



- Clark Labs (Clark University) since 1987 (Prof. Ron Eastman)
- Idrisi is used for GIS lessons at the Faculty of Forestry since 1996 (Prof. Vladimír Židek)
- Idrisi Resource Center since 1997 (together with the FF of the Technical Univ. Zvolen, Slovakia)
- 32-bit mainly raster oriented system, however supporting vector data format
- Image processing – mosaic, transformation, classification (including hyperspectral images)
- GIS analysis – distance and context operators, decision, statistical modules (neural network), time series, DMT → complex environmental modules
- Abu Abd Allah Muhammed al-Idrisi (1100 – 1166 n.I.)



IDRISI Environment: Data Path

- Setting New Project:
 - Open **Idrisi Explorer**
 - Fold **Projects**, right click and find the path to your directory **D:\ NAME**

- You can change the name of your project in the **Editor** (low part of the fold **Projects**)
- Fold **Files** shows data and files which contains the project
- Fold **Filters** enable to filtrate files which can be seen within the fold **Files**

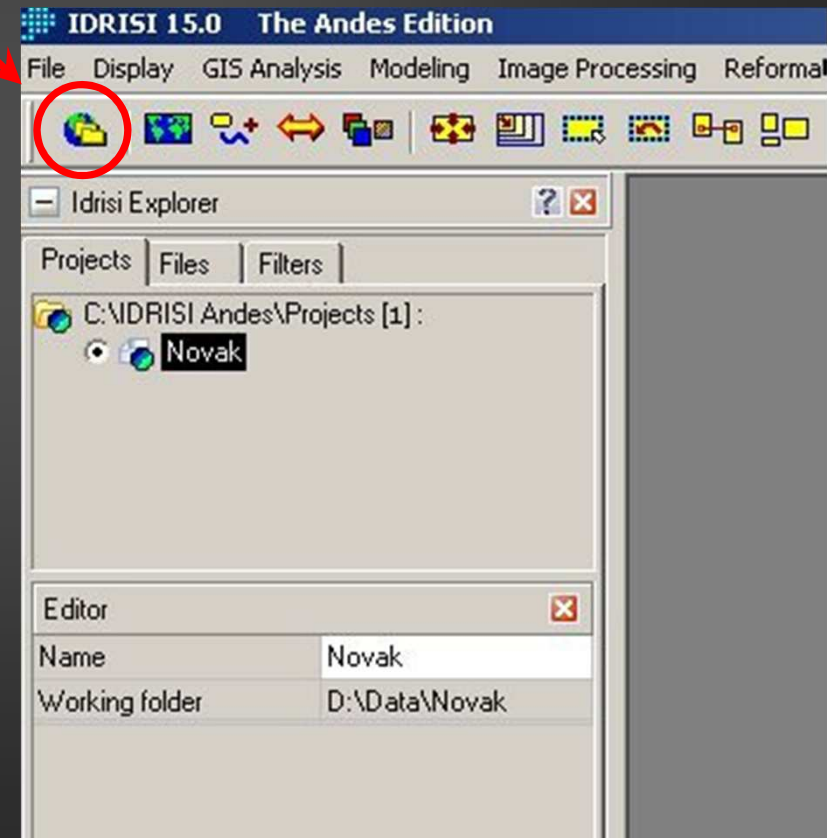
Copy data from:

- \\yain\student\

GIS_Fundamentals\Using Idrisi

To:

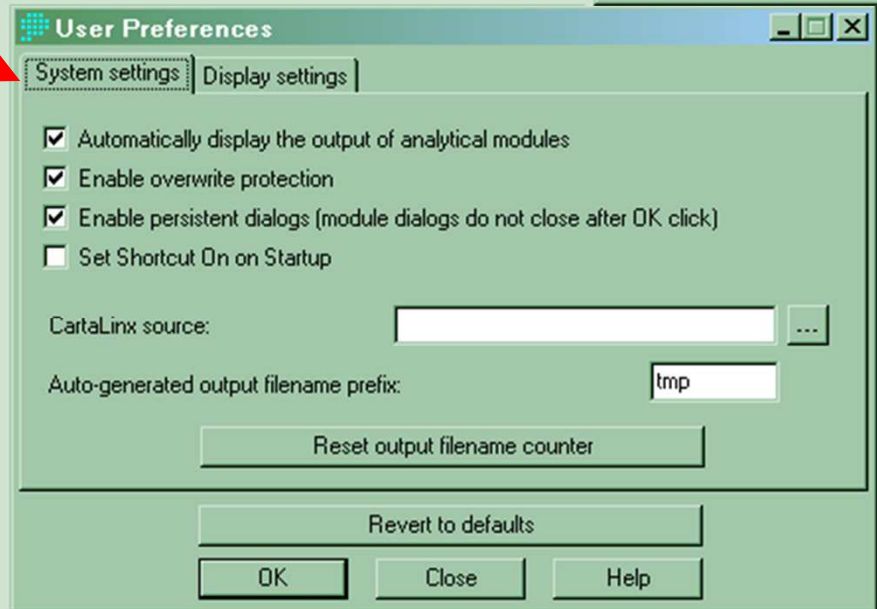
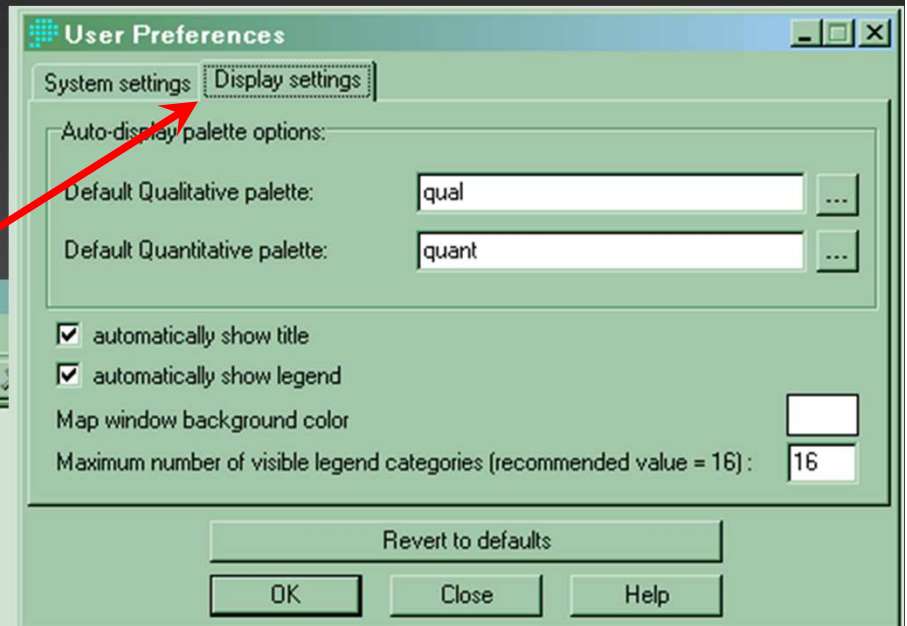
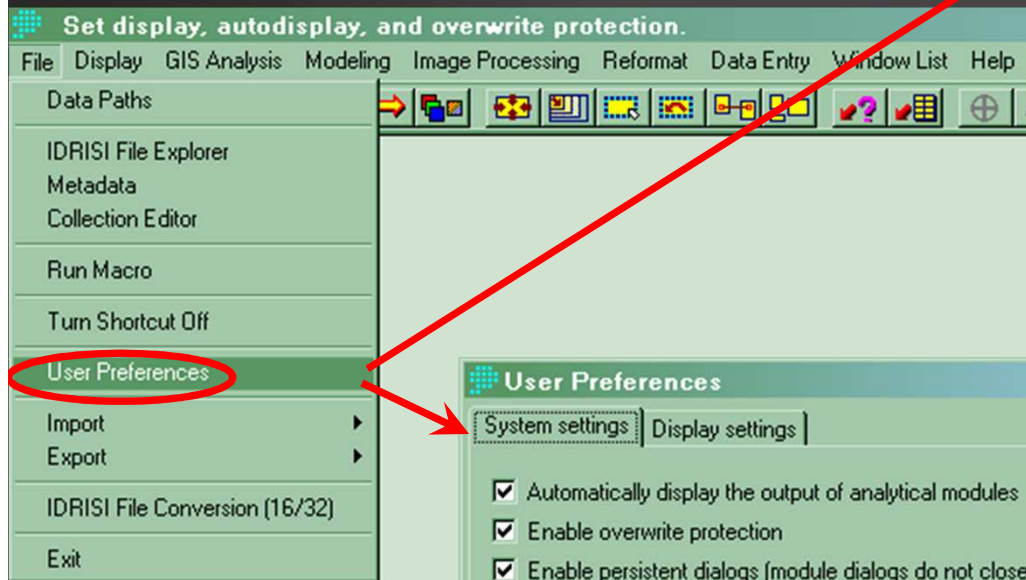
- D:\ ... (your directory)





