

Práca v ArcGIS Desktop

(školenie)

Spracovala: Hana Stanková



Cvičenie 2 :

Vizualizácia geografických údajov

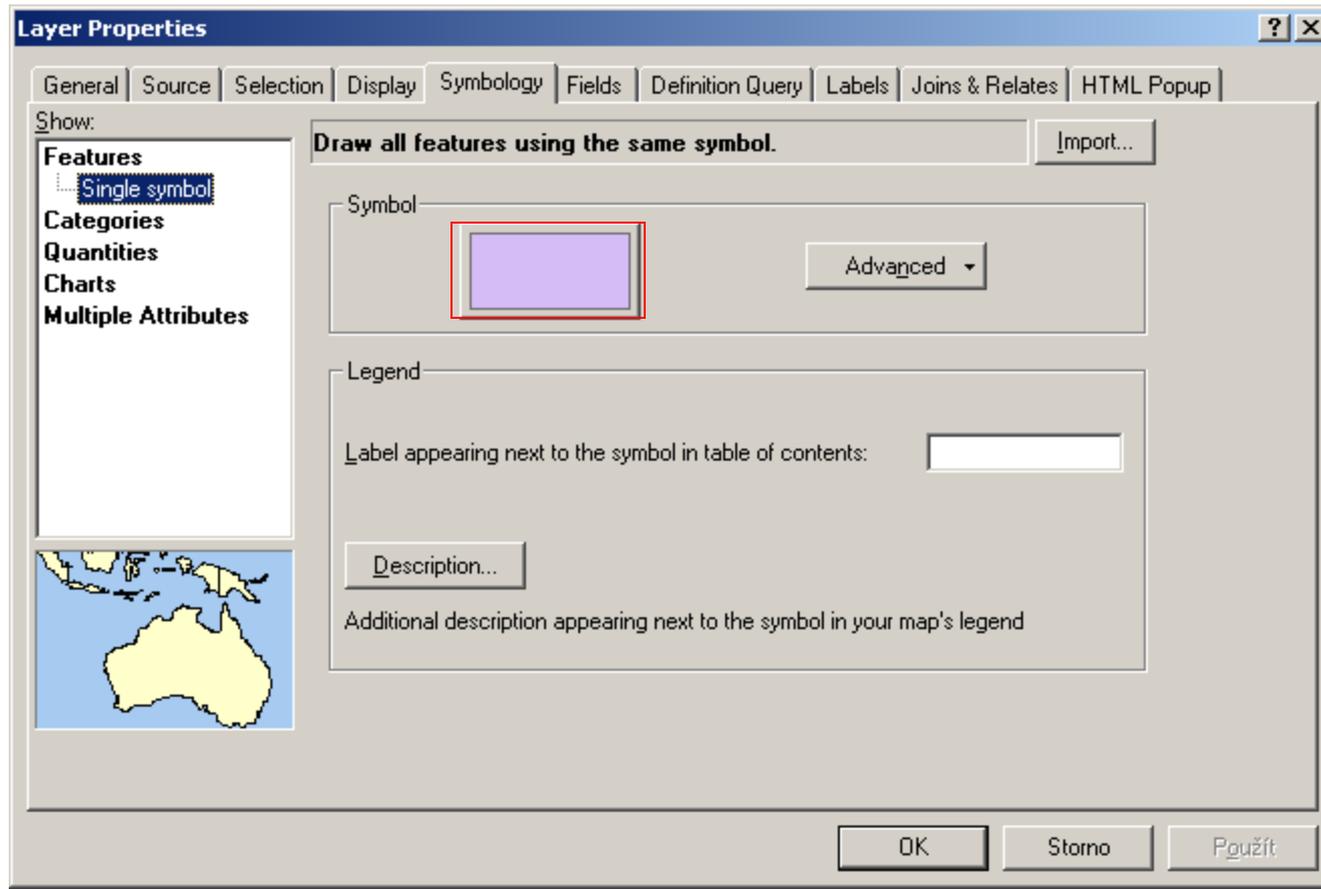
Spracovala: Hana Stanková





Vizualizácia údajov: Jeden symbol

Layer Properties – Symbology





Vizualizácia údajov: Jeden symbol

Layer Properties – Symbol

Symbol Selector

Category: All

Green	Blue	Sun
Hollow	Lake	Rose
Beige	Yellow	Olive
Green	Jade	Blue

Preview: [Purple square]

Options:

- Fill Color: [Purple]
- Outline Width: 0.40
- Outline Color: [Grey]

Properties... (highlighted)

More Symbols

Save... Reset

OK Cancel

Layer Properties

General Source Sele

Show:

- Features
 - Single symbol
- Categories
- Quantities
- Charts
- Multiple Attributes

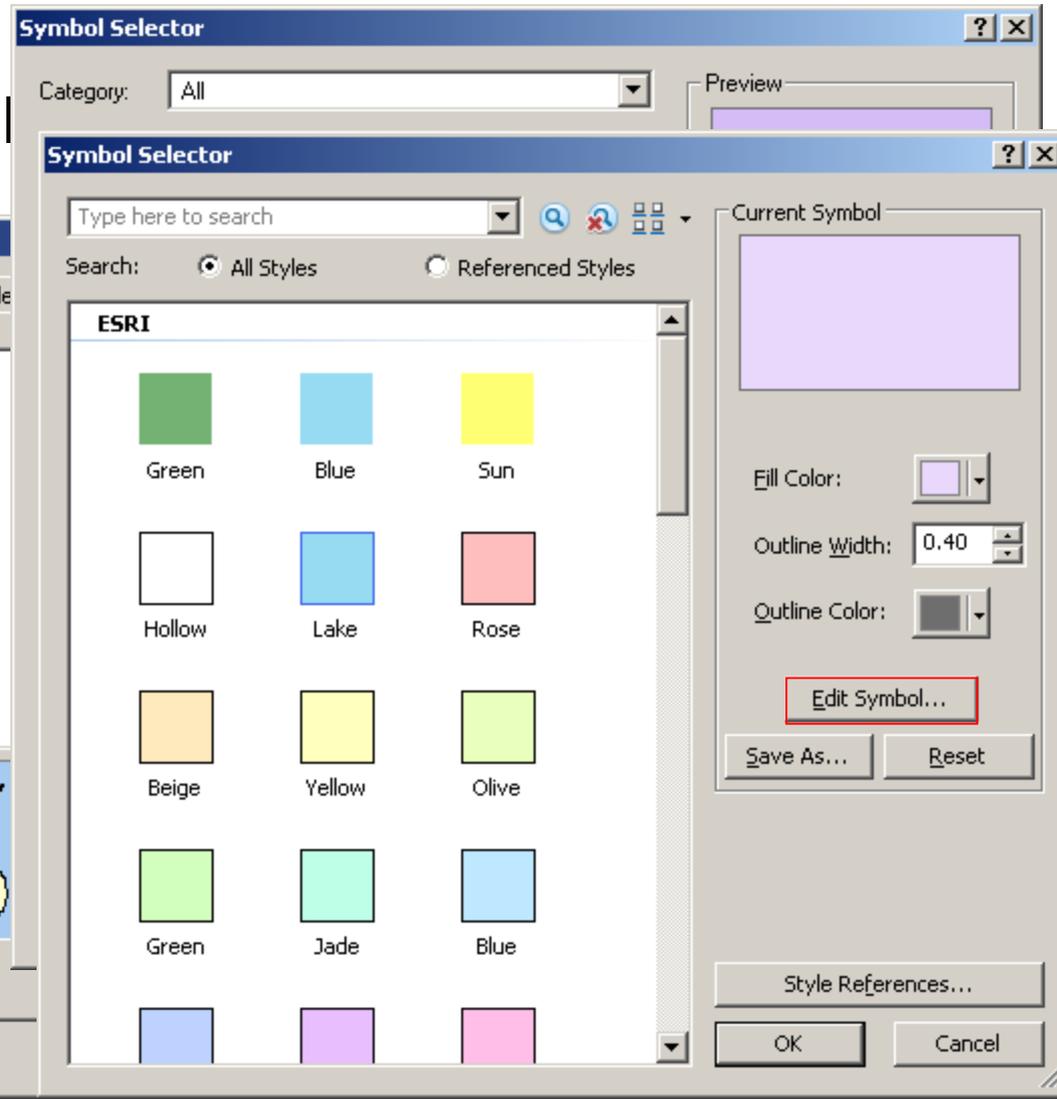
[Map showing Australia highlighted]

OK Storno Použiť



Vizualizácia údajov: Jeden symbol

Layer Properties – Symbol





Vizualizácia údajov: Jeden symbol

Layer Properties – Symbol

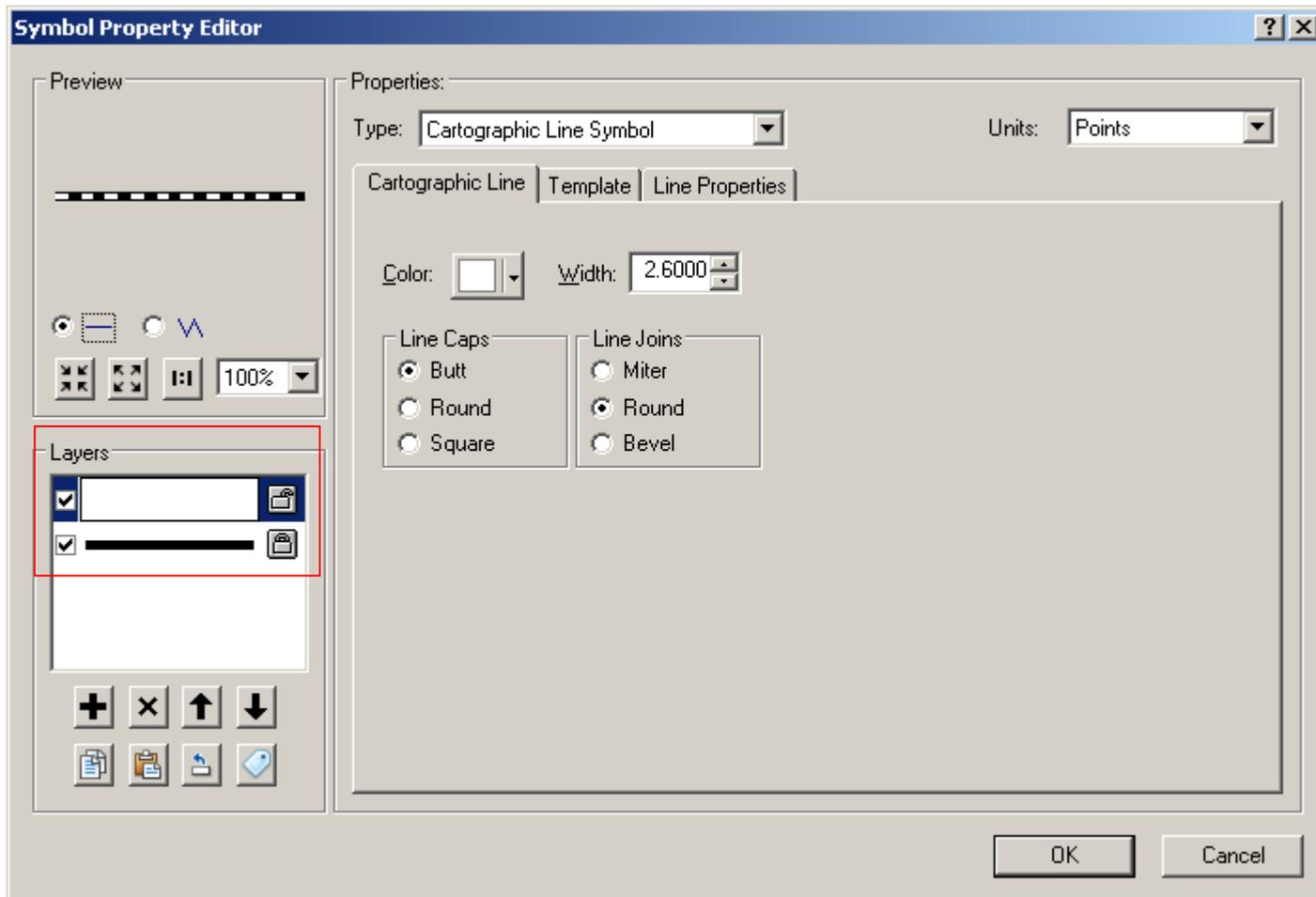
The image displays the ESRI software interface for editing a layer's symbol. The main window is the **Symbol Property Editor**, which is currently set to edit a **Simple Fill Symbol**. The **Properties** section shows the following settings:

- Type: Simple Fill Symbol
- Units: Points
- Simple Fill tab selected
- Color: Light purple
- Outline Color: Dark grey
- Outline Width: 0.4000
- Outline... button

The **Preview** area on the left shows a light purple square. The **Layers** panel at the bottom left shows a list of layers with a purple square icon selected. The **Symbol Selector** dialog box is open in the background, showing a category of **All** and a preview of the selected symbol. The **Current Symbol** section on the right of the Symbol Property Editor shows the same settings as the Properties section, with an **Edit Symbol...** button highlighted in a red box. Other buttons visible include **Save As...**, **Reset**, **Style References...**, **OK**, and **Cancel**.

