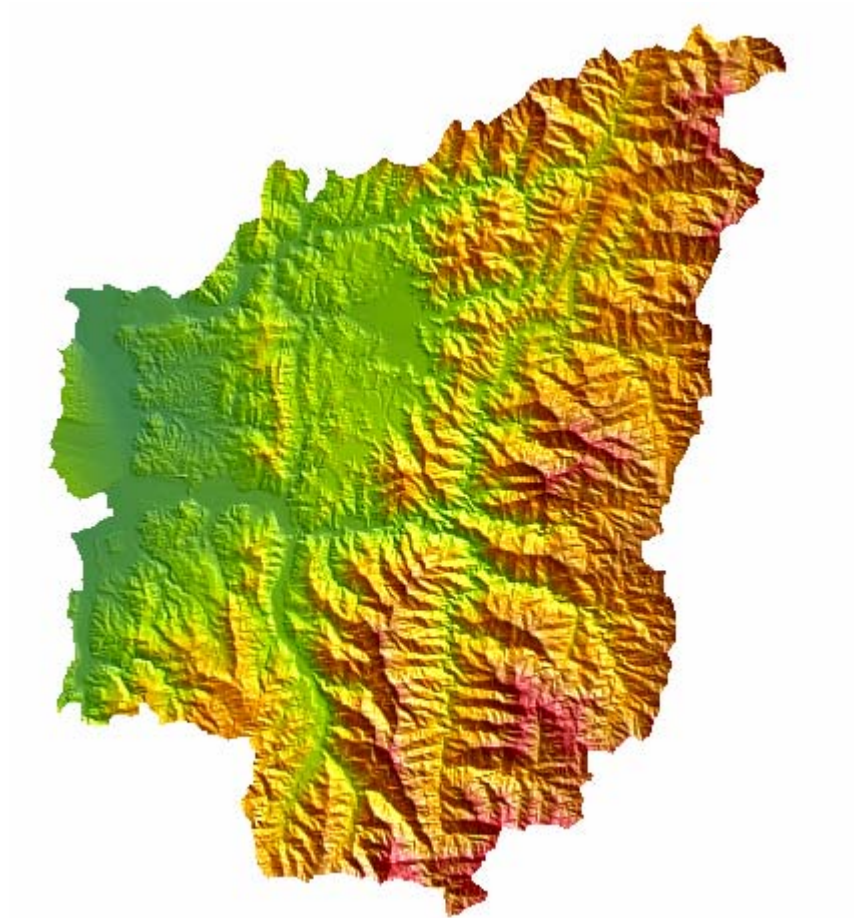
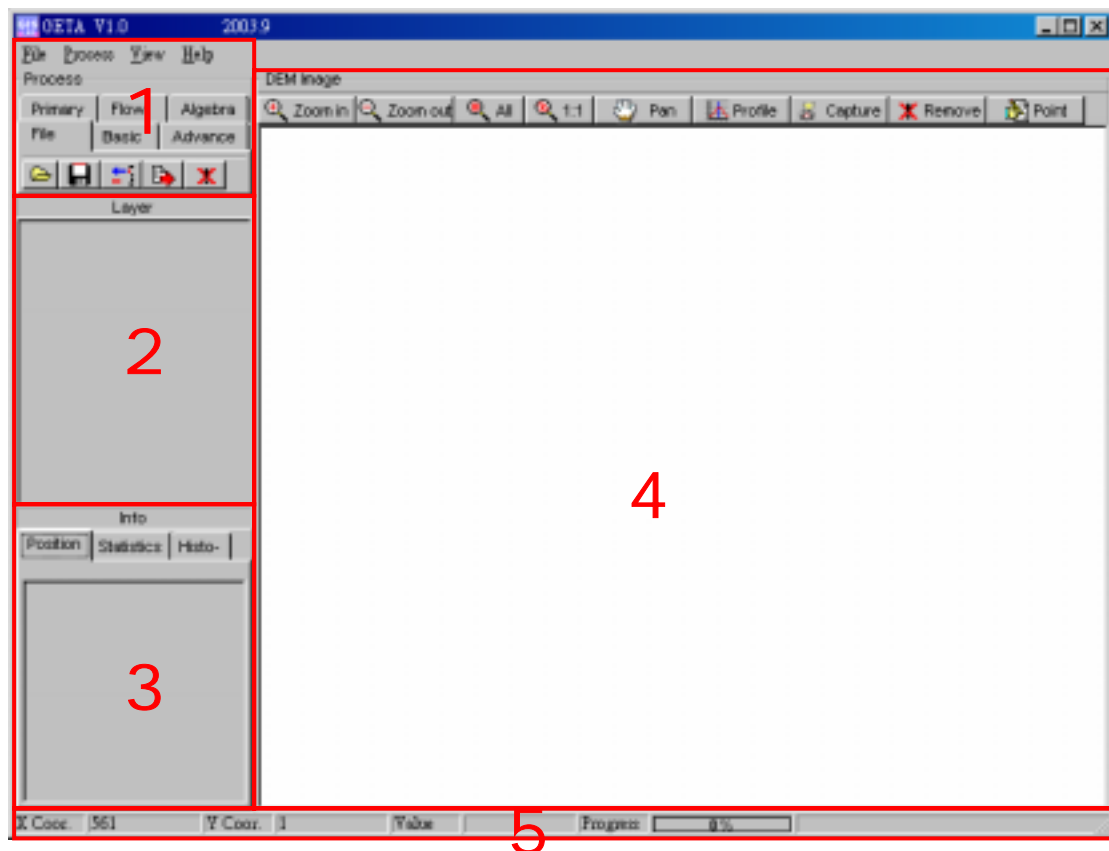