IDRISI Environment: User Preferences

- File → User Preferences
 - System settings
 - Display settings



Taiga Tutorial Part 1:
Using IDRISI



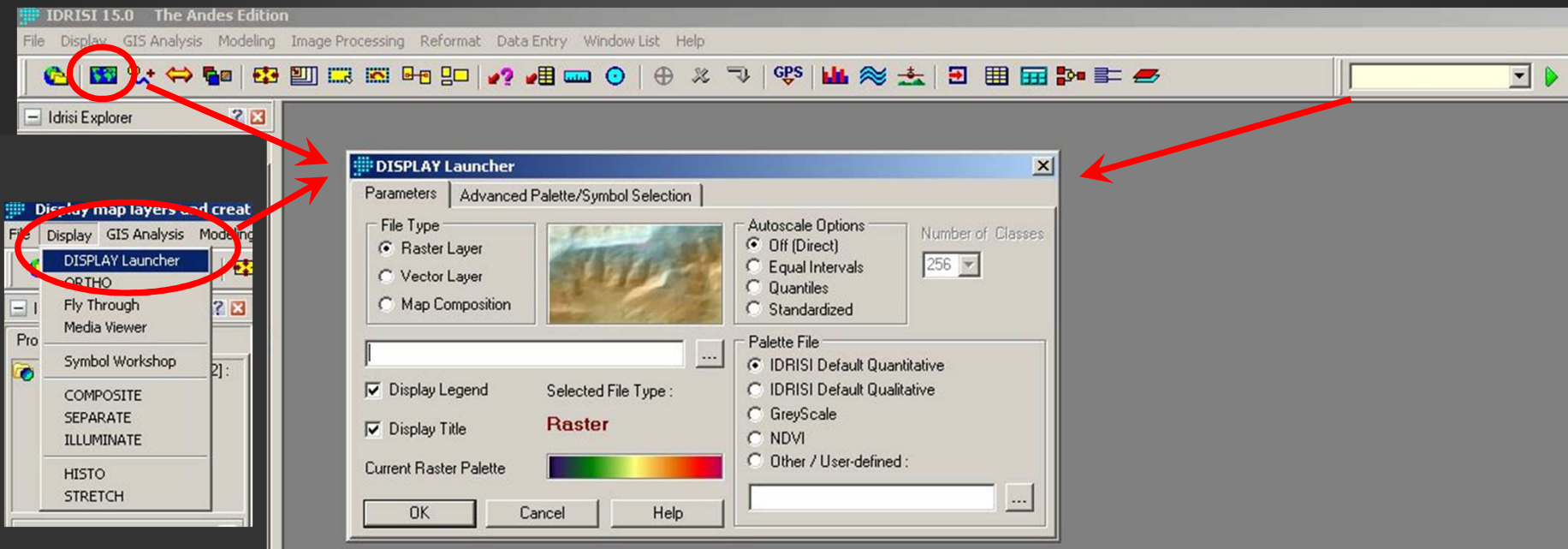
IDRISI Environment: Dialog Boxes, Pick List, Moduls

- modules (approx. 200) – icon, menu, shortcut (on/off)
- pick list



DISPLAY SIERRADEM

- Idrisi Explorer: double click or right click + menu





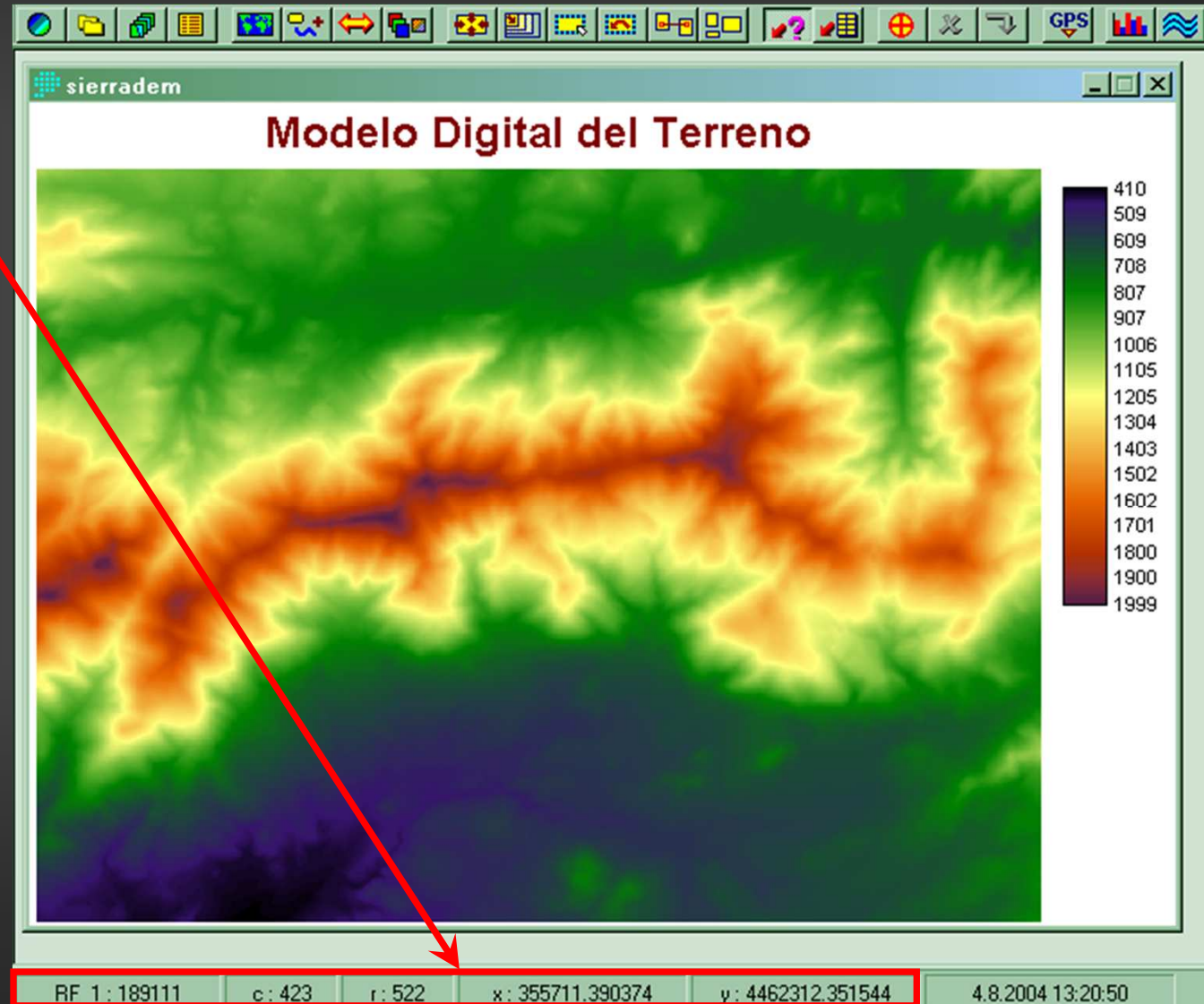
IDRISI Environment: The Status and Tool Bars