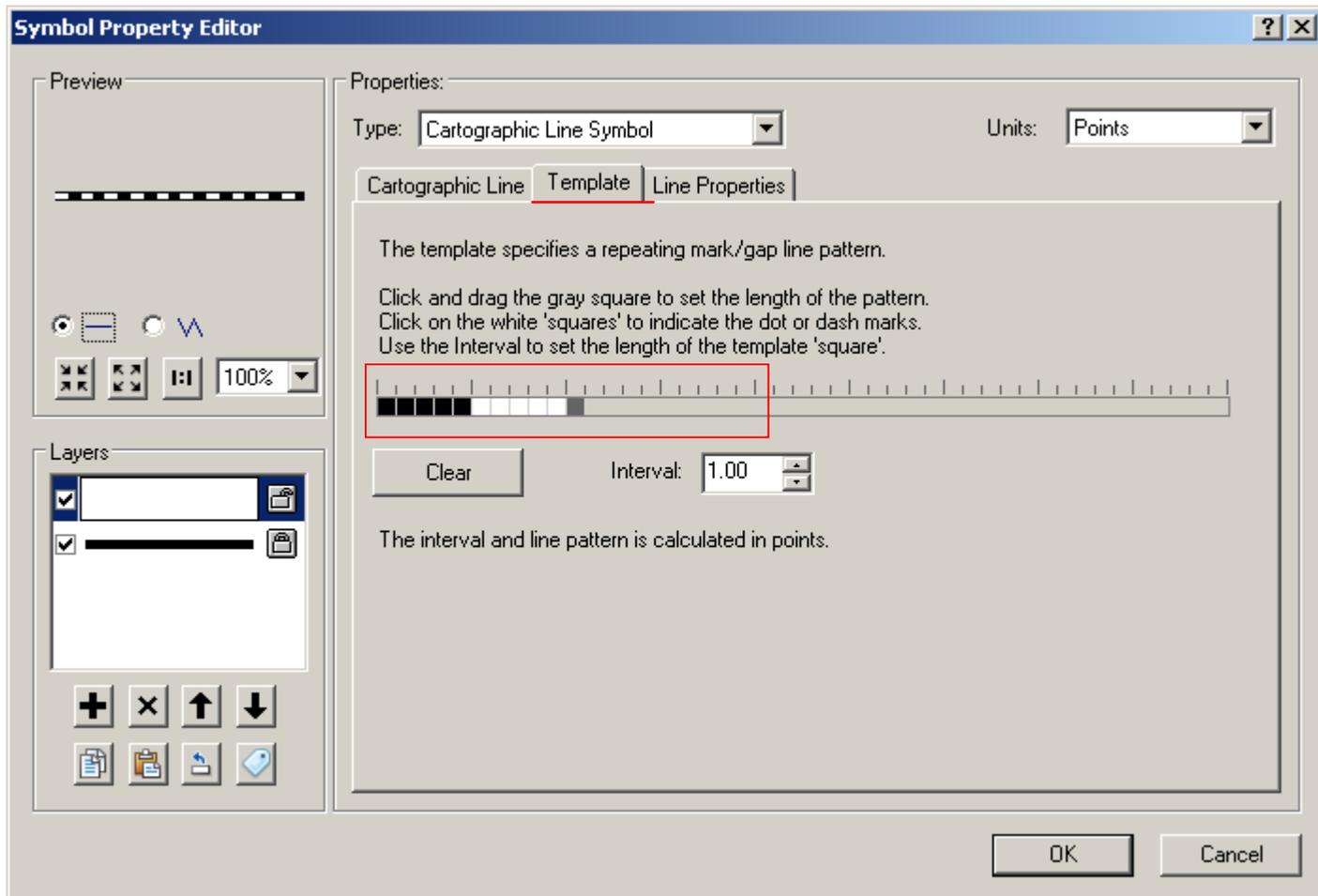


Vizualizácia údajov: Zložený symbol





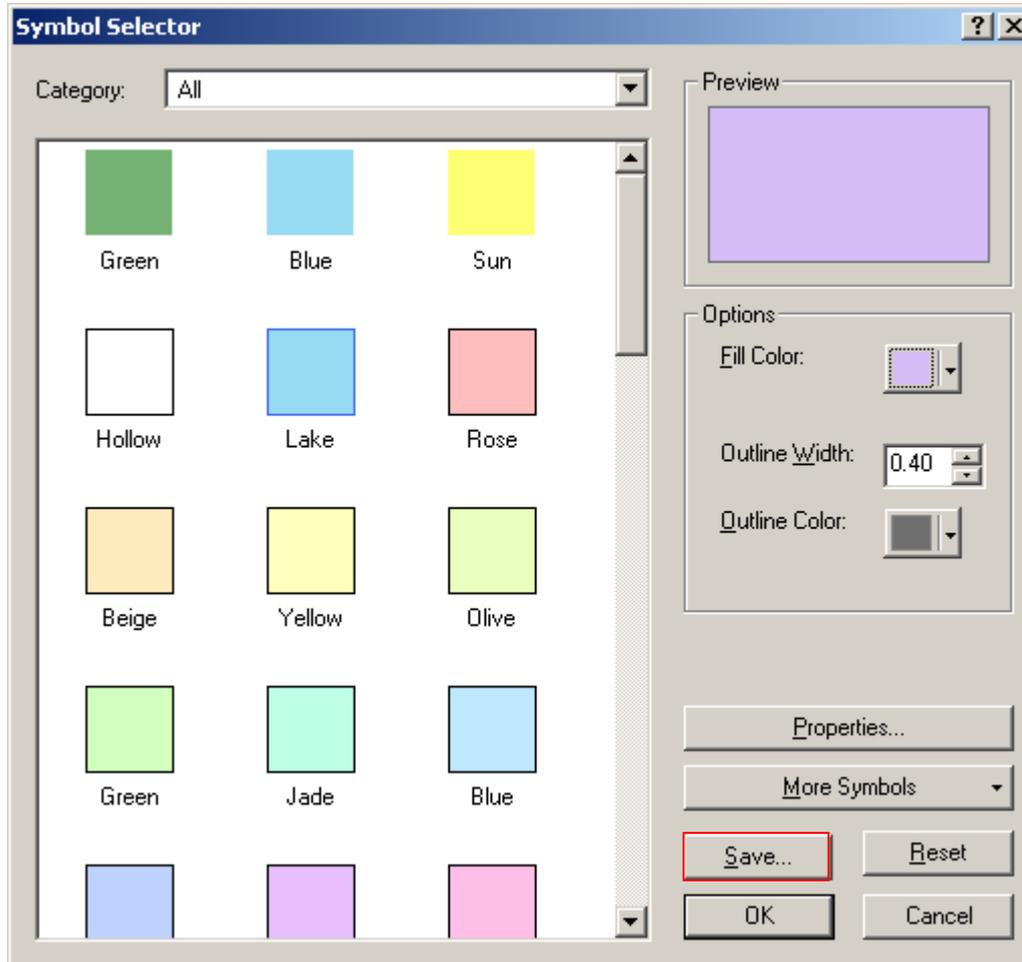
Vizualizácia údajov: Zložený symbol





Vizualizácia údajov: Ukladanie symbolov

ArcGIS 9





Vizualizácia údajov: Ukladanie symbolov

ArcGIS 10

The image displays two overlapping dialog boxes from ArcGIS 10. The 'Symbol Selector' dialog is in the background, showing a search bar with the text 'Type here to search', search options for 'All Styles' and 'Referenced Styles', and a grid of color swatches under the 'ESRI' category. The 'Item Properties' dialog is in the foreground, showing fields for Name, Category, Style, and Tags. The 'Style' field contains the path 'C:\Documents and Settings\hanele\Data aplikací\ESRI\Desktop1...' and has a red box around the ellipsis button. The 'Symbol Selector' dialog also shows a 'Current Symbol' preview area with a purple fill, 'Fill Color' and 'Outline Color' dropdowns, 'Outline Width' set to 0.40, and buttons for 'Edit Symbol...', 'Save As...', 'Reset', 'Style References...', 'OK', and 'Cancel'.

Item Properties

Name: Ihličnatý les

Category: CORINE

Style: C:\Documents and Settings\hanele\Data aplikací\ESRI\Desktop1... **...**

Tags: green;simple

Finish Storno

Symbol Selector

Type here to search

Search: All Styles Referenced Styles

ESRI

Green Blue Sun

Lake Rose

Yellow Olive

Jade Blue

Current Symbol

Fill Color: [Purple]

Outline Width: 0.40

Outline Color: [Grey]

Edit Symbol...

Save As... Reset

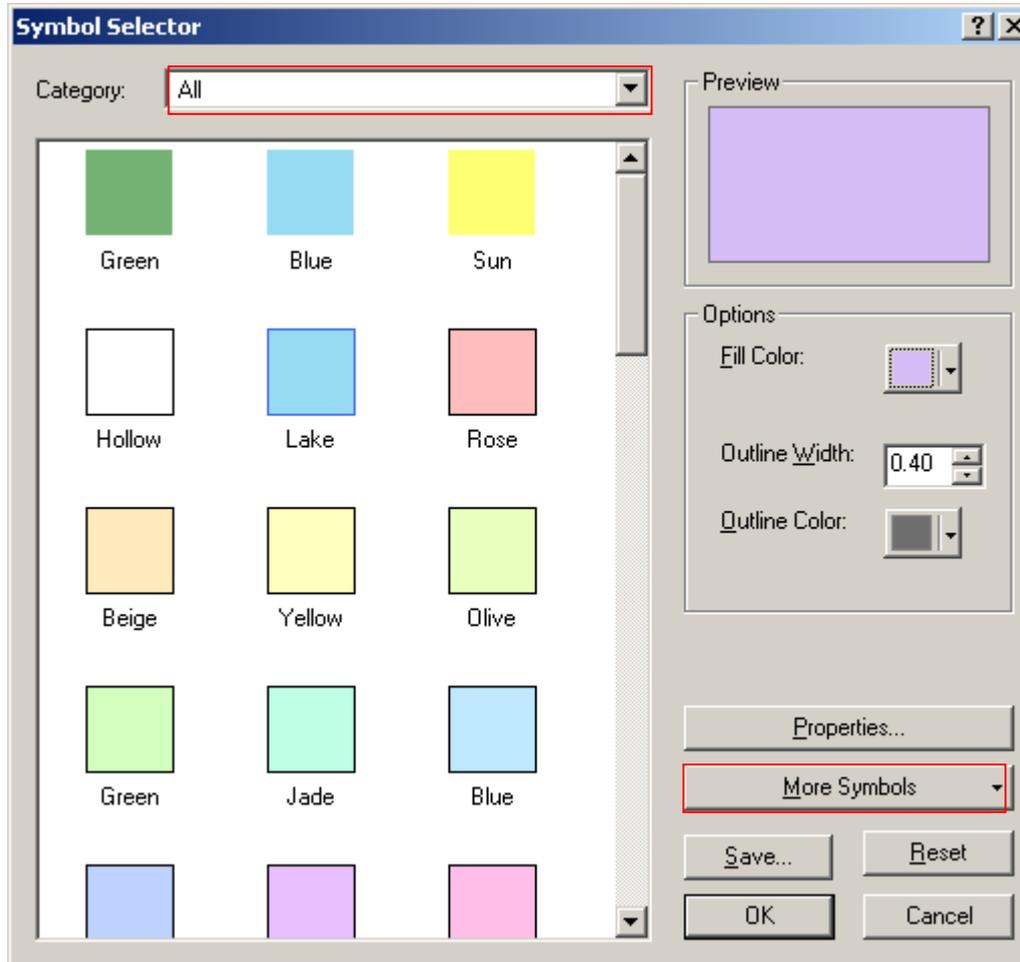
Style References...

