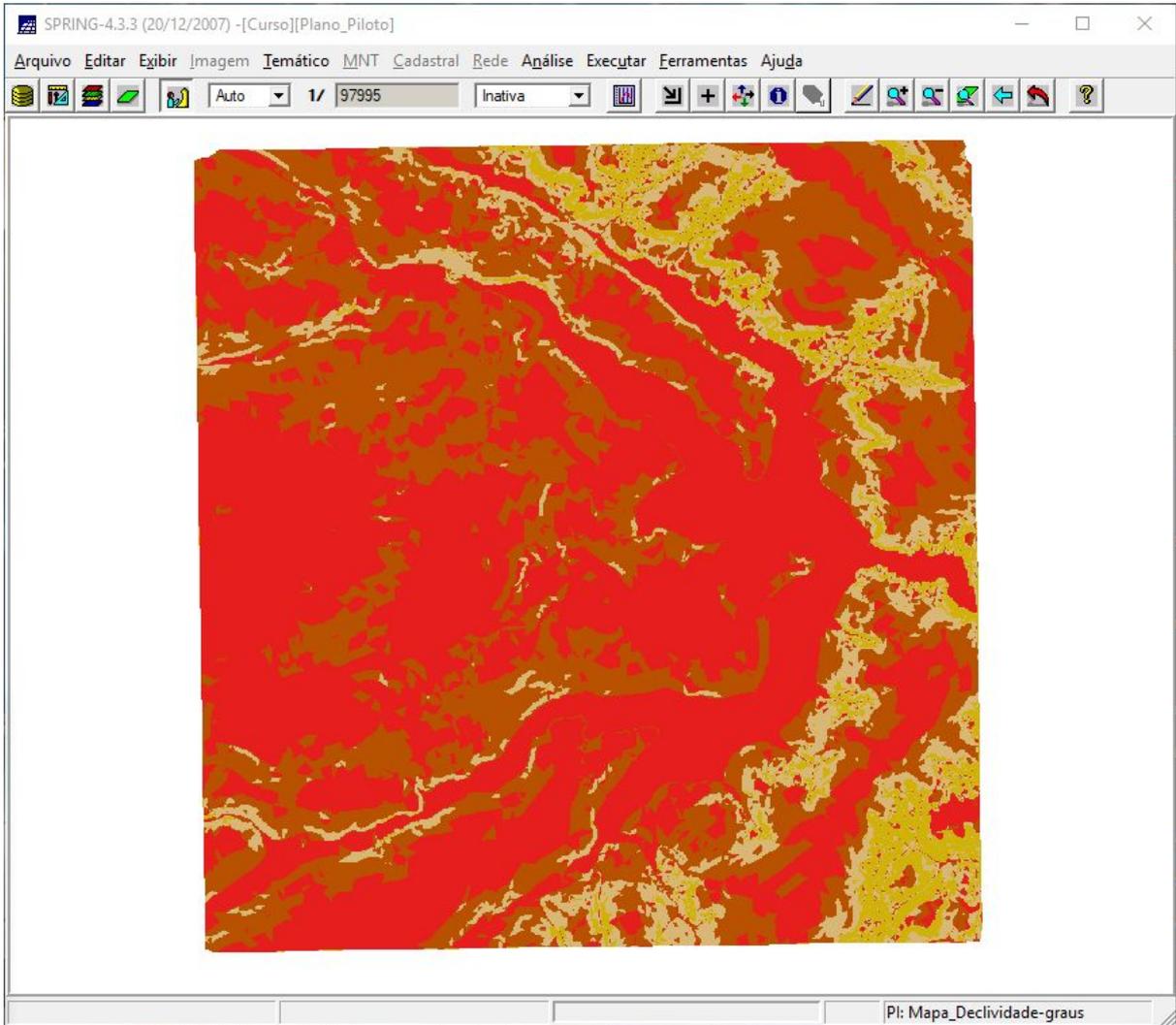
PI de Saída:

Definição de Fatias...

Associação de Fatias - Classes...

