

Converting *.ers and *.ecw orthophotos into GeoTiffs

We have received a number of requests to read orthophotos (geographically corrected aerial images) in the ERS/ECW format into Farm Site, Site Pro and Site Mate.

Background:

ERS : This is an ER Mapper dataset file

ECW: This is ER Mapper compressed image

These file formats are specific to a program called ER Mapper, but in a similar fashion to ESRI Shape Files have been adopted by the wider industry as a standard.

ER Mapper is a professional geospatial image processing application. It is designed to analyse the data contained within the image, rather than just display it (as Farm Works does)

Opening ERS/ECW files

To open/edit these files requires specialist imaging software, however to simply view these ER Mapper files there is a free viewer program.

ER Viewer can be downloaded by going to <http://www.ermapper.com> and following the links from "products & downloads" to ER Viewer.

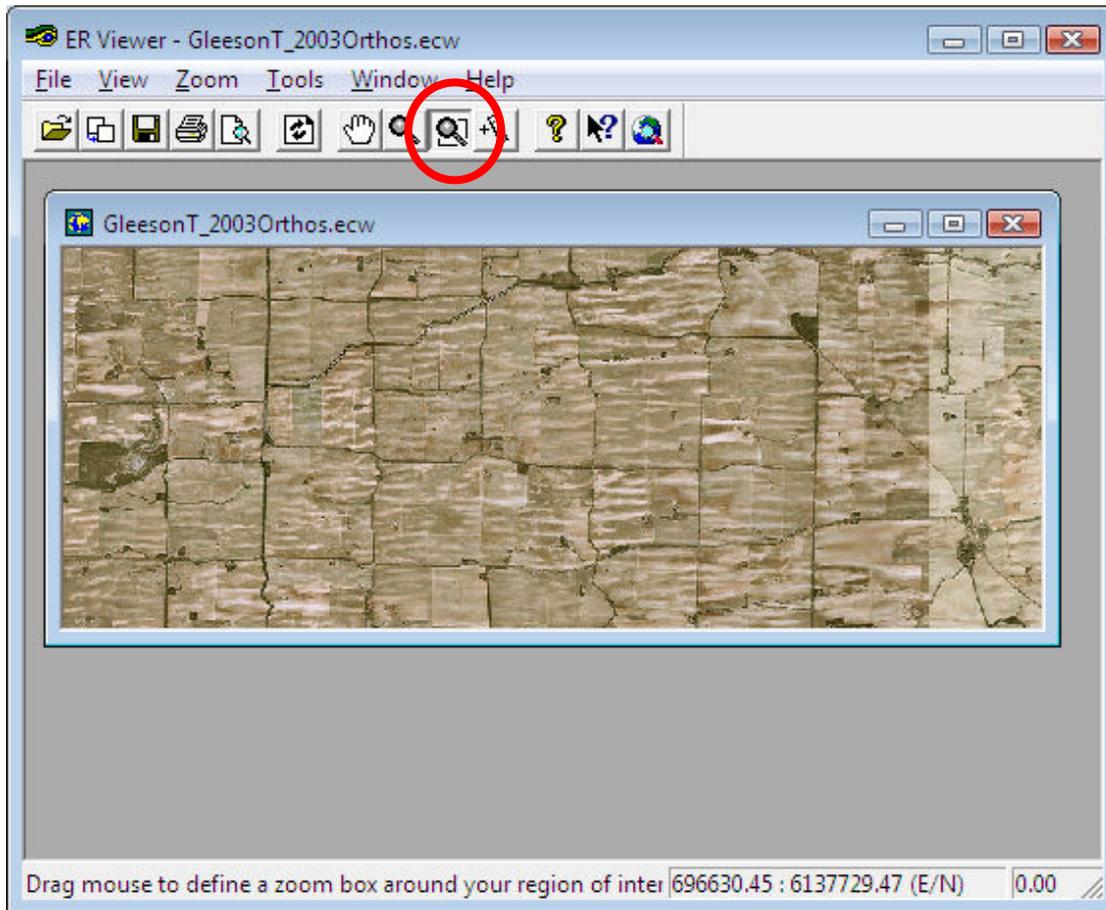
ER Viewer can then be used to save the image (or a small part of a much larger image) as a GeoTiff.

GeoTiff is a much more common file format, and can be opened in just about any windows software (eg inserted into an email in Outlook).

