

ERDAS IMAGINE 2010, LPS 2010

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5-10-15

- × 5 konferencji N-T
- × 10 konferencji użytkowników ERDAS
- × 15 lat GEOSYSTEMS Polska Sp. z o.o.

CHWYTY...

*ty znasz moje
chwytty, ja znam
twoje...*

marnujemy czas

Roger Vailland (1907-1965)

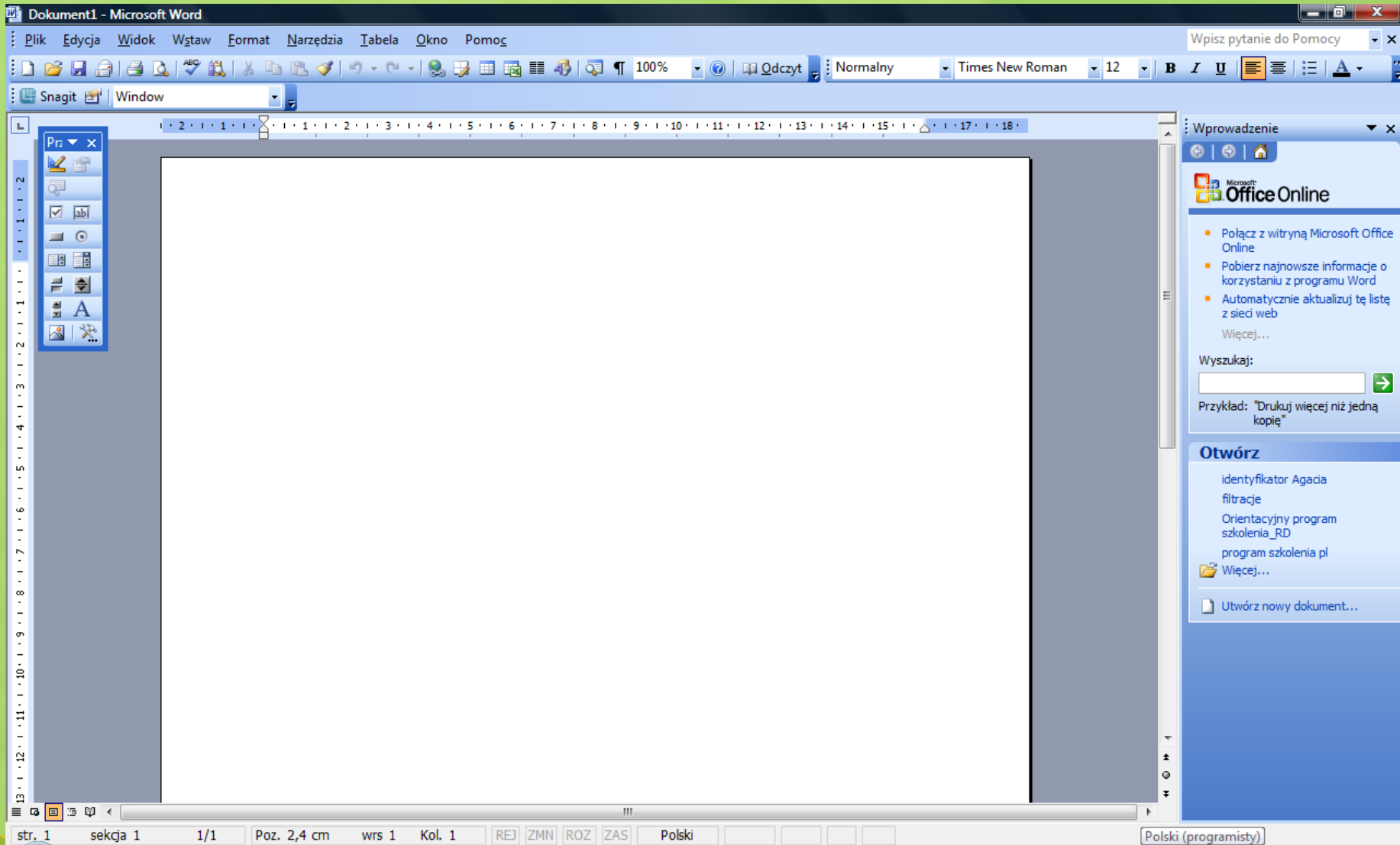
PLAN PREZENTACJI

- ✗ ERDAS IMAGINE w przełomowej wersji 2010
- ✗ LPS 2010 i uaktualnienie 2010.1
- ✗ LPS eATE

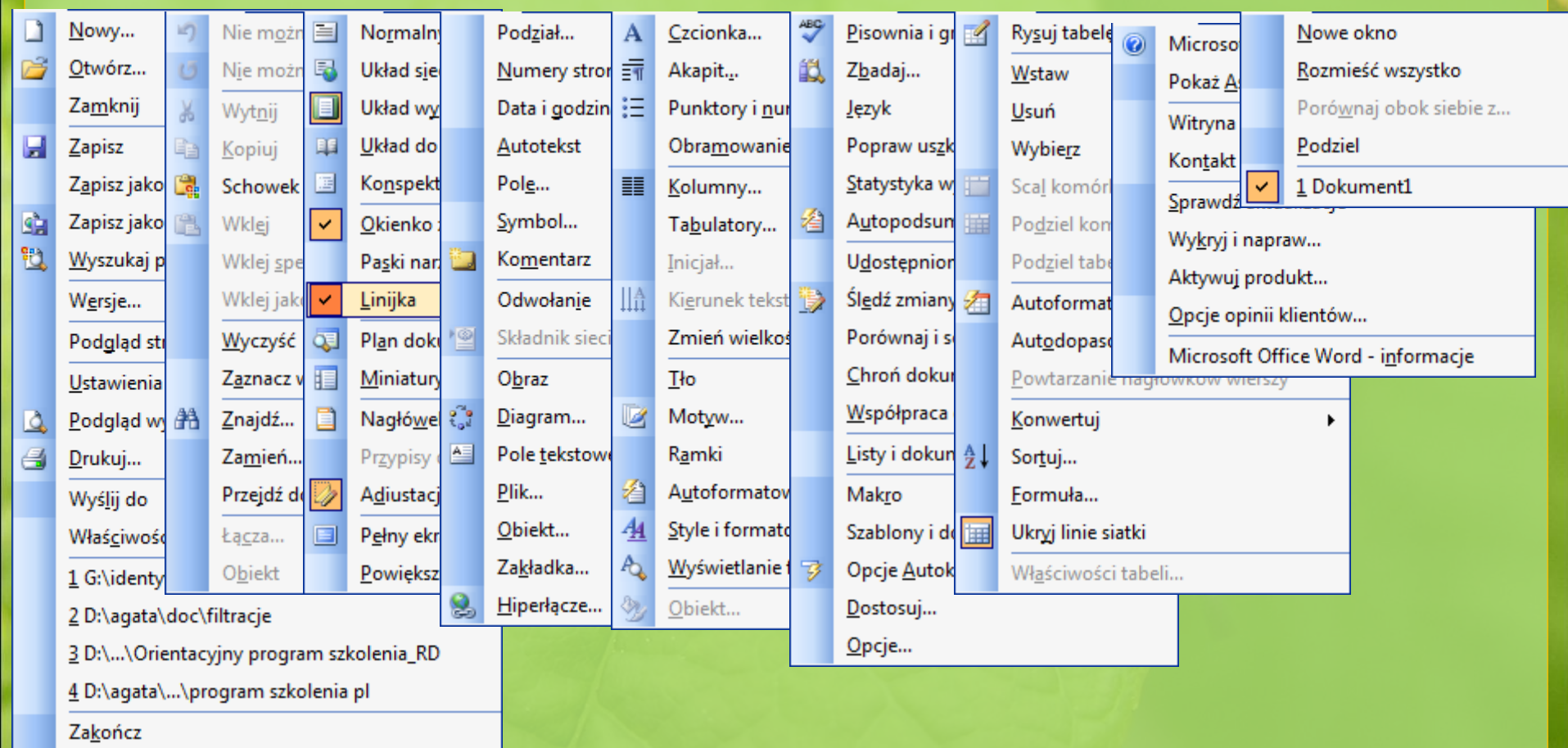
OCZYWISTA...

- ✗ Dotychczasowy interfejs stał się „przeładowany” i mało intuicyjny
- ✗ Przeciętny użytkownik:
 - + wykorzystuje niewielki procent funkcji
 - + nie wie o istnieniu wielu funkcji mogących mu ułatwić pracę
- ✗ Początkujący użytkownik:
 - + Przerażony ilością funkcji (jak ja to znajdę, jak powtórzę te wszystkie kroki, gdzie znajdę te funkcje???)
 - + Rozwiązanie: notatki, mapa???

