

ER Mapper 7.0 adds new wizards to make your job easier.

Batch Processing Wizards

Batch processing allows you to 'queue' a number of time and resource intensive tasks and run these unattended. For example, you can queue a number of large image mosaics and complete these overnight. When you arrive the next morning, all the mosaics will be completed.



Import images in batch

- Import up to seven files from various locations, all files in a directory, or all files listed in a text file.
- Automatically transfer geocoding information from World files for TIFF or JPEG images (including rotation) to ER Mapper datasets, and specify datum and projection to assure correct georeferencing in ER Mapper.
- Batch uncompress ECW files to create ER Mapper Raster files.



Rectify images in batch

- Polynomial or triangulated rectifications, and rectify background (for triangulation).
- Supports all ER Mapper direct read formats, and saves as GeoTIFF, ECW or ERS format.

- Use rectification parameters for cell size, null value, and resampling already defined in each image (using the Geocoding Wizard), or override them to specify a common set to be used for all rectifications.



Reproject images in batch

- Reproject or datum shift between any datum/projection combination supported by ER Mapper.
- Define common reprojection parameters for all images, or have the wizard use parameters already defined for each image with the Geocoding Wizard.
- Specify output datum, map projection, null value, resampling and speed optimization (if defining common parameters).



Rotate or resample images in batch

- Select to rotate all images by a fixed amount, rotate all to the same orientation, or resample the pixel size only.
- Automatically rotate all images to point to the same orientation (north, for example).

regardless of the current orientation of each image.

- Resample to a different cell size while rotating if desired.



Orthorectify images in batch

- Orthorectifications using GCPs or Exterior Orientation.
- Use the parameters already defined for each input image, or specify different output resampling, cell size and/or null value to be used for all images.
- Append a text string to output filenames to differentiate them from input files of the same name, for example “ortho.”



Print to PC printer in batch

This is a batch interface to the “PC Printing” option on the ER Mapper “Print” dialog. This can be handy for batch printing map sheets overnight, printing multiple copies, or other purposes.

- Select up to seven algorithms from any locations to print, or print all algorithms in a directory.
- Print multiple copies of each algorithm.
- Select a “timeout” wait period between prints to let the printer actually print the image before ER Mapper starts to process the next one.



Export images in batch

- Export to TIFF/GeoTIFF, JPEG, ERS, ALG, ECW or BIL/HDR image formats.
- Export all images in a directory, all images listed in a text file, or all images in a mosaic algorithm.
- Resample the pixel size for exported images (does not apply to ALG exports).
- Create basic display algorithms for a set of images (for example, apply a 99% clip to all).



Create or edit ERS files in batch

Edit a directory of ER Mapper header (ERS) files in batch, or create ERS headers for image files with World or TAB metadata or GeoTIFF files.

- Edit the current datum, projection, null cell value or dataset rotation value for group of ERS files in batch.
- Change the Units setting to Meters or Feet, and change cell sizes in feet to the meter-equivalent values.
- Create ERS files containing correct georeferencing information for TIFF, JPEG or BMP images with World or TAB files without manual “one at a time” header editing.

Utility Wizards



Cut algorithm into tiles wizard

Subset (or “cut”) a geocoded algorithm into tiles of standard geographic sizes (1000 meters, 7.5 minutes, etc.), numbers of pixels (512 by 512, etc.), number of tiles (5 by 5, etc.) or using text file with tile names and extents. This can be handy for subsetting a large dataset or mosaic, or creating a series of equal size images for map sheets.

- Select tile sizes from standard menu lists, or enter your own custom X and Y sizes or number of tiles.
- Export image tiles to TIFF/GeoTIFF, JPEG, ERS, ALG, ECW or BIL/HDR image formats.
- Use a text file with names and extents to help tile irregular areas or when specific filenames are required.
- Specify adjacent tiles to adjoin exactly, or overlap by a fixed amount (for example 50 meters).
- Supports “on-the-fly” reprojected algorithms (except to/from GEODETIC) to export tiles in a different projection.



- Build an index map of all image files loaded into a specific layer type (Pseudo, Red, Intensity, etc.) in the algorithm.
- Assign a single color to all index boxes and text, or cycle through a set of rainbow colors (useful to see extents of highly overlapping images).
- Set index box line thickness, and filename font, size and position (upper-left corner or centered).



Create Rotated Clip Regions wizard

Create custom clip regions for a set of images in batch that mask out a specific percentage of the outer image area.