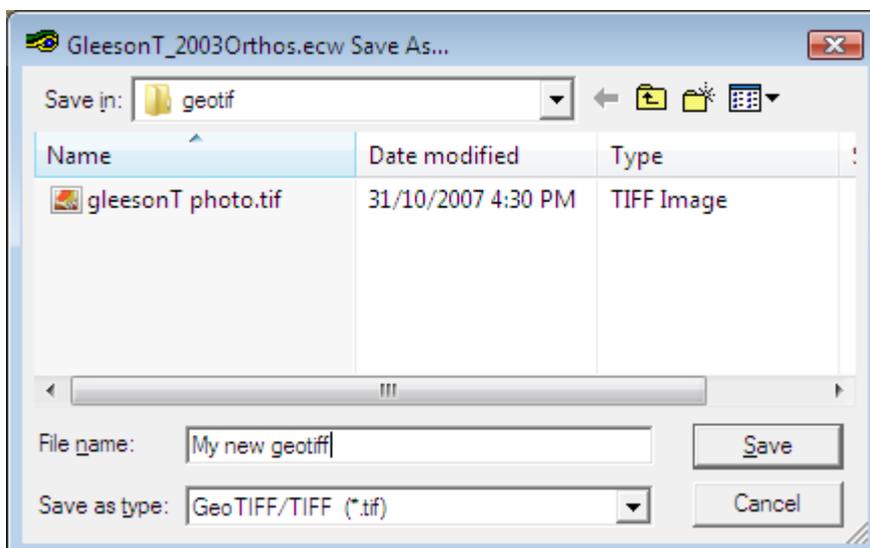
The disadvantage of a GeoTiff is that the image is much larger. Taking a 200MB ERS/ECW and saving it as a GeoTiff resulted in an estimated 12GB file!

Exporting part of an ERS/ECW as a GeoTiff

1. Download, install and run ER Viewer from www.ermapper.com It will look like this:

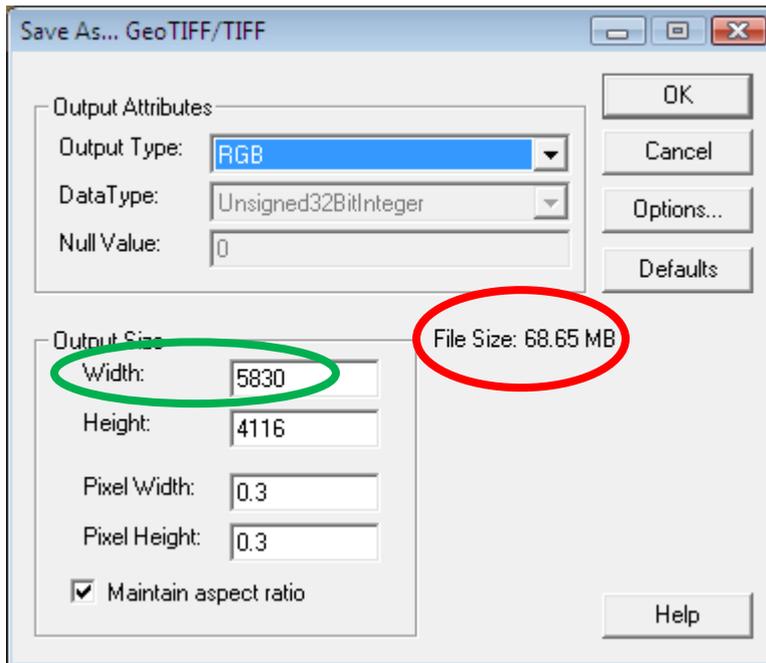


2. Click **File** then **Open** and browse to, then open, your ECW file
3. Using the zoom tool (circled in red in the image above) zoom in to the area of the photo you are interested in.
4. Click **File** then **Save As...** this box will appear:



5. In this box, choose a location for your file, give it a name, then click **Save**

6. This box will appear with the details for the GeoTiff:



7. Note the file size (indicated in the red oval above)

8. If this file is much bigger than 100MB you might run into problems (this is a very rough guide, the speed of your PC and amount of RAM you have will make a big difference here)

9. To make this file smaller either:

a. cancel, go back to ER Viewer and save a smaller section of the image (maybe think about 1 field at a time if using Site Mate on a PocketPC

b. adjust the width (in the green oval above) to be a smaller number. Note: the height will adjust itself to keep the image in the same proportions providing you leave the tick in the box next to **Maintain aspect ratio**.

10. You now have a standard GeoTiff image.

11. If you have problems getting Farm Works Calibrate to recognise the geographic coordinates in your GeoTiff, see the document "Adding a world file to a GeoTiff"