GUI... - PRZYKŁAD 1



GUI... - PRZYKŁAD 1



GUI... - PRZYKŁAD 2

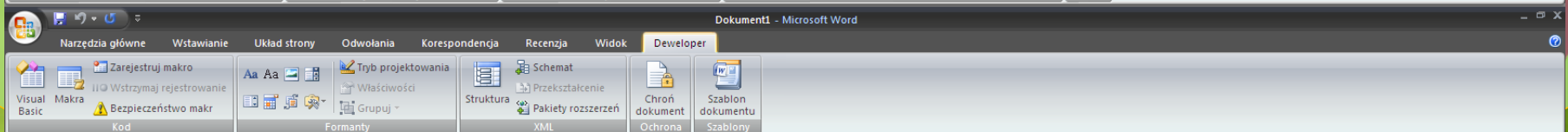
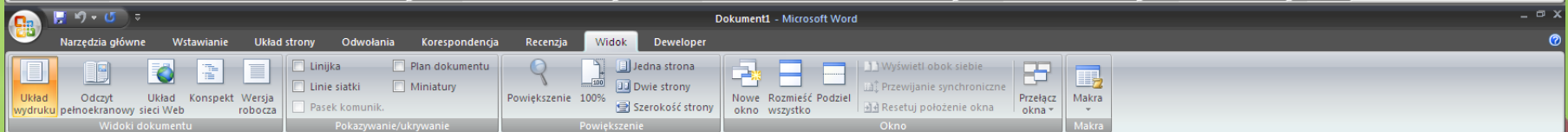
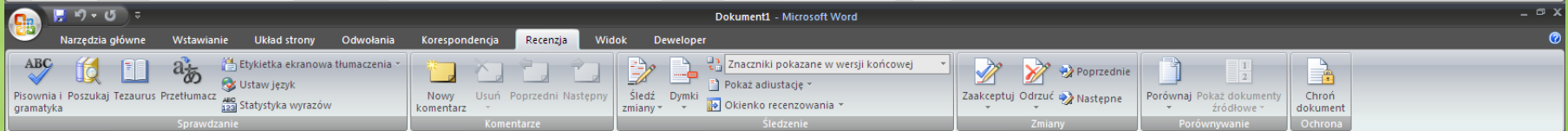
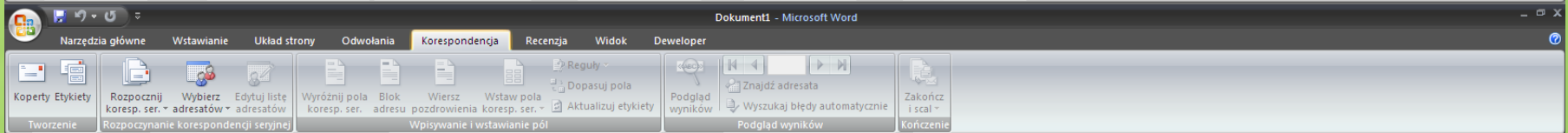
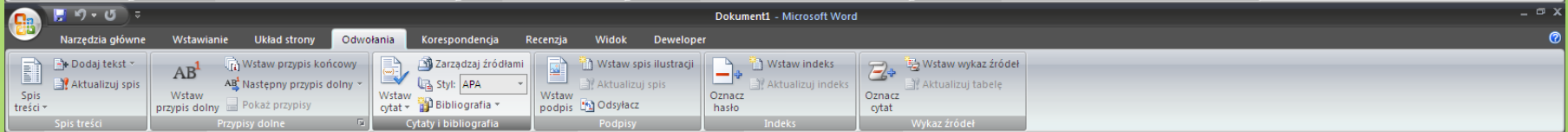
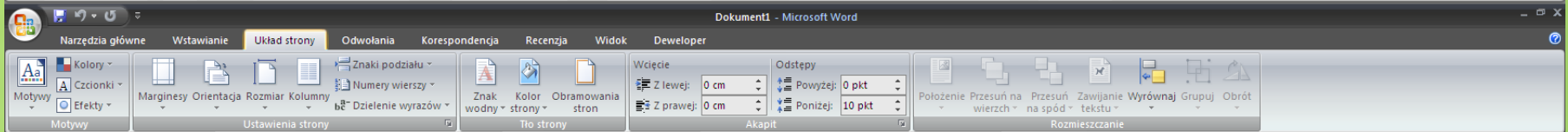
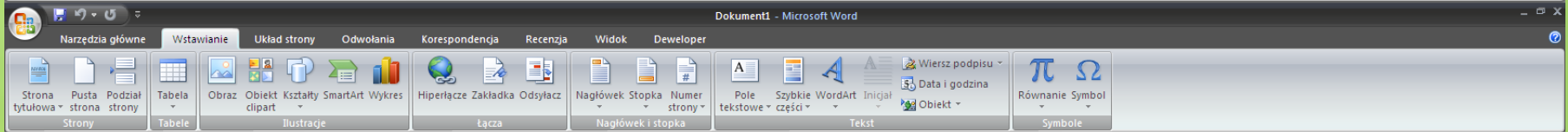
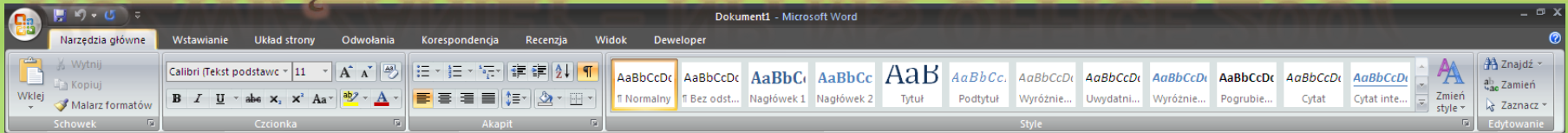
The image displays the OpenOffice.org Writer application interface with several overlapping menus. The main menu bar at the top includes: Plik, Edycja, Widok, Wstaw, Format, Tabela, Narzędzia, Okno, and Pomoc. The toolbar below contains various icons for file operations, editing, and formatting. The left sidebar shows a list of actions such as Nowy, Otwórz..., Poprzednie..., Kreatory, Zamknij, Zapisz, Zapisz jako..., Zapisz wszystkie..., Załaduj poprzednie wersje..., Eksportuj..., Eksportuj jako..., Wyślij, Właściwości..., Podpisy cyfrowe, Szablony, Podgląd w pełnym ekranie, Podgląd wycięty, Drukuj..., Ustawienia..., and Zakończ.

Overlapping menus include:

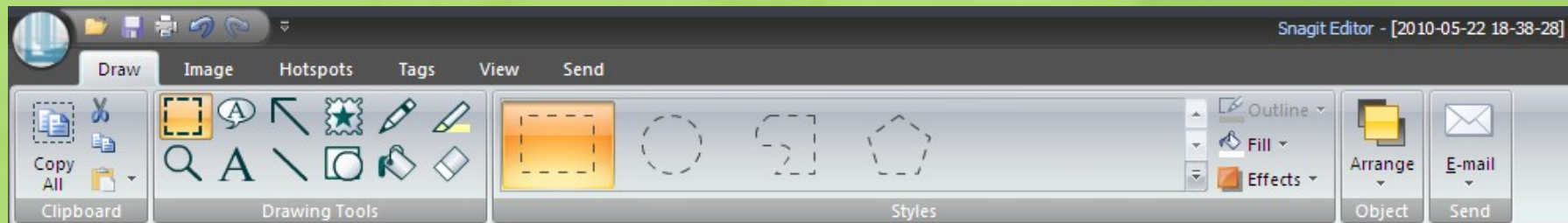
- Clipboard:** Nie można cofnąć (Ctrl+Z), Nie można powtórzyć (Ctrl+Y), Powtórź.
- Formatowanie:** Znak..., Akapit..., Wyliczanie i numery..., Strona..., Zmień wielkość..., Kolumny..., Sekcje..., Style i formaty..., Autokorekta, Zakotwiczenie, Ogięwanie, Wyrównanie, Rozmieść, Odbij, Grupuj, Obiekt, Ramka/obiekt..., Obraz...
- Wstaw:** Wstaw, Usuń, Zaznacz, Scal komórki, Podziel komórki, Chron komórki, Scal tabele, Podziel tabelę, Autoformatowanie, Autodopasowanie, Powtórz wiersz..., Konwertuj, Sortuj..., Formuła, Format liczb..., Granice tabeli, Właściwości tabeli.
- ABC (Language Tools):** Pisownia i gramatyka... (F7), Język, Połącz słowa, Numeracja konspektu..., Numeracja wierszy..., Przypisy dolne/przypisy końcowe..., Galeria, Odtwarzacz multimedialny, Bibliograficzna baza danych, Kreator korespondencji seryjnej..., Sortuj..., Oblicz (Ctrl++), Aktualizuj, Makra, Menedżer rozszerzeń..., Ustawienia filtrów XML..., Opcje autokorekty..., Dostosuj..., Opcje...
- Okno (Window):** Nowe okno, Zamknij okno (Ctrl+W), Bez tytułu 1 - OpenOffice.org Writer, Pomoc OpenOffice.org (F1), Co to jest?, Wsparcie techniczne, Rejestracja..., Sprawdź aktualizację..., OpenOffice.org - Informacje...

In the bottom right corner, there is a logo for "POLSKA GEO SYSTEMS" featuring a globe and a red arrow pointing right.

