

Applanix Introduces DSS RapidOrtho System



Applanix (Canada) has introduced its new Digital Sensor System (DSS) RapidOrtho system, and with it, new rapid orthorectification processing options designed to better match specific emergency airborne-collected data requirements.

The DSS RapidOrtho supports the rapid capture, processing, and delivery of airborne geospatial imagery to meet specific user demands, from disaster first-responders to engineers working on emergency infrastructure recovery operations. The Applanix DSS RapidOrtho is capable of delivering directly georeferenced orthorectified imagery products for exploitation in minutes instead of days without collecting ground control points.

The DSS RapidOrtho system showcases an orthorectification product that enables users to design a workflow to match specific data delivery needs. Data delivery processing options include: RapidOrtho, Precision RapidOrtho, and High Precision RapidOrtho options. The RapidOrtho option is designed to help users who require orthos made in as little time as possible, using existing Digital Elevation Models (DEMs) in combination with a real-time navigation solution from the Applanix DSS Position and Orientation System (POS). The system is capable of individual orthophoto generation within 20 seconds and individual orthomosaic tile generation within 8 minutes with accuracies typically averaging less than 1 metre Root Mean Square (RMS). The Precision RapidOrtho option functions in similar fashion but involves the post-processing of GPS/Inertial data collected during the flight along with GPS base station data (if available). This results in an improved accuracy typically to better than 2 times the Ground Sample Distance (GSD) of the ortho product. The High Precision RapidOrtho option generates orthos and orthomosaics when no DEM exists; it also requires post-processing but in this case a DEM is auto-extracted by using stereo imagery. Accuracy is then typically improved to a value of better than 1.2 times the GSD.

At the heart of RapidOrtho system technology is the Applanix DSS digital airborne system, a directly georeferenced mapping-quality platform. The DSS Rapid Ortho system is expected to be available in April 2007 through the Applanix sales network.

Source: [Applanix](#)

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