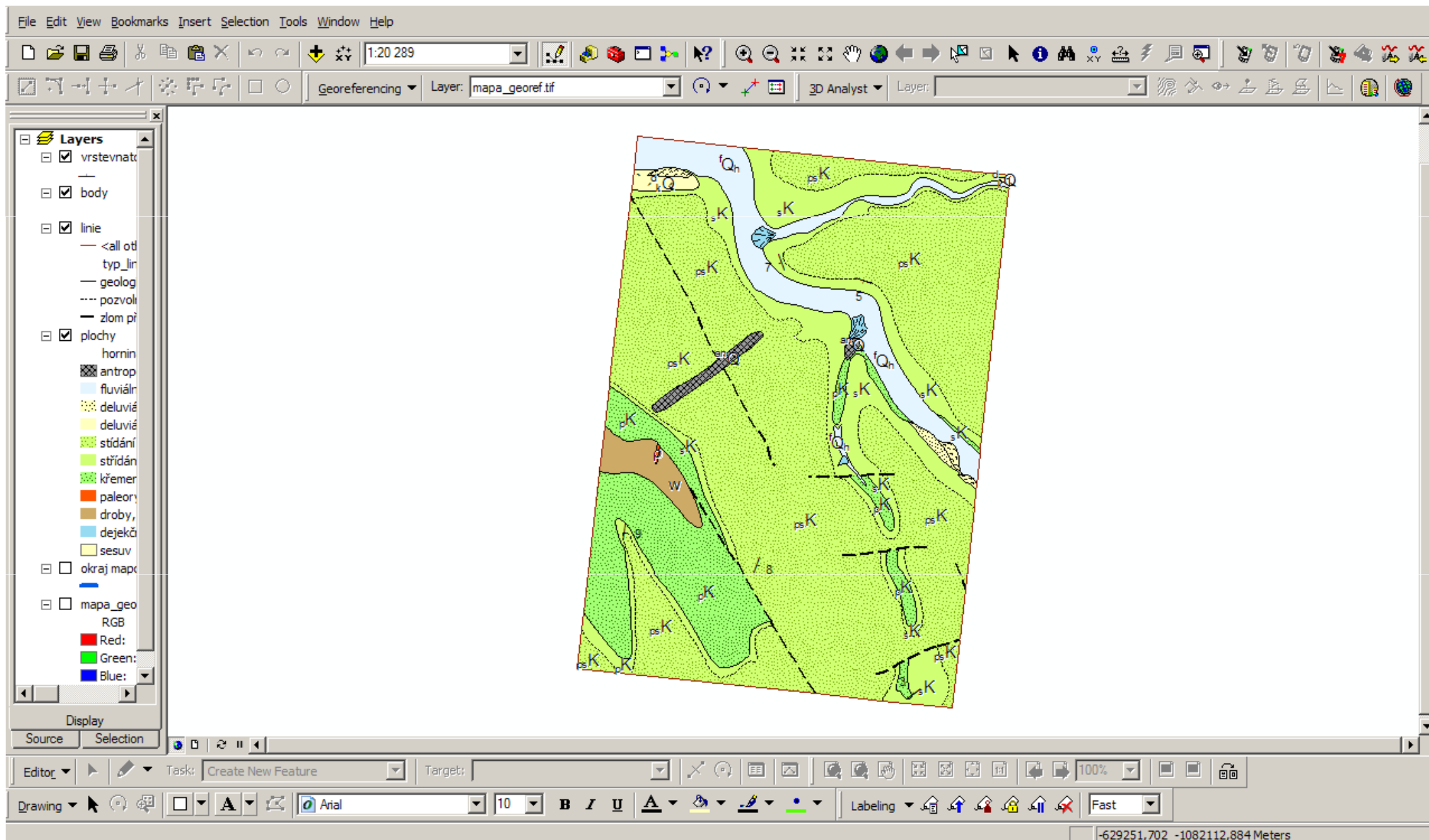


# Vytvoření mapového listu

G5221 Elektronické zpracování geologie území  
podzim 2010  
Vojtěch Šešulka

# Dosavadní výsledek naší práce



# Rotace mapového listu

v položce view > data frame properties > general vyplňte do řádku rotation hodnotu 6,1

Rotation: 6,1

náhled mapového listu s projekcí S-JTSK (Křovák) ne nutně orientovat k severu, tj. nastavit korekci o 6,1°