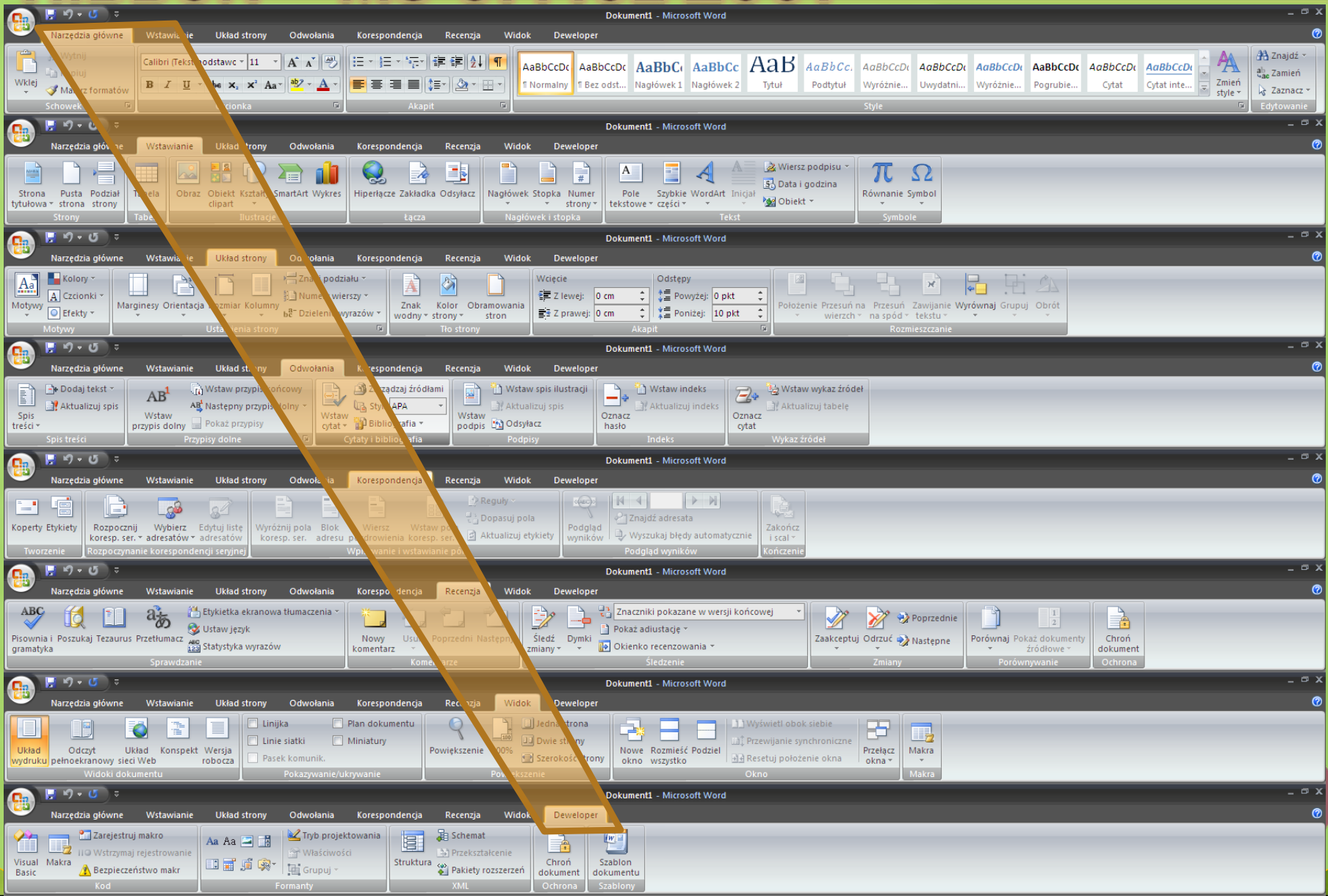
ROZWIĄZANIE? – NP. MS OFFICE 2007



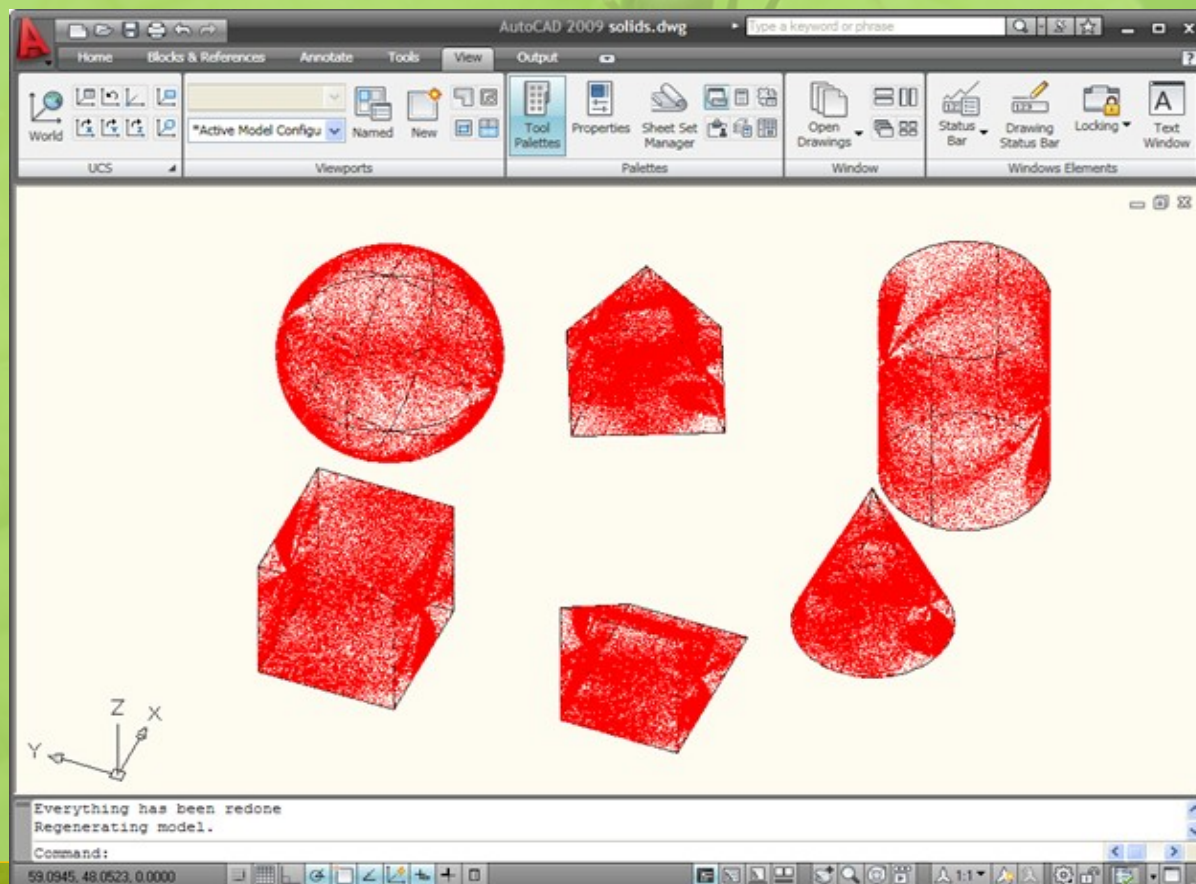
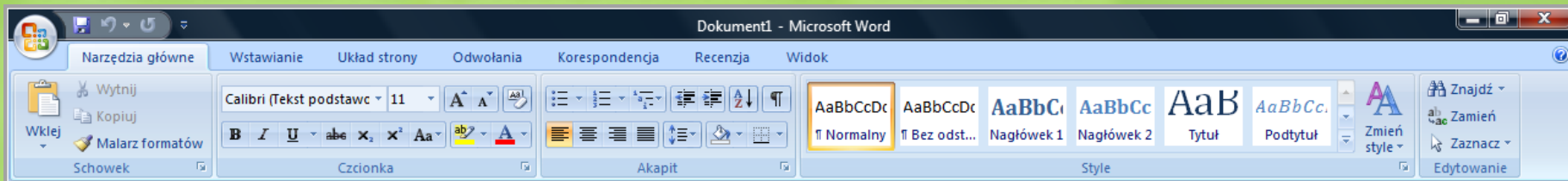
INNY PRZYKŁAD - SNAGIT



RIBBON – MS OFFICE 2007

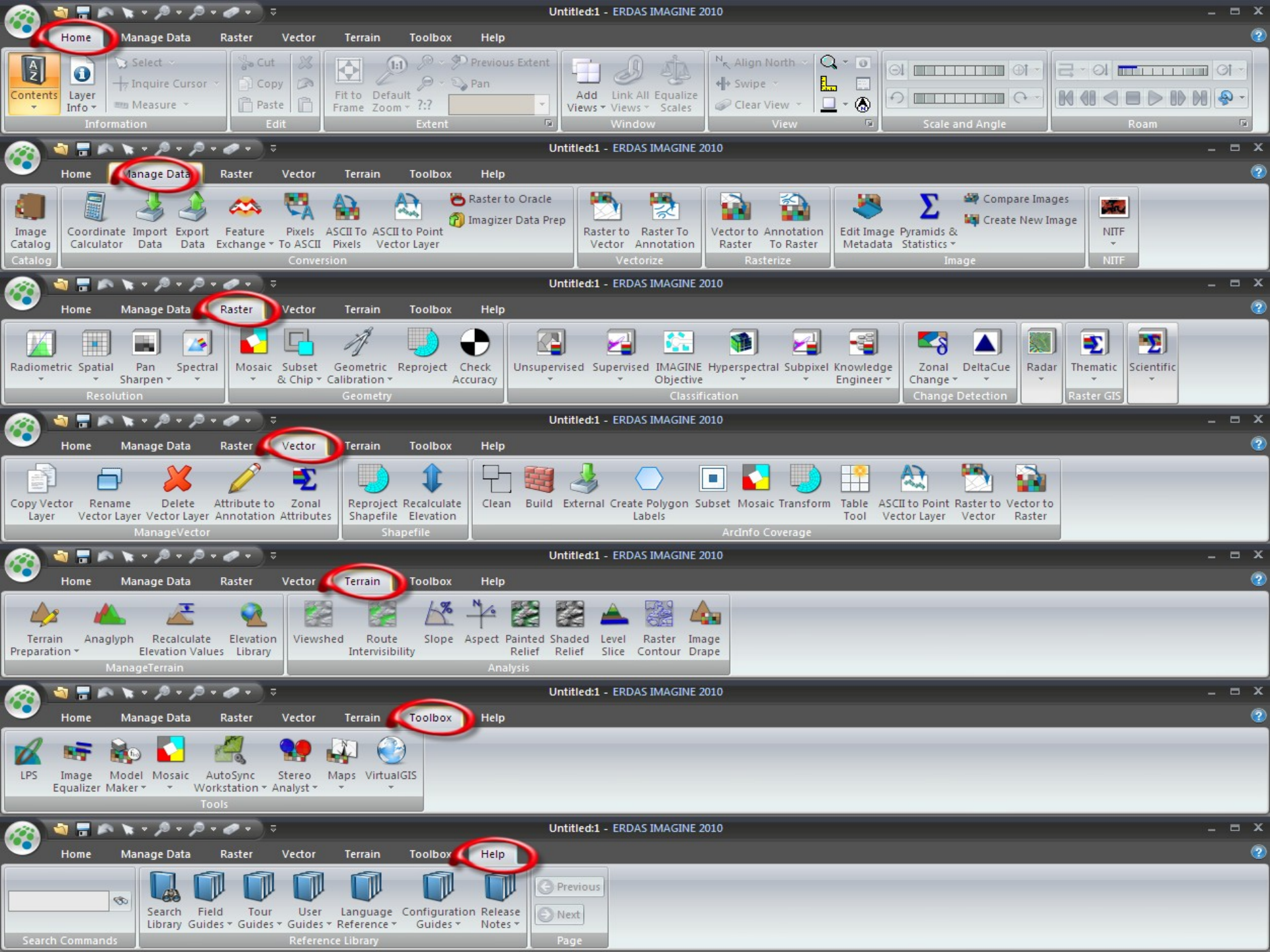


INTERFEJS RIBBON „W AKCJI”



ERDAS IMAGINE 2010

The screenshot displays the ERDAS IMAGINE 2010 software interface. The title bar reads "Untitled - ERDAS IMAGINE 2010" and the active tab is "Raster". The ribbon menu includes "Home", "Manage Data", "Raster", "Vector", "Terrain", "Terrain", "Toolbox", and "Help". The "Raster" ribbon is expanded, showing various tool groups: "Information" (Contents, Layer Info, Measure), "Edit" (Cut, Copy, Paste), "Extent" (Zoom to Data Extent, Default Zoom, Previous Extent, Pan), "Window" (Add Views, Link All Views, Equalize Scales), "View" (Align North, Swipe, Clear View), and "Scale and Angle" (Scale and Angle, Roam). The "Contents" panel on the left shows a tree view for "2D View #1" with layers "test_all_7.img" and "Background". The "ShoeBox" panel is also visible. The main workspace displays a satellite image of a rural landscape with a large blue area overlaid on the right side. The status bar at the bottom indicates coordinates "596729.76, 644019.36 meters (Transverse Mercator (GRS 1980))" and a scale of "0.00 (CW)".



Home

Manage Data

Raster

Vector

Terrain

Toolbox

Help

Untitled:1 - ERDAS IMAGINE 2010

Manage Data

Untitled:1 - ERDAS IMAGINE 2010

Raster

Untitled:1 - ERDAS IMAGINE 2010

Vector

Untitled:1 - ERDAS IMAGINE 2010

Terrain

Untitled:1 - ERDAS IMAGINE 2010

Toolbox

Untitled:1 - ERDAS IMAGINE 2010

Help

Search Commands

- Search Library
 - Field Guides
 - Tour Guides
 - User Guides
 - Language Reference
 - Configuration Guides
 - Release Notes
- Reference Library

Previous

Next

Page

CREDO...