OK Cancel



Vizualizácia údajov: Štýly

ArcGIS 9

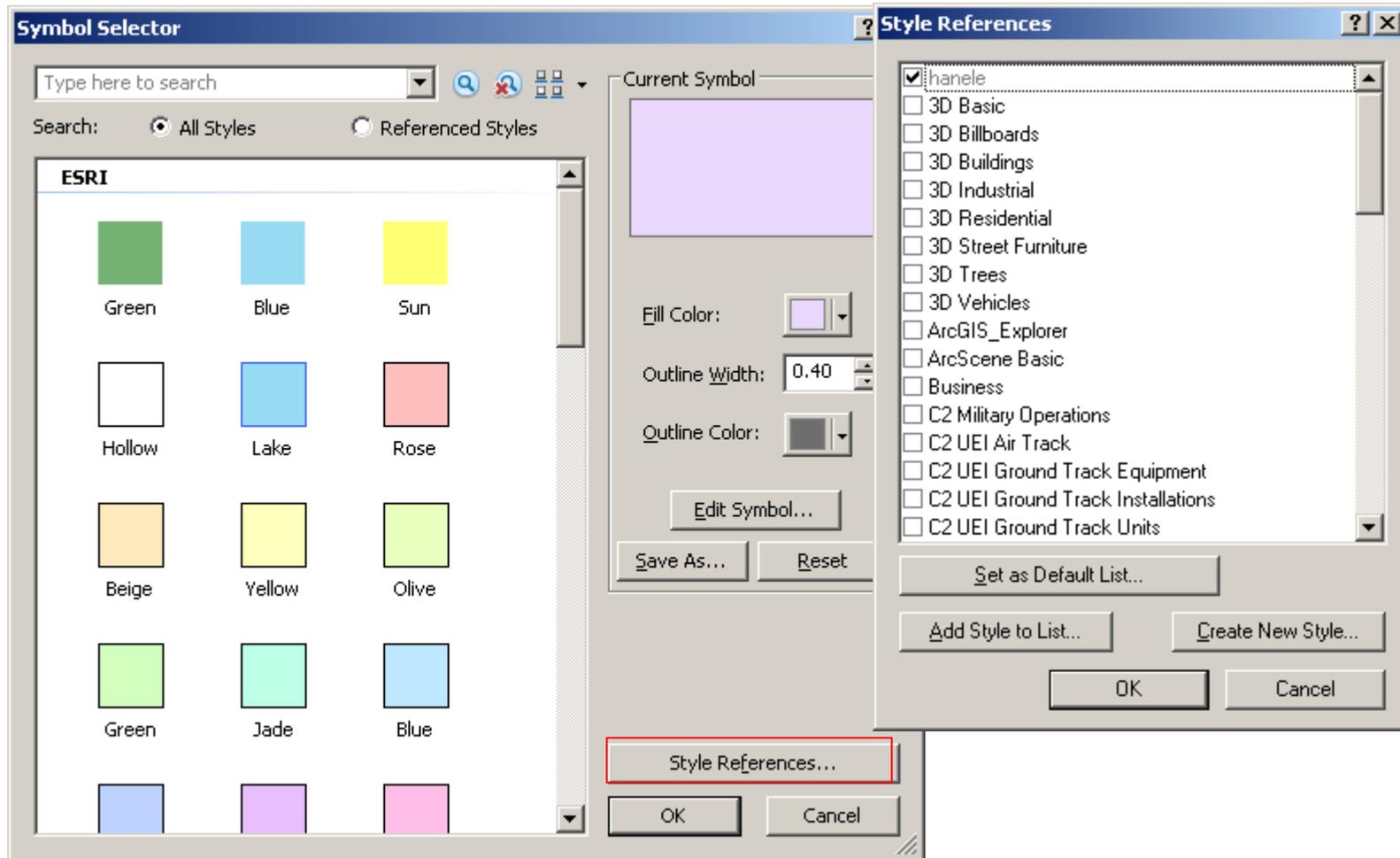


- ✓ Administrator
- ✓ ESRI
 - 3D Basic
 - ArcGIS_Explorer
 - ArcScene Basic
 - CADD GIS Center SDS 200
 - CADD GIS Center SDS 220
 - CADD GIS Center SDS195
 - Caves
 - Civic
 - Conservation
 - Crime Analysis
 - Environmental
 - ESRI_Optimized
 - Forestry
 - Geology 24K
 - Hazmat
 - Ordnance Survey
 - Petroleum
 - Public Signs
 - Real Estate
 - Soils EURO
 - Survey
 - Transportation
 - Utilities
 - Water Wastewater
 - Weather
- Add...



Vizualizácia údajov: Štýly

ArcGIS 10





ArcMap úlohy č.24-25



Vizualizácia kvalitatívnych údajov

Jedinečné hodnoty (Unique values)

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Show:

Features

Categories

- Unique values
- Unique values, many I
- Match to symbols in a

Quantities

Charts

Multiple Attributes

Draw categories using unique values of one field. [Import...]

Value Field: CENTRY_NAME

Color Ramp: [Color Ramp]

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	CENTRY_NAME	252
	Afghanistan	Afghanistan	1
	Albania	Albania	1
	Algeria	Algeria	1
	American Samoa	American Samoa	1
	Andorra	Andorra	1
	Angola	Angola	1
	Anguilla	Anguilla	1
	Antarctica	Antarctica	1
	Antigua_Barbuda	Antigua_Barbuda	1

[Add All Values] [Add Values...] [Remove] [Remove All] [Advanced]

OK Storno Použiť



Vizualizácia kvalitatívnych údajov

Symboly pre vybrané / všetky kategórie

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

Features

Categories

- Unique values
- Unique values, many
- Match to symbols in e

Quantities

Charts

Multiple Attributes

Draw categories using unique values of one field. Import...

Value Field: popis

Color Ramp

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	popis	1031
	areály s riedkou vegetáciou	areály s riedkou vegetáciou	3
	areály skládok (smetiská)	areály skládok (smetiská)	1
	cestná a železničná sieť a		
	ihličnatý les		
	listnatý les		
	mozaika polí, lúk a trvalých		
	nesúvislá sídelná zástavba		
	nezavlažovaná orná pôda		
	ovocné stromy a plantáže		

Add All Values | Add Values...

- Group Values
- Ungroup Values
- Reverse Sorting
- Reset Sorting
- Remove Value(s)
- Flip Symbols
- Properties for Selected Symbol(s)...
- Properties for All Symbols...
- Apply Color Scheme
- Edit Description...
- Move to Heading

OK | Storno | Použiť



Vizualizácia kvalitatívnych údajov

Symboly pre vybrané / všetky kategórie

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

Features

- Categories
 - Unique values
 - Unique values, many
 - Match to symbols in e
- Quantities
- Charts
- Multiple Attributes

Draw categories using unique values of one field. Import...

Value Field: popis

Color Ramp

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	popis	1031
	areály s riedkou vegetáciou	areály s riedkou vegetáciou	3
	areály skládok (smetiská)	areály skládok (smetiská)	1
	cestná a železničná sieť a pi	cestná a železničná sieť a pi	3
	ihličnatý les	ihličnatý les	88
	listnatý les		
	mozaika poľí, lúk a		
	nesúvislá sídelná z		
	nezavlažovaná orná		
	ovocné stromy a pla		

Group Values
Ungroup Values
Reverse Sorting
Reset Sorting
Remove Value(s)
Flip Symbols
Properties for Selected Symbol(s)...
Properties for All Symbols...
Apply Color Scheme
Edit Description...
Move to Heading

Add All Values Add Value

OK Storno Použiť



Vizualizácia kvalitatívnych údajov

Organizovanie tried

Group
(Skupina)

Heading
(Nadpis)

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

Features

Categories

- Unique values
- Unique values, many
- Match to symbols in

Quantities

Charts

Multiple Attributes

Draw categories using unique values of one field. [Import...]

Value Field: popis

Color Ramp

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	popis	1031
	areály s riedkou vegetáciou	areály s riedkou vegetáciou	3
	areály skládok (smetiská)	areály skládok (smetiská)	1
	cestná a železničná sieť a		
	ihličnatý les		
	listnatý les		
	mozaika polí, lúk a trvalých		
	nesúvislá sídelná zástavba		
	nezavlažovaná orná pôda		
	ovocné stromy a plantáže		

Group Values

Ungroup Values

Reverse Sorting

Reset Sorting

Remove Value(s)

Flip Symbols

Properties for Selected Symbol(s)...

Properties for All Symbols...

Apply Color Scheme

Edit Description...

Move to Heading

Add All Values | Add Values...

OK | Storno | Použiť



Vizualizácia kvalitatívnych údajov

Organizovanie tried

Group
(Skupina)

Heading
(Nadpis)

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

Features

Categories

- Unique values
- Unique values, many
- Match to symbols in e

Quantities

Charts

Multiple Attributes

Draw categories using unique values of one field. Import...

Value Field: popis

Color Ramp

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	popis	1031
	areály s riedkou vegetáciou	areály s riedkou vegetáciou	3
	areály skládok (smetiská); cĕ Umelé povrchy		107
	ihličnatý les	ihličnatý les	
	listnatý les	listnatý les	
	mozaika polí, lúk a trvalých l	mozaika polí, lúk a	
	nezavlažovaná orná pôda	nezavlažovaná orn	
	ovocné stromy a plantáže ov	ovocné stromy a pl	
	prechodné lesokroviny	prechodné lesokro	
	prevažne poľnohospodárske	prevažne poľnohos	

Group Values

Ungroup Values

Reverse Sorting

Reset Sorting

Remove Value(s)

Flip Symbols

Properties for Selected Symbol(s)...

Properties for All Symbols...

Apply Color Scheme

Edit Description...

Move to Heading

Add All Values | Add Values... | Remove | Re

OK | Storno | Použiť



Vizualizácia kvalitatívnych údajov

Organizovanie tried

Group
(Skupina)

Heading
(Nadpis)

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

Features

Categories

- Unique values
- Unique values, many
- Match to symbols in e

Quantities

Charts

Multiple Attributes

Draw categories using unique values of one field. Import...

Value Field: popis

Color Ramp

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	popis	1031
	areály s riedkou vegetáciou	areály s riedkou vegetáciou	3
	areály skládok (smetiská)	areály skládok (smetiská)	1
	cestná a železničná sieť a pi	cestná a železničná sieť a pi	3
	ihličnatý les	ihličnatý les	88
	listnatý les		
	mozaika polí, lúk a tr		
	nesúvislá sídelná zás		
	nezavlažovaná orná		
	ovocné stromy a plar		

Group Values

Ungroup Values

Reverse Sorting

Reset Sorting

Remove Value(s)

Flip Symbols

Properties for Selected Symbol(s)...

Properties for All Symbols...

Apply Color Scheme

Edit Description...

Move to Heading

New Heading...
popis

Add All Values | Add Values

OK | Storno | Použiť

New Heading

Enter new heading name:

les

OK

Cancel



Vizualizácia kvalitatívnych údajov

Organizovanie tried

Group
(Skupina)

Heading
(Nadpis)

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

- Features
- Categories
- Quantities
- Charts
- Multiple Attributes

Draw categories using unique values of one field. [Import...]

Value Field: popis

Color Ramp

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	les	265
	ihličnatý les	ihličnatý les	88
	listnatý les	listnatý les	82
	zmiešaný les	zmiešaný les	95
	<Heading>	popis	766
	areály s riedkou vegetáciou	areály s riedkou vegetáciou	3
	areály skládok (smetiská)	areály skládok (smetiská)	1
	cestná a železničná sieť a pr	cestná a železničná sieť a pr	3
	mozaika polí, lúk a trvalých I	mozaika polí, lúk a trvalých I	31
	nesúvislá sídelná zástavba	nesúvislá sídelná zástavba	103

Add All Values | Add Values... | Remove | Remove All | Advanced ▾

OK | Storno | Použiť



Vizualizácia kvalitatívnych údajov

Organizovanie tried

Group
(Skupina)

Heading
(Nadpis)

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

Features

Categories

- Unique values
- Unique values, many
- Match to symbols in e

Quantities

Charts

Multiple Attributes

Draw categories using unique values of one field. Import...

Value Field: popis

Color Ramp

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	les	265
	ihličnatý les	ihličnatý les	88
	listnatý les	listnatý les	82
	zmiešaný les	zmiešaný les	95
	<Heading>		766
	areály s riedk		8
	areály skládo		8
	cestná a žele		8
	mozaika polí.		81
	nesúvislá síd		03

Group Values

Ungroup Values

Reverse Sorting

Reset Sorting

Remove Value(s)

Flip Symbols

Properties for Selected Symbol(s)...

Properties for All Symbols...

Apply Color Scheme

Edit Description...