# Rotace mapového listu

The screenshot shows a GIS application window with a menu bar (File, Edit, View, Bookmarks, Insert, Selection, Tools, Window, Help) and a toolbar. The main map area displays a topographic map of a river valley with various geological and hydrological features. A red arrow points from the text 'další editaci budeme provádět v náhledu layout view' to the 'Layout View' icon in the bottom toolbar. The 'Layers' panel on the left lists several layers, including 'vrstevnaté', 'body', 'linie', and 'plochy', with a legend for 'plochy' showing different colors and patterns for various geological units. The bottom status bar shows the coordinates '-625705,429 -1084104,471 Meters'.

další editaci budeme provádět v náhledu  
layout view

# Vzhled mapového listu

**v menu file > page and print setup nastavíme vlastní vzhled listu**

**odškrtneme use printer paper settings a nastavíme velikost a orientaci listu (např. A3 naležato)**

Specify page size and orientation

-21,99 28,23 Centimeters



# Vzhled mapového listu

The image shows a screenshot of a GIS software interface with several red arrows pointing to specific elements and their insertion points. The interface includes a menu bar, a toolbar, a Layers panel, a Data Frame, and a map area.

**Map Layout Elements (indicated by red arrows):**

- textové pole** (text field) - points to the 'Text' tool in the toolbar.
- legenda** (legend) - points to the 'Legend...' tool in the toolbar.
- měřítko** (scale bar) - points to the 'Scale Bar...' tool in the toolbar.
- obrázek** (image) - points to the 'Picture...' tool in the toolbar.
- název** (title) - points to the 'Title' tool in the toolbar.
- styl označení prvků** (feature label style) - points to the 'Neatline...' tool in the toolbar.
- severka** (north arrow) - points to the 'North Arrow...' tool in the toolbar.
- textové měřítko** (text scale) - points to the 'Scale Text...' tool in the toolbar.
- jiný objekt** (other object) - points to the 'Object...' tool in the toolbar.

**Map Content (indicated by red arrows):**

- jednotlivé součásti mapového listu vkládáme zde** (individual map layout components are inserted here) - points to the map area.
- další datový rámeček** (another data frame) - points to the 'Data Frame' tool in the toolbar.

**Map Content (indicated by red arrows):**

- název** (title) - points to the title text on the map.
- styl označení prvků** (feature label style) - points to the labels on the map.
- severka** (north arrow) - points to the north arrow on the map.
- textové měřítko** (text scale) - points to the scale bar on the map.
- jiný objekt** (other object) - points to a specific feature on the map.

**Layers Panel (indicated by red arrows):**

- vrstevnata** (layered) - points to the 'vrstevnata' layer.
- linie** (lines) - points to the 'linie' layer.
- plochy** (polygons) - points to the 'plochy' layer.

**Map Area (indicated by red arrows):**

- mapa\_geo** (map\_geo) - points to the 'mapa\_geo' layer.

**Bottom Panel (indicated by red arrows):**

- Task: Create New Feature** - points to the 'Task' dropdown.
- Target:** - points to the 'Target' dropdown.
- Editor** - points to the 'Editor' dropdown.
- Drawing** - points to the 'Drawing' dropdown.
- Labeling** - points to the 'Labeling' dropdown.
- Fast** - points to the 'Fast' dropdown.

**Status Bar (indicated by red arrows):**

- 628216,471 -1081591,152 Meters** - points to the coordinate display.
- 10,45 21,06 Centimeters** - points to the scale display.

# Vzhled mapového listu

The screenshot displays the ArcGIS Desktop interface with the **Data Frame Properties** dialog box open. The **Data Frame** tab is active, and the **Extent** section is expanded. The **Fixed Scale** radio button is selected, and the scale value is set to **1:10 000**. A red arrow points to this value. The **Extent** section also shows the following coordinates:

- Top: -1 080 668,88452315 m
- Left: -629 429,3986391 m
- Right: -627 146,812114469 m
- Bottom: -1 083 991,70952305 m

The **Clip to Shape** section has the **Enable** checkbox unchecked. The **Extent Used By Full Extent Command** section has the **Extent of data in all layers (Default)** radio button selected.