- RF = representative fraction = map scale

- column
- row

- X coordinate
- Y coordinate

- zoom
Page Up = zoom out
Page Down = zoom in





IDRISI Environment: Composer



DISPLAY SIERRADEM



Add Layer CONTOURS

The screenshot displays the IDRISI Composer interface with three 'Layer Properties' dialog boxes and the 'Composer' panel. The 'Layer Properties' dialog boxes are arranged horizontally, each showing different tabs: 'Visibility', 'Properties', and 'Display Parameters'. The 'Composer' panel is on the right, showing a list of layers ('sierradem' and 'contour') and various control buttons. Red arrows indicate the workflow from the 'Layer Properties' dialog boxes to the 'Add Layer' button in the 'Composer' panel.

Layer Properties (Left): Tab: **Visibility**. Raster Layer Transparency Options: Opaque, Blend (0%), Transparent Overlay, Cyan Component of Anaglyph, Composite : Red Component, Composite : Green Component, Composite : Blue Component. Drawing Sort Order (based on value): Ascending, Descending. Scale/Visibility Options: Layer is visible at scales ranging from: 1 : 0 to 1 : 10000000000.

Layer Properties (Middle): Tab: **Properties**. Layer Name: sierradem, Layer Type: Raster, Data Type: Integer, Ref System: utm-30n, Ref Units: meters, Min X: 343000, Max X: 371020, Min Y: 4457000, Max Y: 4478000, Columns: 934, Rows: 700, Min Value: 410, Max Value: 1999, Value Units: m. Buttons: View Metadata, Histogram.

Layer Properties (Right): Tab: **Display Parameters**. Autoscaling Options: None (direct), Equal Intervals, Quantiles, Standard Scores. Number of Classes: 256. Display Min: 438, Display Max: 1834. Palette File: Quant. Button: Advanced Palette/Symbol Selection. Buttons: Apply, Revert, Save.

Composer Panel: Layers: sierradem, contour. Buttons: Add Layer, Remove Layer, Layer Properties, Map Properties, Feature Properties, Save, Print. Navigation: Up, Down, Left, Right, Home, End.

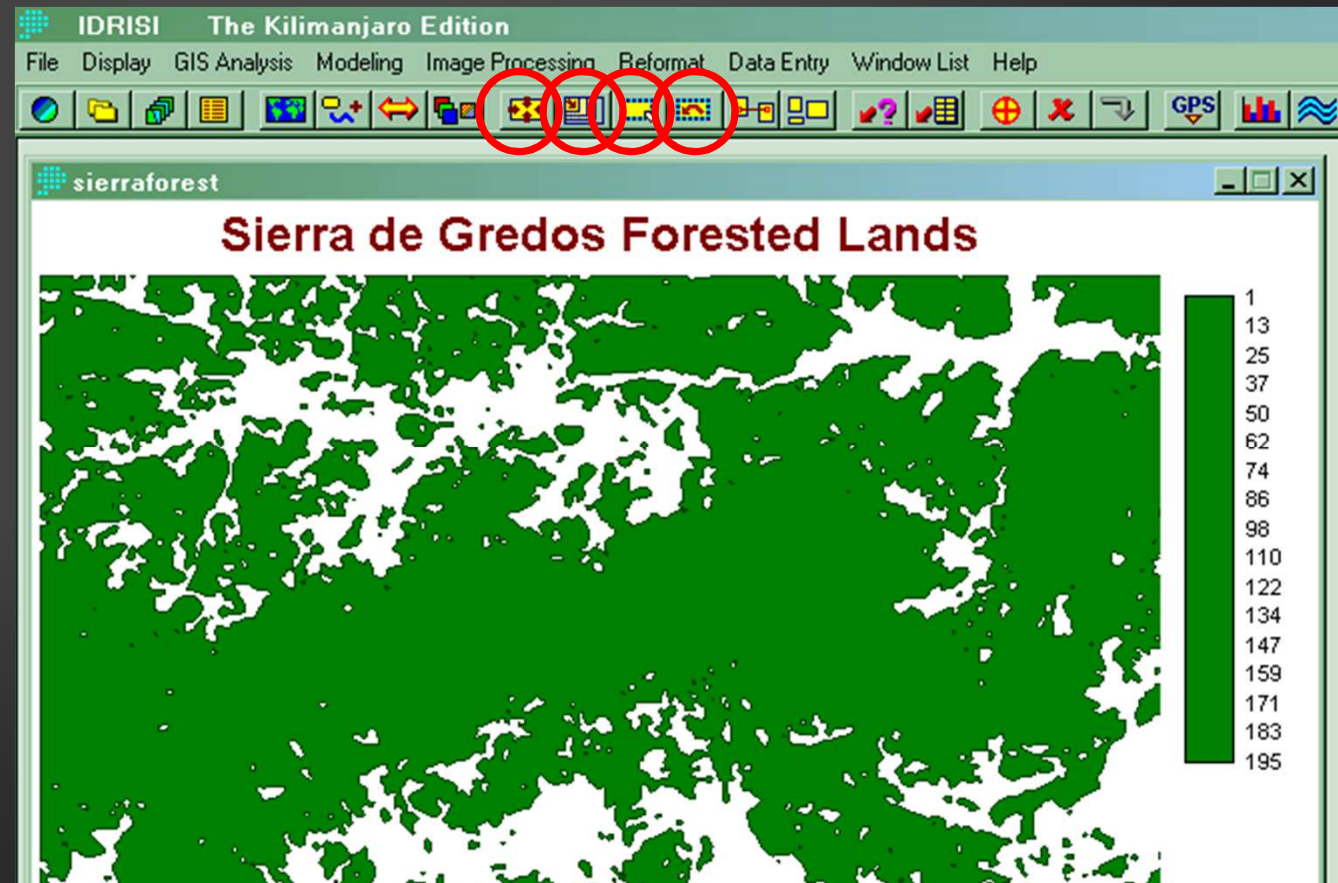


Display: Displaying Map Layers



DISPLAY **SIERRAFOREST** (Forest)