Executar Fechar Ajuda





Exercício 9 - Geração de Perfil a partir de grades

Perfil

Entrada: Grade TIN

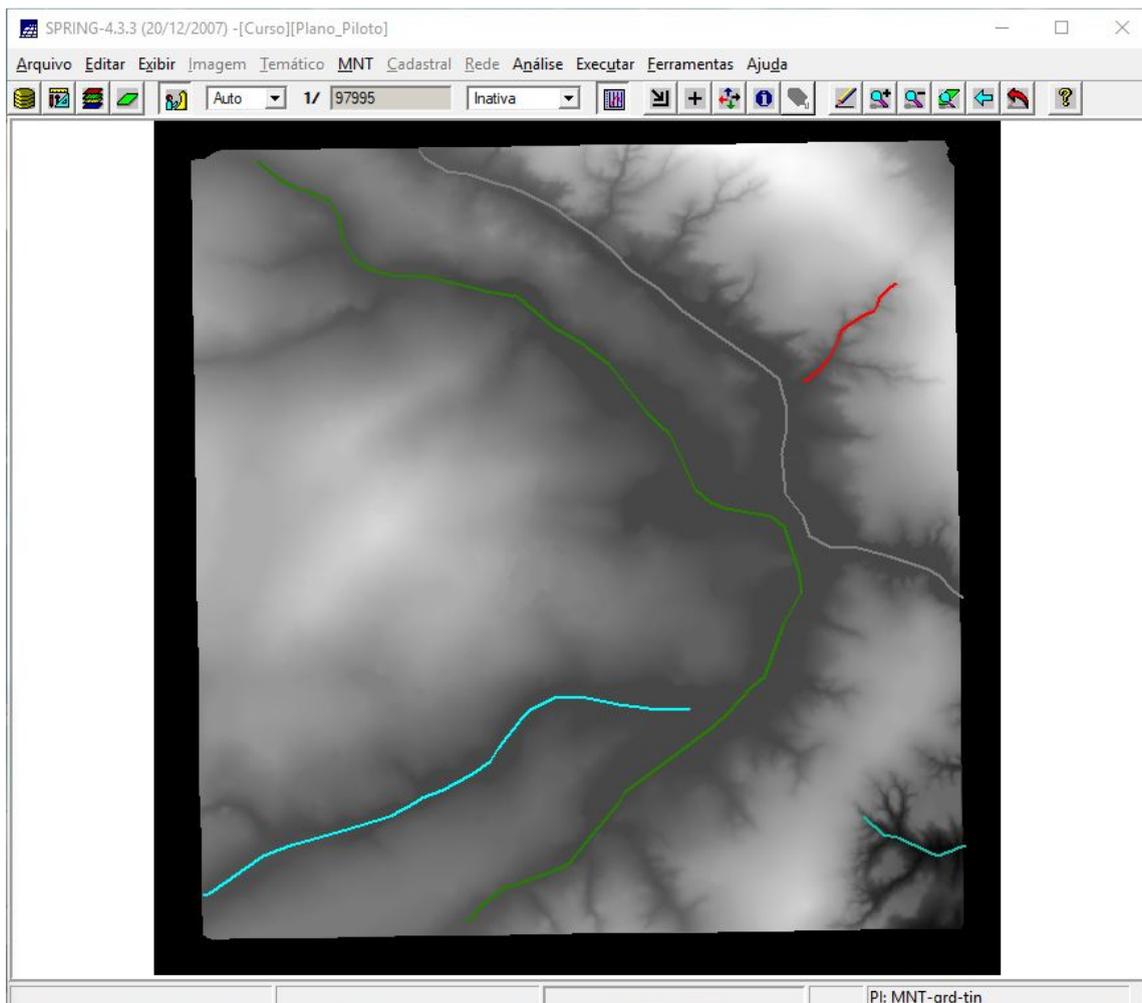
Trajectoria: Edição PI

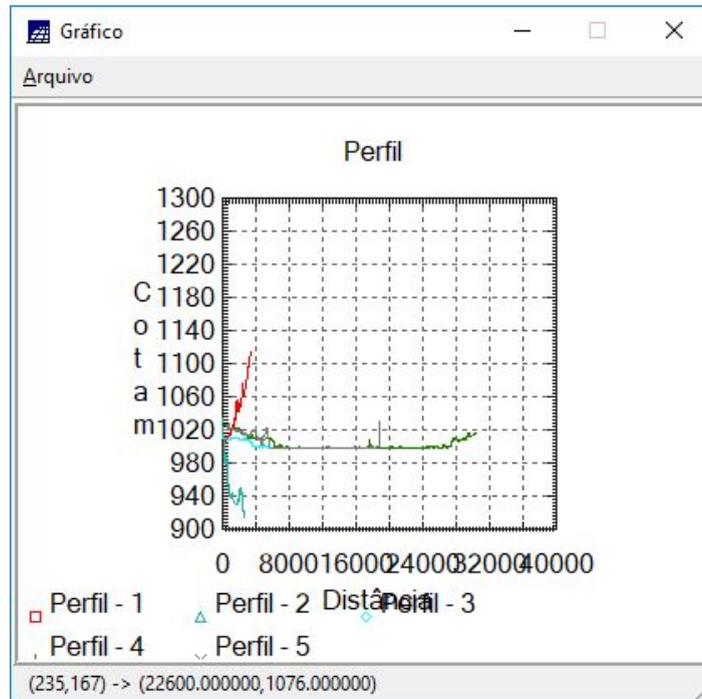
Linhas: Criar Remover

Pontos: Criar Mover Remover

Título do Gráfico:

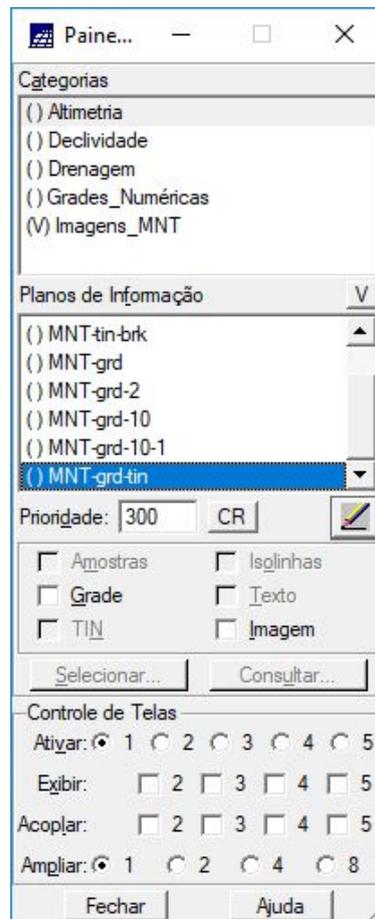
Eixo Y: Unidade:





Exercício 10 - Visualização de Imagem em 3D

- Visualização 3D:



Visualização 3D

Plano de Textura...

Limites

Xmín: Xmáx:

Ymín: Ymáx:

Zmín: Zmáx:

Projeção

Paralela Perspectiva Par-estéreo

Observador

X: Azimute:

Y: Elevação:

Z: Abertura:

Distância entre Projeções:

Exagero Vertical:

Executar Fechar Ajuda

Categ...

Categorias

Imagens_MNT

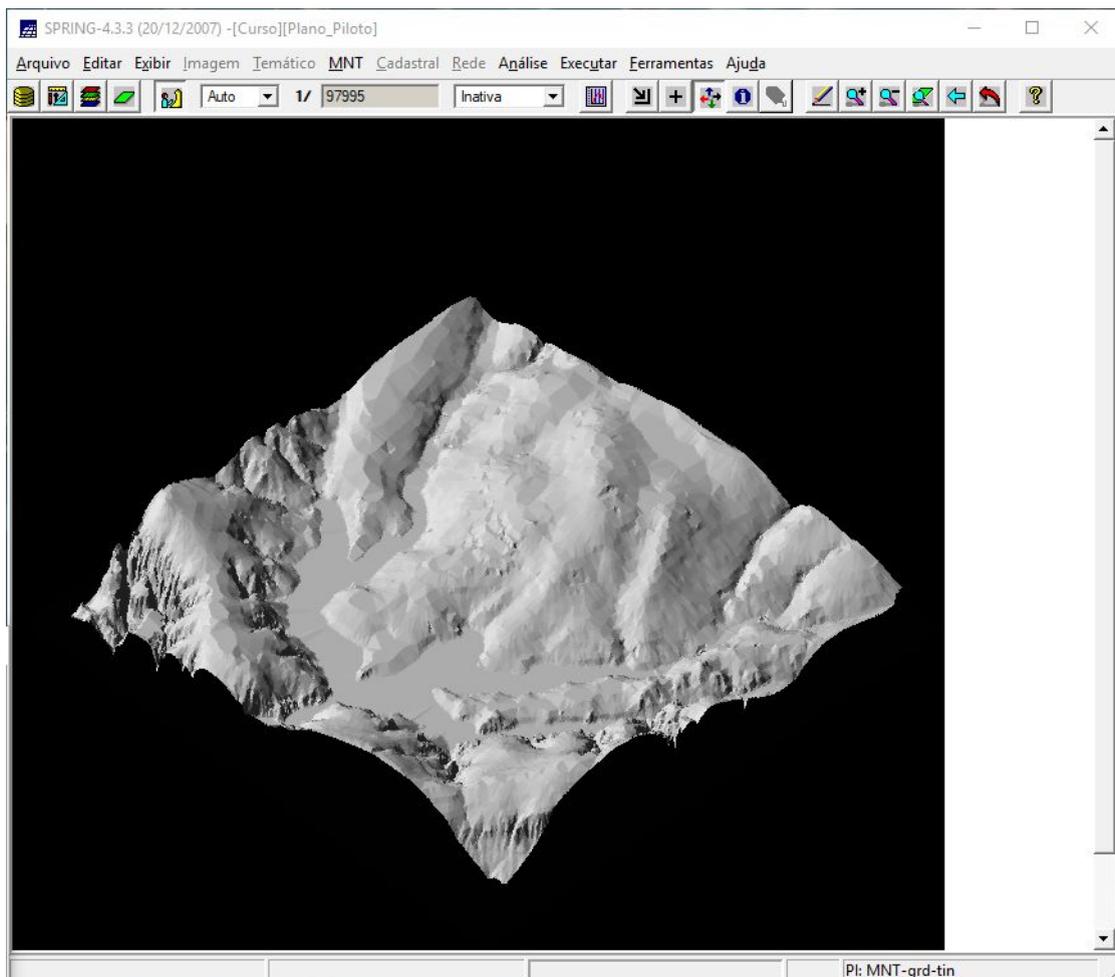
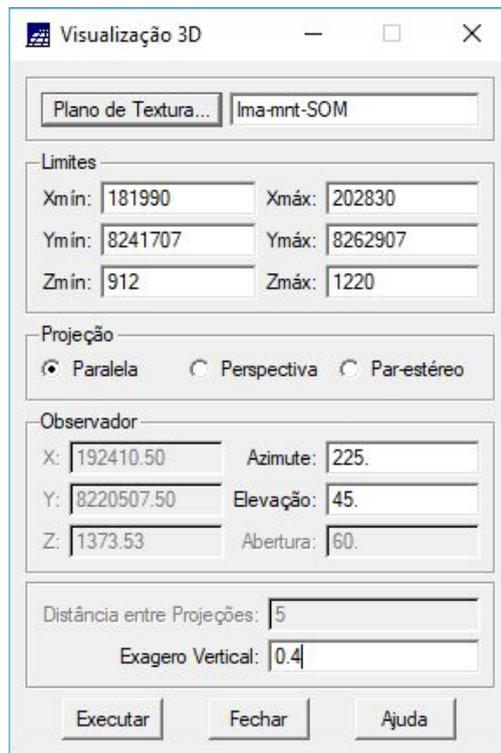
Planos de Infomação