- ✗ Możliwość pracy „od zaraz”
- ✗ Łatwa modyfikacja i personalizacja interfejsu
- ✗ Prosta, intuicyjna obsługa od uruchomienia programu

EFEKT

The screenshot displays the ERDAS IMAGINE 2010 software interface. The title bar shows the file name "Untitled:1 - ERDAS IMAGINE 2010" and the current workspace "Raster". The menu bar includes Home, Manage Data, Raster, Vector, Terrain, Toolbox, Help, Multispectral, Drawing, and Table. The toolbar contains various tools such as Image Catalog, Coordinate Calculator, Import Data, Export Data, Feature Exchange, Pixels To ASCII, ASCII To Pixels, ASCII to Point Vector Layer, Raster to Oracle, and Imagizer Data Prep. There are also dropdown menus for Vectorize, Rasterize, Image, and NITF.

The main workspace is titled "2D View #1: orto__4_7217_b.img (:Layer_1):(:Layer_2):(:Layer_3)". It displays a mosaic of four aerial images arranged in a 2x2 grid. The images show a rural landscape with fields, roads, and some buildings. The images are slightly offset from each other, creating a mosaic effect. The top-left image is the most prominent, showing a large field with a road running through it. The top-right image shows a similar area but with more detail, including a small cluster of buildings. The bottom-left image shows a different area, possibly a different part of the same field. The bottom-right image shows a similar area to the top-right one, but with a different perspective or lighting.

The Contents panel on the left shows the following structure:

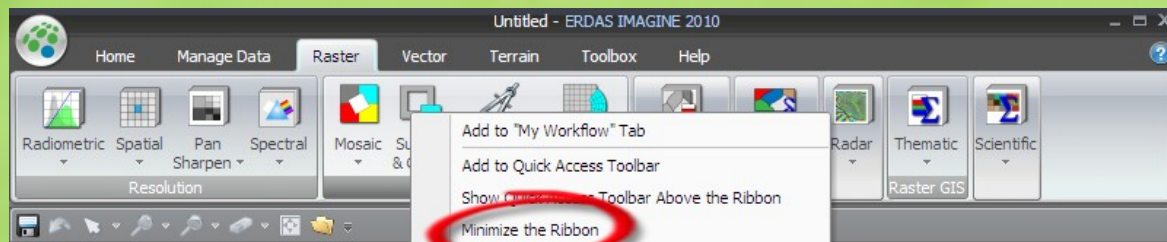
- 2D View #1
 - orto__4_7217_b.img
 - orto__4_7216_b.img
 - orto__4_7215_b.img
 - orto__3_8855_b.img
 - orto__3_8854_b.img
 - Background

The ShoeBox panel on the left shows the following structure:

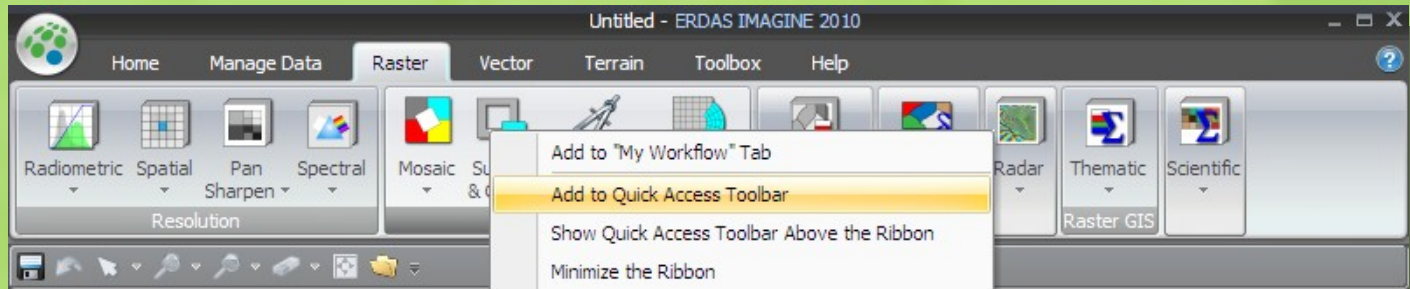
- ShoeBox: lotnicze.ixp
 - orto
 - orto__3_8854_b.img
 - orto__3_8855_b.img
 - orto__4_7215_b.img
 - orto__4_7216_b.img
 - orto__4_7217_b.img
 - DTM
 - dtm_z_map.img

The status bar at the bottom shows the coordinates "682382.67, 525810.56 meters (Transverse Mercator (GRS 1980))" and the scale "0.00 (CW)".

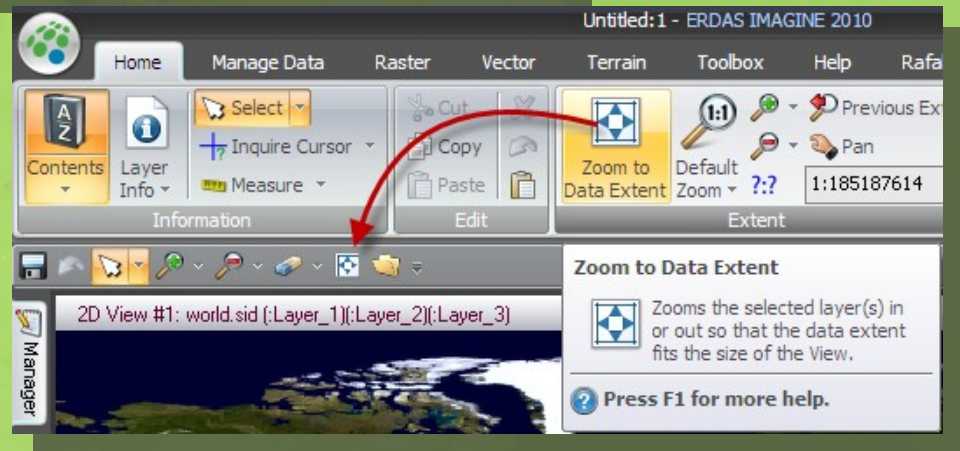
PASEK NARZĘDZI – MINIMALIZACJA



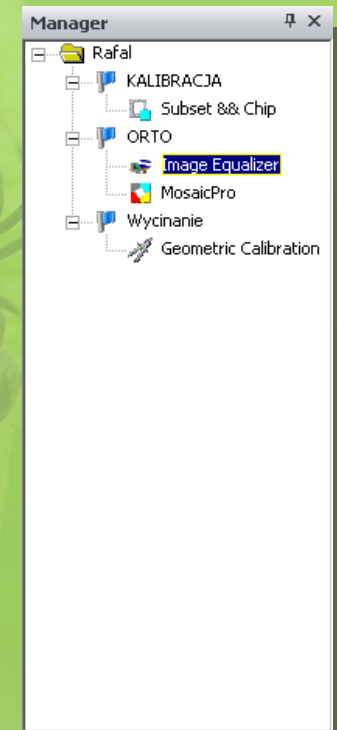
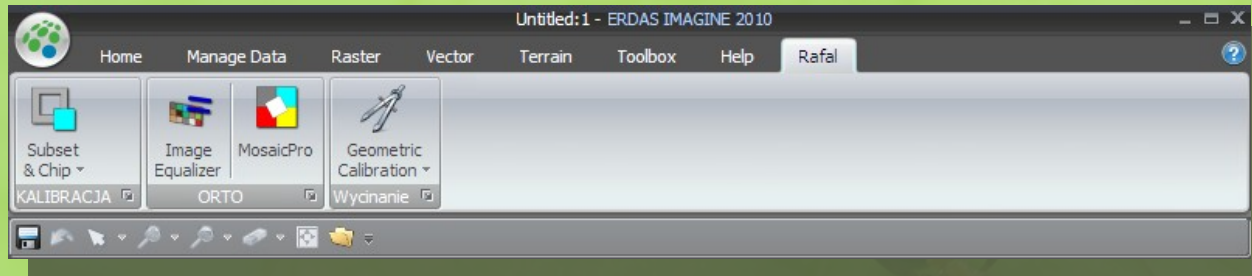
PASEK SZYBKIEGO DOSTĘPU



- ✗ Pozwala na umieszczenie najczęściej wykorzystywanych narzędzi na wąskim pasku narzędzi widocznym niezależnie od minimalizacji interfejsu RIBBON

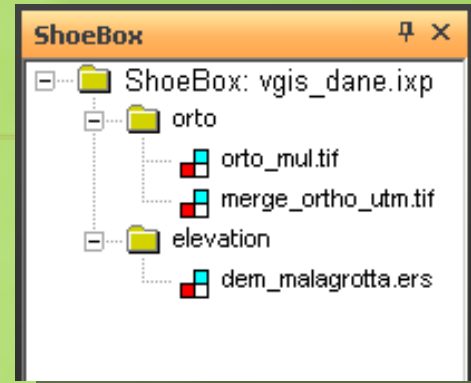
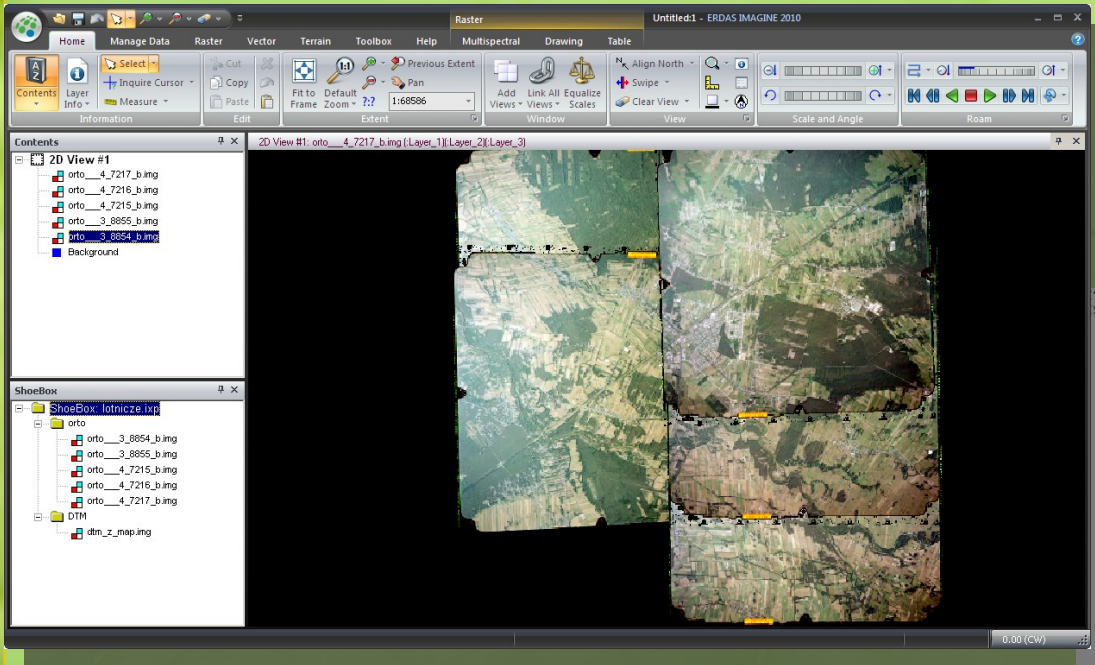


