Michigan statewide ECW mosaic to benefit GIS users

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The Michigan State University (MSU), Center for Remote Sensing and GIS (CRS & GIS) is currently mosaicing, color balancing and compressing, a statewide set of 5,000 USGS Digital Orthophoto Quarter Quad (DOQQ) images of Michigan, approximately 800GB in size, using ER Mapper.

The MSU Center staff undertook a pilot project that defined the protocols to mosaic, color balance and compress a 9.2GB DOQQ mosaic of Ingham Country, MI, to just 394MB using a 10:1 target compression ratio. Following the successful pilot project, MSU has created DOQQ mosaics for 21 other counties. A seamless statewide DOQQ mosaic will be constructed this year using image mosaics for all 83 counties in Michigan. Previous statewide mosaics completed by MSU include Landsat imagery and USGS topographic maps.

ER Mapper’s compression format Enhanced Compressed Wavelet (ECW), is an essential component to the success of the project as it allows the MSU CRS & GIS to compress their data to manageable sizes. The ECW compression technology is fast becoming the spatial industry standard for wavelet-based imagery compression. ECW provides up to 100:1 multi-band compression at speeds up to 50% faster than its closest competitor. The ECW format also provides viewing that is 300% faster than any other wavelet-based compression format, thus adding the ability to efficiently deal with gigabyte sized image files.

JoAnn Render from the MSU CRS & GIS said: “ER Mapper has made it possible for us to create seamless statewide image mosaics that can be used as backdrops in our standalone and Web applications. The process is fast and the quality and performance of the mosaics have been impressive.”

About Earth Resource Mapping

Earth Resource Mapping is the world's leading image handling and integrated mapping software company. Clients in more than 120 countries use ER Mapper to prepare imagery, ECW to compress and use imagery, and the Image Web Server to serve imagery over the Internet. Visit ER Mapper at www.ermapper.com or the Image Web Server web site at www.EarthEtc.com

About Michigan State University Center for Remote Sensing and GIS

The Center for Remote Sensing and Geographic Information Science is a unit in the College of Social Sciences at Michigan State University. The Center conducts research, contract work, and
outreach training to provide state-of-the-art remote sensing, GPS, GIS and cartographic services to
the MSU campus, the State of Michigan and other agencies. For more information, visit
http://iws.crs.msu.edu/viewer/