Ima-mnt-NC

Ima-mnt-SOM

Executar Fechar Ajuda

- Visualizando em projeção paralela:



Visualização 3D

Plano de Textura... | lma-mnt-SOM

Limites

Xmín:	181990	Xmáx:	202830
Ymín:	8241707	Ymáx:	8262907
Zmín:	912	Zmáx:	1220

Projeção

Paralela Perspectiva Par-estéreo

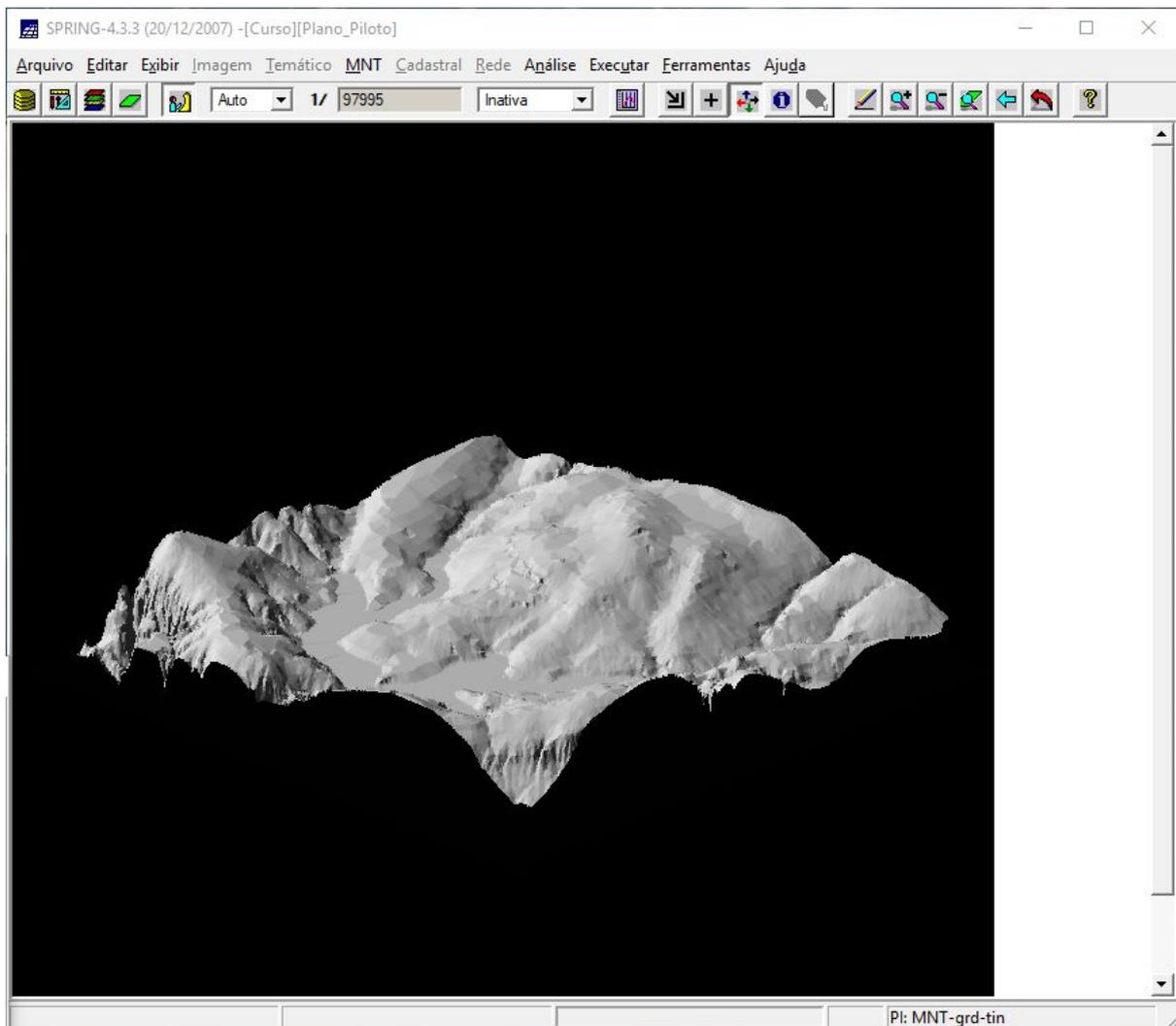
Observador

X:	192410.50	Azimute:	225.
Y:	8220507.50	Elevação:	25
Z:	1373.53	Abertura:	60.

