PřF: Z8113 Kartografické modelování (jaro 2016)

1 – ZÁKLADNÍ NÁSTROJE RASTR

I. Data management tools – raster toolset
- I.A Raster proccesing
- I.B Raster Properties

II. Spatial analyst
- II.A Generalization
- II.B Math

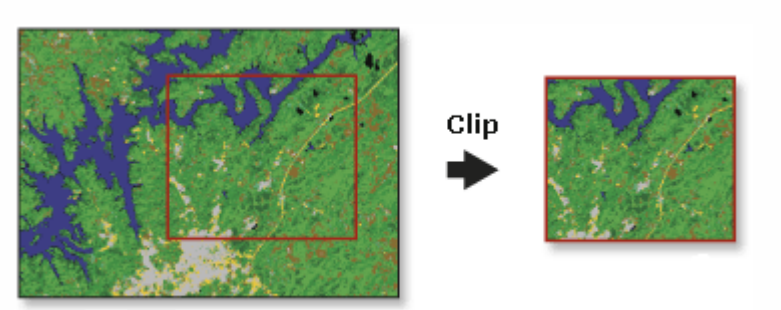
I. Data Management Tools – Raster Toolset

Toolset	Description
Mosaic Dataset	Allows you to create and edit mosaic datasets.
Raster Catalog	Allows you to work with raster catalogs. These tools allow you to copy, create, edit, and delete raster catalogs and their items.
Raster Dataset	Allows you to create and mosaic raster datasets.
Raster Processing	Allows you to perform tasks to get your raster data ready for use.
Raster Properties	Provides tools to create, view, or edit the raster dataset properties.

I.A Raster Proccesing

- Clip
- Composite Bands
- Resample – změna prostorového rozlíšení pomocí pravidel
- Split Raster – rozdělí rastr na části (tiles)
- ...

