

SECON Airborne Survey Experience

First private company in India to conduct Aerial LiDAR Survey in India

In August-2006, unprecedented flash floods occurred in Barmer district of Rajasthan, India severely affecting SECON's client's proposed surface facility areas of oil fields. Villages had stagnant water in the low-lying areas because of Gypsum-rich soil. Though engineers tried to filter the water to sub surface, the gypsum prevented the water to seep in. The only way out was to drain out the water through evaporation. This became a major challenge for the project wherein all the engineering for the facilities were in the advanced stage. For the effective flood risk management, a detailed flood model study was carried out which required detailed topography survey of a substantial area within a shortest possible time. This data was crucial from the point of flood risk management.

SECON suggested Aerial LiDAR survey coupled with ground survey to meet this requirement and successfully managed to provide the topographical details for the flood affected areas.

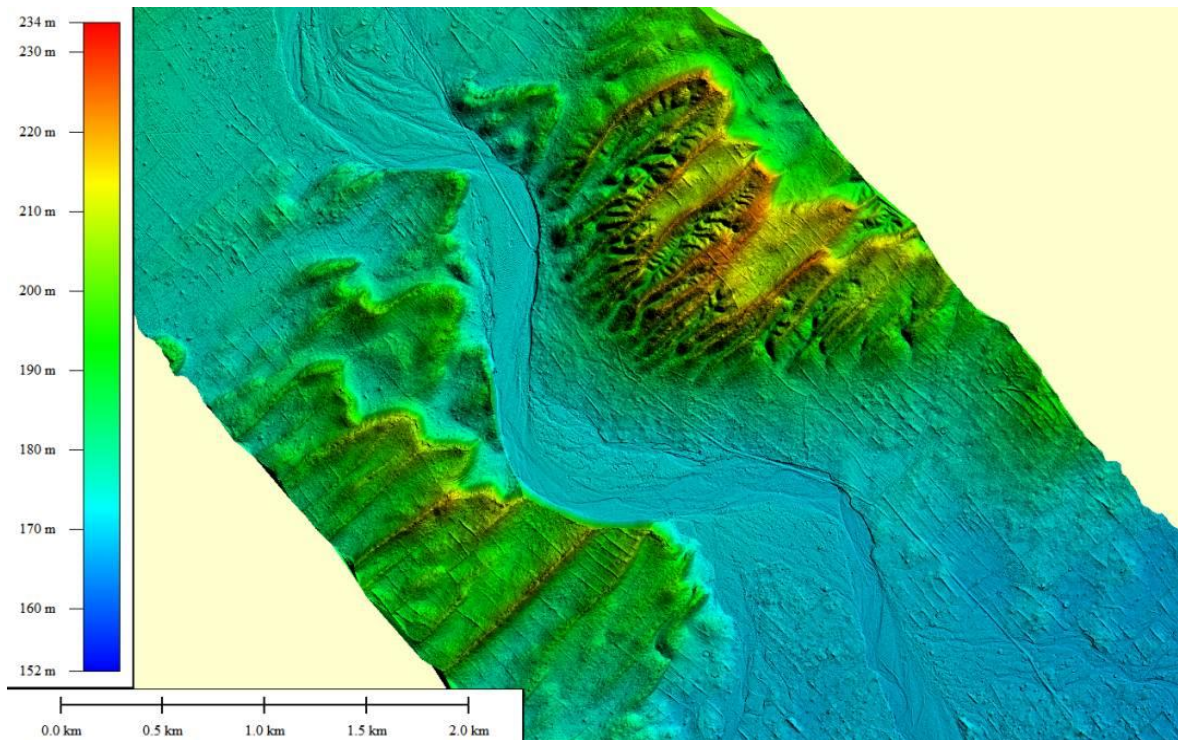
Project Photographs



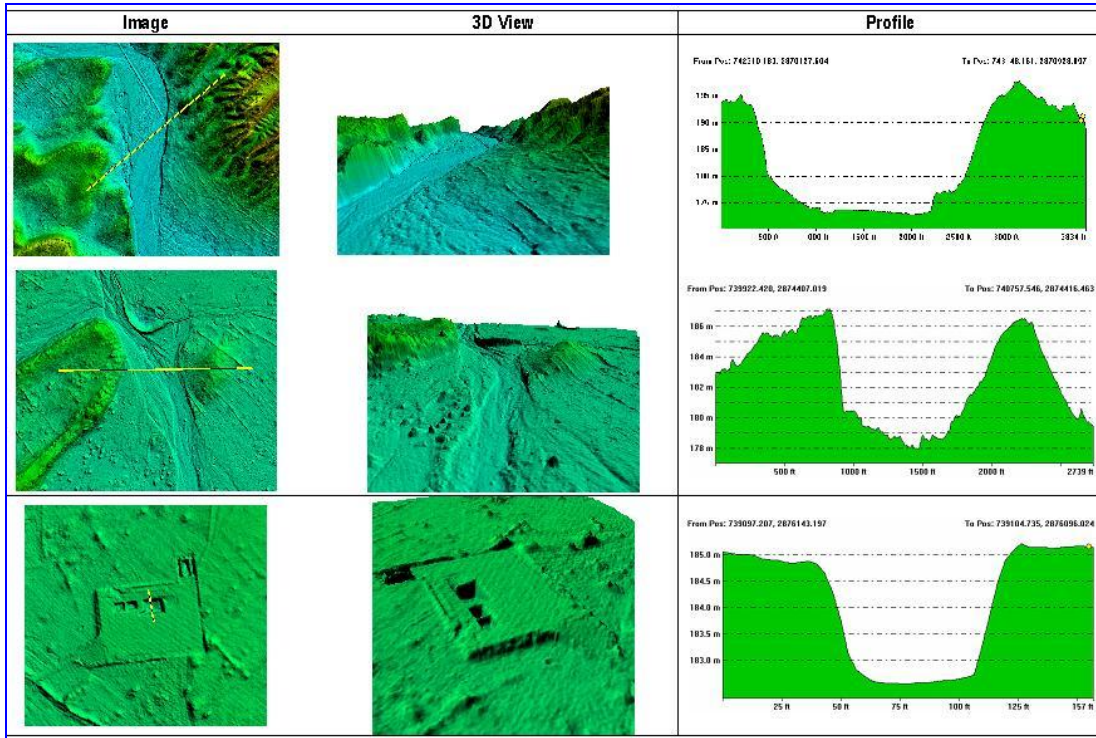
Flood affected area



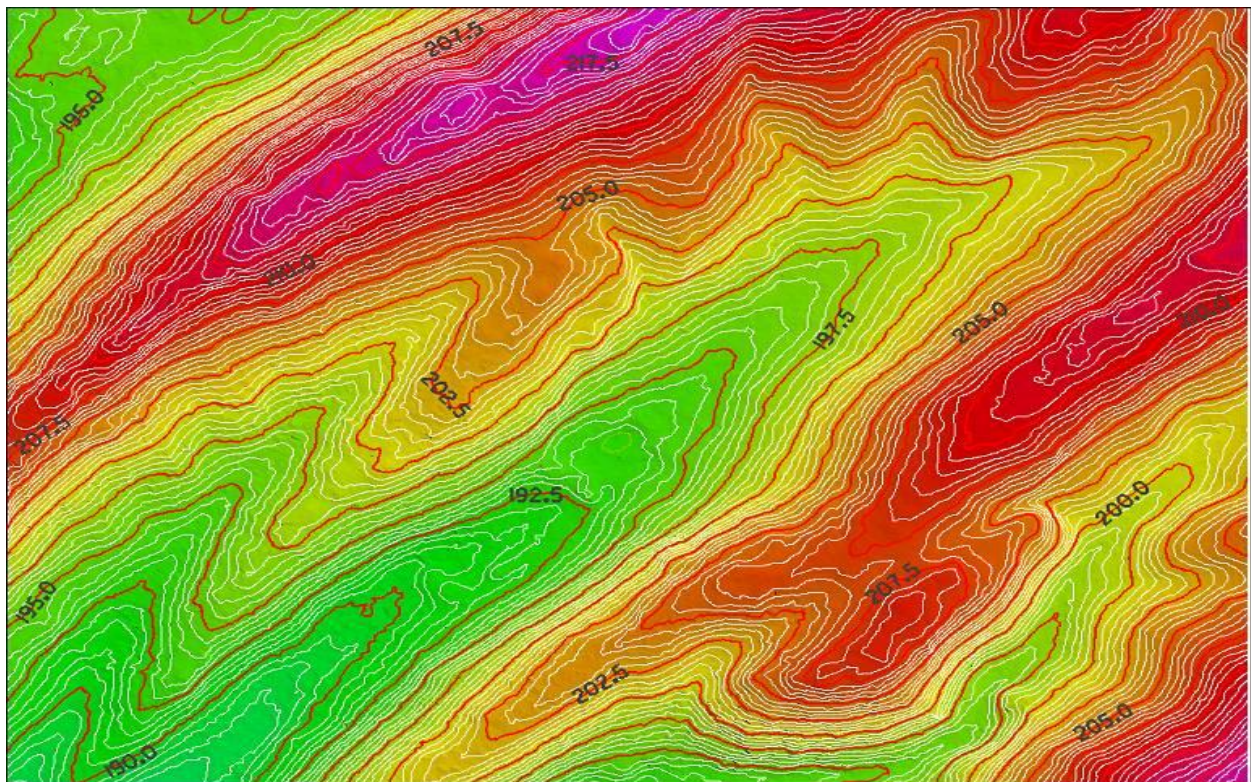
Helicopter with LiDAR Sensor taking off from Helipad for Mapping



Aerial LiDAR flood model for real world simulation and analysis



Cross sections from LiDAR model used for analysis



0.25m Contour Generated for the purpose of engineering analysis