Create color table wizard

- Select up to seven colors graphically using the standard ER Mapper color chooser buttons.
- Specify either smooth interpolation between the selected colors, or create “steps” with blocks of color.
- Create several color tables in one run.



Run algorithm slideshow wizard

Display all algorithms in a directory one after another, so you can create your own ER Mapper “slideshows.”

- Automatic (unattended) or manual control.
- Number of cycles to run, time between images and image window size
- Start, move ahead or move back one slide (algorithm) for manual control.

ColorEnhance Wizards



Colordrape wizard

Create several different types of colordrape images, or images that combine color with shaded relief. This wizard gives you fast access to many different combinations and options. Typical input data types includes DEMs, bathymetry, and geophysical data.

- Create images using Standard, Softened, Wet Look, Shiny Look or Metallic Look colordrape techniques.
- Select any ER Mapper color table, or various sets of colors for Wet and Shiny looks.
- Select predefined shade elevations or azimuths, or define your own custom shading.
- Invert color or shaded image data values if desired, or median filter shaded data to reduce noise.
- Process a subset of the image area, and specify a wide variety of contrast enhancements.
- Fine tune all enhancements and options, and immediately see the results.

Color enhancement wizard

Perform several different types of color space enhancements on an RGB image. These enhancements are designed to make the image more pleasing to the eye or enhance the overall information content to aid interpretation.

- Use Hue Saturation Intensity (HSI), Brovey (Chromaticity) Transform, Direct Decorrelation Stretch (DDS), Intensity Conservation DDS, or Hybrid Contrast Stretch enhancement.

Resolution merge wizard

Merge or “fuse” an RGB image with a higher resolution panchromatic image to create a hybrid image with the RGB color and panchromatic spatial resolution. Typical examples are merging Landsat TM 30-meter data with SPOT Panchromatic 10-meter data or SAR imagery.

- Use Red Green Blue Intensity (RGBI), Hue Saturation Intensity (HSI), Brovey Transform, Smooth Filter Intensity Modulation (SFIM), High Pass Filter (HPF) Additive, or Transparency Merge fusion techniques.
- RGBI and HSI techniques include histogram matching Pan intensity to RGB intensity, averaging Pan and an infrared band for intensity, and method to convert RGB to Intensity.
- Process a subset of the image area, and specify a wide variety of contrast enhancements.

SFIM pan sharpening wizard

Use this wizard to pan sharpen a multi-spectral image with a higher resolution panchromatic image. Similar to ‘resolution merge wizard’ but uses different processing logic.

Natural color wizard

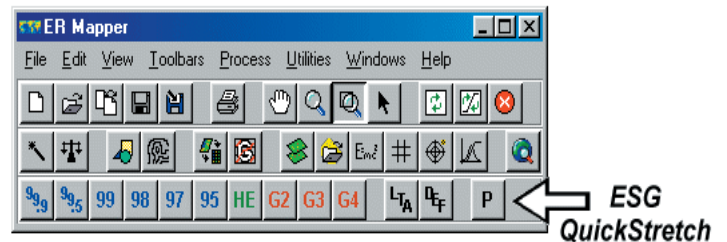
Convert typical “false color infrared” images into simulated natural color images, so vegetation appears in green instead of red. Typical data types for this transformation include SPOT XS, Landsat MSS, color infrared (CIR) airphotos, or any data that does not contain a visible blue wavelength band.

- Use the Simple Weighted Average (WTA) technique to generate natural color, or enhance WTA colors using Direct

Decorrelation Stretch (DDS) or Brovey Transform techniques.

- Generate a vegetation (NDVI) mask to apply the natural color transformation only to vegetated areas, or to modify the transformation effects.
- Process a subset of the image area, and specify a wide variety of contrast enhancements.

QuickStretch Wizards



The QuickStretch Wizards let you apply a variety of contrast enhancements to an image or mosaic of images. This is a fast way to instantly try various enhancements without having to cycle through the transforms and apply them to each layer.

All active Red, Green, Blue, Pseudo or Intensity layers in the current algorithm surface are affected.

The wizards do not affect Hue, Saturation, Height, Classification or Class Display layers.

They also do not affect Intensity layers when sun shading is turned on. If the surface is a mosaic of images, the enhancement is applied to all images in the mosaic. Only the post-formula transforms are affected (not pre-formula).

See the separate “What’s New in ER Mapper 7.0” brochure for more new features.

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