Distância entre Projeções: 5

Exagero Vertical: 0.4

Executar Fechar Ajuda



Visualização 3D

Plano de Textura... | lma-mnt-SOM

Limites

Xmín:	181990	Xmáx:	202830
Ymín:	8241707	Ymáx:	8262907
Zmín:	912	Zmáx:	1220

Projeção

Paralela Perspectiva Par-estéreo

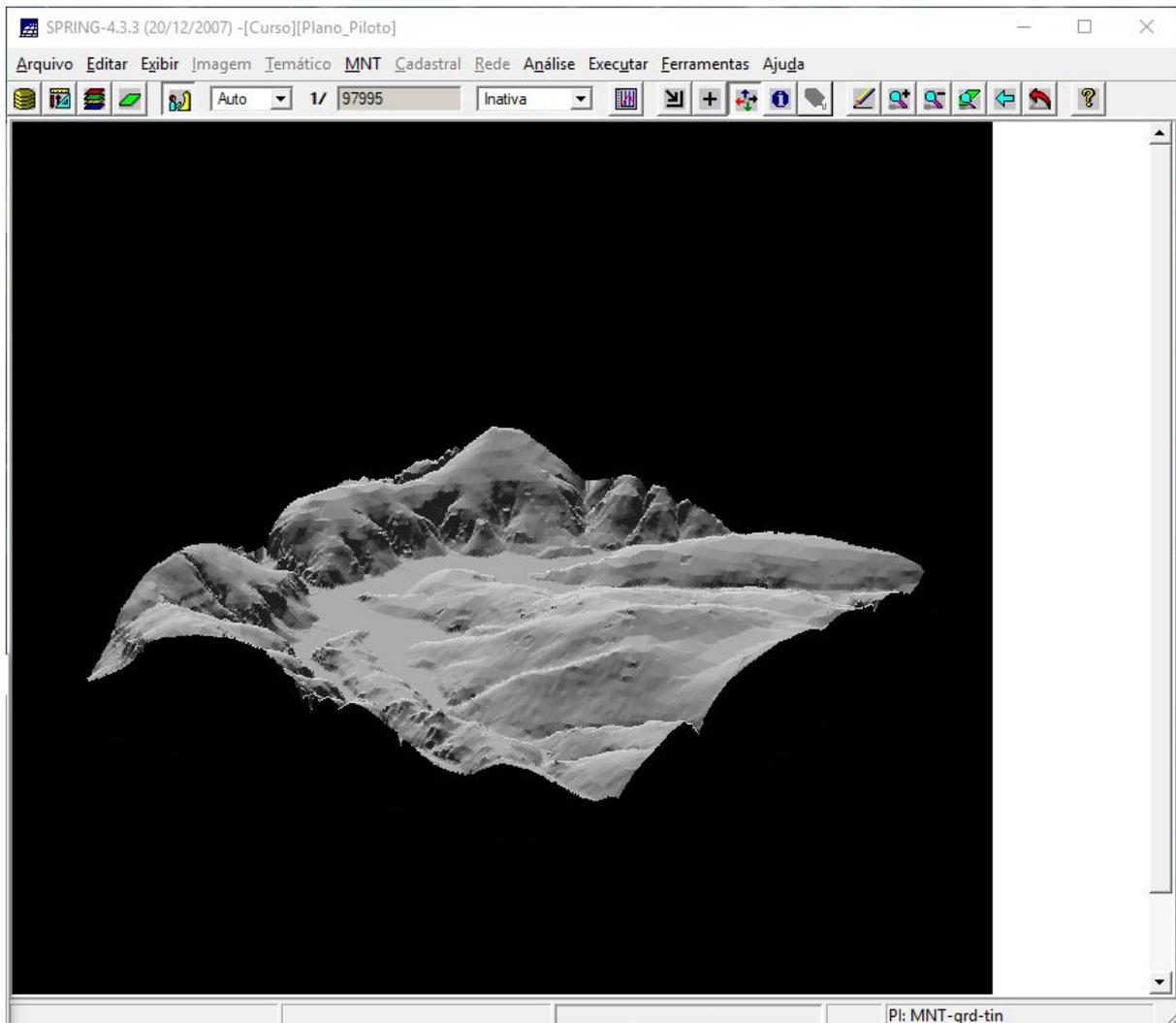
Observador

X:	192410.50	Azimute:	150
Y:	8220507.50	Elevação:	25
Z:	1373.53	Abertura:	60

