TerraSAR - X 3D mapping geological survey in Indonesia

Earth Observation Support to Development Thematic Area

Users: Indonesian Government Geological Survey

Need: (i)Map geological features (ii)Update existing maps (iii)Creation of new geological maps

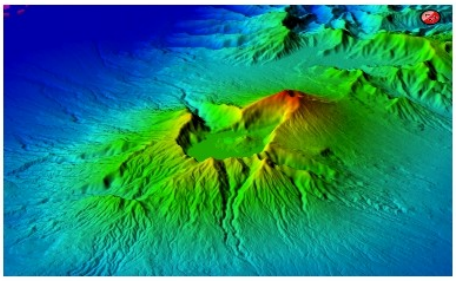

Fig 1 DEM, Mount_Rinjani, Lombok, Indonesia

Initiative: Provision of 3D Mapping Data fromTerraSAR-X radargrammetry. Mapping based on images and Digital Elevation Models (DEM) automatically produced by ASV GEO Processing Suite. Astrium GEO partnered with an Indonesian firm for: DEM editing, Final packaging, Distribution to the Indonesian Government. Quality Control was maintained by Astrium GEO

Challenge: (i)Much of the land-mass is almost permanently under cloud cover (ii) Indonesia is extremely geologically active and a rapidly developing nation (iii) Reliable geologic mapping is essential

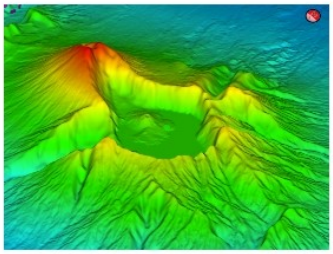

Fig 2 DEM, Mount_Rinjani, Lombok, Indonesia, Zoom

Results: Indonesian Geological Survey has imagery and elevation information for the majority of Indonesia. With weather and terrain challenges, radar mapping has proven to be a disruptive technology. The inclusion of partner firms is essential since it allows Astrium GEO increased access to markets and the flexibility to add production capacity. Knowledge and technology transfer to Indonesian firms

Service provider: Astrium GEO-Information Services