MY WORKFLOW



- ✗ Możliwość skomponowania własnego paska narzędzi dostosowanego do sekwencji czynności realizowanego procesu. Ilość tych pasków właściwie nieograniczona (zapis w pliku)

SHOEBOX



✘ Plik XML z listą pogrupowanych odnośników do danych przestrzennych. Ilość plików – nieograniczona

```
?xml version="1.0" encoding="UTF-8"?>
ShoeBox
  <FileGroup>
    <Title>ShoeBox: vgjs_dane.ixp</Title>
    <Description>noop</Description>
    <Expanded>true</Expanded>
    <FileGroup>
      <Title>orto</Title>
      <Description>noop</Description>
      <Expanded>true</Expanded>
      <File>
        <Path>d:/liege_2010/orto images/orto_mul.tif</Path>
        <Description>noop</Description>
        <Projection>
          <Name>noop</Name>
          <Datum>noop</Datum>
          <Spheroid>noop</Spheroid>
        </Projection>
      </File>
      <File>
        <Path>d:/liege_2010/merge_ortho_utm.tif</Path>
        <Description>noop</Description>
        <Projection>
          <Name>noop</Name>
          <Datum>noop</Datum>
          <Spheroid>noop</Spheroid>
        </Projection>
      </File>
    </FileGroup>
  </FileGroup>
  <FileGroup>
    <Title>elevation</Title>
    <Description>noop</Description>
    <Expanded>true</Expanded>
    <File>
      <Path>d:/liege_2010/reference data/dem_malagrotta.ers</Path>
      <Description>noop</Description>
      <Projection>
        <Name>noop</Name>
        <Datum>noop</Datum>
        <Spheroid>noop</Spheroid>
      </Projection>
    </File>
  </FileGroup>
</ShoeBox>
```

POMOC – WSTAŻKA HELP

The image displays two overlapping screenshots of the ERDAS IMAGINE 2010 software interface, illustrating the search process for help documentation. The top screenshot shows the search bar with the term "classification" entered. The bottom screenshot shows the search results page, which is divided into several sections:

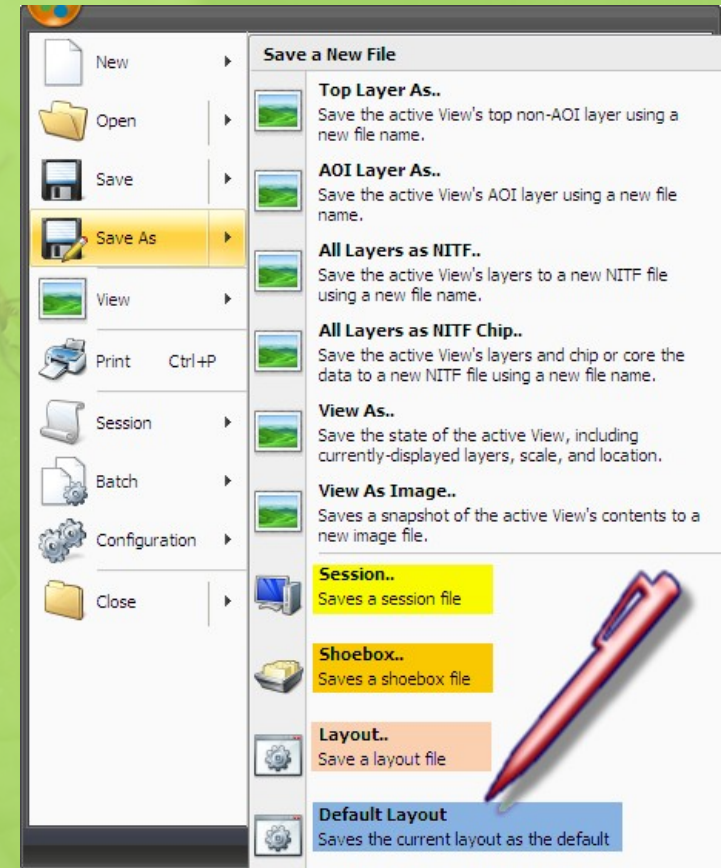
- Search Command:** "classification"
- Reference Library:** A row of icons for Search Library, Field Guides, Tour Guides, User Guides, Language Reference, Configuration Guides, and Release Notes.
- Search Results:** A list of 18 documents found, displaying page 1 of 2. The results are categorized into several groups:
 - Language Guides:** Spatial Modeler Language, ERDAS Macro Language.
 - Release Notes:** IMAGINE Release Notes, LPS Release Notes.
 - Configuration Guides:** Configuration Guide for Windows, ERDAS-Net Licensing, LPS Configuration Guide.
 - User Guides:** AutoSync User Guide, DeltaCue User Guide, EasyTrace User Guide, eATE User Guide, Global Retriever User Guide, Hyperspectral User Guide, IMAGINE Enterprise Editor User Guide, IMAGINE Objective User Guide, Imagizer Data Prep User Guide, Imagizer Viewer User Guide, LPS Automatic Terrain Extraction, LPS Project Manager, LPS Terrain Editor, Radar Mapping Suite User Guide, Stereo Analyst User Guide, Subpixel Classifier User Guide, VirtualGIS User Guide.
 - Essentials and Support:** ERDAS IMAGINE Essentials, ERDAS IMAGINE Advantage, ERDAS IMAGINE Professional, IKONOS Sensor Model Support, ERDAS Field Guide, Radar Interferometry.

Blue arrows indicate the flow of information from the search bar to the search results and from the search results to the various help topics listed.

ZAPIS SESJI I KOMPOZYCJI

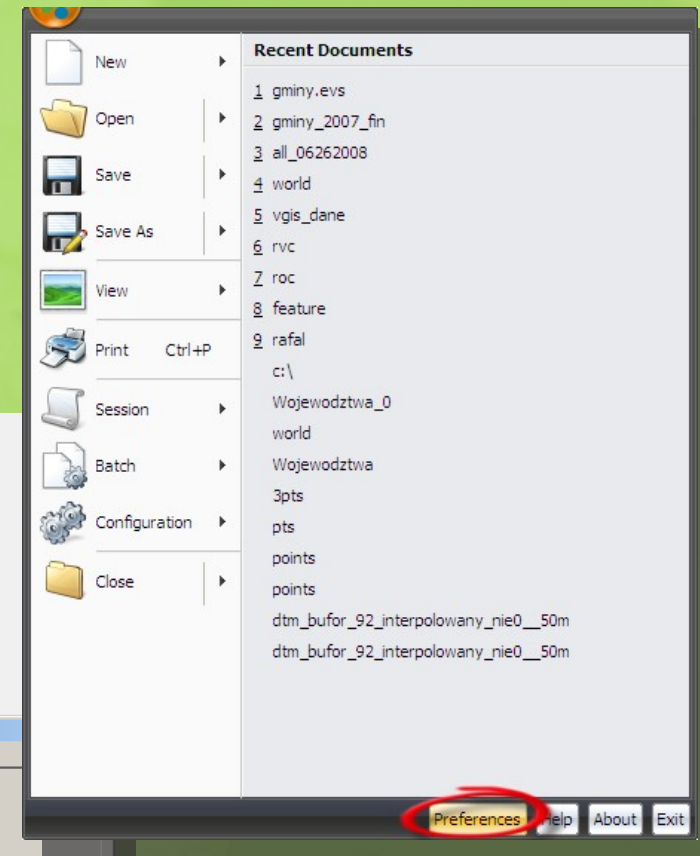
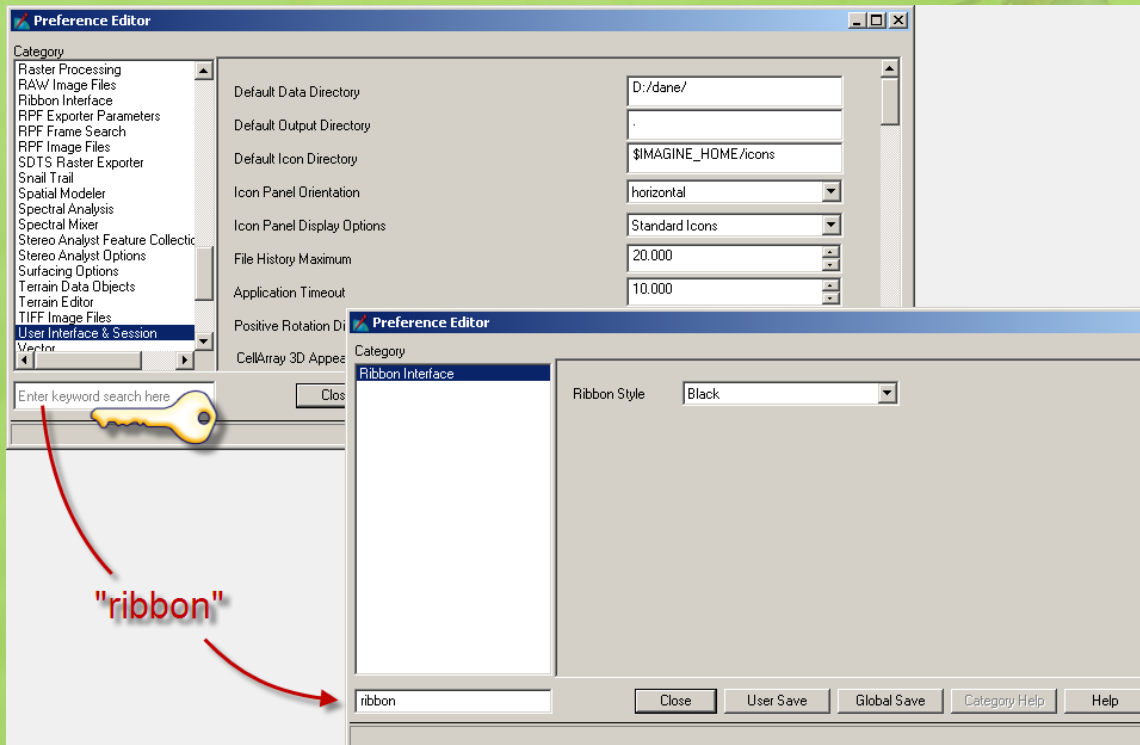
Zapis:

- ✗ Sesji (widok, pliki, paski narzędzi, ilość okien itp..)
- ✗ Layout – ilość okien i paski, bez widocznych danych przestrzennych
- ✗ Ustanowienie domyślnej kompozycji



PREFERENCJE

✘ Wyszukiwanie ustawień wg słów kluczowych



Untitled:1 - ERDAS IMAGINE 2010 Raster

Home Manage Data Raster Vector Terrain Toolbox Help Multispectral Drawing Table

Contents Layer Info Measure Inquire Cursor Select

Cut Copy Paste Edit

Fit to Frame Default Zoom 1:1 Pan 1:65055 Previous Extent

Add Views Link All Views Equalize Scales Window

View Scale and Angle Roam

Contents

2D View #1

- sandomierz.img
- Background

ShoeBox

- ShoeBox



PROCESY RÓWNOLEGŁE

- ✗ Batch pozwala na ustalenie do 4 procesów na jednym komputerze przetwarzanych równoległo

The screenshot displays the ERDAS IMAGINE 2010 software interface. The main window shows a 2D view of a raster image. Overlaid on this are several windows related to batch processing:

- Contents:** A tree view showing the current project structure, including several raster files (e.g., orto_4_7217_b.img) and a Background layer.
- Batch Commands:** A dialog box for configuring batch processing. It contains a table with the following data:

Row	Input
1	orto_3_8854_b.img
2	orto_3_8855_b.img
3	orto_4_7215_b.img
4	orto_4_7216_b.img
5	orto_4_7217_b.img
- Process List (top):** A table showing the progress of five parallel processes. The data is as follows:

Row	Process Title	File	State	Progress
1	eWkspace			
2	exporttif	1/5	Exporting raster data to d:/dane/trening/3_lohnicze	67%
3	exporttif	2/5	Exporting raster data to d:/dane/trening/3_lohnicze	59%
4	exporttif	3/5	Exporting raster data to d:/dane/trening/3_lohnicze	66%
5	exporttif	4/5	Exporting raster data to d:/dane/trening/3_lohnicze	64%
- Process List (bottom):** A table showing the completion status of the five parallel processes. The data is as follows:

Row	Process Title	File	State	Progress
1	eWkspace			
2	exporttif	1/5	DONE - Click Dismiss to Remove	100%
3	exporttif	2/5	DONE - Click Dismiss to Remove	100%
4	exporttif	4/5	DONE - Click Dismiss to Remove	100%
5	exporttif	5/5	Exporting raster data to d:/dane/trening/3_lohnicze	42%

The status bar at the bottom indicates the current location: 682382.67, 525810.56 meters (Transverse Mercator (GRS 1980)) and 0.00 (CW).

FME – FEATURE EXCHANGE

- ✗ Konwerter formatów wektorowych wyposażony w wiele funkcji analitycznych i operatorów geometrycznych

The screenshot displays the ERDAS IMAGINE 2010 software interface. The main window title is "Untitled:1 - ERDAS IMAGINE 2010". The menu bar includes Home, Manage Data, Raster, Vector, Terrain, Toolbox, and Help. The toolbar is divided into several sections: Image Catalog, Coordinate Calculator, Import Data, Export Data, Feature Exchange (highlighted), Conversion (Pixels, ASCII To ASCII, ASCII To Point Vector Layer), Vectorize (Raster to Vector, Raster To Annotation), Rasterize (Vector to Raster, Annotation To Raster), Image (Edit Image Pyramids & Metadata, Statistics, Compare Images, Create New Image), and NITF.

On the left side, a tree view shows a "Categorized" folder containing various tool categories: 3D, Calculators, Collectors, Database, Filters, Geometric Operators, Infrastructure, Linear Referencing, Lists, Manipulators, Rasters, Strings, Surfaces, Web Services, Workflow, XML, Embedded Transformers, Recent, and Search Results.

On the right side, a table lists supported file formats with columns for Description, Short Name, Extensions, Type, Read, Write, Coord. Sys., Licensed, and In List.

Description	Short Name	Extensions	Type	Read	Write	Coord. Sys.	Licensed	In List
Autodesk AutoCAD ...	ACAD	.dxf, .dwg	File	•	•		•	<input type="checkbox"/>
Bentley MicroStation...	IGDS	.pos, .fc1, .dgn	File	•	•		•	<input type="checkbox"/>
Bentley MicroStation...	DGNV8	.pos, .fc1, .dgn	File	•	•		•	<input type="checkbox"/>
CityGML	CITYGML	.gml, .xml, .gz	File	•	•		•	<input type="checkbox"/>
Digital Line Graph (D...	DLG	.opt, .dlg	File	•	•		•	<input type="checkbox"/>
ESRI ArcGIS Layer	ARCGIS_LAYER		ESRI Layer	•	•		•	<input type="checkbox"/>
ESRI ArcInfo Cover...	ARCINFO	.adf	Directory	•	•		•	<input type="checkbox"/>
ESRI ArcInfo Export...	E00	.e00	File/Directory	•	•	•	•	<input type="checkbox"/>
ESRI ArcInfo Gener...	ARCGEN	.gen	File/Directory	•	•		•	<input type="checkbox"/>
ESRI ArcSDE	SDE30		Database	•	•	•	•	<input type="checkbox"/>
ESRI Geodatabase (...)	GEODATABASE_SDE		Database	•	•		•	<input type="checkbox"/>
ESRI Geodatabase (...)	GEODATABASE_FILE		Geodatabase	•	•	•	•	<input type="checkbox"/>
ESRI Geodatabase (...)	GEODATABASE_MDB	.mdb	File	•	•	•	•	<input type="checkbox"/>
ESRI Geodatabase (...)	GEODATABASE_XML	.xml, .z, .zip	File	•	•		•	<input type="checkbox"/>
ESRI Shape	SHAPE	.shp	File/Directory	•	•	•	•	<input checked="" type="checkbox"/>
FalconView File	FALCONVIEW	.mdb	File	•	•	•	•	<input type="checkbox"/>
FME Feature Store (...)	FFS	.ffs	File/Directory	•	•	•	•	<input type="checkbox"/>
GML (Geography Ma...	GML	.gml, .xml, .gz	File	•	•	•	•	<input type="checkbox"/>
Halliburton GeoGrap...	WHITESTAR	.cdf	File	•	•		•	<input type="checkbox"/>
MapInfo MIF/MID	MIF	.mif	File/Directory	•	•	•	•	<input type="checkbox"/>
MapInfo TAB (MITAB)	MITAB	.tab	File/Directory	•	•	•	•	<input type="checkbox"/>
OpenGIS KML Encodi...	OGCKML	.kmz, .kml		•	•	•	•	<input type="checkbox"/>
S-57 (ENC) Hydrogr...	S57	.000, .030	File	•	•		•	<input type="checkbox"/>
U.S. Census Bureau ...	TIGER	.rt1, .r*1, .bw1	File/Directory	•	•	•	•	<input type="checkbox"/>
Vector Product Form...	VPF	.*ft	File/Directory	•	•		•	<input type="checkbox"/>
Vector Product Form...	VPF_DB	DHT	File/Directory	•	•		•	<input type="checkbox"/>

At the bottom of the table, there is a "Search" section with a search box and buttons for "New...", "Import...", "Edit", "Delete...", "OK", "Anuluj", and "Details..."

FME – FEATURE EXCHANGE

The screenshot displays the FME Workbench interface. The main workspace contains a data flow diagram with the following components:

- Source Types:** A folder icon containing a box labeled "areas [...SHAPE]".
- Data Flow:** A box labeled "Generalizer" with an expanded output list:
 - INPUT
 - OUTPUT
 - AREAID
 - TYPE
 - NAME
 - REGION
 - REGION2
 - BUILDINGS
- Destination Types:** A folder icon containing a box labeled "areas [... GML2]".
- Visualizer:** A magnifying glass icon labeled "Visualizer" connected to the output of the Generalizer.

Arrows indicate the flow of data from the source to the generalizer, and from the generalizer to both the destination and the visualizer.

An "FME Workbench" dialog box is open in the foreground, showing options for workspace creation and file selection. The "Use the workspace wizard" option is selected. The "More Files..." list includes:

- C:\Documents and Settings\rafal\Moje dokumenty\
- D:\dane\boropoulos\points.shp
- C:\shape2shape.fmw
- D:\liege_2010\Vectors\buildings.shp

The "Transformers" pane on the left shows a tree structure with "Categorized", "Embedded Transformers", "Recent", and "Search Results" folders.