GETA V1.0

Operation Manual



This window opens when you start GETA V1.0



There are five (5) main windows in the GETA

1. Process Window
Include File I/O, Basic Process, Advance Process, Primary Process, Flow Process, Algebra Process
2. Layer Arrange Window
When you open a DEM image, it will create a layer bar in the layer window.
3. Info Window
Include the information (visible image position, statistics information, and histogram drawing) about this current DEM
4. Image View Window
After opening a new DEM, it will show the contents of this image
5. Status Window
After opening a new DEM and when you moving the mouse on the Image View Window, the Status Window will show this geographical coordinate and its value.

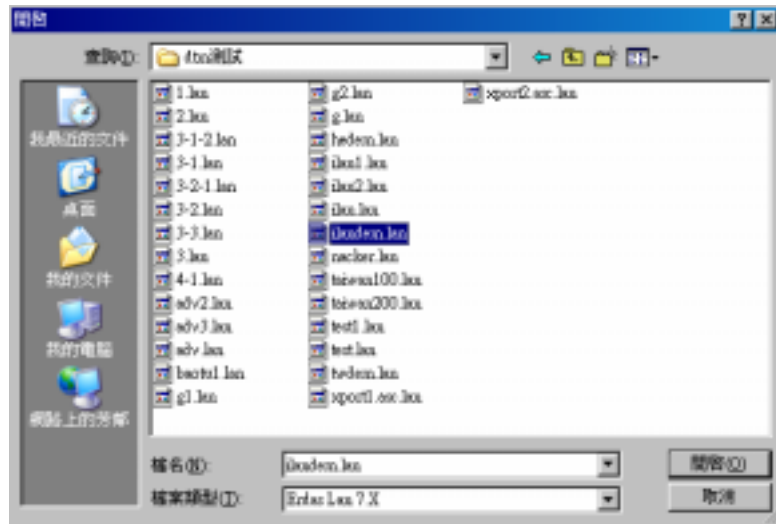
1. Process Window

There are Six (6) Tabgroups in the Process window of GETA

I. File



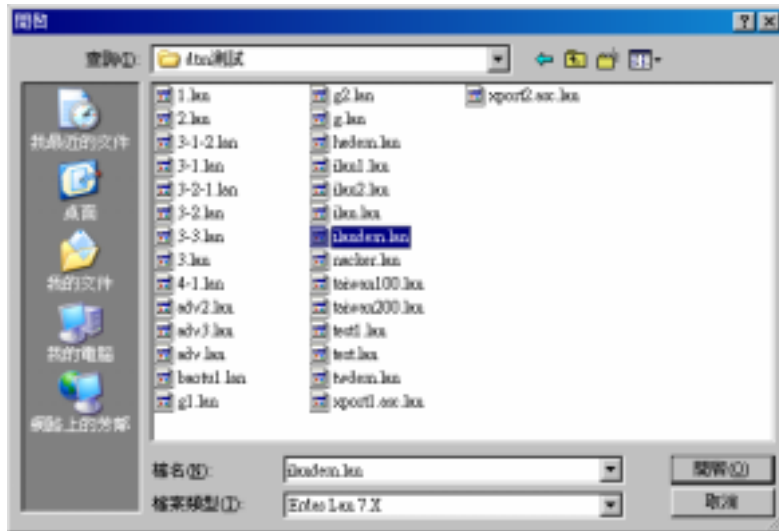
a. Open Lan File