Distância entre Projeções: 5

Exagero Vertical: 0.4

Executar Fechar Ajuda



Visualização 3D

Plano de Textura... | Ima-mnt-SOM

Limites

Xmin:	181990	Xmáx:	202830
Ymin:	8241707	Ymáx:	8262907
Zmin:	912	Zmáx:	1220

Projeção

Paralela Perspectiva Par-estéreo

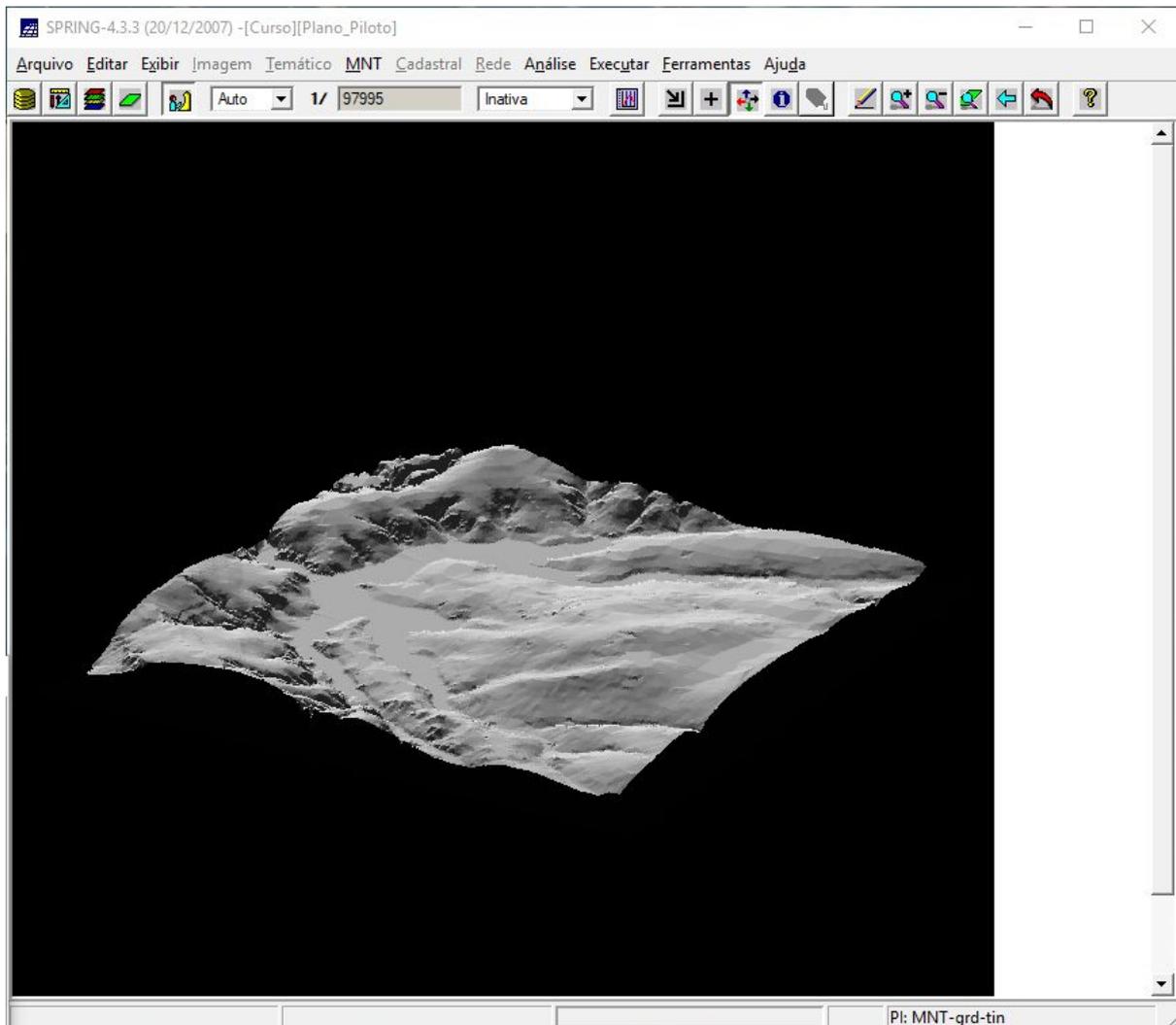
Observador

X:	192410.50	Azimute:	150.
Y:	8220507.50	Elevação:	25.
Z:	1373.53	Abertura:	60.

