

PRATICAL TRAINING

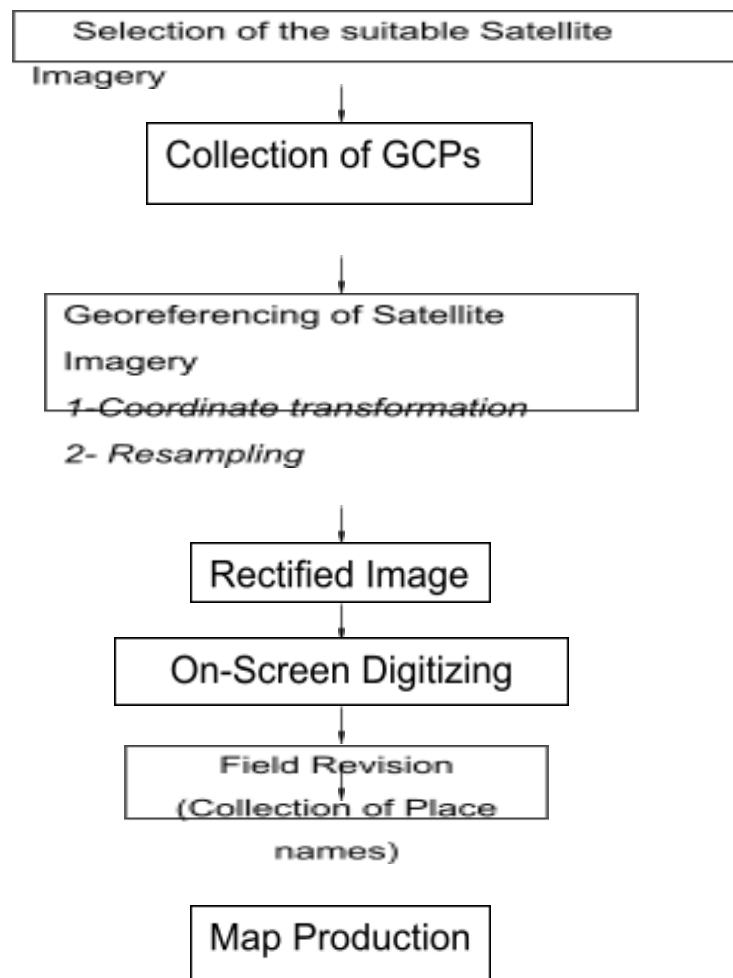


Figure (1): Steps of

Maps production from

HRSI.

Georeferencing of the satellite image

The process involved georeferencing of the image to the Universal Transverse Mercator projection (UTM) using GPS coordinates in ERDAS IMAGINE software, where the projection information is:

Project type	
Reference Ellipsoid	
Zone Number	

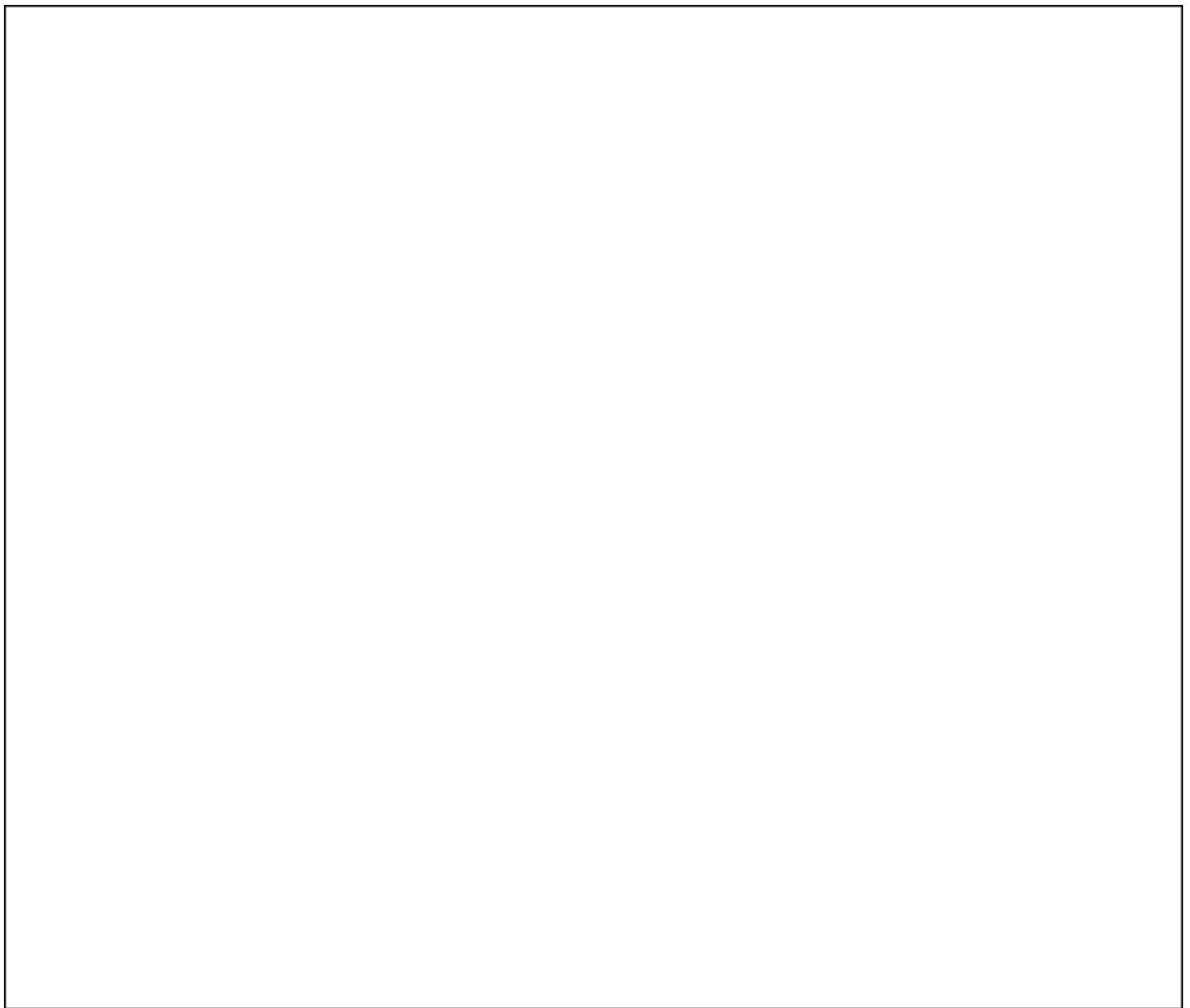


Figure (2): Image Controls and Check points for Image Rectification

Table (1): Accuracy of image georeferencing Using GPS Coordinates for Control Points.

Pt.	X image (Pixel)	Y image (Pixel)	E GPS (Meter)	N GPS (Meter)	Z (Meter)	ΔE Meter	ΔN Meter	Resul. (Meter)
GCP 1								
GCP 2								
GCP 3								
GCP 4								
GCP 5								
GCP 6								
GCP 7								
GCP 8								
GCP 9								
GCP10								

The Root Mean Square (RMS) error from the satellite modeling were m and m in E and N respectively and the total RMS error were m.

Table (2): Accuracy of image georeferencing Using GPS Coordinates for Checkpoints.

Pt.	X image (Pixel)	Y image (Pixel)	E GPS (Meter)	N GPS (Meter)	Z (Meter)	ΔE Meter	ΔN Meter	Resul. (Meter)
GCP1								
GCP2								
GCP3								
GCP4								
GCP5								

The Root Mean Square (RMS) error from the satellite modeling were m and m in E and N respectively and the total RMS error were m.

