University Applications Using a New Tool to Mosaic and Georeference Imagery: "New Tool = DIME Software"

Dale R. JOHNSON, USA

Key words: GIS, Image Processing, Mosaic, Georeference.

ABSTRACT

With the introduction of new imagery from satellites, digital cameras and the increased use of scanned film aerial photography, there is a great need for tools that quickly and cost effectively mosaic and georeference imagery to use in a GIS or Image Processing Systems at universities worldwide. Traditional methods for creating suitable input imagery typically require students to either manage numerous individual image files (which can be cumbersome) or to acquire expensive orthorectification services. However, new technology and production processes, such as those found in DIME Software, have recently been developed to allow users to preprocess their imagery so it can easily become a useful addition to their GIS.

This paper will discuss innovative "image matching" techniques found in the new Georeferencing and Mosaicking Software called DIME and will highlight how DIME can be used in the university environment as an alternative to traditional orthorectification processes. Included will be an examination of how DIME georeferencing and mosaicking is being used in a variety of university research applications to solve specific project problems in both commercial and governmental sectors.

CONTACT

Dale R. Johnson Positive Systems, Inc. 223 Baker Avenue Whitefish, MT 59937 USA Tel. + 1 406 862 7745 Fax + 1 406 862 7759 E-mail: djohnson@possys.com Web Site: www.possys.com