AIR-II: A GEOMETRIC CORRECTION SOFTWARE PACKAGE FOR AIRBORNE IMAGE RECTIFICATION AND REGISTRATION

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ABSTRACT

The AIR-II System is an integrated turn-key hardware/software system for geometric correction of airborne imagery and for transcription of airborne high density tapes to standard format computer compatible tapes. The primary processing function of the AIR-II is the utilisation of Inertial Navigation System data to compute geocoded positions for all input pixels and subsequently to resample the input pixels to a user selectable output (georeferenced) grid. Products are available with and without the utilisation of ground control points; in the latter case the high frequency INS information is exploited to produce a product which is geometrically correct but mispositioned absolutely due to inherent drift and offset errors in the INS data.

Examples of AIR-II image products will be presented along with a statistical analysis of the output image quality and registration accuracy.