A red text annotation on the right side of the map area reads: **ve vlastnostech datového rámce nastavíme fixní měřítko (v našem případě 1:10000)**. The map area shows a topographic map with a blue river and green fields, enclosed in a dashed blue rectangle representing the data frame extent.

The status bar at the bottom of the window displays the coordinates **-628320,312 -1083802,062 Meters** and the scale **11,54 2,85 Centimeters**.

# Vzhled mapového listu

The screenshot displays a GIS application window with a menu bar (File, Edit, View, Bookmarks, Insert, Selection, Tools, Window, Help) and a toolbar. The main workspace shows a map of a river valley with various terrain features. A dashed blue rectangle is drawn around a portion of the map, indicating a data frame. The left sidebar contains a 'Layers' panel with a tree view of map layers, including 'vrstevnat', 'body', 'linie', and 'plochy'. The bottom status bar shows the current scale as 1:10 000 and the map's dimensions as 36,67 x -1,18 Centimeters.

upravíme velikost datového rámce  
(velikost mapového výřezu)



# Vzhled mapového listu

The image shows a screenshot of a GIS software interface with several windows and toolbars. The main window displays a map of a river and surrounding terrain. A scale bar is overlaid on the map. Two dialog boxes are open: 'Alternating Scale Bar Properties' and 'Scale Bar Selector'. Red arrows point to specific elements in the interface with accompanying text in Czech.

**vložíme grafické měřítko** (we will insert a graphical scale bar)

**vybereme libovolný styl měřítka** (we will choose any style of scale bar)

**ve vlastnostech měřítka nastavíme další parametry (např. jednotky, popisky jednotek, umístění popisků atd.)** (in the scale bar properties we will set further parameters (e.g., units, unit labels, label placement, etc.))

The 'Alternating Scale Bar Properties' dialog box has the following settings:

- Scale and Units: Division value: Auto, Number of divisions: 2, Number of subdivisions: 2, Show one division before zero:
- Units: Division Units: Kilometers, Label Position: below bar, Label: km, Gap: 3 pt

The 'Scale Bar Selector' dialog box shows several scale bar styles: Scale Line 1, Scale Line 2, Scale Line 3, and Stepped Scale Line. The 'Stepped Scale Line' is selected.

# Vzhled mapového listu

The screenshot shows the ArcGIS interface with a map of a landscape. A scale bar is visible at the top of the map area, ranging from 0 to 40 units. The Scale Text Selector dialog box is open, displaying various scale options. A red arrow points from the 'Scale Text...' menu item in the 'Text' toolbar to the dialog box. Another red arrow points from the 'Absolute Scale' option in the dialog box to a text box containing '1:1 000 000'. A third red arrow points from the 'Scale Text Selector' dialog box to the text 'vybereme libovolný styl textového měřítka'. The status bar at the bottom indicates the current scale as 1:10 000 and the page size as -8,96 30,70 Centimeters.

**vložíme grafické měřítko**

**vybereme libovolný styl textového měřítka**

1:10 000

Georeferencing Layer: mapa\_georef.tif

3D Analyst Layer:

Layers

- vrstevnat
- body
- linie
- plodny
- okraj map
- mapa\_geo

Scale Text Selector

1:1 000 000

**Absolute Scale**

1 cm = 10 km  
Centimeters = Kilometers

1 centimeter = 10 000 meters  
Centimeters = Meters

1 inch = 83 333 feet  
Inches = Feet

1 in = 16 miles  
Inches = Miles

1 inch = 27 778 yards  
Inches = Yards

1 page unit = 0,22 map units  
Relative Scale

Preview

1:1 000 000

Scale to fit page

Properties...

More Styles

Save... Reset

OK Cancel

Editor Task: Create New Feature Target:

Drawing 10 B I U A Anal Labeling Fast

Insert a text description of the scale in Layout view

-8,96 30,70 Centimeters

# Vzhled mapového listu

The screenshot displays the ArcGIS interface for creating a map layout. The main map area shows a geological map with the text "Geologická mapa" overlaid. A red arrow points from the text "vložíme název mapového listu (např. Geologická mapa)" to the text on the map. Another red arrow points from the text "text formátujeme ve vlastnostech textového pole" to the "Properties" dialog box, which is open to the "Text" tab and shows the text "Můj mapový list" with font settings of Arial 28.00. A third red arrow points from the "Symbol Selector" dialog box to the "Change Symbol..." button in the "Properties" dialog. The "Symbol Selector" dialog shows a preview of the map layout with various text elements like "Country 1", "Country 2", "Country 3", "Capital", and "AaBbYyZz". The "Symbol Selector" dialog has a "Preview" section titled "ůj mapový lis" and various options for color, font, size, and style. The "Properties" dialog has buttons for "About Formatting Text" and "Change Symbol...". The "Symbol Selector" dialog has buttons for "Properties...", "More Symbols", "Save...", "Reset", "OK", and "Cancel". The "Properties" dialog has buttons for "OK", "Stomo", and "Použit". The "Symbol Selector" dialog has a "Category" dropdown set to "All". The "Properties" dialog has a "Text" tab and a "Size and Position" tab. The "Symbol Selector" dialog has a "Preview" section and a "Options" section. The "Properties" dialog has a "Text" field and a "Font" dropdown set to "Arial 28.00". The "Symbol Selector" dialog has a "Color" dropdown set to black, a "Size" dropdown set to "28", and a "Style" section with buttons for "B", "I", "U", and "SF". The "Properties" dialog has a "Text" field containing "Můj mapový list". The "Symbol Selector" dialog has a "Preview" section showing a map layout with various text elements. The "Properties" dialog has a "Text" tab and a "Size and Position" tab. The "Symbol Selector" dialog has a "Category" dropdown set to "All". The "Properties" dialog has a "Text" field and a "Font" dropdown set to "Arial 28.00". The "Symbol Selector" dialog has a "Color" dropdown set to black, a "Size" dropdown set to "28", and a "Style" section with buttons for "B", "I", "U", and "SF". The "Properties" dialog has a "Text" field containing "Můj mapový list". The "Symbol Selector" dialog has a "Preview" section showing a map layout with various text elements. The "Properties" dialog has a "Text" tab and a "Size and Position" tab. The "Symbol Selector" dialog has a "Category" dropdown set to "All". The "Properties" dialog has a "Text" field and a "Font" dropdown set to "Arial 28.00". The "Symbol Selector" dialog has a "Color" dropdown set to black, a "Size" dropdown set to "28", and a "Style" section with buttons for "B", "I", "U", and "SF". The "Properties" dialog has a "Text" field containing "Můj mapový list".

vložíme název mapového listu (např. Geologická mapa)

text formátujeme ve vlastnostech textového pole

ůj mapový lis



# Vzhled mapového listu

vložíme legendu

po několika kliknutích na další se zobrazí legenda na listu

Legend Wizard

Choose which layers you want to include in your legend

Map Layers:

- vrstevnatost
- body
- linie
- plochy
- okraj mapového listu
- mapa\_georef.tif

Legend Items:

- vrstevnatost
- body
- linie
- plochy

Set the number of columns in your legend: 1

Preview

< Zpět Další > Stomo

1:10 000

44%

Fast

-4,80 30,88 Centimeters

# Vzhled mapového listu

The screenshot shows a GIS application window with a map of a geological area. The map is titled "Geologická mapa" and includes a legend, a scale bar (1:10,000), and a north arrow. The legend is titled "Legend" and lists various symbols and colors used on the map. The map itself shows a river, a road, and various geological features. A red text overlay is present on the map, stating: "zobrazila se legenda, s jejímž obsahem nejsme spokojeni (položky jsou zpřeházené, obsahuje nechtěné nadpisy atd.)".

**Geologická mapa**

**Legend**

- vrstevnatost
- body
- linie
  - <all other values>
- typ\_linie
  - geologická hranice otevřená
  - pozvolný přechod
  - zám přepokládány
- plochy
  - hornina
    - antropogenní/ubíženiny: navážky a násypy
    - fluviální / písčitohlinité sedimenty (hlavy)
    - deluviální / písčitohlinité sedimenty (svahoviny)
    - deluviální / kamenitohlinité sedimenty (svahoviny)
    - střední / silhové a opuky, opuky převažují / nad silhové
    - střední / silhové a opuky, silhové převažují / nad opukami
    - křemenné pískovce s glaukonitem a glaukonitické pískovce
    - paleozoolit
    - droby, slabě přeměněné meta droby
    - dejekč / kužel
    - sesuv

