عنوان مقاله:

GEOMETRIC EVALUATION OF 2D/3D GENERIC SENSOR MODELS FOR MATHEMATICAL MODELING OF IKONOS IMAGERIES

محل انتشار:

همایش ژئوماتیک 82 (سال: 1382)

تعداد صفحات اصل مقاله: 11

نویسندگان:

Farhad Samadzadegan - *Dept. of Surveying and Geomcatics Engineering, Faculty of Engineering, University of Tehran.*

.Morteza Haeri - *Dept. of Surveying and Geomatics Engineering, Faculty of Engineering, University of Tehran*

*(*Ahmad Abootalebi - *National Cartographic Center (NCC*

خلاصه مقاله:

The current and upcoming high resolution satellite imageries are expected to have a significant impact on the topographic mapping applications of primary data acquisition. However, successful exploitation of the high accuracy potential of these imageries depends on the ability of the mathematical models for the sensor modelling. Nevertheless, most of high resolution satellite vendors do not intend to present their sensor ephemeris data. There is consequently a need for a range of alternative practical approaches for extracting accurate terrain information from these imageries. Although several investigations have already begun in this area, still the subject demands more comprehensive tests for the determination of the geometric suitability of such high resolution images for 2D/3D large scale topographic map production or revisions. In this study the geometric potential of the panchromatic and pansharpen IKONOS images have been thoroughly examined in a test site in Iran. The test is conducted based on a comprehensive evaluation of the ability of the several different mathematical models, e.g. Rational functions, Direct Linear Transformation (DLT), 2D Projective, Polynomials, 3D Affine and Multiquadric approximate models in their different situations.

کلمات کلیدی: