

Cloud Cover Assessment of Quickbird Imagery Using NEURANUS Software

Z. Bergen
Digital Globe, USA

The success of Cloud Cover Assessment (CCA) of satellite imagery is highly dependent on band coverage. We present a constrained problem where existing archive imagery requires assessment in a production environment and band coverage is limited. We utilize NEURANUS software to build an artificial neural net (ANN) for creating classified images from Quickbird imagery. The advantage of ANNs for production work is that a confidence measure is inherent in the process, and low confidence images may be processed according to existing semi-automated techniques. The resulting thematic layers are translated into polygon coverages in an Oracle Spatial database. In addition, we present a current approach to cloud assessment resulting from the low confidence cases of the ANN.