b. Save Lan File



c. Export Lan File to Open a Exist file



(Select output type ASCII,XYZ or, GRID ASCII) Save to File



Support output file

File Type	Ext.	Support: software and packages
ASCII	*.asc	Esri ArcGIS、Erdas Imagine、Grass
XYZ	*.txt	Esri ArcGIS、Golden Software Surfer、Grass
GRID(ASCII)	*.grd	Golden Software Surfer

d. Import File to Lan

Support input file

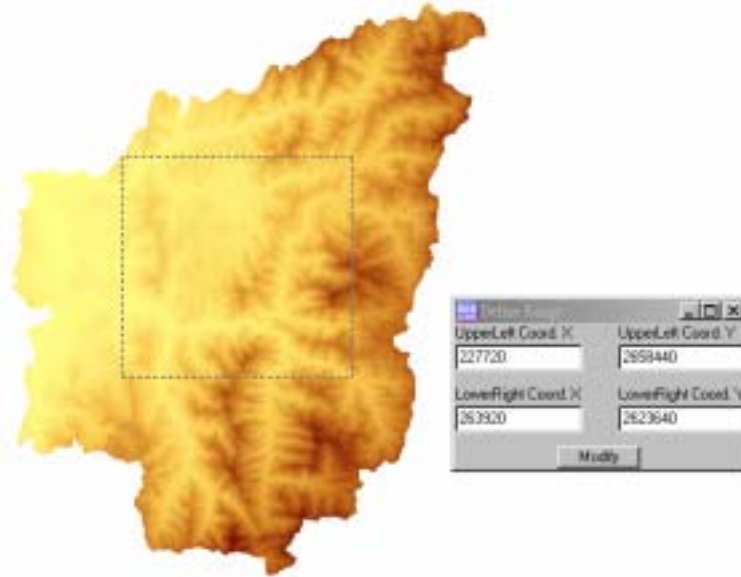
File Type	Ext.	Support: software and packages
ASCII	*.asc	Esri ArcGIS、Erdas Imagine、Grass
XYZ	*.txt	Esri ArcGIS、Golden Software Surfer、Grass
GRID(ASCII)	*.grd	Golden Software Surfer

e. Close Current active File opened

II. Basic



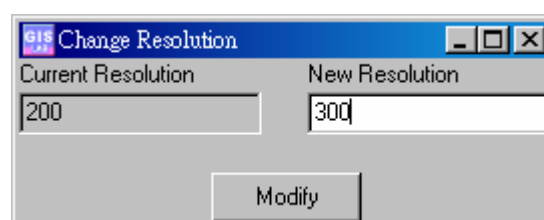
- Crop a rectangle range from current file to a new file.



- Crop a ShapeFile polygon range from current file to a new file.
The result of the process is the union DEM of all the Shapefile polygons that cover.