Move to Heading

New Heading...

popis

les

Add All Values Add

Advanced

OK Storno Použiť

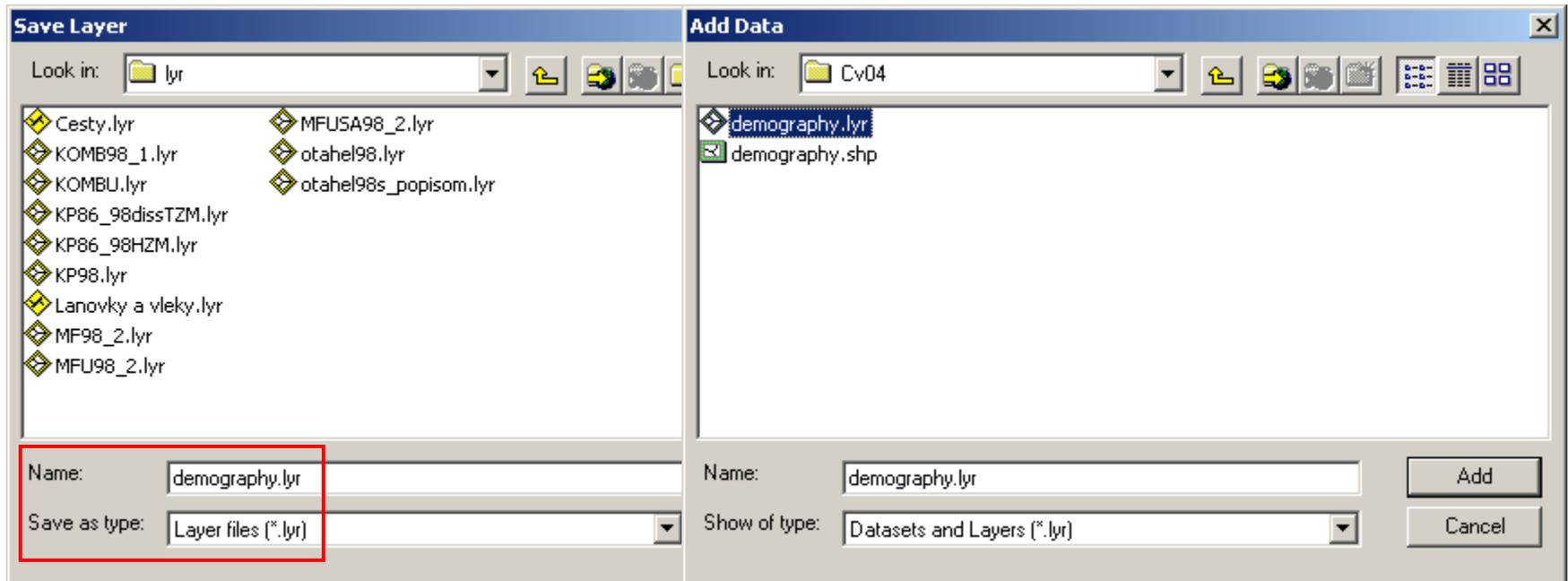


ArcMap úlohy č.26-28



Uloženie symboliky vrstiev

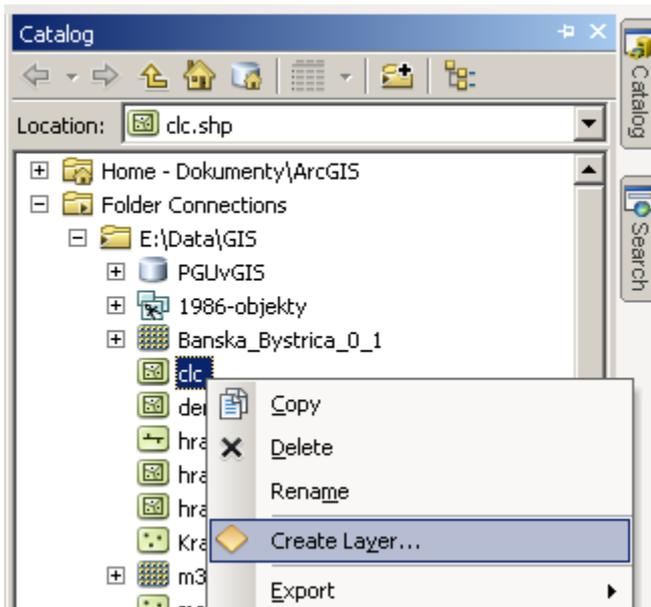
1. v projekte (.mxd)
2. v LYR súbore (.lyr) – kontextové menu vrstvy - **Save As Layer File**





Vrstva (Layer)

- neukladajú sa v nej samotné údaje, ale iba odkaz na ne
- môže byť uložená v projekte alebo ako samostatný súbor
- obsahuje definíciu zobrazenia prvkov (symboliku)



- vrstvy sa dajú vytvárať v aplikácii ArcMap aj ArcCatalog



Import symboliky vrstiev

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Show:

- Features
- Categories
- Quantities
- Charts
- Multiple Attributes

Draw categories using unique values of one field. Import...

Value Field: CENTRY_NAME

Color Ramp: [Color Ramp]

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	0
	<Heading>	CENTRY_NAME	252
	Afghanistan	Afghanistan	1
	Albania	Albania	1
	Algeria	Algeria	1
	American Samoa	American Samoa	1
	Andorra	Andorra	1
	Angola	Angola	1
	Anguilla	Anguilla	1
	Antarctica	Antarctica	1
	Antigua_Barbuda	Antigua_Barbuda	1

Add All Values | Add Values... | Remove | Remove All | Advanced ▾

OK | Storno | Použit

Import Symbology

Import symbology definition from another layer in the map or from a layer file.

Import symbology definition from an ArcView 3 legend file (*.avl):

Layer: hranice_stat

What do you want to import?

Complete symbology definition

Just the symbols

Just the classification

OK | Cancel



ArcMap úlohy č.29-30



Vizualizácia kvantitatívnych údajov

Graduated Colors - kartogram

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Show:

- Features
- Categories
- Quantities
 - Graduated colors
 - Graduated symbols
 - Proportional symbols
 - Dot density
- Charts
- Multiple Attributes

Draw quantities using color to show values. [Import...]

Fields:
Value: Shape_Area
Normalization: none

Classification:
Natural Breaks (Jenks)
Classes: 5 [Classify...]

Color Ramp: [Color Ramp]

Symbol	Range	Label
[Yellow]	22,686374 - 17436,521487	22,686374 - 17436,521487
[Light Orange]	17436,521488 - 71868,976745	17436,521488 - 71868,976745
[Orange]	71868,976746 - 230414,075741	71868,976746 - 230414,075741
[Dark Orange]	230414,075742 - 517993,823074	230414,075742 - 517993,823074
[Dark Red]	517993,823075 - 2550727,612984	517993,823075 - 2550727,612984

Show class ranges using feature values [Advanced]

OK Storno Použiť



Vizualizácia kvantitatívnych údajov

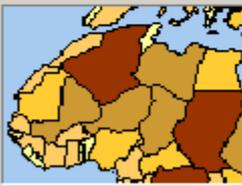
Graduated Colors - kartogram

Layer Properties

General | Source | Sele

Show:

- Features
- Categories
- Quantities
 - Graduated colors
 - Graduated symbols
 - Proportional symbols
 - Dot density
- Charts
- Multiple Attributes



Classification

Classification

Method: Natural Breaks (Jenks)

Classes:
Manual
Equal Interval
Defined Interval
Quantile
Natural Breaks (Jenks)
Geometrical Interval
Standard Deviation

Data Exclusion

Columns: 100 Show Std. Dev. Show Mean

Classification Statistics

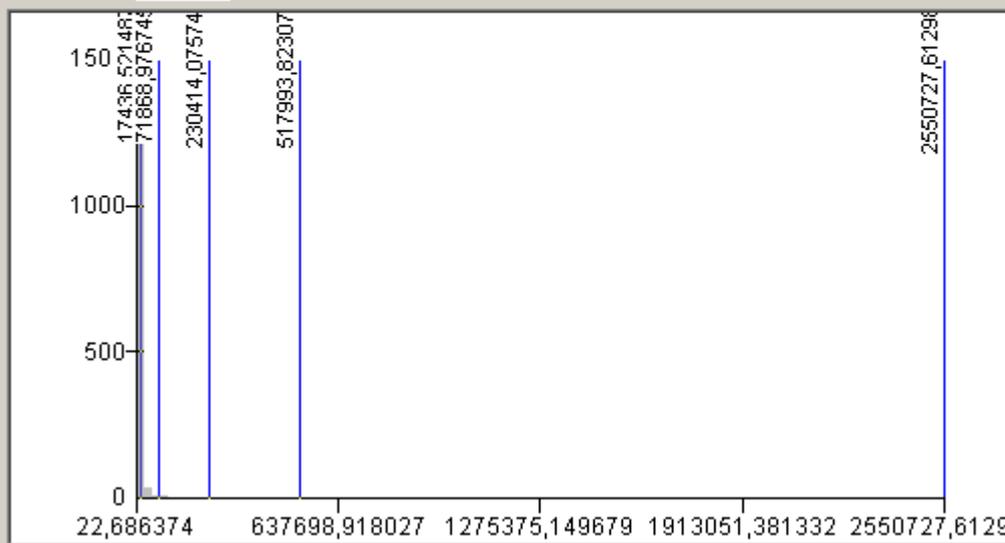
Count:	1497
Minimum:	22,686374
Maximum:	2550727,612984
Sum:	13440000,945724
Mean:	8977,956544
Median:	898,153906
Standard Deviation:	83793,518893

Break Values %

17436,521487	%
71868,976745	%
230414,075741	%
517993,823074	%
2550727,612...	%

Snap breaks to data values

OK Cancel





Vizualizácia kvantitatívnych údajov

Graduated Symbols - metóda signatúr

Layer Properties

General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates HTML Popup

Show:

- Features
- Categories
- Quantities
 - Graduated colors
 - Graduated symbols**
 - Proportional symbols
 - Dot density
- Charts
- Multiple Attributes

Draw quantities using symbol size to show relative values. Import...

Fields: Value: Shape_Area Classification: Natural Breaks (Jenks)

Normalization: none Classes: 5 Classify...

Symbol Size from: 4 to: 18

Symbol	Range	Label
	22,686374 - 17436,521487	22,686374 - 17436,521487
	17436,521488 - 71868,9767	17436,521488 - 71868,9767
	71868,976746 - 230414,075	71868,976746 - 230414,075
	230414,075742 - 517993,82	230414,075742 - 517993,82
	517993,823075 - 2550727,6	517993,823075 - 2550727,6