- fit map window
- maximize display
- zoom window
- restore original window



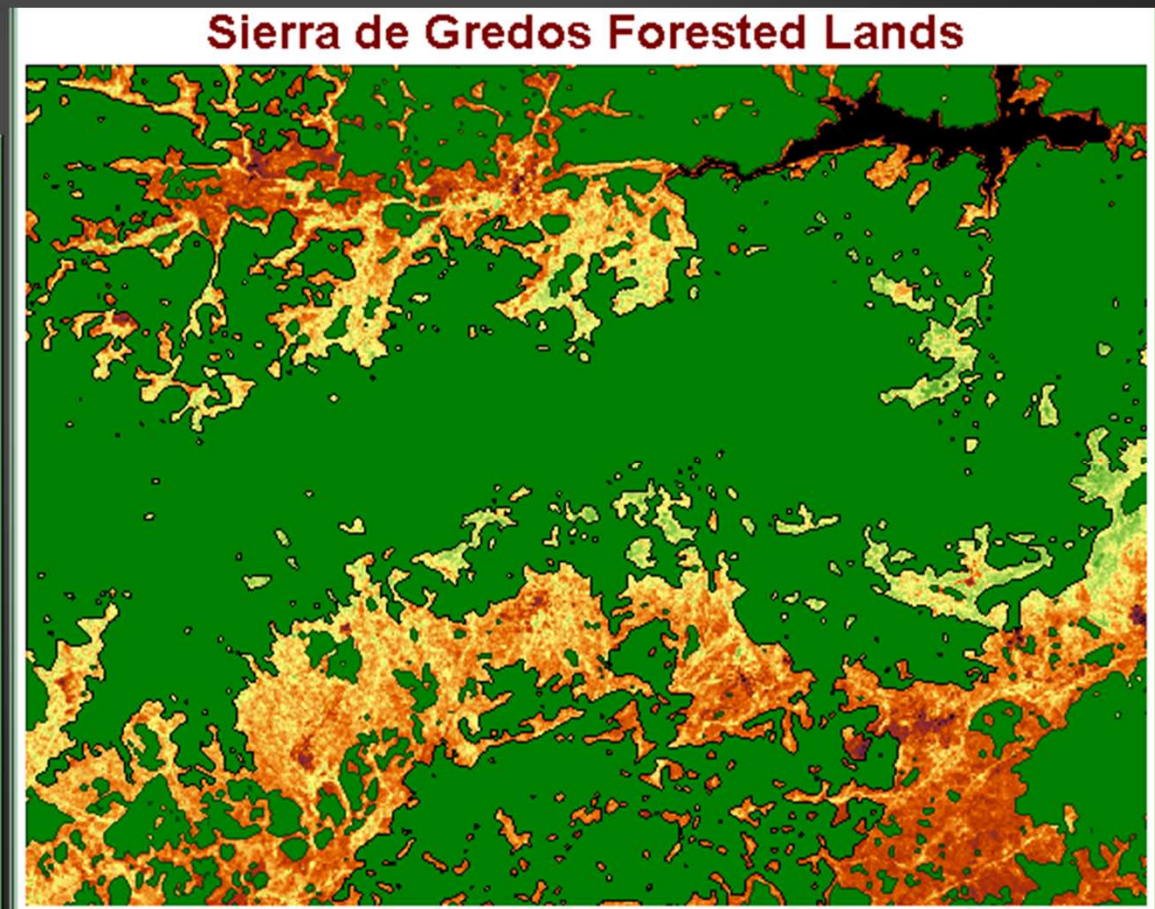
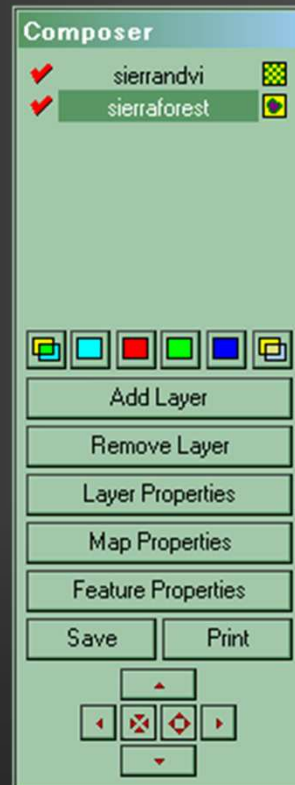


Display: Displaying Map Layers



Add Layer **SIERRANDVI** (NDVI)

- check mark
- position of layers
- change palette/symbol

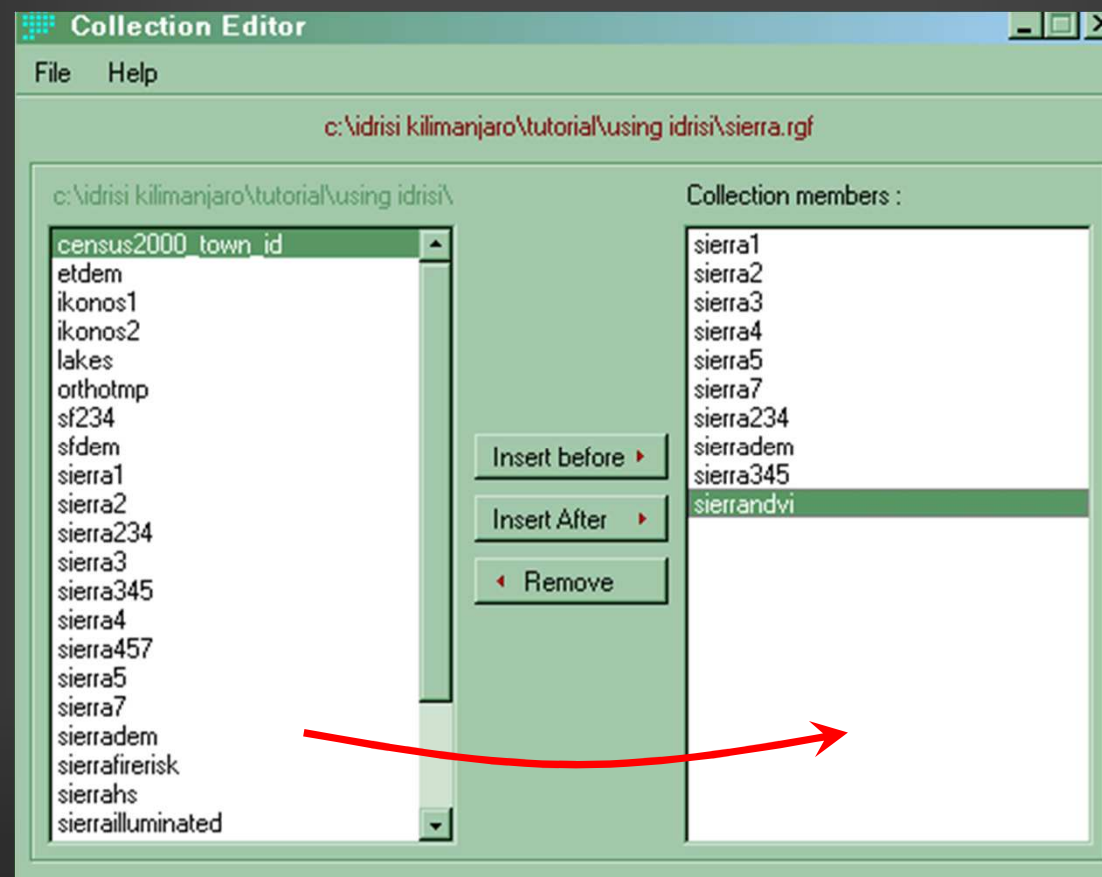




Display: Raster Layer Collections



Collection Editor → File → New → SIERRA2
(SIERRA1, SIERRA2, SIERRA3, SIERRA4, SIERRA5 , SIERRA7,
SIERRA234, SIERRA345, SIERRADEM, SIERRANDVI)