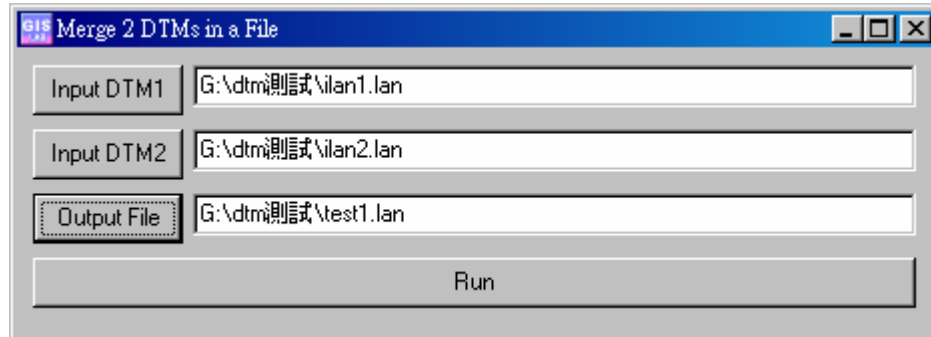
- Change current image resolution by using interpolation



- d. Merge two image in a new image

Input DEM#1, DEM#2 and Output Filename and press Run button.

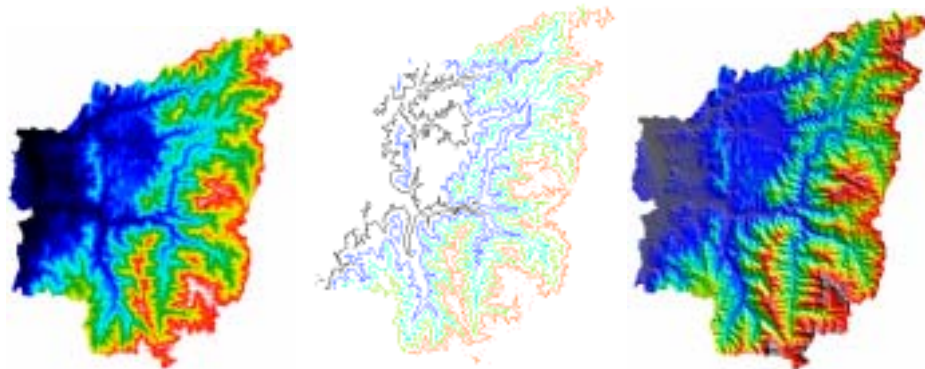
(notice: Combine 2 images in one ,the resolution refers to the rough one)



III. Advance



- a. Show DEM image in the Image View Window
- b. Show Contour image in the Image View Window
Input the contour interval value
- c. Show Shaded Relief image in the Image View Window
- d. Fill sink to current DEM image
- e. From the result of b, this function converts Contour image to a vector ShapeFile.



Original

Contour

Shaded Relief

IV. Primary



- a. Process current DEM to a Slope image as a new Lan file.
- b. Process current DEM to a Aspect image as a new Lan file.
- c. Process current DEM to a Profile Curvature image as a new Lan file.
- d. Process current DEM to a Plan Curvature image as a new Lan file.
- e. Process current DEM to a Curvature image as a new Lan file.

V. Flow (Single image only!!) ps. Single image source(from ESRI ArcView)



- a. Process current Single image to a FCC image as a new Lan file.
- b. Process current Single image to a River image as a new Lan file.
- c. Process current Single image and open an existent DEM to build a watershed Shape as a new ShapeFile.
- d. Process current Single image to a WTI image as a new Lan file.
- e. Process current Single image to a SPI image as a new Lan file.

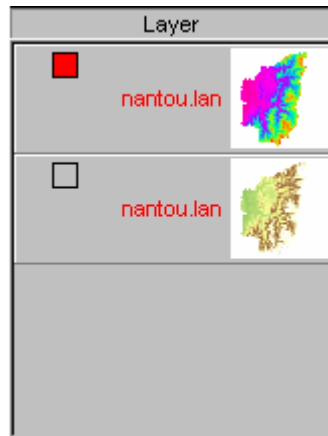
VI. Algebra



- a. Kernel operation (Convolution): Process current DEM image with a (3x3 or 5x5) Moving Window kernel to a new convolution Lan file.
- b. Process two DEM images with an operation (+) to a new Lan file.
- c. Process two DEM images with an operation (-) to a new Lan file.
- d. Process two DEM images with an operation (*) to a new Lan file.