Show class ranges using feature values

Advanced

Template

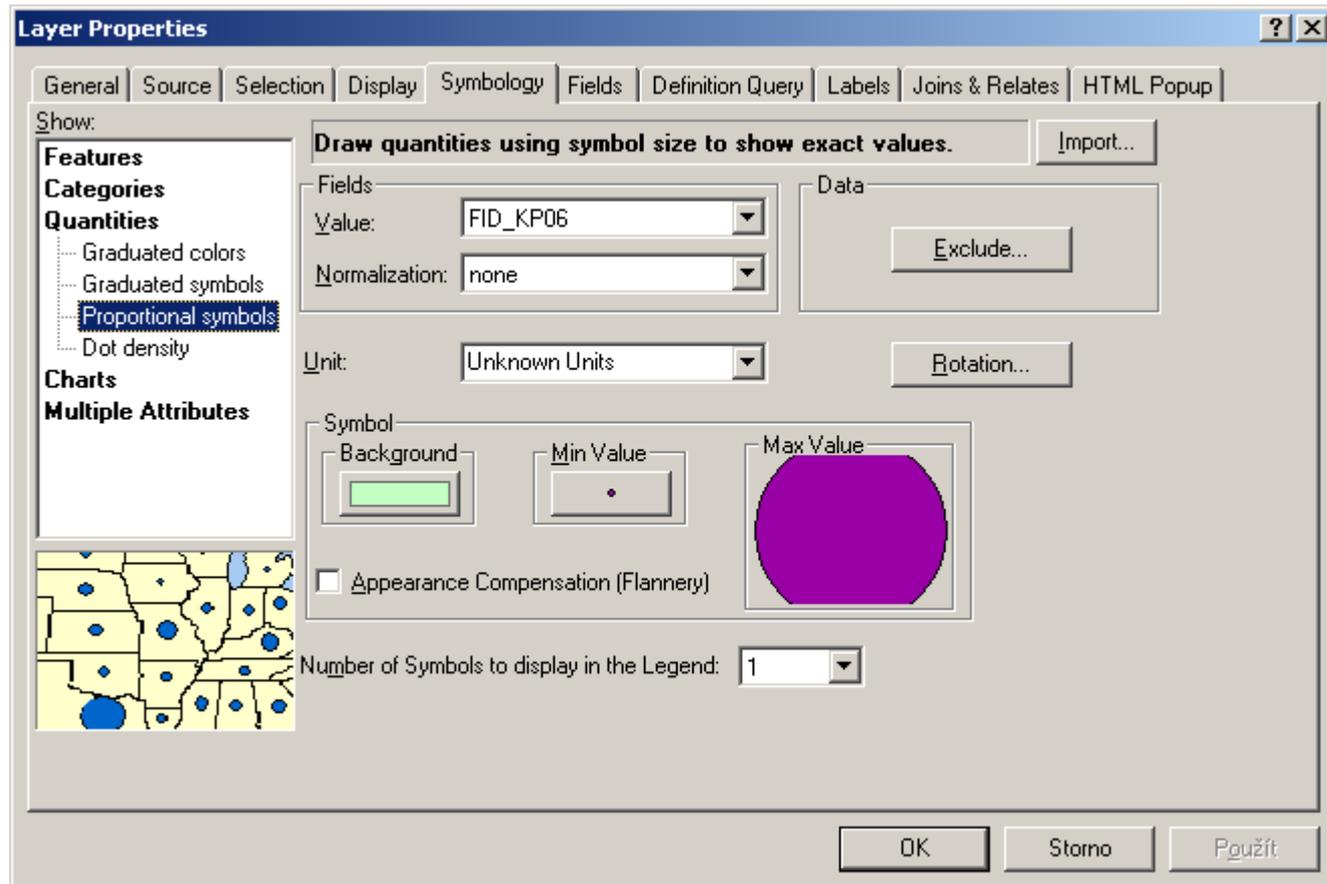
Background

OK Storno Použiť



Vizualizácia kvantitatívnych údajov

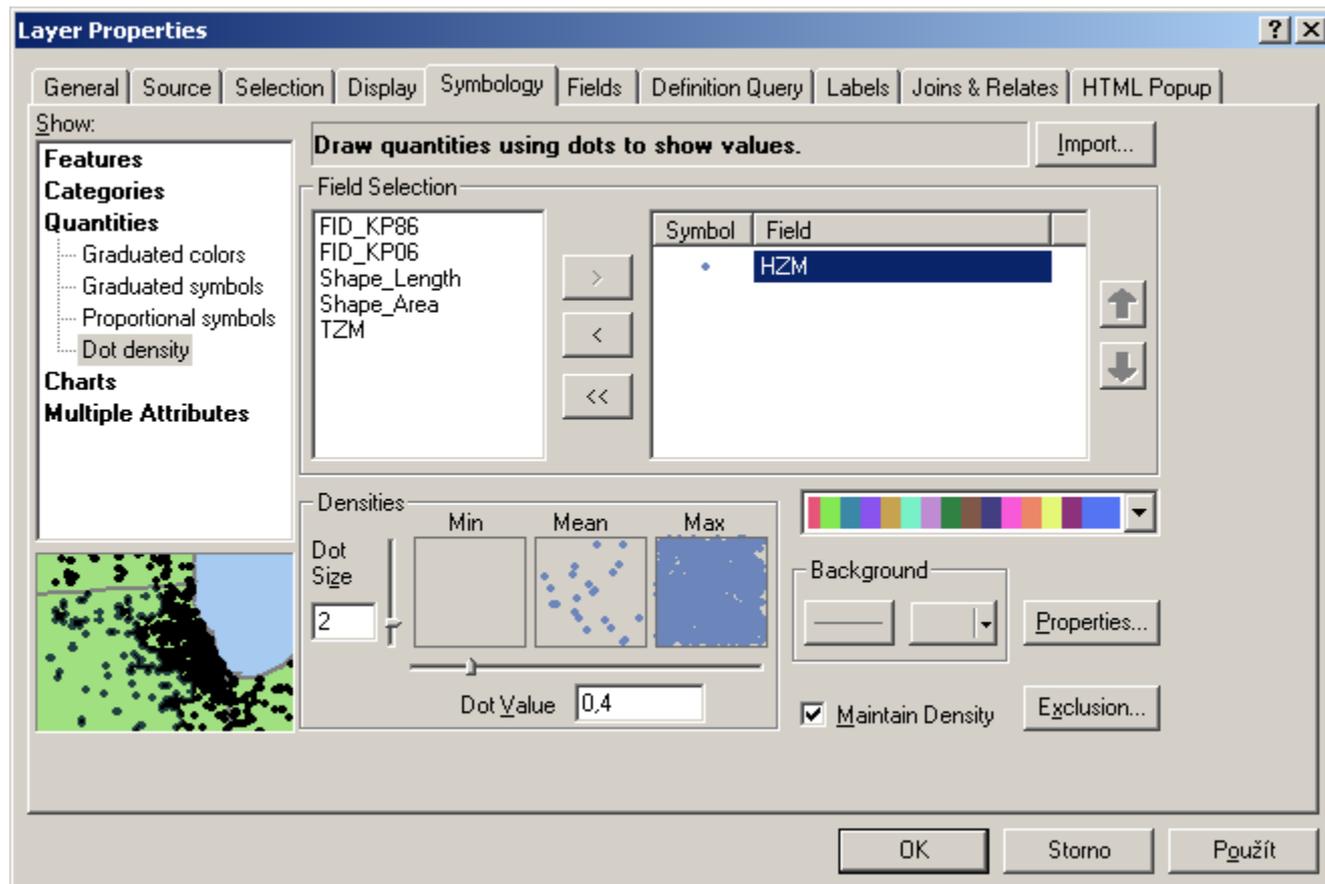
Proportional Symbols - metóda signatúr





Vizualizácia kvantitatívnych údajov

Dot Density - hustotná bodová metóda





ArcMap úlohy č.31-34



Vizualizácia kvantitatívnych údajov

Charts - kartodiagram

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Show:

- Features
- Categories
- Quantities
- Charts**
 - Pie
 - Bar/Column
 - Stacked
- Multiple Attributes

Draw pie chart for each feature. [Import...]

Field Selection

Field	Symbol
H2M	[Blue]
T2M	[Green]

Background: [Light Purple] Color Scheme: [Multi-color palette]

Prevent chart overlap

[Properties...] [Exclusion...] [Size...]

[OK] [Storno] [Použiť]



Vizualizácia kvantitatívnych údajov

Zložené symboly – metóda signatúr na podklade kartogramu

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Show:

- Features
- Categories
- Quantities
- Charts
- Multiple Attributes
 - Quantity by category

Draw quantities for each category. [Import...]

Value Fields:
KOD1
none
none

Color Scheme: [Color Ramp]

Variation by:
Color Ramp... [Symbol Size...]

Symbol	Value	Label	Count
<input checked="" type="checkbox"/>	<all other values>	<all other values>	
	<Heading>		
	KOD1		
[Green]	1	1	?
[Cyan]	2	2	?
[Brown]	3	3	?
[Blue]	5	5	?

Add All Values | Add Values... | Remove | Remove All | Advanced ▾

OK | Storno | Použiť



Vizualizácia kvantitatívnych údajov

Zložené symboly – metóda signatúr na podklade kartogramu

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Show: Features Draw quantities for each category. Import...

Draw quantities using symbol size to show relative values.

Fields
Value: AREA
Normalization: none

Classification
Natural Breaks (Jenks)
Classes: 5 Classify...

Symbol Size from: 4 to: 18

Symbol	Range	Label
	2053263872,000	2053263872,000
	2053263872,001 - 44991611	2053263872,001 - 44991611
	4499161088,001 - 6341266	4499161088,001 - 6341266
	6341266432,001 - 67932631	6341266432,001 - 67932631
	6793263616,001 - 9453109; 6793263616,001 - 9453109;	

Show class ranges using feature values

Color Scheme
Variation by: Color Ramp... Symbol Size...

Label	Count
<all other values>	
KOD1	
1	?
2	?
3	?
5	?

Remove Remove All Advanced

OK Cancel OK Storno Použiť



ESRI

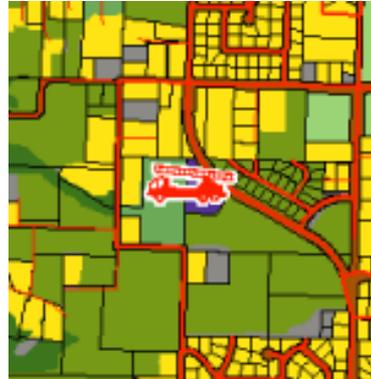
Nastavenie referenčnej mierky

- referenčná mierka (**Reference Scale**) definuje, pri akom zväčšení sa symboly a popisy zobrazujú vo svojej skutočnej veľkosti
- ak **je** nastavená, pri približovaní a oddiaľovaní sa symboly zväčšujú (zmenšujú)
- ak **nie je** nastavená, ako referenčná sa použije aktuálna mierka, takže veľkosť symbolov sa nemení

s RS



bez RS





Nastavenie referenčnej mierky

Data Frame Properties [?] [X]

Annotation Groups | Extent Rectangles | Frame | Size and Position

General | **Data Frame** | Coordinate System | Illumination | Grids | Map Cache

Name: Banská Bystrica

Description:

Credits:

Units

Map: Meters

Display: Meters

Tip: See Tools>Options>Data View tab for additional options for displaying coordinates in the status bar

Reference Scale: 1:100,000

Rotation: 0

Label Engine: ESRI Standard Label Engine

Simulate layer transparency in legends

OK Storno Použiť

- + Add Data...
- + New Group Layer
- Copy
- Paste Layer(s)
- Remove
- Turn All Layers On
- Turn All Layers Off
- Select All Layers
- Expand All Layers
- Collapse All Layers
- Reference Scale**
- Advanced Drawing Options...
- Labeling
- Convert Labels to Annotation...
- Convert Features to Graphics...
- Convert Graphics To Features...
- Activate
- Properties...

Set Reference Scale

Clear Reference Scale

Zoom To Reference Scale

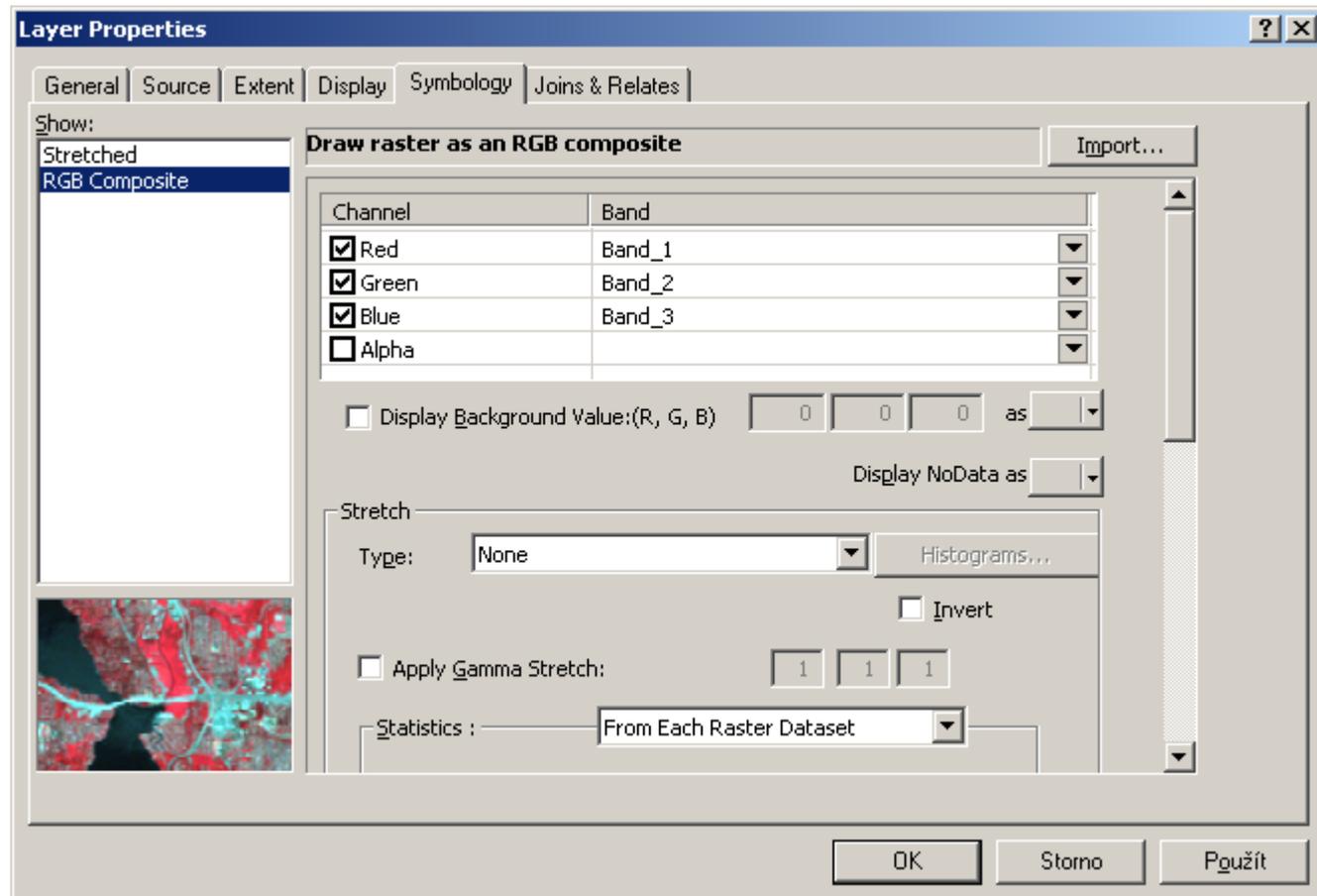


ArcMap úlohy č.35-37



Vizualizácia rastrových údajov

RGB Composite – farebná syntéza





Vizualizácia rastrových údajov

Stretched – rozťahnutá legenda

The screenshot shows the 'Layer Properties' dialog box with the 'Symbology' tab selected. The legend type is 'Stretched'. The 'Color Ramp' is set to a grayscale ramp. The 'Stretch' type is 'Standard Deviations' with 'n' set to 2. The 'Value' column shows '70,063011' and '0,098401'. The 'Label' column shows 'High : 70,063' and 'Low : 0,098401'. The 'Color Ramp' and 'Stretch' labels are circled in red.