Display: Raster Layer Collections



DISPLAY + SIERRA 2 SIERRA345

The screenshot shows the IDRISI software interface. The main window displays a raster map titled "Sierra de Gredos Landsat Bands 3,4,5 1% Saturation". A red box highlights a specific location on the map with the text "R: 87 G: 62 B: 40". To the right, a "Feature Properties" window is open, showing a table of attributes and values. The table includes entries for "sierra1" through "sierra7", "sierra234", "sierradem", "sierra345", and "sierrandvi". The "sierra345" entry shows values "r: 87 g: 62 b: 40". The "View as Graph" and "Relative Scaling" options are unchecked.

Attribute	Value
sierra1	84
sierra2	37
sierra3	40
sierra4	62
sierra5	87
sierra7	36
sierra234	r: 62 g: 40 b: 37
sierradem	1986
sierra345	r: 87 g: 62 b: 40
sierrandvi	0.2156863



Display: Collection Linked Zoom



DISPLAY + SIERRA SIERRADEM



DISPLAY + SIERRA SIERRA345



DISPLAY + SIERRA SIERRANDVI (NDVI)





Display: Blends



DISPLAY **SIERRADEM**

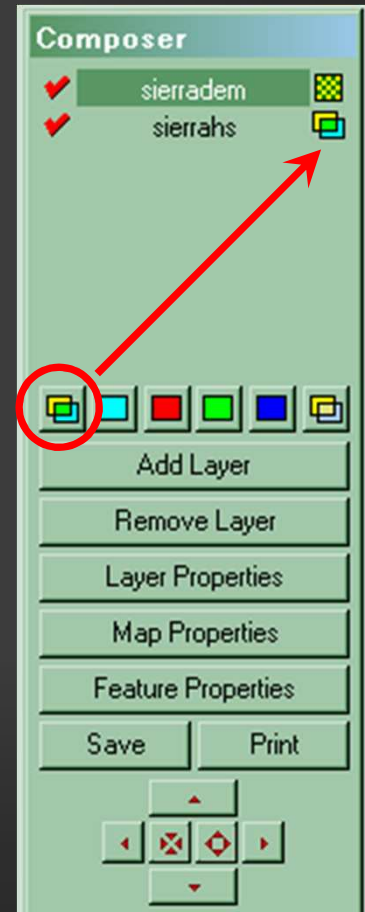
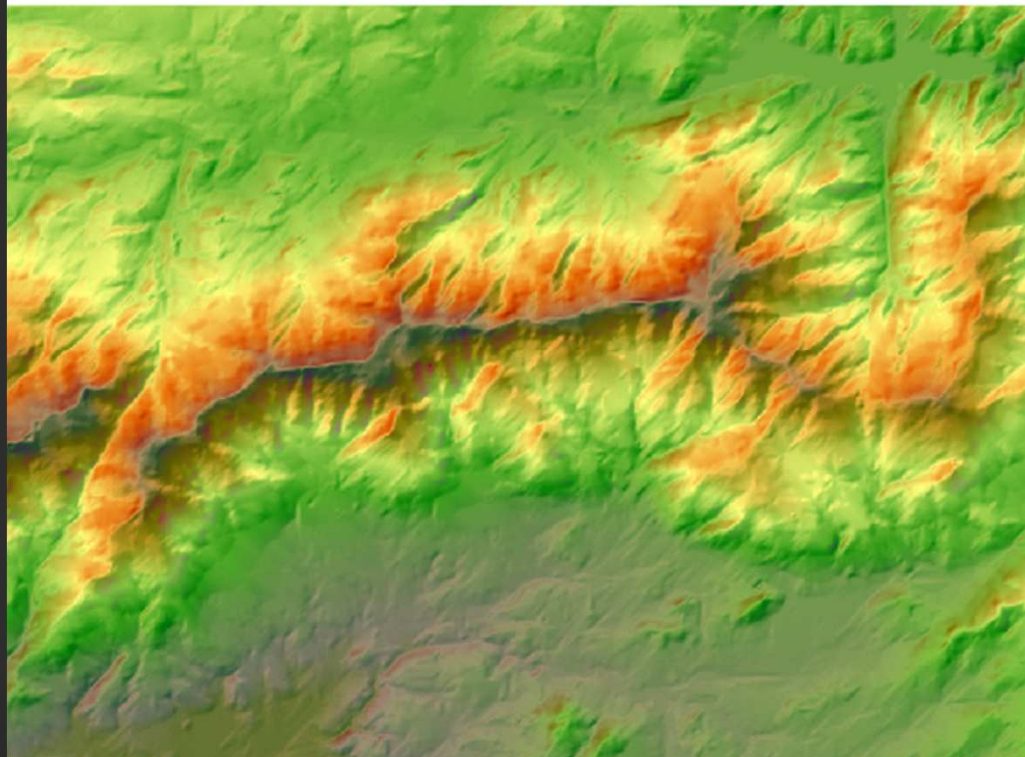


