

# 1 – ZÁKLADNÍ NÁSTROJE RASTR

## I. Data management tools – raster toolset

I.A Raster processing

I.B Raster Properties

## II. Spatial analyst

II.A Generalization

II.B Math

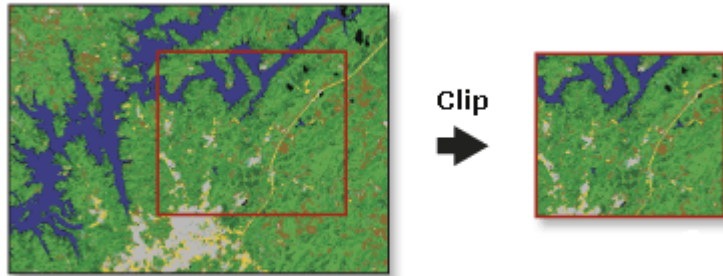
# I. Data Management Tools – Raster Toolset

Toolset	Description
Mosaic Dataset	Allows you to create and edit mosaic datasets.
Block Adjustment	Allows you to adjust the geographic alignment of mosaic dataset 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 Processing

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

# Clip RASTER PROCESING



## Vstup

- Raster
- Bounding box, raster, vektor

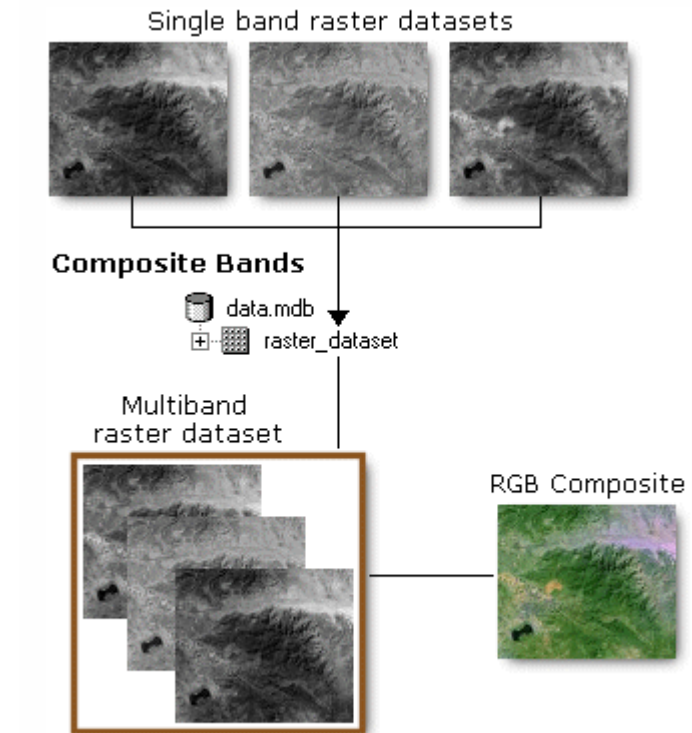
## Výstup

- Raster