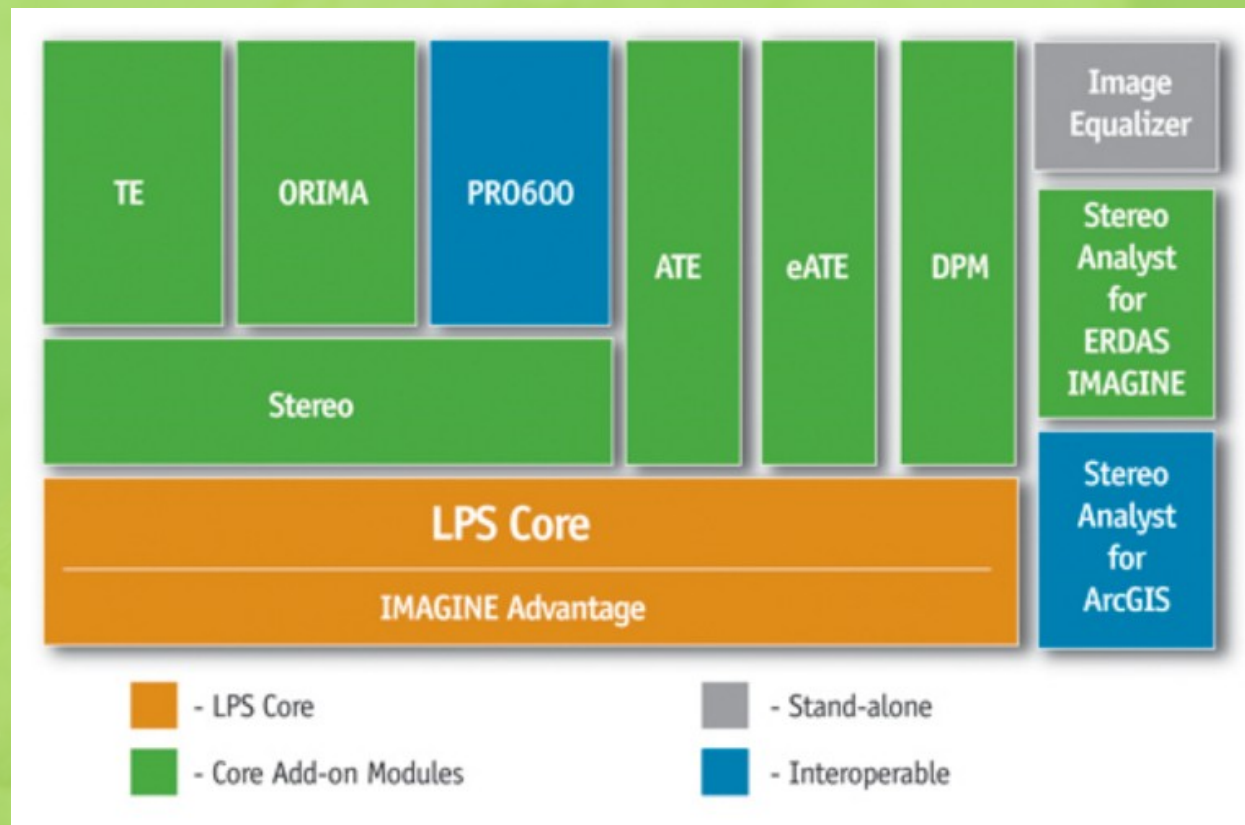
FME – FEATURE EXCHANGE

The screenshot displays the QGIS 2.10.1 desktop environment. At the top, a menu bar includes 'Plik', 'Edycja', 'Widok', 'Warstwa', 'Ustawienia', 'Wtyczki', 'Wektor', and 'Pomoc'. Below it is a comprehensive toolbar with icons for file operations, navigation, and editing. The main map window shows a vector layer with two 'areas' sub-layers. The map content consists of a network of red and blue lines forming irregular polygons. A scale bar at the top of the map indicates a distance of 0.4 degrees. The left sidebar contains a 'Warstwy' (Layers) panel with two 'areas' entries and a 'Przechwyć współrzędne' (Copy coordinates) panel with input fields and buttons for 'Kopiuj do schowka' and 'Przechwytuj'. The right sidebar features an 'Obiekt OSM' (OSM Object) panel with fields for 'Typ, ID:', 'UTWORZONY:', and 'UŻYTKOWNIK:', along with 'Właściwość' and 'Relacje' tabs. The bottom status bar shows 'CRS undefined - defaulting to default CRS', 'Współrzędne: 21.029,54.225', 'Skala: 1:221210', and a 'Renderuj' button.

CRS undefined - defaulting to default CRS

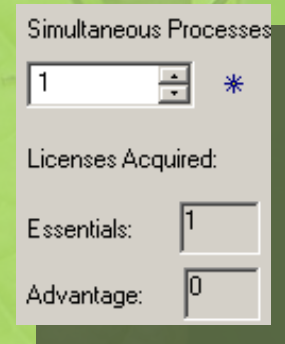
Współrzędne: 21.029,54.225 Skala: 1:221210 Renderuj

ERDAS LPS 2010.1 WN



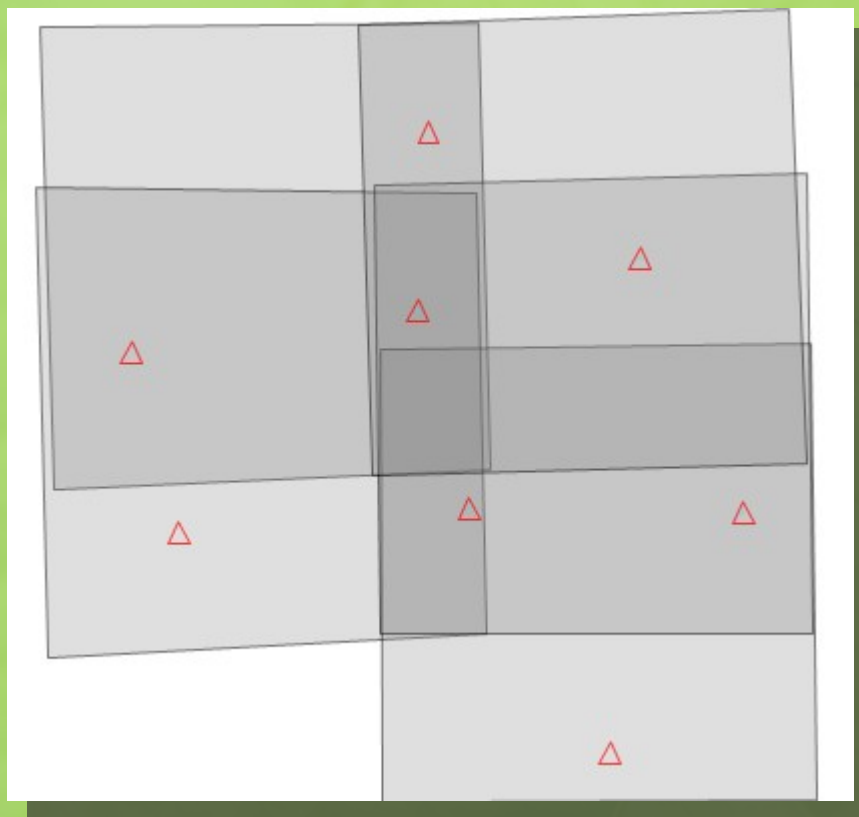
ERDAS LPS 2010.1 WN

- ✗ Nowe sensory – WV2 i format *.TIL
- ✗ Przetwarzanie równoległe dla procesorów wielordzeniowych podczas ortorektifikacji w trybie BATCH



ERDAS LPS 2010.1 WN

✘ Przezroczystość w LPS Project Manager



ERDAS LPS 2010.1 WN

✘ Przebudowany interfejs SPM (Stereo Point Measurement Tool)

Image Selection

Master: d:\dane\trening\3_col

Overlap: 5%

Load As: Stereo

Row	Image	Load
1	3_8855_b.img	✓
2	4_7215_b.img	✓
3	4_7216_b.img	✓
4	4_7217_b.img	✓

Set Master Load at Selected Point

Check All Clear Load

Image Adjustment

View: All Viewers

☀ [Slider] [Slider]

☾ [Slider]

DRA: Whole Image

Method: Standard Deviation

Invert Stereo

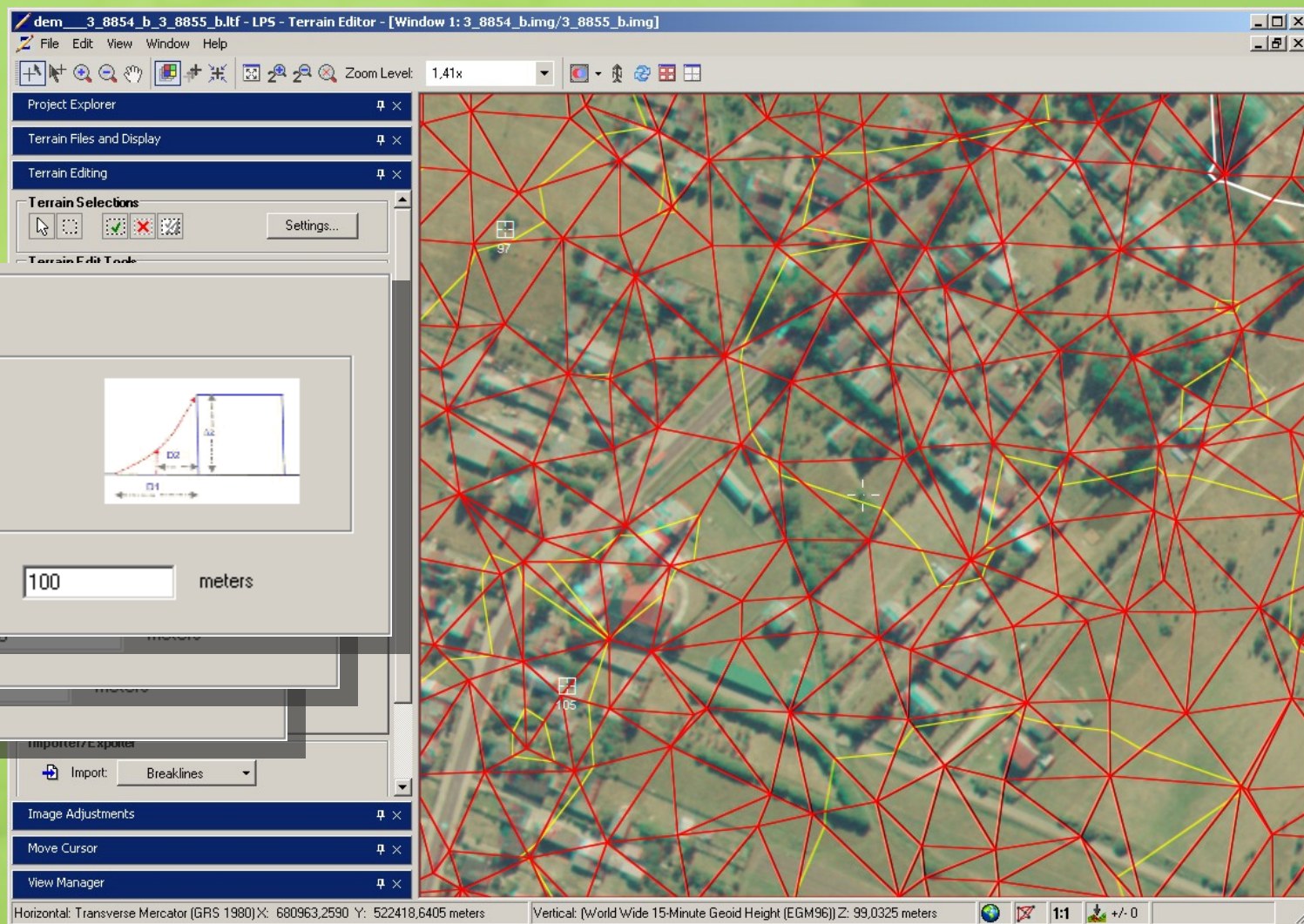
Point #	Point ID	Description	Type	Usage	Active	X Reference	Y Reference	Z Reference
692	692		Full	Control	✓	682037.155	522040.794	10
693	693		Full	Control	✓	678022.855	521448.494	9
694	694		Full	Control	✓	682753.655	519252.494	10
695	695		Full	Control	✓	686592.655	519203.994	10
696	696		Full	Control	✓	685147.655	522768.894	10