Module HILLSHADE **SIERRADEM** SIERRAHS



Add Layer **SIERRAHS**

Modelo Digital del Terreno





Display: Transparency



DISPLAY **SIERRA4**

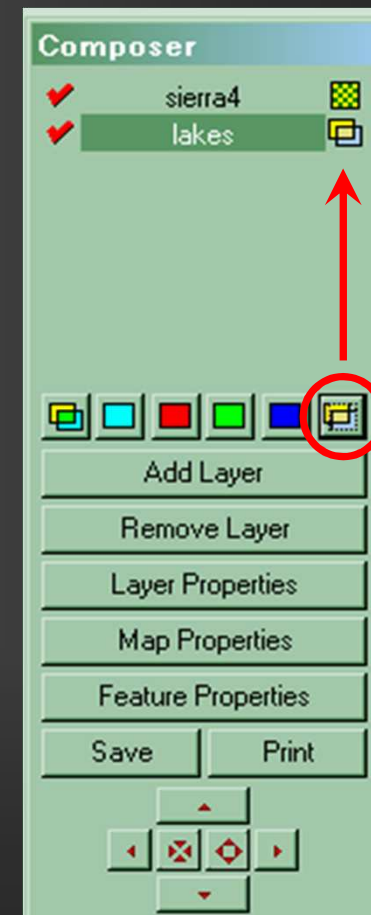
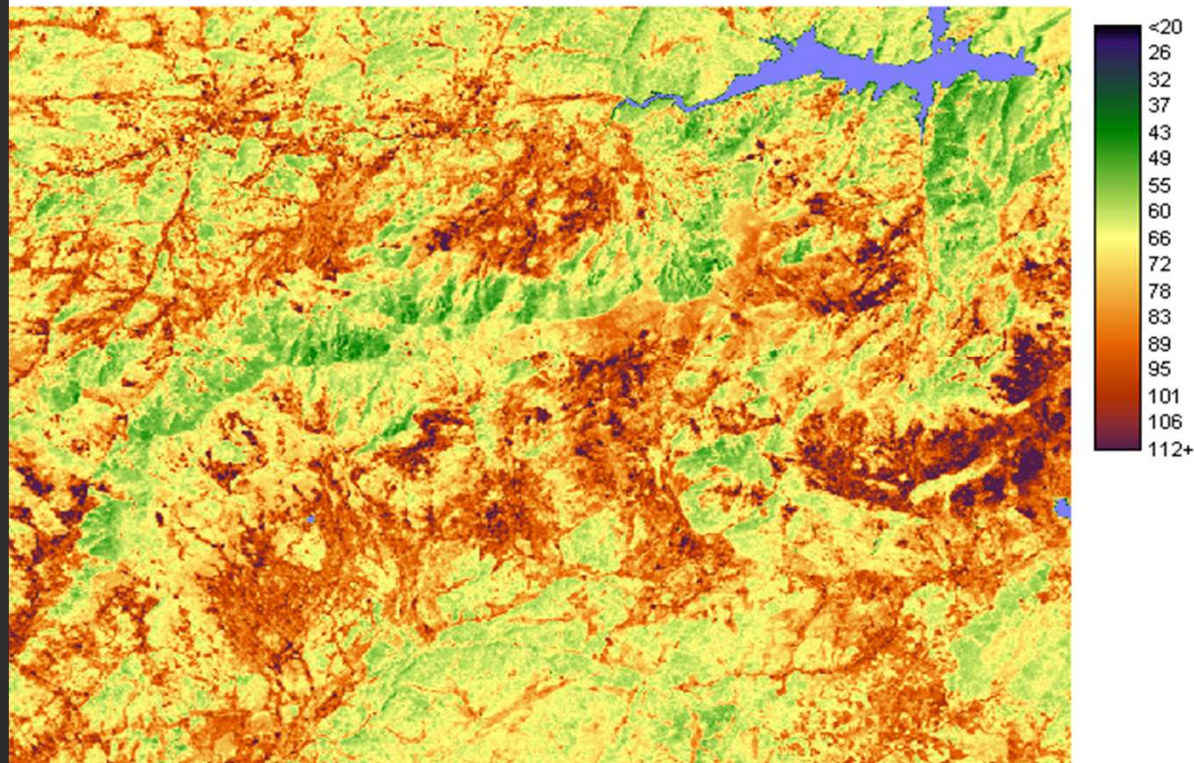


RECLASS **SIERRA4** 1 0 30 0 30 999 LAKES



Add Layer **LAKES** (UniformBlue3)

Banda 4 Landsat-TM





Display: Layer Visibility



DISPLAY **IKONOS1** (UnipolarBcyan)

IDRISI The Kilimanjaro Edition

File Display GIS Analysis Modeling Image Processing Reformat Data Entry Window List Help

ikonos1

IKONOS 1m Panchromatic Anaglyphic Pair

Layer Properties

ikonos1

Display Parameters Properties **Visibility**

Raster Layer Transparency Options

- Opaque
- Blend
- Transparent Overlay
- Cyan Component of Anaglyph
- Composite : Red Component
- Composite : Green Component
- Composite : Blue Component

Drawing Sort Order (based on value)

Ascending Descending

Scale/Visibility Options

Layer is visible at scales ranging from :

1 : 1500 to 1 : 20000

OK Close Help



Display: Composites



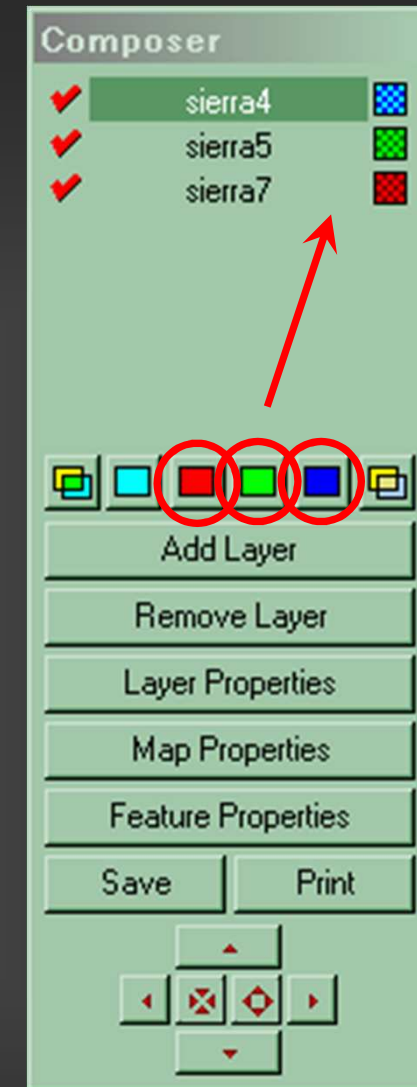
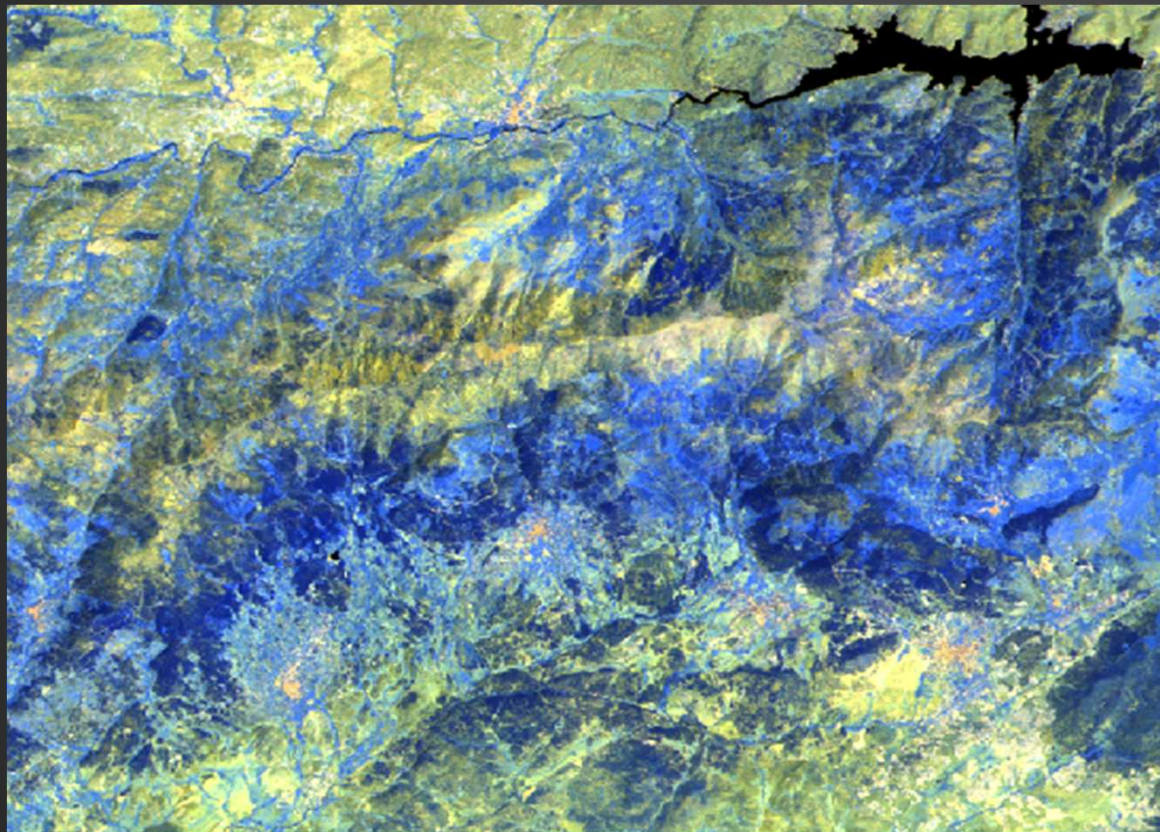
DISPLAY **SIERRA4** (GreyScale)



Add Layer **SIERRA5** (GreyScale)



Add Layer **SIERRA7** (GreyScale)



- COMPOSITE
- SEPARATE



Display: Anaglyphs

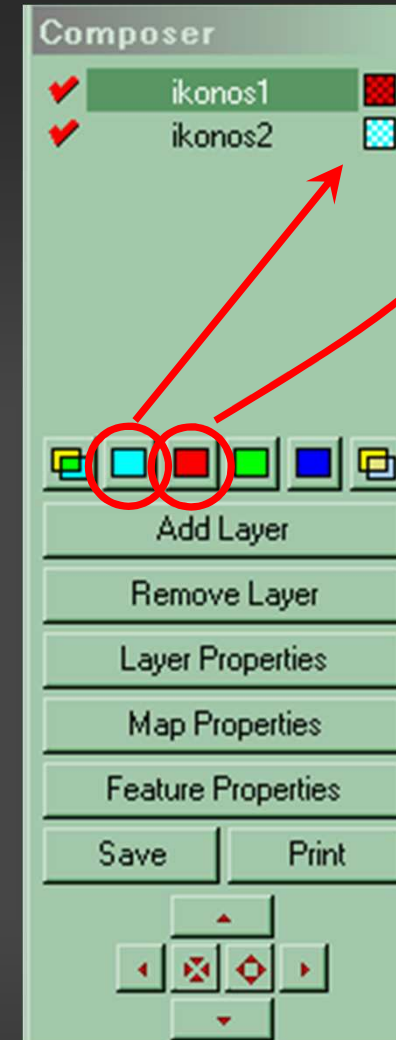
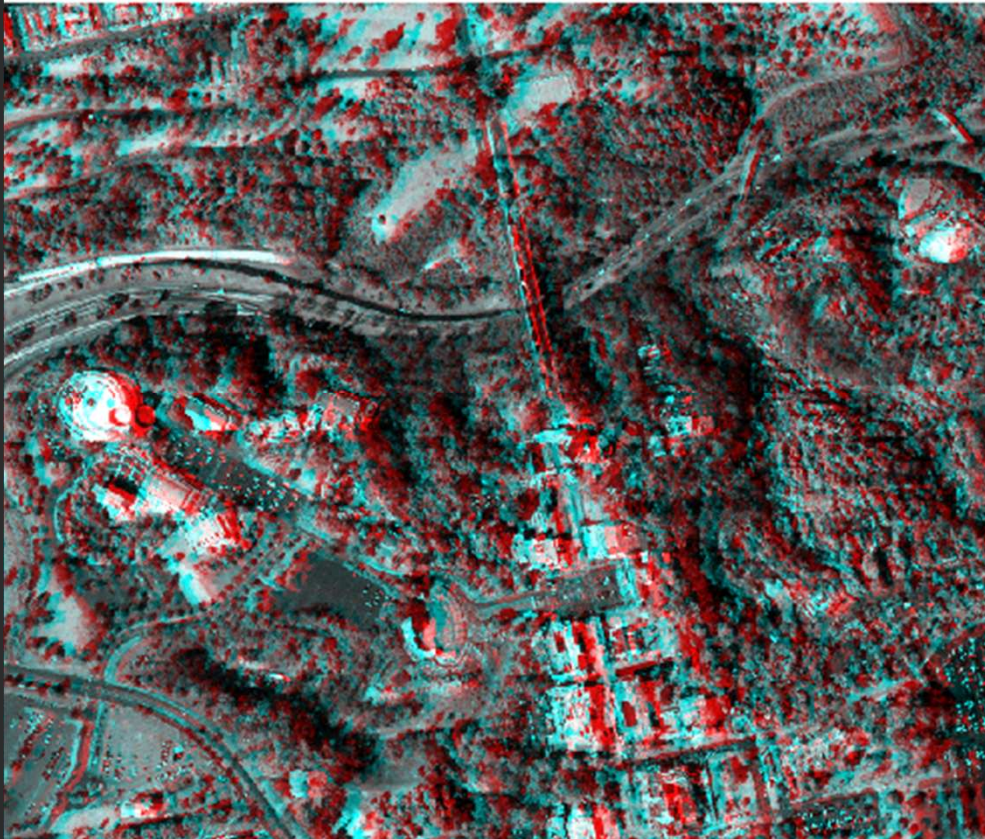


DISPLAY **IKONOS1** (GreyScale)



Add Layer **IKONOS2** (GreyScale)

IKONOS 1m Panchromatic Anaglyphic Pair



▪ 3D glasses

RED = left eye

CYAN = right eye



Display: Surface – Fly Through



Fly Through

SIERRADEM

SIERRA345

Produce a interactive 3-D view of surface data with optional draping of a second color image.

File Display GIS Analysis Modeling Image Processing Reformat Data Entry Window List Help

Display Launcher
ORTHO
Fly Through
Media Viewer
Symbol Workshop
COMPOSITE
SEPARATE
ILLUMINATE
HISTO
STRETCH

Fly Through

Surface image : sierradem
 Use drape image : sierra345

Palette file
 IDRISI Default Quantitative
 IDRISI Default Qualitative
 GreyScale
 Terrain
 RADAR
 NDVI
 User defined : 24-Bit Composite

System resource use
 Low Medium High

Initial velocity
 Slow Medium Fast

Exaggeration factor [100%]
[Slider]

Start window maximized

OK Close Help



Display: Surface – Orthographic perspective



DISPLAY **SIERRA234**



ORTHO **SIERRADEM** **SIERRA234**

ORTHO - orthographic perspective display

Surface image : ...

Use drape image ...

Output image : ...