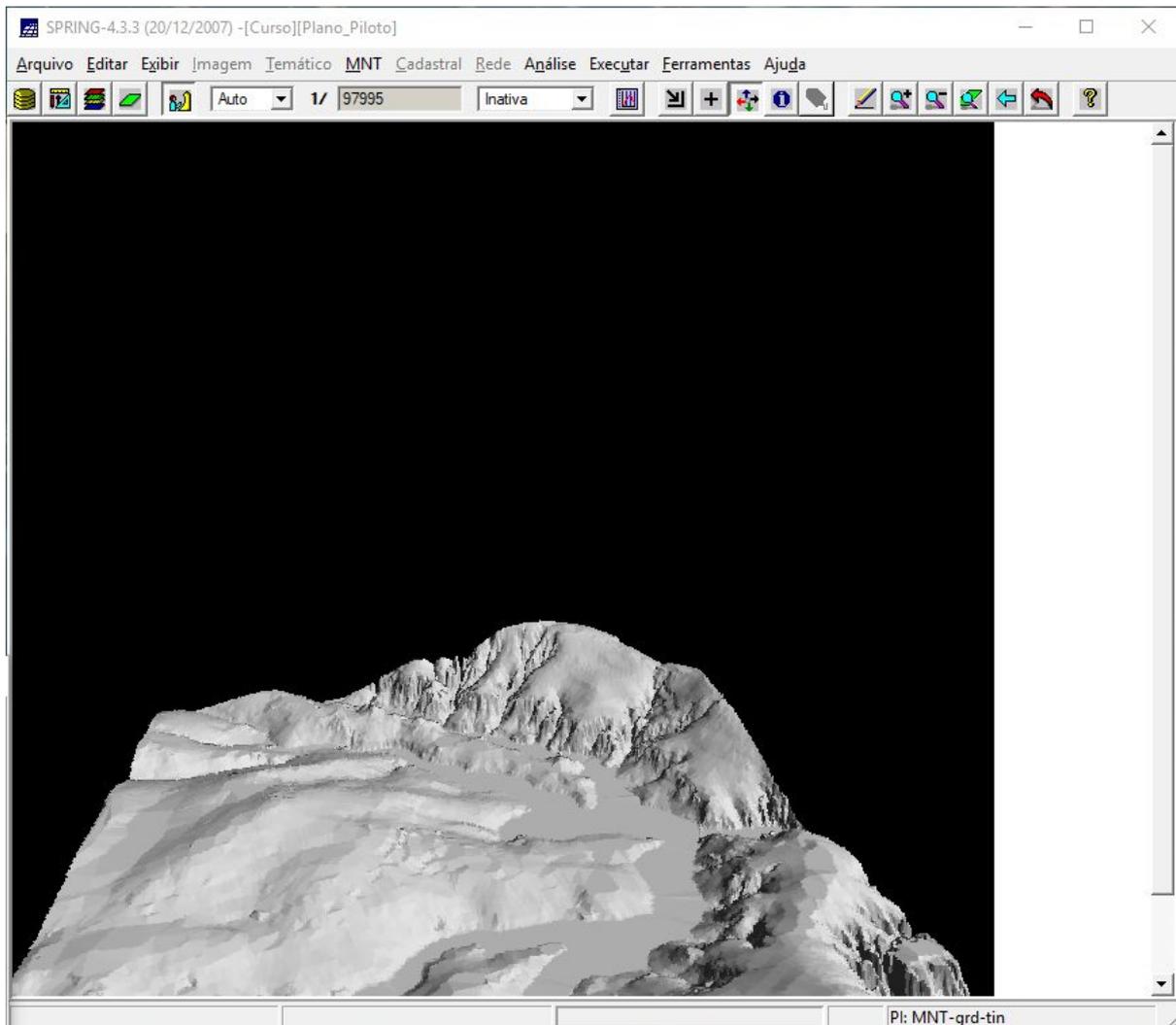
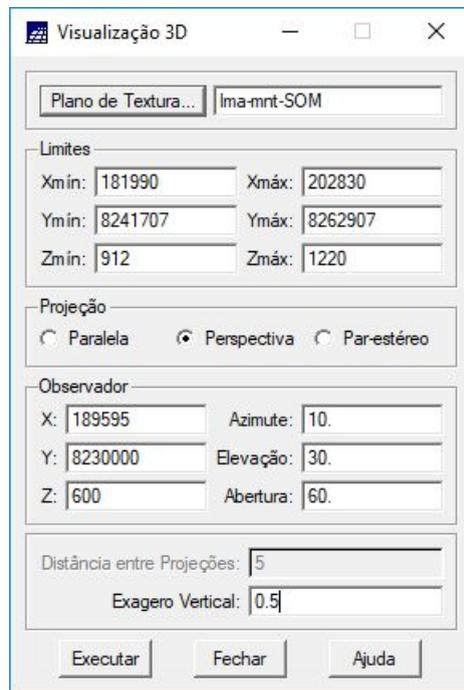
Distância entre Projeções: 5