Color	Value	Label
	70,063011	High : 70,063
	0,098401	Low : 0,098401

Color Ramp: [Standard Deviations]

Stretch: [Standard Deviations]

Type: [Standard Deviations] n: [2]

Display Background Value: [0] as []

Use hillshade effect: [] Z: [1] Display NoData as []

Buttons: OK, Storno, Použiť



Vizualizácia rastrových údajov

Stretched – rozťahnutá legenda

The screenshot shows the 'Layer Properties' dialog box with the 'Symbology' tab selected. The 'Show:' list on the left includes 'Unique Values', 'Classified', and 'Stretched'. The 'Draw raster stretching values along a color ramp' section is active, showing a vertical color ramp and a table of values. The 'Color Ramp' is set to a grayscale ramp. The 'Stretch' section has a dropdown menu open, showing options: 'None', 'Custom', 'Standard Deviations', 'Histogram Equalize', 'Minimum-Maximum', and 'Histogram Specification'. The 'None' option is currently selected.

Color	Value	Label
	70,063011	High : 70,063
	0,098401	Low : 0,098401

Color Ramp: [Grayscale Ramp]

Display Background Value: 0 as []

Use hillshade effect Z: 1 Display NoData as []

Stretch Type: [None]

Buttons: OK, Storno, Použiť



Vizualizácia rastrových údajov

Unique Values – jedinečné hodnoty

Layer Properties

General Source Extent Display Symbology Fields Joins & Relates

Show:
Unique Values
Classified
Stretched
Discrete Color

Draw raster assigning a color to each value Import...

Value Field: Value

Color Scheme: [Color palette]

Symbol	<VALUE>	Label	Count
[White box]	<all other values>	<all other values>	
<Heading>			
[Black box]	0	neklasifikované	1226
[Green box]	1	les	52868
[Purple box]	2	voda	211311
[Cyan box]	3	močiar	210591
[Orange box]	4	orná pôda	86720
[Pink box]	5	nevyužívaná plocha	180821
[Red box]	6	zastavaná plocha	748840

Add All Values Add Values... Remove Default Colors

Display NoData as []

OK Storno Použiť



Vizualizácia rastrových údajov

Classified – klasifikovaná legenda

Layer Properties

General | Source | Extent | Display | Symbology | Fields | Joins & Relates

Show:
Unique Values
Classified
Stretched

Draw raster grouping values into classes Import...

Fields
Value: <VALUE>
Normalization: <None>

Classification
Natural Breaks (Jenks)
Classes: 5 Classify...

Color Ramp:

Symbol	Range	Label
	0,098401003 - 11,21380043	0,098401003 - 11,21380043
	11,21380043 - 18,38286781	11,21380044 - 18,38286781
	18,38286781 - 25,99580002	18,38286782 - 25,99580002
	25,99580002 - 35,83000183	25,99580003 - 35,83000183
	35,83000183 - 70,06301117	35,83000184 - 70,06301117