View direction (0-90) :
0 = north, 45 = northeast, 90 = east

Viewing angle :
0 = horizontal, 45 = slant, 90 = vertical

Vertical exaggeration factor :

Change minimum and maximum for display

Output resolution

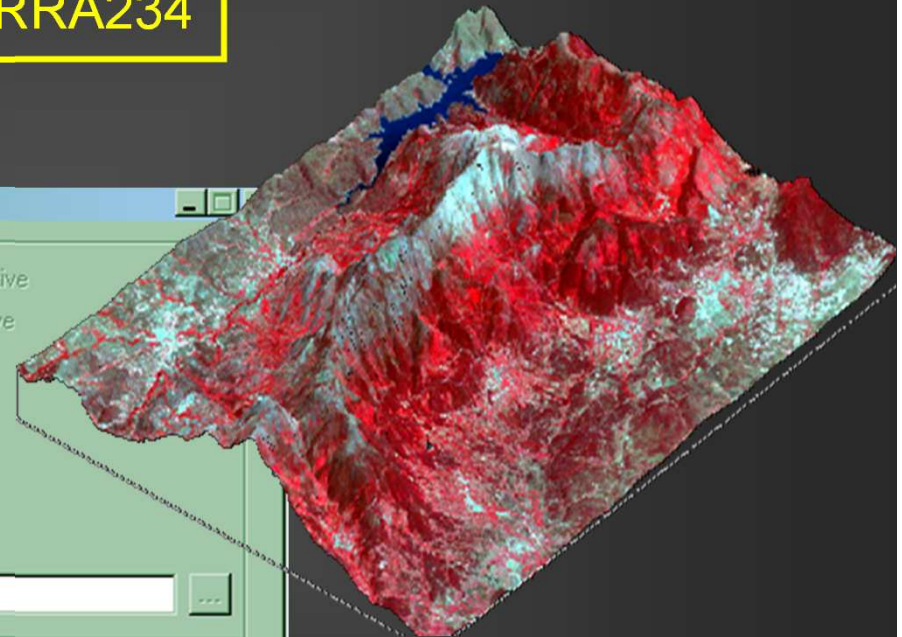
640 x 480 1024 x 768
 800 x 600 1280 x 1024

Palette file

IDRISI Default Quantitative
 IDRISI Default Qualitative
 GreyScale
 Terrain
 RADAR
 NDVI
 User defined :

...

24-Bit Composite Title

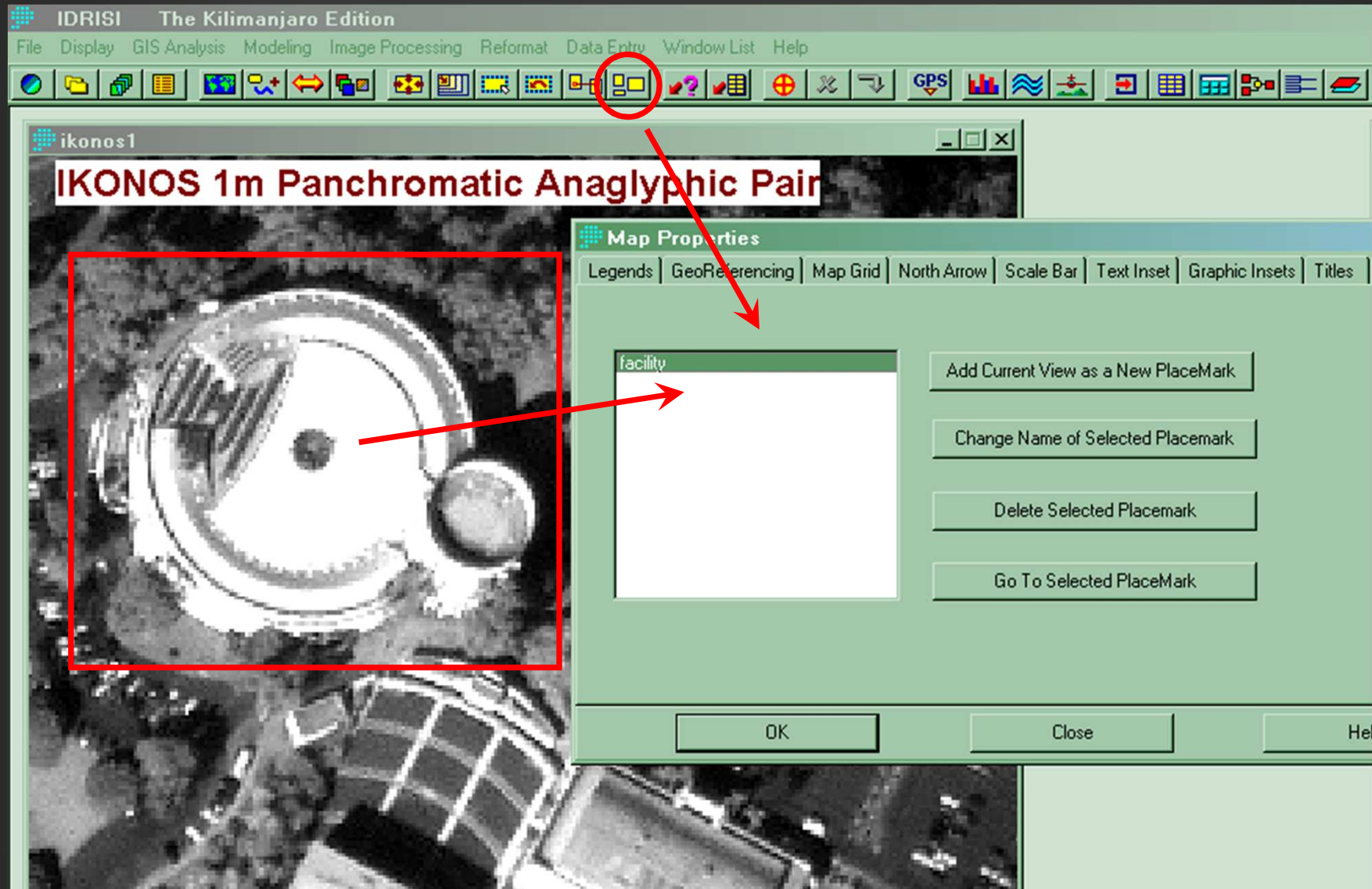




Display: Placemarks



DISPLAY **IKONOS1** (Greyscale)





Symbol Files

The screenshot displays the IDRISI software interface, titled "IDRISI The Kilimanjaro Edition". The menu bar includes File, Display, GIS Analysis, Modeling, Image Processing, Reformat, Data Entry, Window List, and Help. The toolbar contains various icons for file operations and analysis. A red circle highlights the "New" icon (a plus sign in a square) in the toolbar, with an arrow pointing to the "Symbol Workshop" option in the "File" menu. The "Symbol Workshop" menu item is also circled in red. The "Symbol Workshop" window is open, showing a "New Symbol File" dialog box. The dialog box has a title bar "New Symbol File" and a close button. It contains the following options:

- Symbol File Type:
 - Point
 - Polygon
 - Palette
 - Line
 - Text
- File Name: [Text input field]

Buttons for "OK", "Close", and "Help" are located on the right side of the dialog box. The background of the Symbol Workshop window shows a grid of blue circles, representing a symbol file. The main window also displays "Symbol File : Undefined" and "Symbol File Type : Undefined". Other controls in the Symbol Workshop window include a "Blend" button, "From:" and "To:" sliders (both set to 0 and 255), "Blend/Copy Options" (with "All Attributes" selected), a "Copy" button, "Symbol:", "From:", and "To:" sliders (all set to 0 and 255), "Set Background Color for Symbol Grid", "Autoscale Minimum:" and "Autoscale Maximum:" sliders (both set to 0 and 255), and a "Reverse Sequence in Autoscale Range" button.



Data Structures



File → IDRISI File Explorer → View Metadata
(Composer → Layer Properties → Properties → View Metadata)