0 0,5 1 km  
1:10 000

**Layers**

- vrstevnatost
- body
- linie
  - <all other values>
  - typ\_linie
  - geolog
  - pozvol
  - zlom př
- plochy
  - hornin
  - antrop
  - fluviáln
  - deluviá
  - deluviá
  - střední
  - střední
  - křemer
  - paleoz
  - droby,
  - dejekč
  - sesuv
- okraj map
- mapa\_geo
  - RGB
  - Red:
  - Green:
  - Blue:

Display  
Source Selection

Editor Task: Create New Feature Target: 44%

Drawing Anal 10 B I U Labeling Fast

25,52 8,76 Centimeters



# Vzhled mapového listu

**přidáme/odebereme položky v legendě**

**v nabídce seřadíme jednotlivé položky podle naší potřeby**

The screenshot shows the ArcGIS interface with the 'Legend Properties' dialog box open. The 'Map Layers' list on the left contains 'vrstevnatost', 'body', 'linie', 'plochy', 'okraj mapového listu', and 'mapa\_georef.tif'. The 'Legend Items' list on the right contains 'plochy', 'linie', and 'vrstevnatost'. A red arrow points from the 'Map Layers' list to the 'Legend Items' list, indicating the process of adding or removing items. Another red arrow points to the 'Legend Items' list, indicating the process of reordering items. The map legend on the right shows the resulting legend with a scale bar and a north arrow.

# Vzhled mapového listu

The screenshot shows a GIS application interface with a map and a legend. The 'Legend Properties' dialog box is open, showing the 'Legend' tab. The 'Show' checkbox is checked, and a red arrow points to it from the text 'nadpis legenda nebudeme potrebovat, tak jej vypneme'. The map legend is visible on the right, showing a scale bar and a north arrow. The map title is 'Geologická mapa'.

**Legend Properties**

Legend Items Frame Size and Position

Title  
Legend

Show Position: above Symbol...

Patch  
Width: 40 pt  
Height: 20 pt  
Line: —  
Area: [Yellow]

Spacing between:

Category	Spacing
title and items	11,43
items	7,14
columns	7,14
layer name and group	7,14286
groups	7,14286
heading and classes	7,14
labels and descriptions	7,14

Right to left reading

OK Storno Použit

**Legend**

**plochy**

**hornina**

- antropogenní (ubíženiny): návážky a násypy
- fluviální / pleistocenní sedimenty (hlavy)
- deluviální / pleistocenní sedimenty (svahoviny)
- deluviální / kamenitohlinité sedimenty (svahoviny)
- střídání / silnicová a opuk, opuky převažují / nad silnicoví
- střídání / silnicová a opuk, silnicovce převažují / nad opukami
- křemenné pískovce s glaukonitem a glaukonitické pískovce
- paleozoolit
- droby, slabě přeměněné meta droby
- dejekč
- sesuv

**linie**

- <all other values>
- geologická hranice ověřená
- pozdvojný přechod
- zlom předpokládaný
- vrstevnatost

0 0,5 1 km  
1:10 000

# Vzhled mapového listu

ve vlastnostech dále můžeme editovat názvy jednotlivých skupin v legendě (v našem případě všechny nadpisy povypínáme)

The image shows a screenshot of the QGIS software interface. The main window displays a map with a legend. Overlaid on the map are three dialog boxes:

- Legend Properties:** This dialog box is open to the 'Items' tab. It shows a list of map layers on the left and legend items on the right. The 'Style...' button is highlighted with a red arrow.
- Legend Item Selector:** This dialog box shows a preview of the legend with four different styles. The 'Properties...' button is highlighted with a red arrow.
- Legend Item:** This dialog box is open to the 'General' tab. It shows the 'Appearance' section with several options checked, including 'Show Labels', 'Show Descriptions', and 'Show Heading'. The 'Show Layer Name' option is unchecked.

The bottom of the screenshot shows the QGIS status bar with the text '24,01 11,90 Centimeters'.

# Vzhled mapového listu

The screenshot shows a GIS application window with a map titled "Geologická mapa". The map displays various geological features and is accompanied by a legend on the right side. The legend includes symbols for different geological units and features, such as "antropogenní (uložení): návazky a násypy", "fluviální (pískohlinité sedimenty (hlvy))", "deuviální (pískohlinité sedimenty (svahoviny))", "střední (silnovodá a opuky, opuky převažující nad silnovodami)", "střední (silnovodá a opuky, silnovodce převažující nad opukami)", "křemenné pískovce s glaukonitem a glaukonitické pískovce", "paleosolit", "droby, slabě přeměněné metadroby", "dejekón (kužel)", "sesuv", and "geologická hranice ověřená".