Clip RASTER PROCCESING



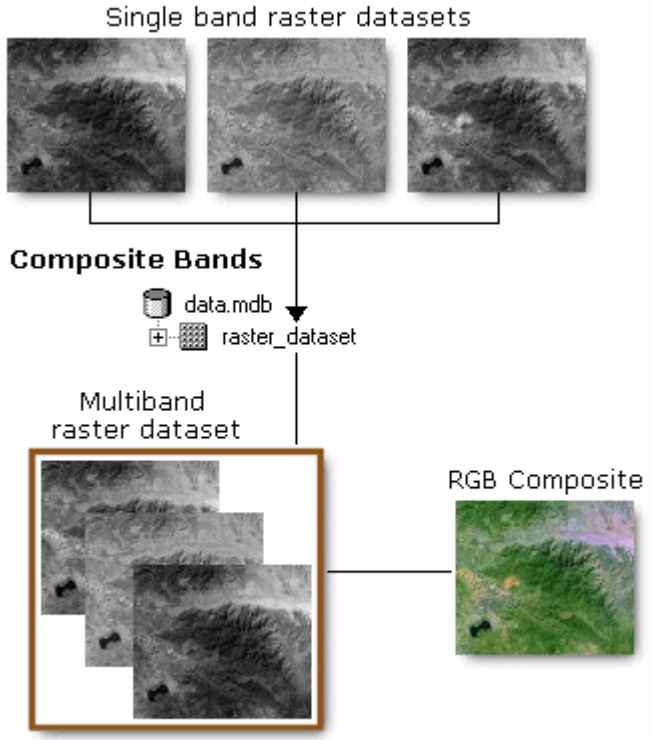
Vstup

- Raster
- Bounding box, raster, vektor

Composite Bands

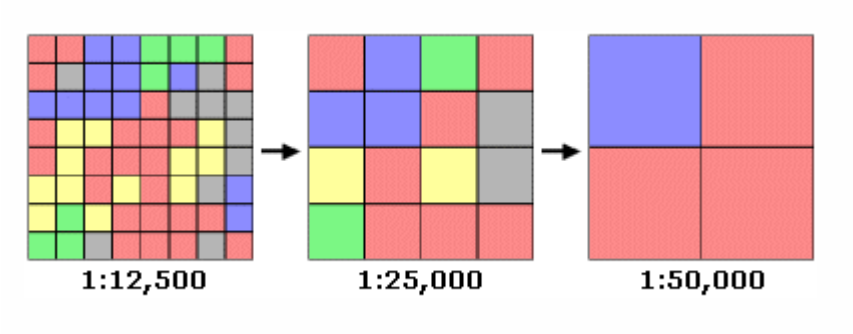
RASTER PROCCESING

Pro kombinování spektrálních pásem

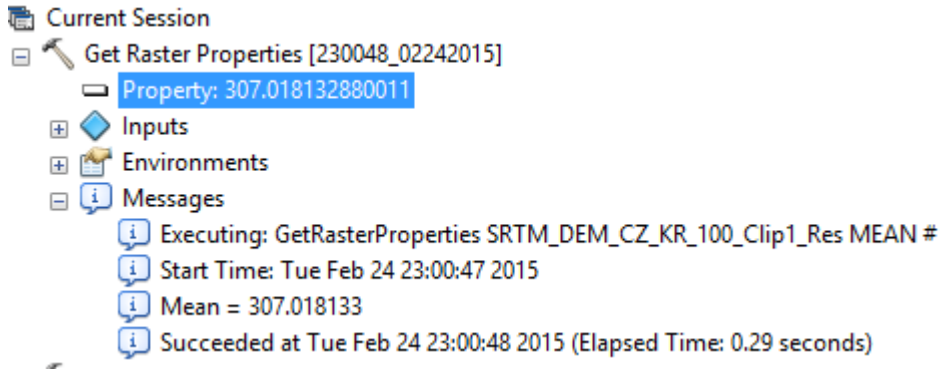


I.B Raster Properties

- Add Colormap
- Build Pyramids



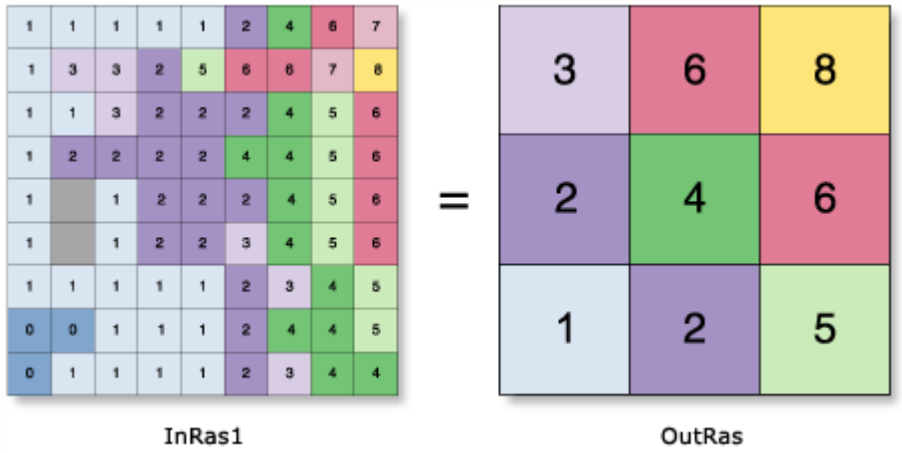
- Calculate Statistics
- Get Cell Value
- Get Raster properties
- ...



II.A Spatial analyst Toolbox – Generalize

- Aggregate
- Boundary Clean
- Expand
- Majority Filter – podobné Boundary Clean
- Region Group - regionalizace
- Thin – linie -> raster
- ...

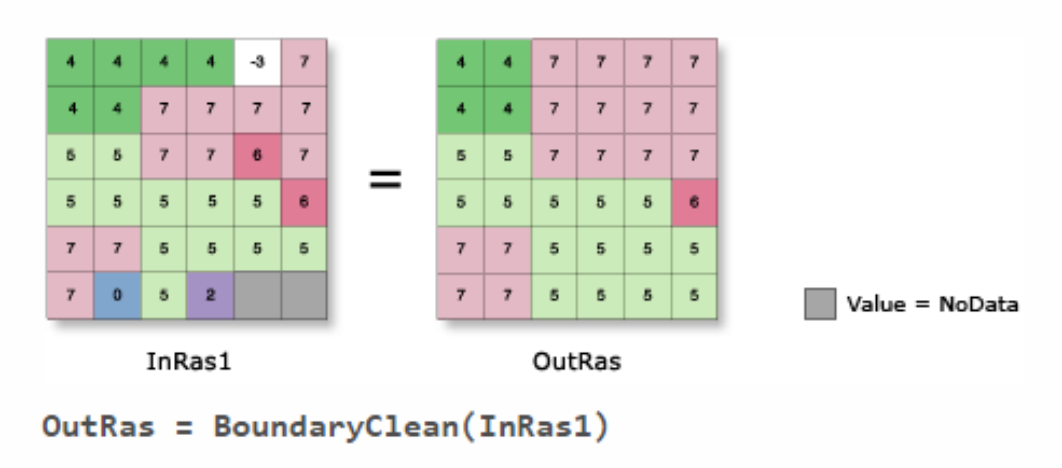
Aggregate GENERALIZE



Mění rozlišení rastru podle zadaných pravidel

- Parametr aggregation_type :
  - SUM, MAXIMUM, MEAN, MEDIAN, MINIMUM
- Parametr cell_factor – změna rozlišení

Boundary Clean GENERALIZE



Pro potřeby zhlazení

II.B Spatial analyst Toolbox – Math Toolset

Matematické operace nad rastry

Dělení

- General – základní aritmetické operace TIMES, MINUS, ROUND DOWN,...
- Logical – „Booleanovská“ logika EQUAL TO, IS NULL, DIFF, OVER, ...
- Trigonometric
- Bitwise – na úrovni binární soustavy