Show class breaks using cell values
 Use hillshade effect Z: 1

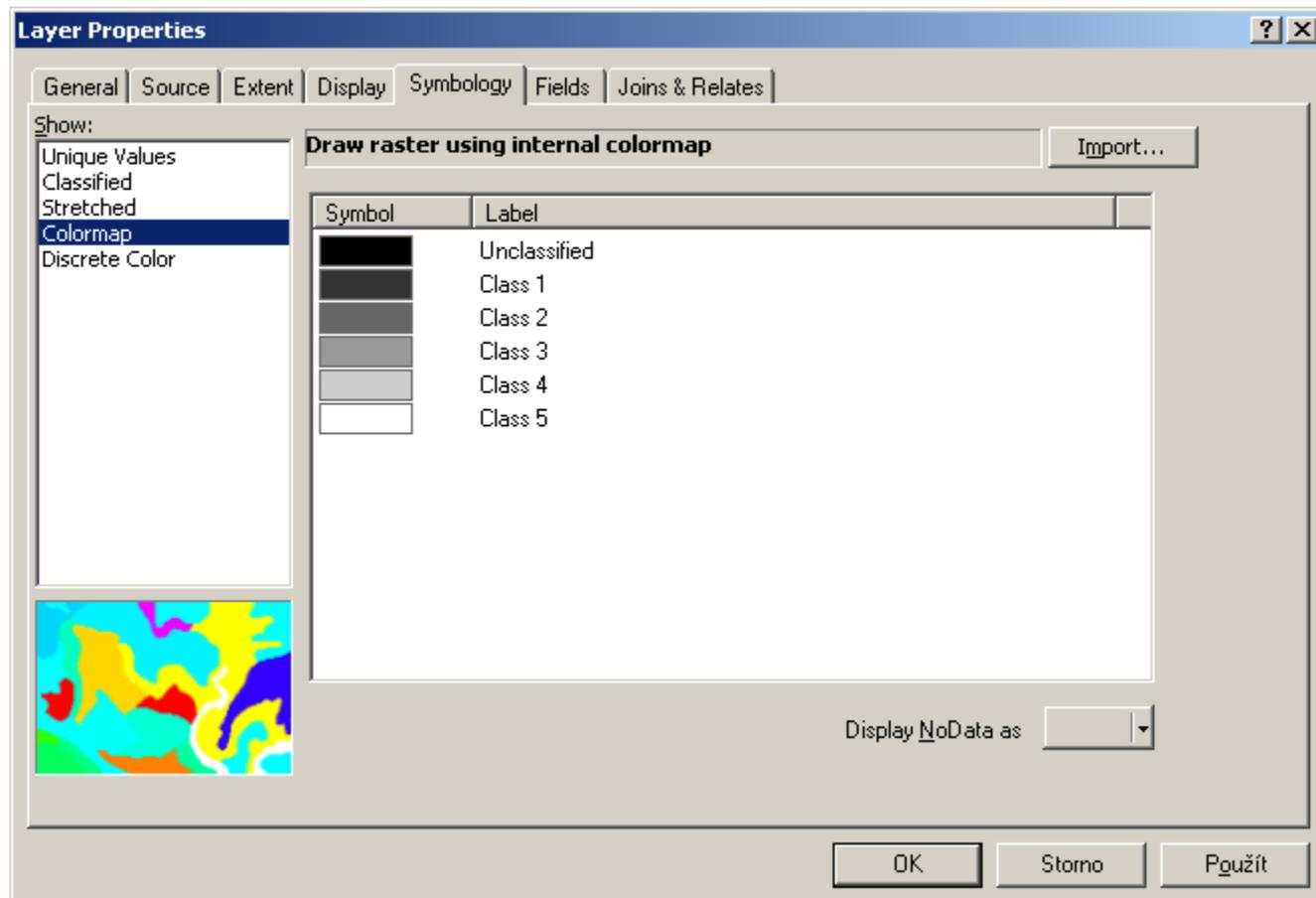
Display NoData as

OK Storno Použiť



Vizualizácia rastrových údajov

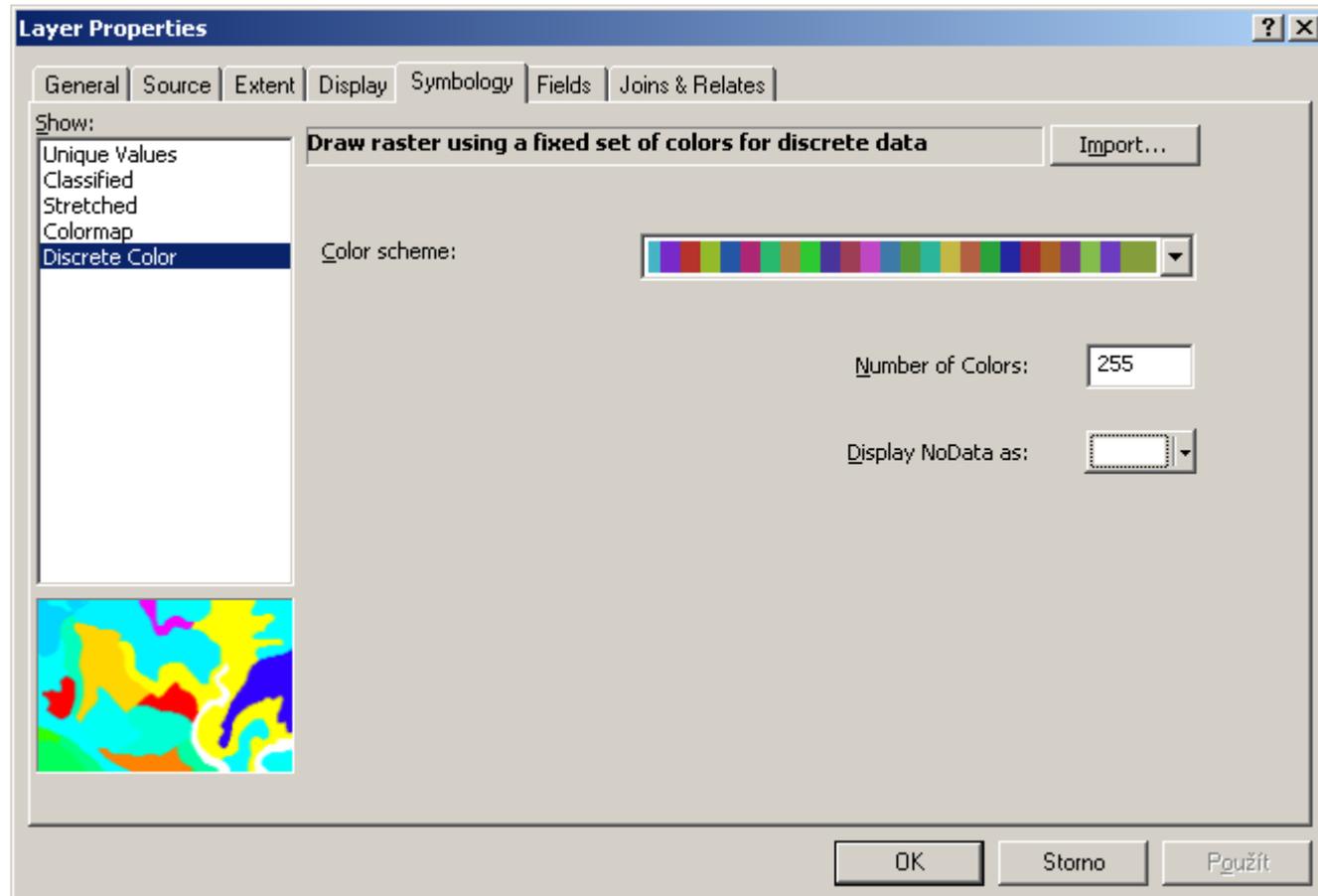
Colormap – farebná mapa





Vizualizácia rastrových údajov

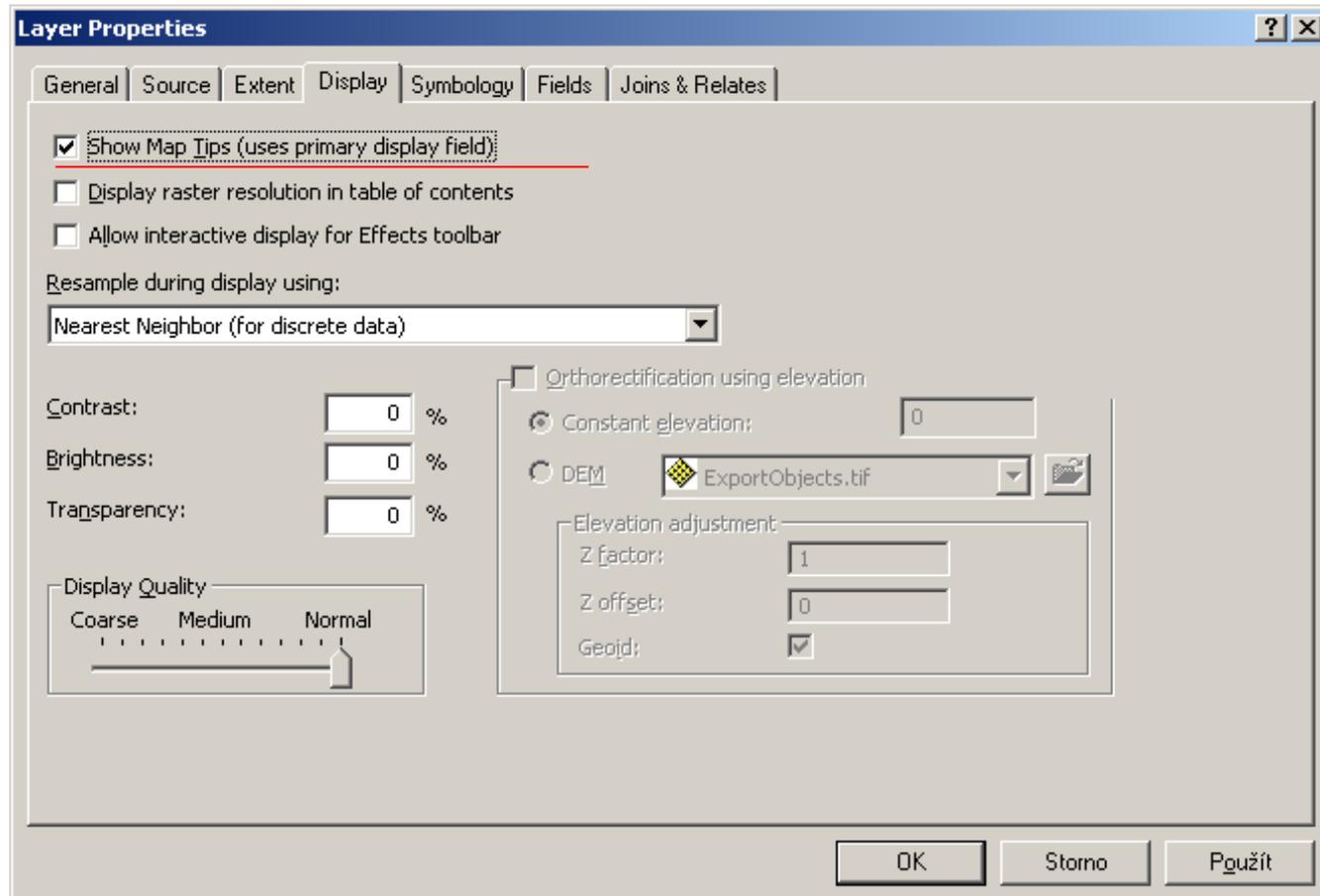
Discrete Color – diskkrétne farby





Vizualizácia rastrových údajov

Zobrazovanie hodnôt pixlov





ArcMap úlohy č.38-41



Tvorba popisov

- **popis (label)**
- textový reťazec viažuci sa ku konkrétnemu geografickému prvku na mape
- umiestňujú sa automaticky
- založené na záznamoch v tabuľke atribútov

- **anotácia (annotation)**
- individuálny textový prvok na popísanie mapových prvkov, oblastí v mape alebo všeobecných informácií
- sú editovateľné, môžeme meniť ich umiestnenie
- popisy sa dajú konvertovať na anotácie



ESRI

Tvorba popisov

Layer Properties - Labels

Layer Properties [?] [X]

General | Source | Selection | Display | Symbology | Fields | Definition Query | **Labels** | Joins & Relates | HTML Popup

Label features in this layer

Method: Label all the features the same way.

All features will be labeled using the options specified.

Text String
Label Field: NAZKRAJA [v] Expression...

Text Symbol
AaBbYyZz Arial 8
[Color] [B] [I] [U] Symbol...

Other Options [Placement Properties...] [Scale Range...]

Pre-defined Label Style [Label Styles...]

OK Storno Pgužit



ESRI

Tvorba popisov

Layer Properties - Labels

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | H

Label features in this layer

Method: Label all the features the same way.

All features will be labeled using the options specified.

Text String

Label Field: NAZKRAJA

Text Symbol

AaBbYyZz Arial 8

Other Options

Placement Properties... Scale Range...

Pre-defined Label Style

Label Styles...

OK Storno Pgožiť

Scale Range

You can specify the range of scales at which labels will be shown.

Use the same scale range as the feature layer.

Don't show labels when zoomed:

Out beyond: <None> (minimum scale)

In beyond: <None> (maximum scale)

OK Cancel



ESRI

Tvorba popisov

Layer Properties - Labels

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Rel

Label features in this layer

Method: Label all the features the same way.

All features will be labeled using the options specified.

Text String
Label Field: NAZKRAJA

Text Symbol
Arial 8
AaBbYyZz

Other Options
Placement Properties... Scale Range...

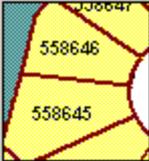
Pre-defined Label Style
Label Styles...

OK

Placement Properties

Placement | Conflict Detection

Polygon Settings



Always horizontal
 Always straight
 Try horizontal first, then straight

Only place label inside polygon

Duplicate Labels

Remove duplicate labels
 Place one label per feature
 Place one label per feature part

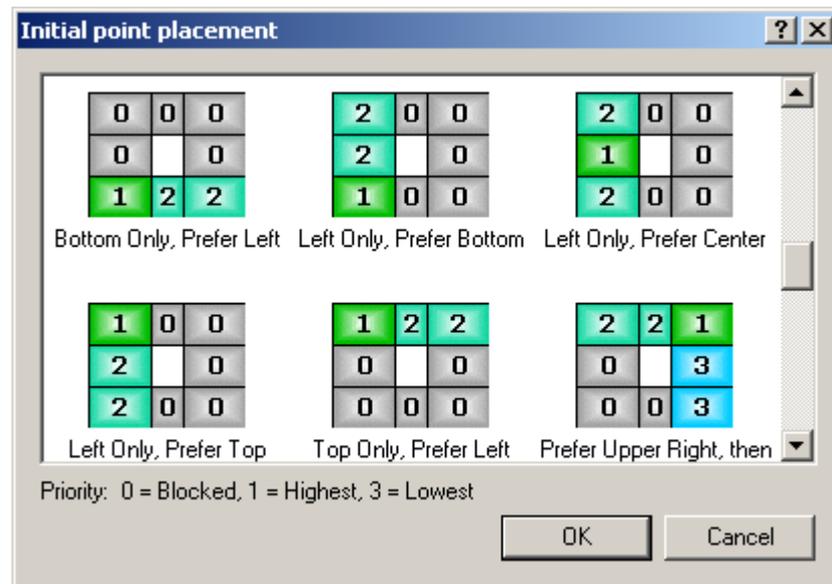
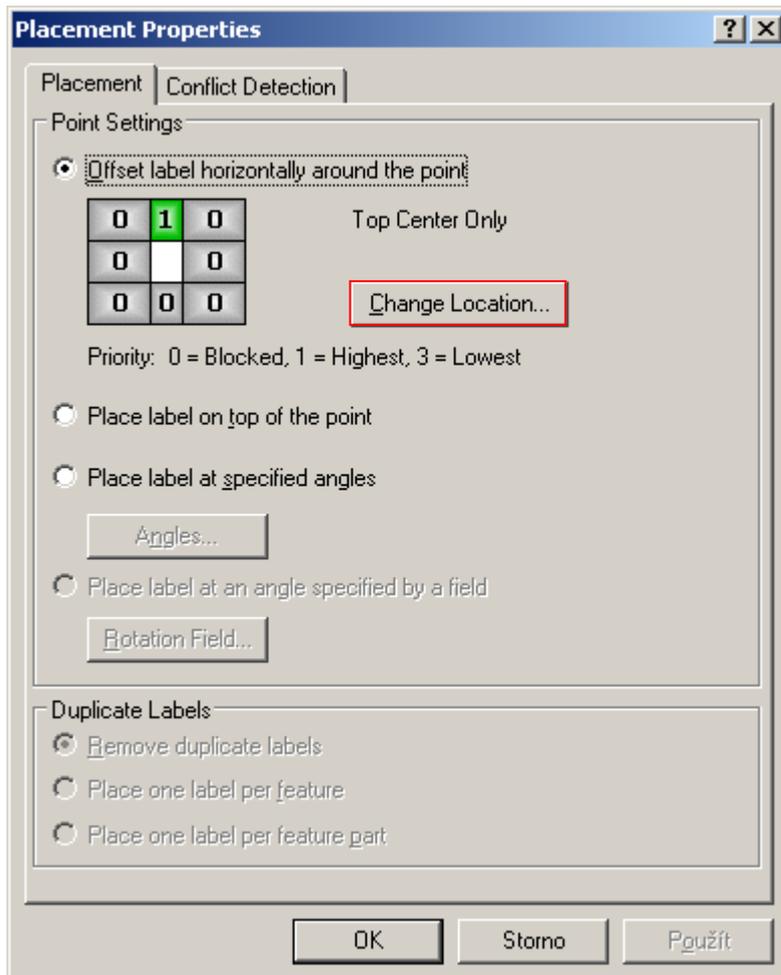
OK Storno



ESRI

Tvorba popisov

- umiestnenie popisov bodových prvkov:





ESRI

Tvorba popisov

- umiestnenie popisov líniových prvkov:

Placement Properties [?] [X]

Placement | Conflict Detection

Line Settings

Orientation

Horizontal

Parallel

Curved

Perpendicular

Position

Above

On the line

Below

Orientation System: Page

Offset: 0 map units

Location

Location along the line: At Best [v] [Priorities...]

Duplicate Labels

Remove duplicate labels

Place one label per feature

Place one label per feature part

OK Sorno Použiť

Placement Properties [?] [X]

Placement | Conflict Detection

Line Settings

Orientation

Horizontal

Parallel

Curved

Perpendicular

Position

Left

On the line

Right

Orientation System: Line

Offset: 0 map units

Location

Location along the line: At Best [v] [Priorities...]

Duplicate Labels

Remove duplicate labels

Place one label per feature

Place one label per feature part

OK Sorno Použiť



ArcMap úlohy č.42-45



ESRI

Tvorba popisov

- umiestnenie popisov pre celú mapu (viacero vrstiev naraz):

View / Customize – Toolbars – Labeling





ESRI

Tvorba popisov

- umiestnenie popisov pre celú mapu (viacero vrstiev naraz):

View / Customize – Toolbars – Labeling

The image shows the ESRI Labeling toolbar and the Label Manager dialog box. The toolbar is located at the top left and contains several icons for labeling, with the first icon (a house with a document) highlighted by a red box. The Label Manager dialog box is open, showing a list of label classes on the left and a form for adding a new label class on the right. The list of label classes includes:

- Kraj_mesto
 - Default
 - popis
- zeleznice_kr
 - Default
- cesta2tr_line
 - Default
- hranice_kraj
 - Default
- hranice_stat
 - Default

The form on the right has two sections:

- Add label class**: Enter class name:
- Add label classes from symbology categories**: Select symbology categories:

At the bottom of the dialog box, there are buttons for **Options**, **Clear All**, and **Summary...**. At the bottom right, there are buttons for **OK**, **Cancel**, and **Apply**.



ESRI

Tvorba popisov

- umiestnenie popisov pre celú mapu (viacero vrstiev naraz):

View / Customize – Toolbars – Labeling

The screenshot shows the ArcGIS Labeling toolbar and the Label Manager dialog box. The toolbar is located at the top left and contains several icons for labeling, with the first icon (a house with a document) highlighted by a red box. The Label Manager dialog box is open, showing the Label Classes list on the left and the Text String, Text Symbol, and Placement Properties sections on the right. The 'popis' label class is selected in the list. The Text String section shows 'mesto' as the Label Field. The Text Symbol section shows 'Arial' as the font and '8' as the size. The Placement Properties section shows 'Around point' as the selected placement method.

Labeling

Labeling

Labeling

Label Manager

Label Classes

- Kraj_mesto
 - Default
 - popis
- zeleznice_kr
 - Default
- cesta2tr_line
 - Default
- hranice_kraj
 - Default
- hranice_stat
 - Default

Text String

Label Field: mesto Expression...

Text Symbol

Arial 8

AaBbYyZz

Symbol...

Placement Properties

Around point Location...

On point Angles... Properties...

Specify angles

Angle by field Rotation...

Scale Range... SQL Query... Label Styles...

Options Clear All Summary...