A red text annotation is overlaid on the map, stating: "legenda obsahuje položku <all other values>, kterou bychom chtěli odstranit".

The interface also shows a "Layers" panel on the left with various layers checked, including "vrstevnatost", "body", "linie", and "plochy". The "Display" panel at the bottom left shows the "Source" and "Selection" options. The "Editor" and "Drawing" panels at the bottom are also visible, along with a scale bar and a north arrow.

# Vzhled mapového listu

odstaneňi položky <all other values> provedeme odkřížkováním této hodnoty ve vlastnostech vrstvy linie (pořadí hodnot ve vlastnostech vrstev určuje i pořadí položek v legendě)



# Vzhled mapového listu

The image shows a screenshot of a GIS application window. The main map area displays a geological map with various features and labels. A text box on the map contains the text: "sklon vrstevnatosti v legendě doplníme ručně" (we will manually add the dip of the bedding in the legend). A red arrow points from this text box to the legend on the right. Another red arrow points from the legend back to the text box. The legend on the right lists the following symbols and their corresponding features:

- dejekční kužel (blue square)
- sesuv (yellow square)
- geologická hranice (solid black line)
- pozvolný přechod (dashed black line)
- zlom předpokládaný (dashed black line)
- vrstevnatost (dashed black line)

The map area shows a geological map with various features and labels. A text box on the map contains the text: "sklon vrstevnatosti v legendě doplníme ručně" (we will manually add the dip of the bedding in the legend). A red arrow points from this text box to the legend on the right. Another red arrow points from the legend back to the text box. The legend on the right lists the following symbols and their corresponding features:

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- zlom předpokládaný (dashed black line)
- vrstevnatost (dashed black line)

The map area shows a geological map with various features and labels. A text box on the map contains the text: "sklon vrstevnatosti v legendě doplníme ručně" (we will manually add the dip of the bedding in the legend). A red arrow points from this text box to the legend on the right. Another red arrow points from the legend back to the text box. The legend on the right lists the following symbols and their corresponding features:

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- geologická hranice (solid black line)
- pozvolný přechod (dashed black line)
- zlom předpokládaný (dashed black line)
- vrstevnatost (dashed black line)

# Vzhled mapového listu

The screenshot displays the ArcGIS interface for creating a map layout. The main window shows a geologic map titled "Geologická mapa" by "Vojtěch Šešulka". The map includes a legend with various geological features and a scale bar. The "Insert" menu is open, highlighting the "Text" option. A red arrow points to this option, with a text box containing the name "Vojtěch Šešulka". The "Properties" dialog box is also open, showing the text formatting options for the selected text.

**další údaje doplníme (např. autor mapy) pomocí vloženého textu**

**Geologická mapa**  
Vojtěch Šešulka

**Properties**  
Text | Size and Position  
Text:  
Vojtěch Šešulka  
Font: Arial 20,00  
Angle: 0,00  
Character Spacing: 0,00  
Leading: 0,00  
About Formatting Text  
Change Symbol...  
OK Storno Použít

# Vzhled mapového listu

The screenshot shows a GIS application window with a map layout. The map is titled 'mapa\_georef.tif' and is displayed at a scale of 1:10,000. The map shows a river and surrounding terrain. A context menu is open over the map, showing options like 'Zoom Whole Page', 'Zoom to Selected Elements', 'Cut', 'Copy', 'Delete', 'Convert To Graphics', 'Group', 'Ungroup', 'Graphic Operations', 'Order', 'Nudge', 'Align', 'Distribute', 'Rotate or Flip', and 'Properties...'. The 'Align' option is expanded, showing sub-options: 'Align to Margins', 'Align Left', 'Align Center', 'Align Right', 'Align Top', 'Align Vertical Center', and 'Align Bottom'. A red arrow points from a text box to the 'Align Center' option. The text box contains the text: 'všechny vložené objekt můžeme nakonec zarovnat pod sebe'. The map layout includes a scale bar at the top and a legend on the left. The legend lists various features and their corresponding colors and patterns, such as 'vrstevnatost', 'body', 'linie', and 'plochy'. The map is displayed on a white background with a grid. The status bar at the bottom shows 'Align selected elements to the horizontal center' and '26,97 13,95 Centimeters'.

