16.047 GeoEye-1 Geolocation Accuracy and Band Co-Registration Analysis

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The National Geospatial-Intelligence Agency (NGA) Image Quality and Utility (NIQU) division evaluates civil and commercial remote sensing systems for the Department of Defense and Intelligence Community. NIQU performed geolocation accuracy and band co-registration assessments of GeoEye-1. Images evaluated came from the panchromatic and 4-band multispectral sensor. Tests quantified sensor absolute geolocation accuracy, error propagation performance, band co-registration, the co-registration between sensors, and the performance of replacement geometry model geolocation compared to using the physical sensor model. (Approved for Public Release, 16-083)