# Composite Bands

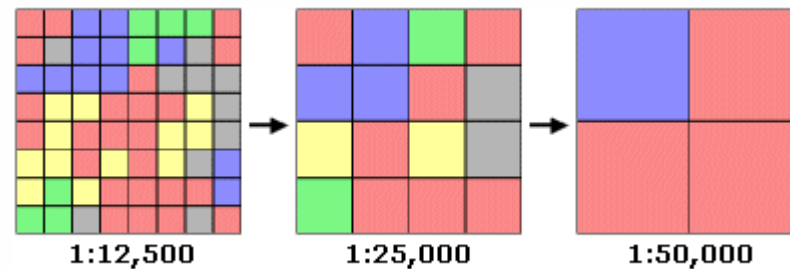
## RASTER PROCESING

Pro kombinování spektrálních pásem

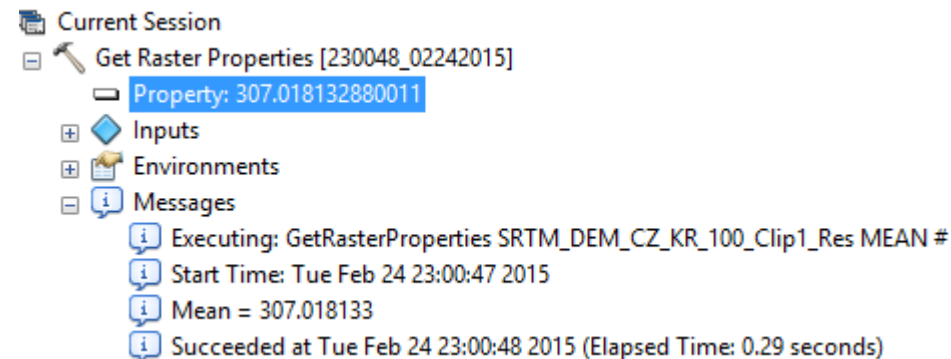


# I.B Raster Properties

- Add Colormap
- Build Pyramids



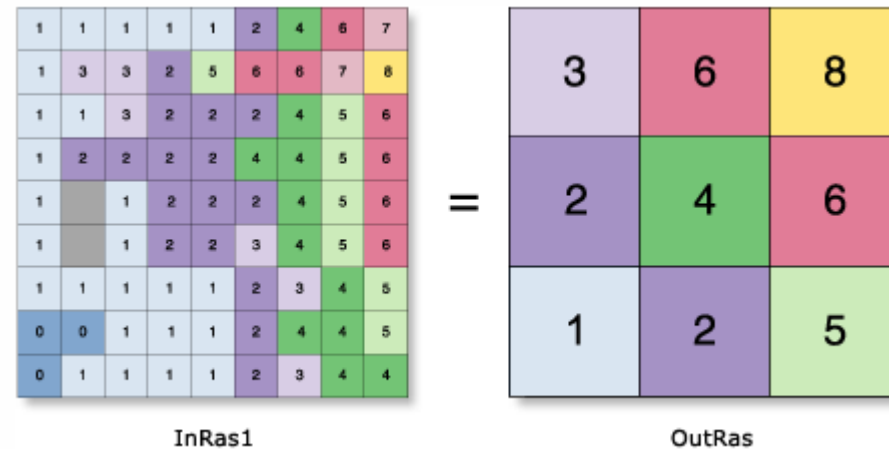
- Calculate Statistics
- Get Cell Value
- Get Raster properties
- ...



# II.A Spatial analyst Toolbox – Generalize

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

# Aggregate GENERALIZE

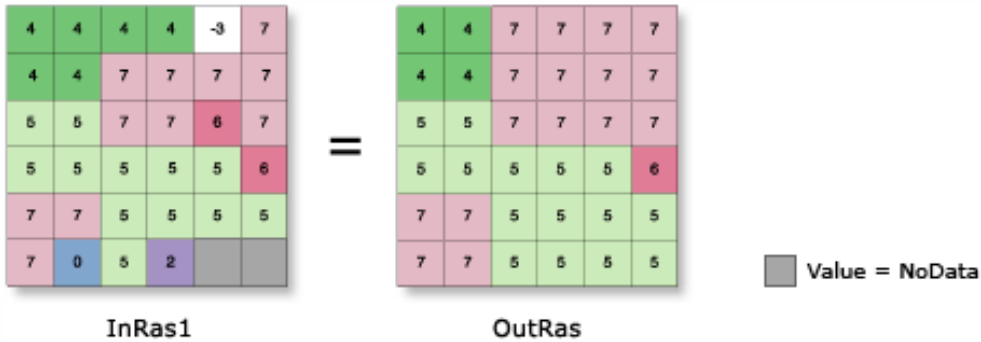


Mění rozlišení rastru podle zadaných pravidel

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



# Boundary Clean GENERALIZE



`OutRas = BoundaryClean(InRas1)`

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