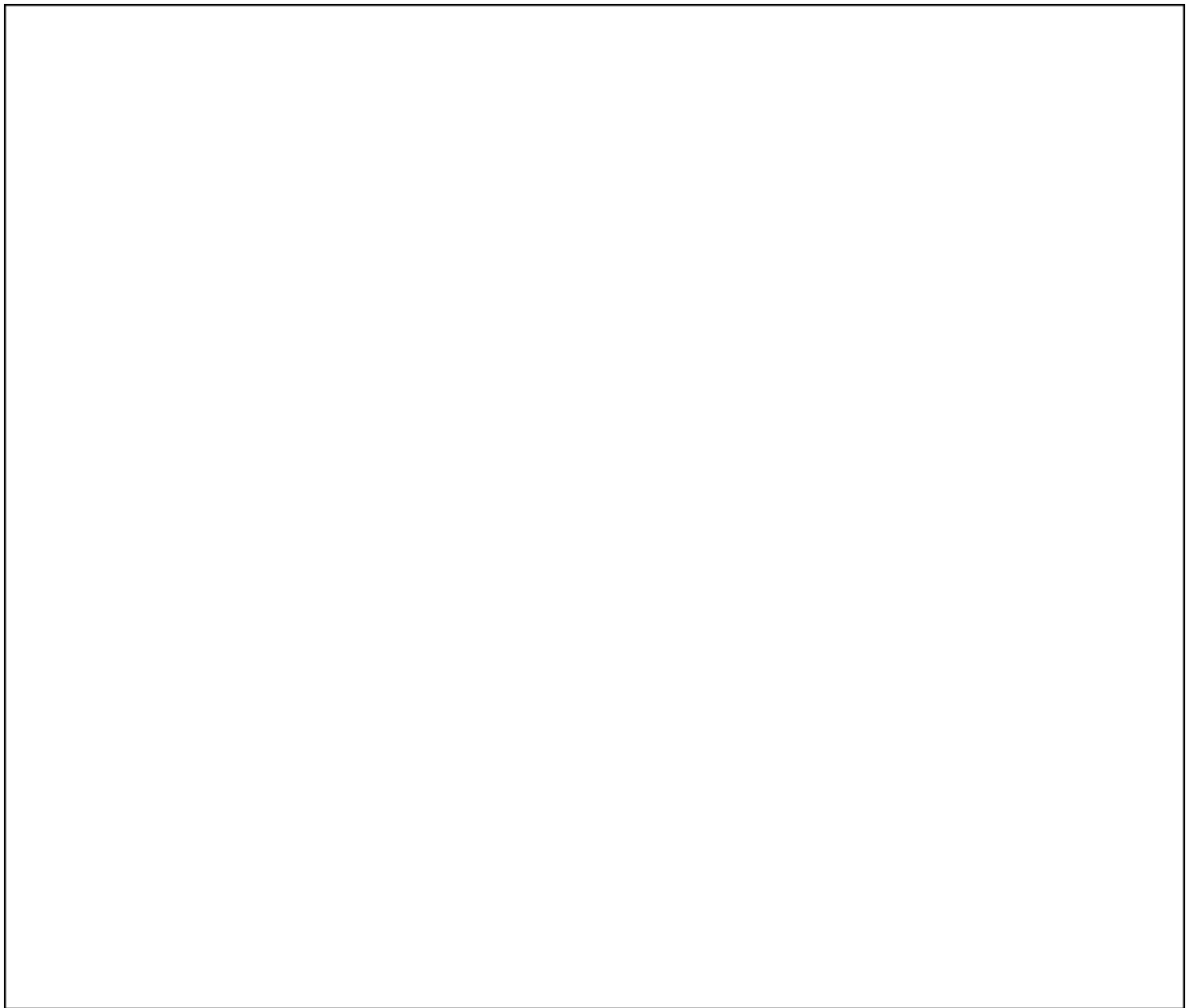


Figure (3): The final vectorized map.

Table (3): Assessment of the HL accuracy of the produced map.

Pt.	E map (m)	N map (m)	E GPS (m)	N GPS (m)	ΔE (m)	ΔN (m)	Resul. (m)
GCP1							
GCP2							
GCP3							
GCP4							
GCP5							
GCP6							
GCP7							
GCP8							
GCP9							
GCP10							
GCP11							
GCP12							
GCP13							
GCP14							
GCP15							
GCP16							
GCP17							
GCP18							
GCP19							
GCP20							

The Root Mean Square (RMS) error from the map modeling were m and m in E and N respectively and the total RMS error were m.