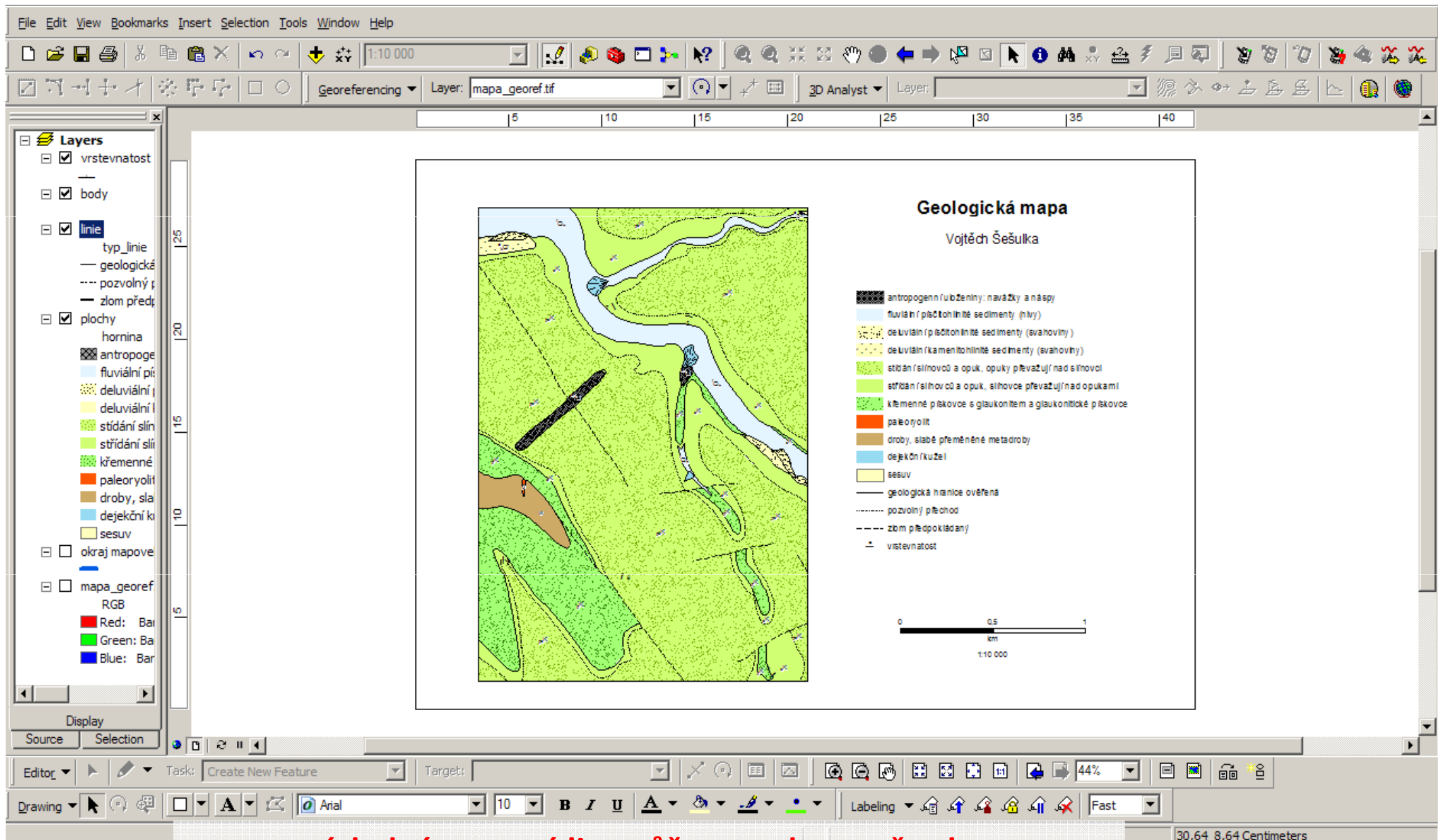
všechny vložené objekt můžeme nakonec zarovnat pod sebe

Align selected elements to the horizontal center

26,97 13,95 Centimeters



# Vzhled mapového listu



**výsledný mapový list může vypadat např. takto**