Image #	Image Name	Active	X File	Y File
1	3_8854_b.img	✓	5487.875	1337.375
2	3_8855_b.img	✓	2272.625	1223.625
3	4_7216_b.img	✓	6224.125	818.874
4	4_7217_b.img	✓	3141.375	969.625

Move Both Horizontal: none Vertical: lochow.img

ERDAS LPS 2010.1 WN

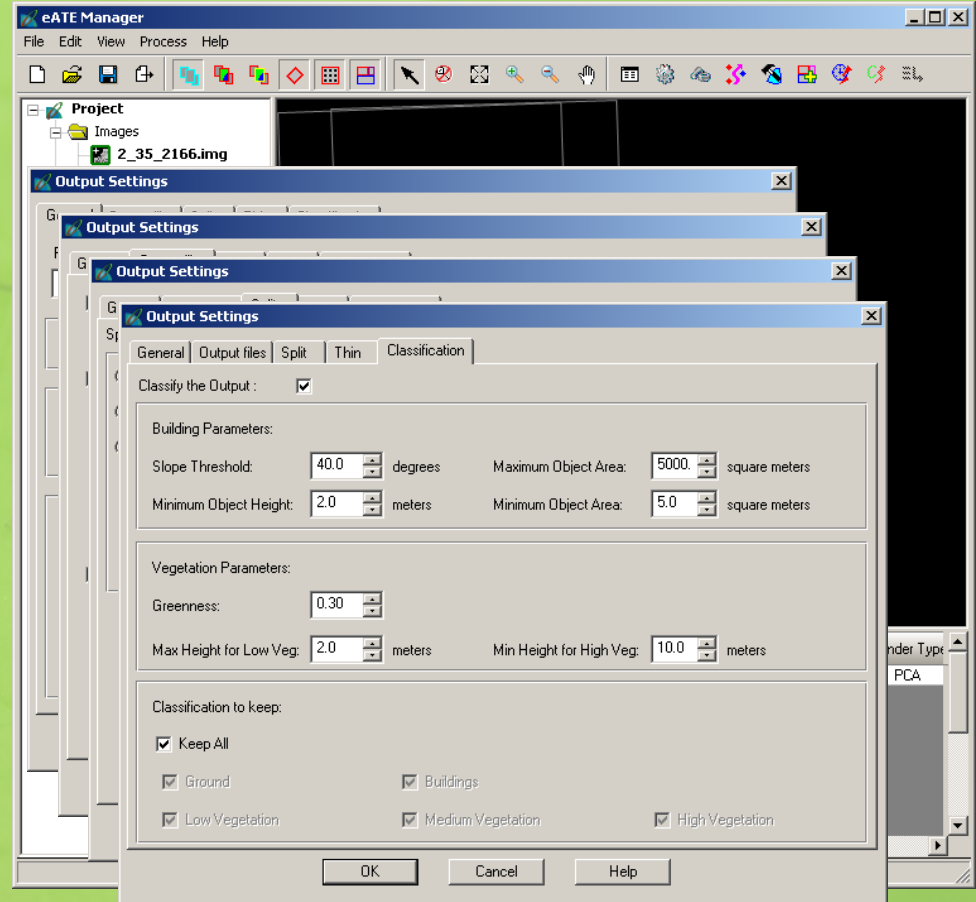
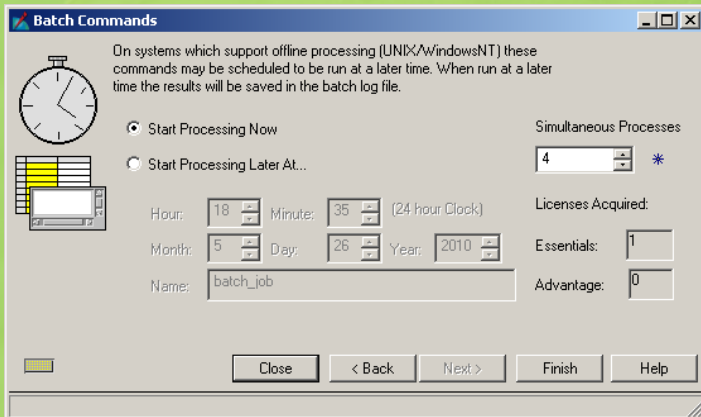
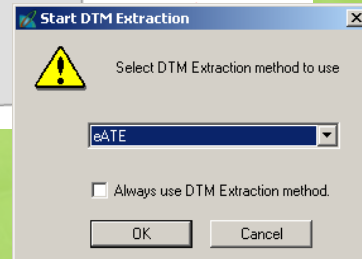
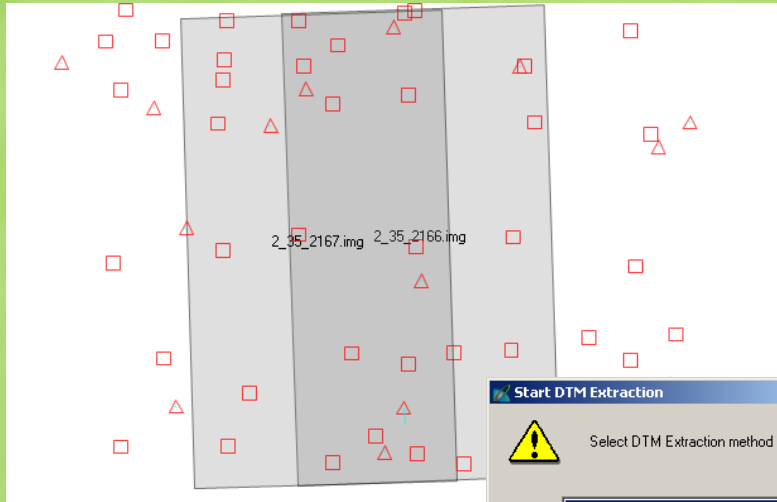
- ✗ Terrain Editor –wyglądanie przy edycji wskazanego obszaru



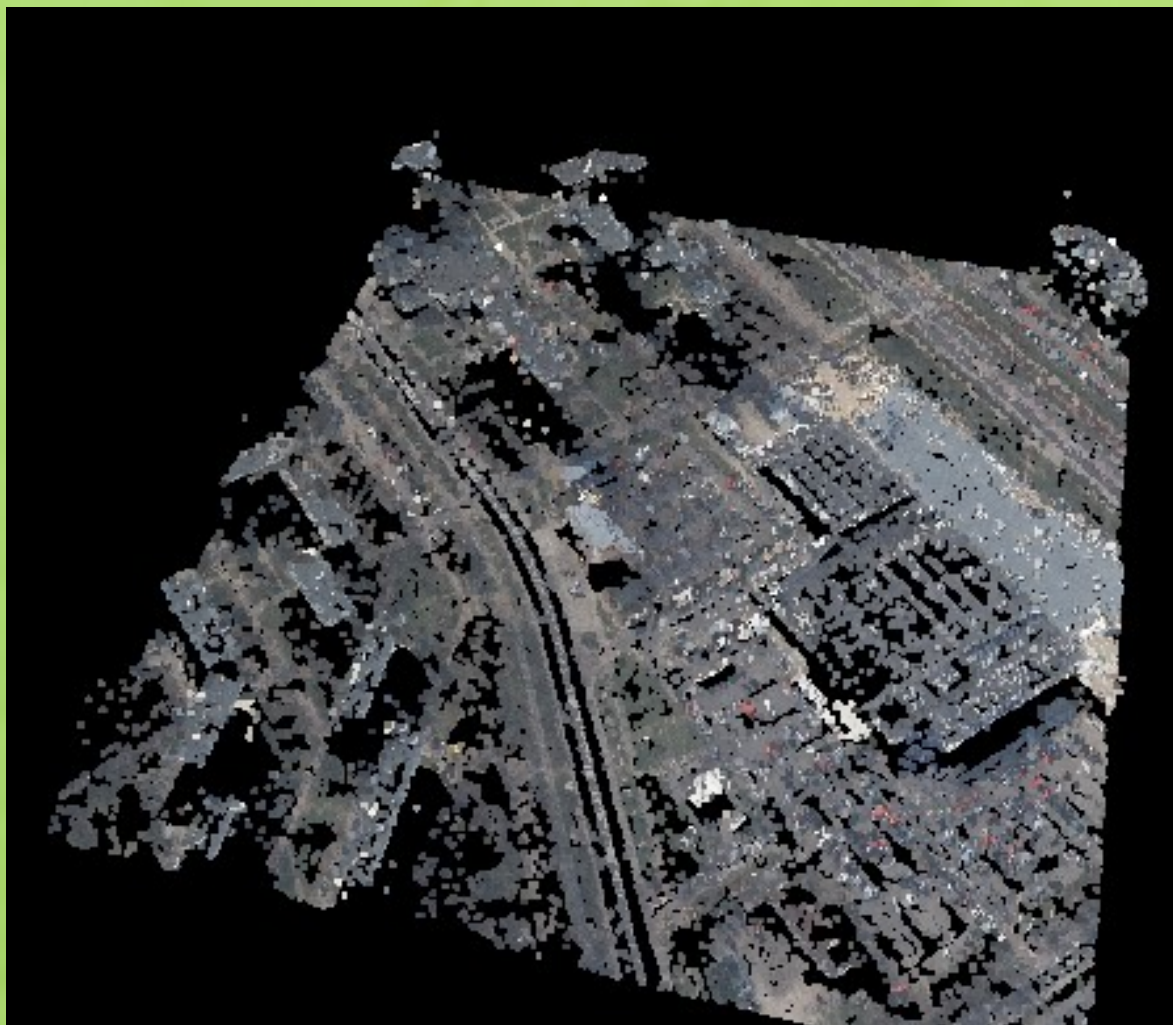
LPS EATE

- ✗ zautomatyzowane generowanie numerycznych modeli wysokości w oparciu o stereoskopowe zobrazowania (2+)satelitarne i zdjęcia lotnicze
- ✗ Wynikiem może być sklasyfikowana chmura punktów w formacie LAS
- ✗ W eATE przewidziano możliwość przetwarzania w klastrze komputerów (jeden komputer zarządza procesami dystrubowanymi na pozostałych komputerach dostępnych w sieci instytucji (Condor Processing)

LPS EATE



LPS EATE





Dziękuję za uwagę!