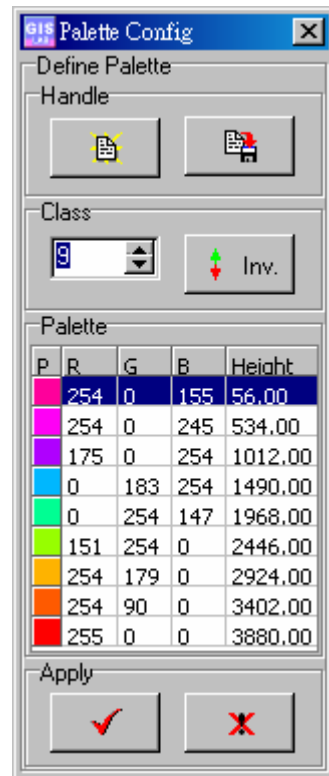
2. Layer Arrange Window

Layer Arrange Window will Show what you have already open. The current active layer is the layer bar where a red rectangle marks on . When clicking once on the layer bar ,it changes its active status to what you choose.



When double clicking on the layer bar, it will show the Palette Form depends upon the active layer.

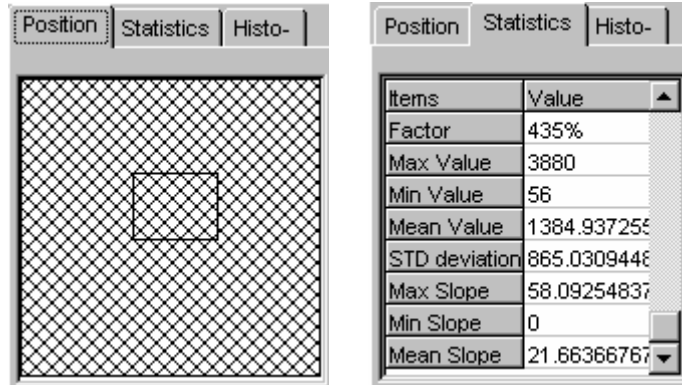
This Palette Form defines this layers palette.



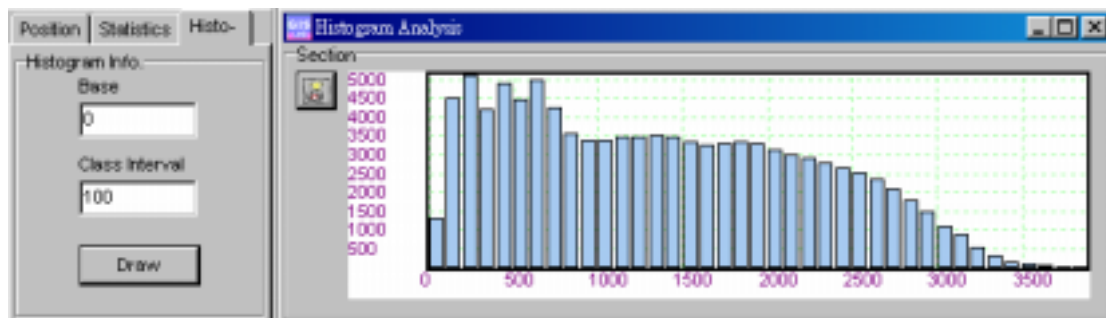
3. Info Window

There are Three (3) Tabgroups in the Info window of GETA
When open a new DEM file ,and this set to active.

- I. Position
Show the current position in the global image
- II. Statistics
- III. Histogram



When setting the base value and the cluster interval value and click Draw button, the Histogram shows.

