

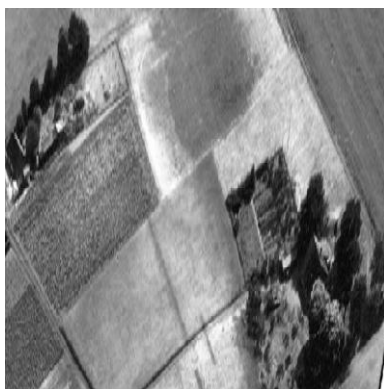
Rolta Aerial Reconnaissance Photo Interpretation and Analysis (RAIRS)

Version 5.0

Rolta Aerial Reconnaissance Photo Interpretation and Analysis (RAIRS) is designed to remove the distortions that creep in the oblique aerial photographs, and transforms them to NADIR images. This process improves their interpretability significantly. Aerial reconnaissance photos taken from an oblique camera mounted in an aircrafts are available with all IITs as 5” Roll film. These oblique photos have high geometric distortion and these need to be fully corrected so that these images can be visualised & analysed. Cross-border oblique aerial photographs derive significant benefit from this product.

RAIRS includes interactive geo-referencing tool for easy and accurate selection of control points to minimize the error in processed image. Information from the Long Range Oblique images can be extracted once they are converted to Nadir image and they can be easily geo-referenced for creation of detailed maps of the area.

The software uses advanced Projective transformations and complex matrix calculations to redistribute the pixels in the corrected images. As a result the corrected images are highly accurate when compared to conventional methods for geometric transformation.



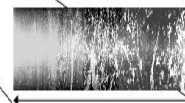
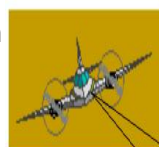
Original Image – Oblique View



Corrected Image - Nadir

Features

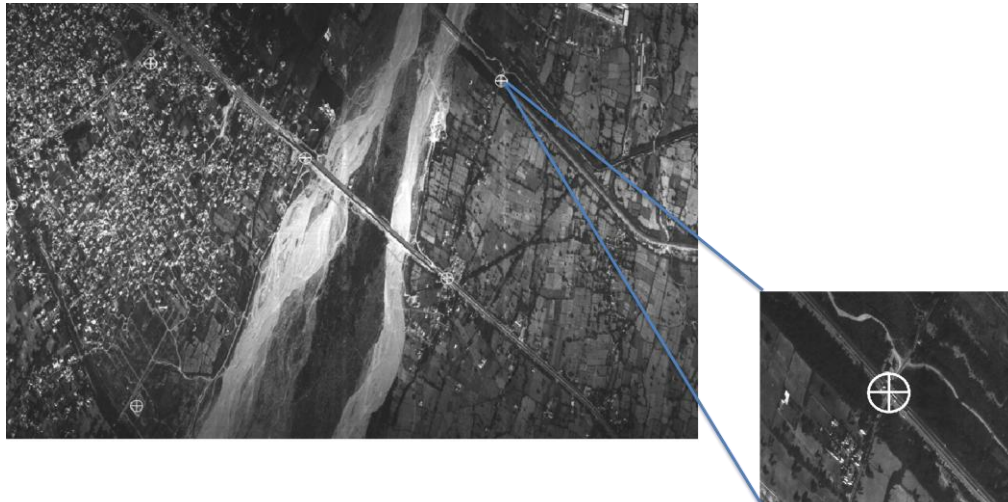
- Tool to identify the flight path based on the oblique image information's.
- Supports up to 16 bit oblique images.
- Improved to Support large size data sets.
- Facility to flip and rotate the image interactively.
- Easy interface to collect ground control points with all the facility.
- Advanced Projective transformation and complex matrices algebra to redistribute the pixels correcting the camera parameters as per scale.



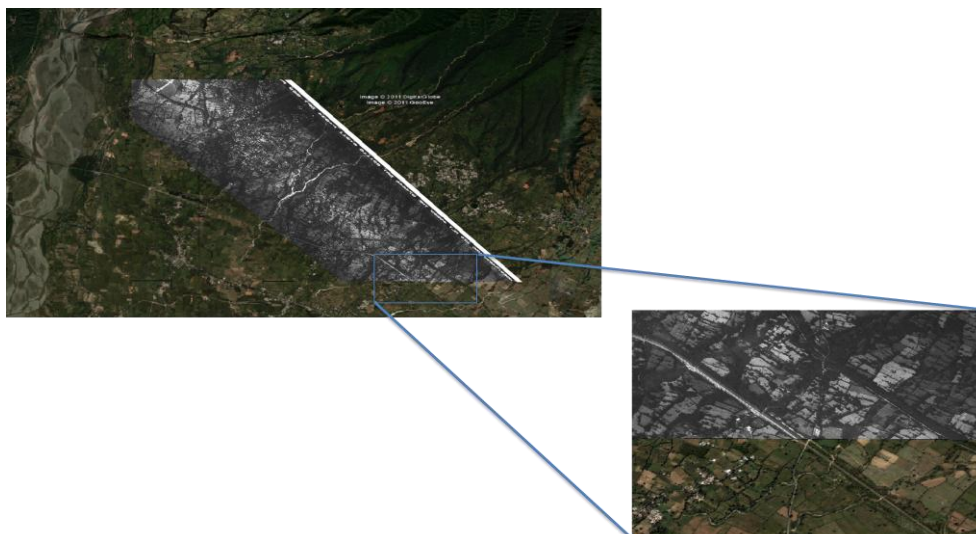
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- Interactive geo-referencing and different re-sampling techniques for Geometric Corrections.



- Improved workflow to achieve accurate geo-referenced Nadir Images as output in GeoTiff format.
- Aerial Oblique photograph is transformed to rectified image in which the image is to the scale and it can be used as a map.



- Facilitates extraction of information from oblique photographs