OK Cancel Apply

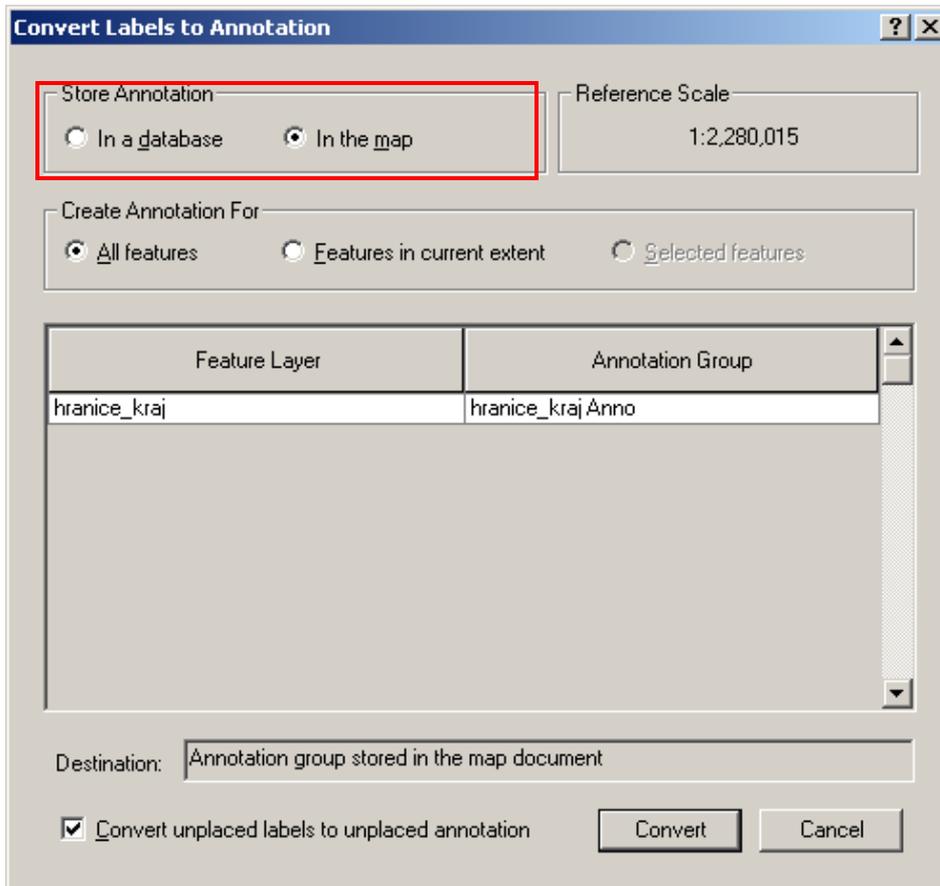


Tvorba anotácií

- konverziou z popisov:
- kontextové menu vrstvy – **Convert Labels**

to Annotation

- môžu byť uložené v geo-databáze alebo ako súčasť mapového dokumentu
- v mapovom dokumente sa vytvorí nová skupina anotácií alebo si vyberieme z existujúcich
- anotácie sa dajú editovať



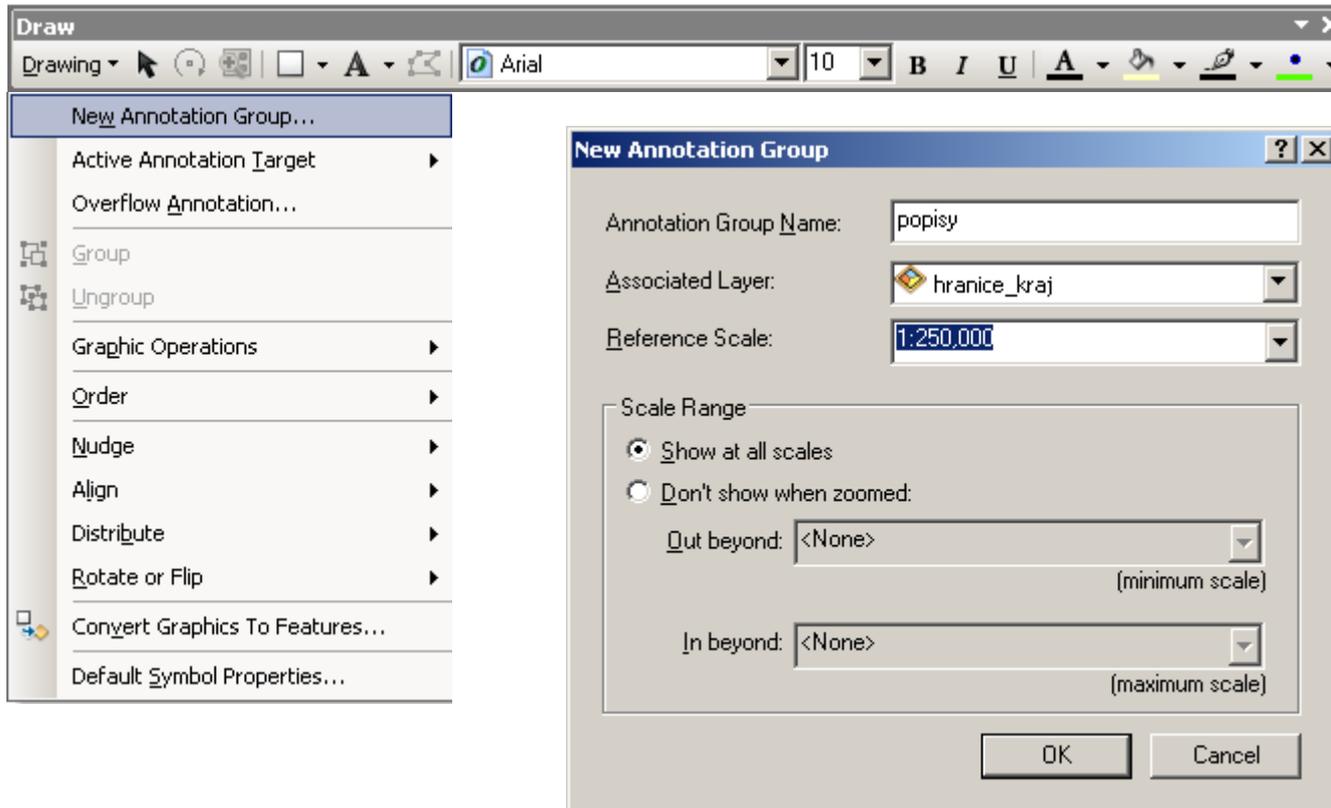


ESRI

Tvorba anotací

- tvorba novej skupiny anotací:

Drawing – New Annotation Group

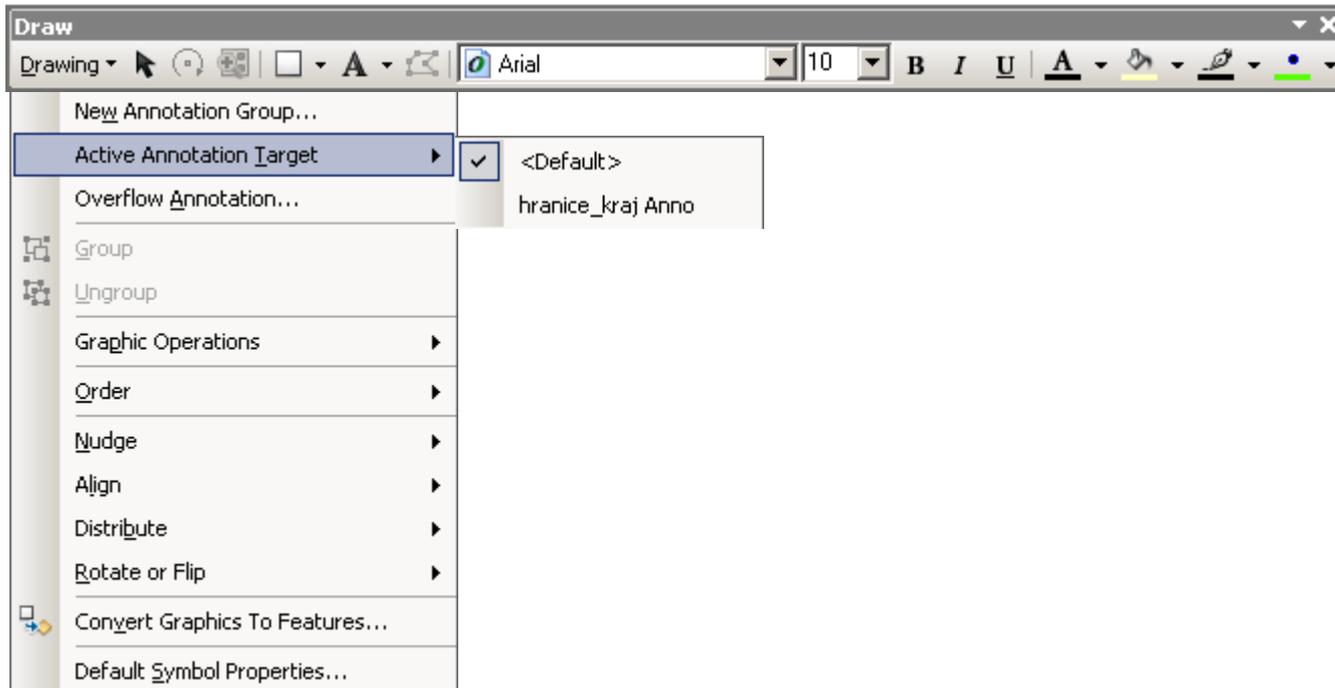




Tvorba anotácií

- nastavenie aktívnej (cieľovej) skupiny anotácií:

Drawing – Active Annotation Target



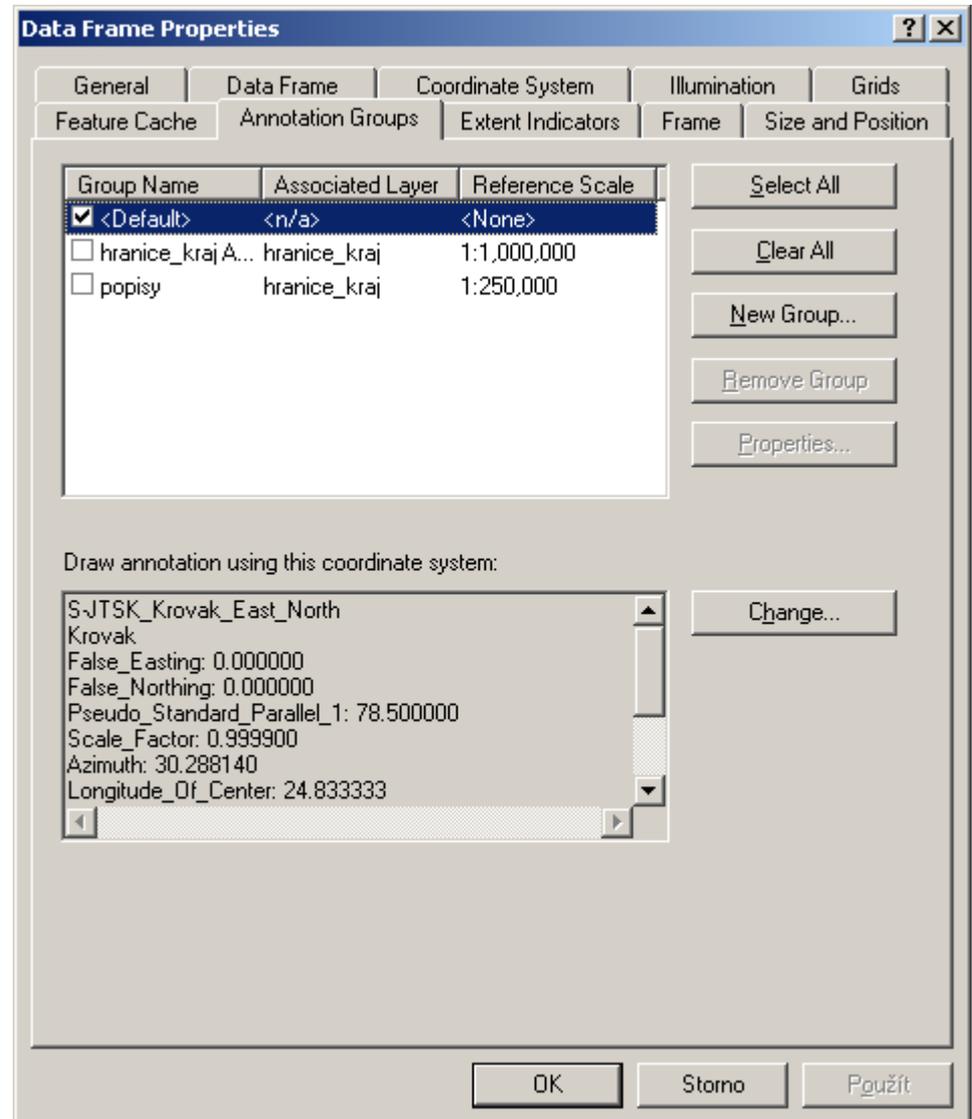


ESRI

Tvorba anotácií

- správa skupín anotácií:

Data Frame Properties – Annotation Groups





ArcMap úlohy č.46-47