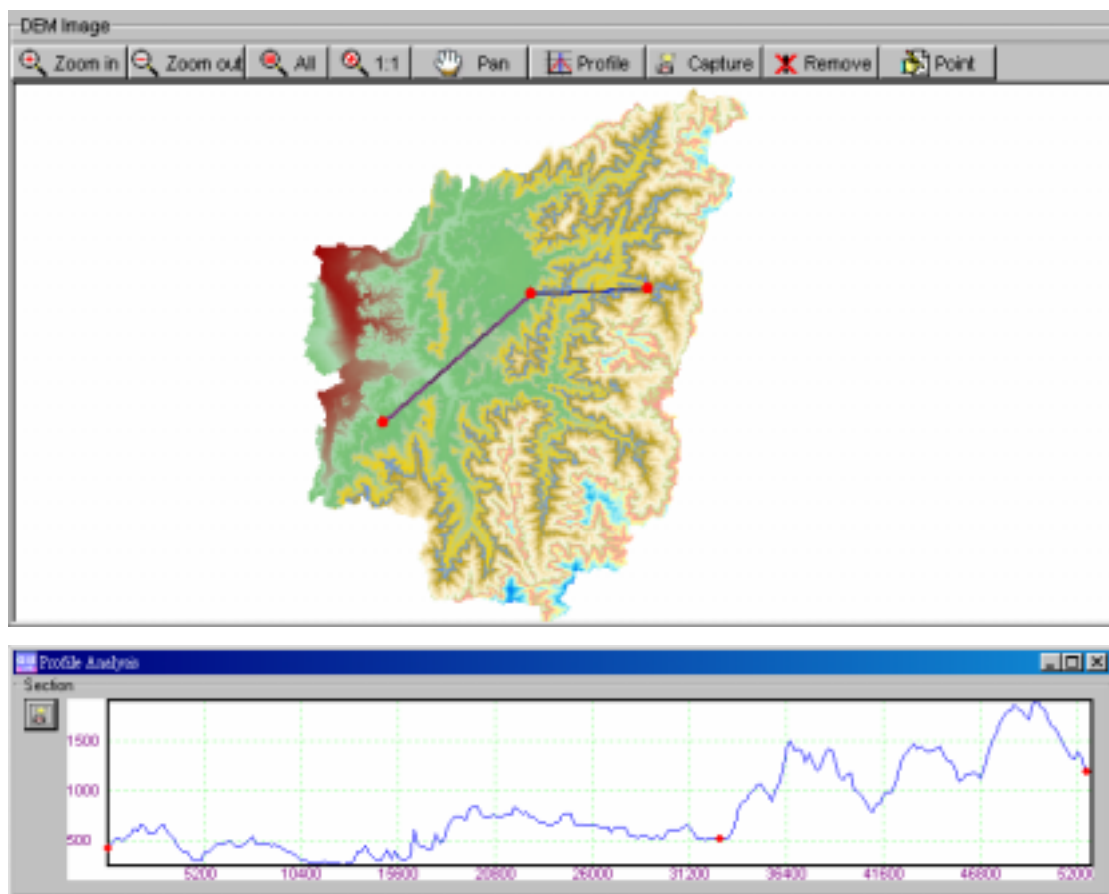


4. Image View Window

There are Nine (9) Icons in the Image View Window of GETA

This Window show image when opening a Lan file

- I. Zoom in : Click or (drag) the view image to zoom in
- II. Zoom out: Click or (drag) the view image to zoom out
- III. Zoom all to this view
- IV. Zoom to 1:1 size
- V. Pan this image: Drag the view image to zoom in
- VI. Profile :Draw a profile diagram when you digitized the path in the view(double click end digitize)
- VII. Capture: Capture current view to clipboard ,you can use paste to in a software (like MS WORD...etc)
- VIII. Remove :Remove current active layer from the view
- IX. Point :Record point-attributes (X, Y and its value) by digitizing the view image.



5. Status Window

After opening a new DEM and when you moving the mouse on the Image View Window, the Status Window will show this geographical coordinate and its value.

X Coord.	257920	Y Coord.	2634640	Value	2042.0000
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