Exagero Vertical: 0.2

Executar Fechar Ajuda



- Visualizando em projeção perspectiva:



Visualização 3D

Plano de Textura... | Ima-mnt-SOM

Limites

Xmín:	181990	Xmáx:	202830
Ymín:	8241707	Ymáx:	8262907
Zmín:	912	Zmáx:	1220

Projeção

Paralela Perspectiva Par-estéreo

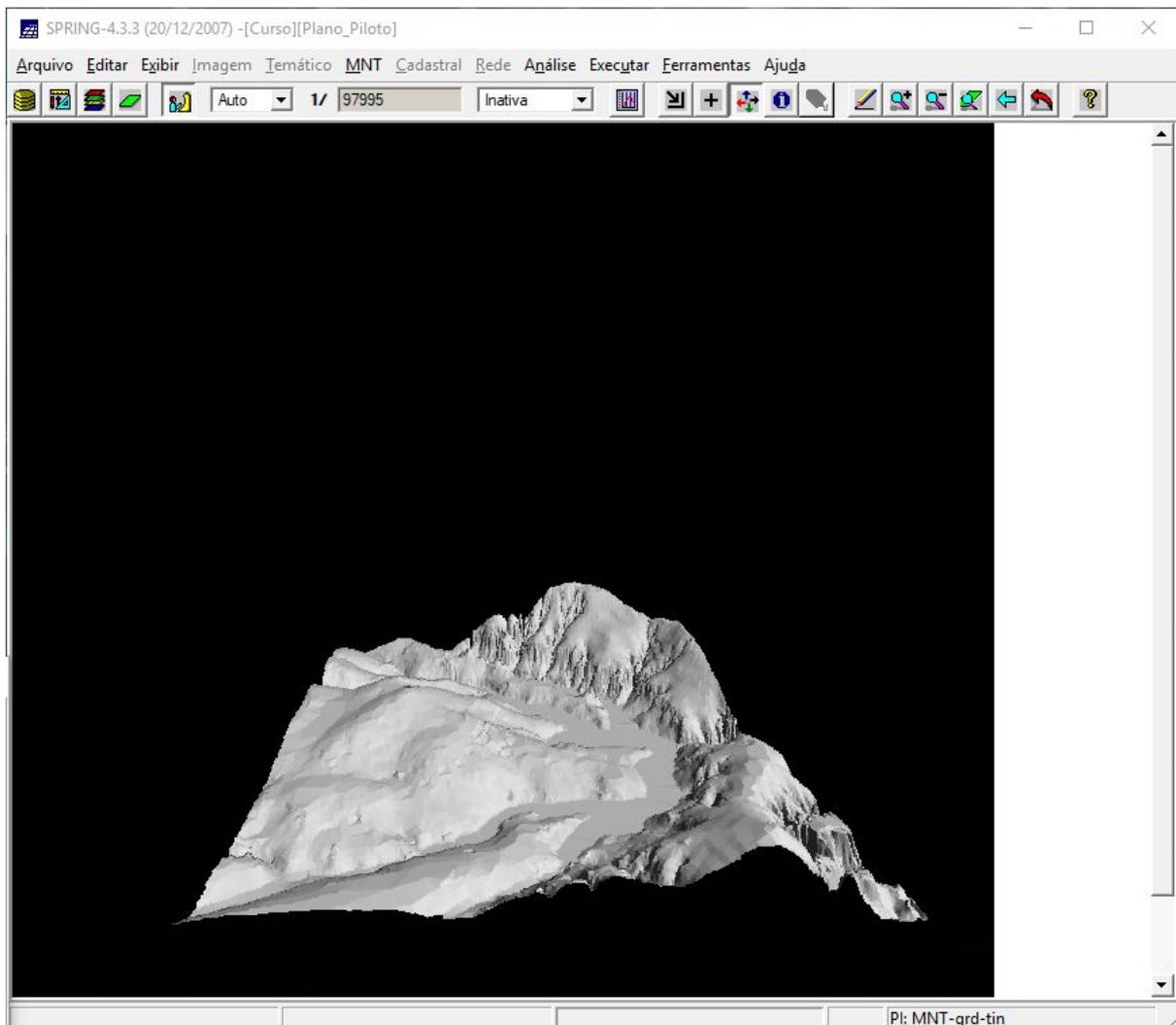
Observador

X:	189595	Azimute:	5.
Y:	8230000	Elevação:	30.
Z:	600	Abertura:	85.

Distância entre Projeções: 5

Exagero Vertical: 0.8

Executar Fechar Ajuda



- Visualizando em projeção paralela-estéreo:

