

Elevation models and orthophotos in Africa

Topographic data for mining and railway infrastructure



- 📍 Senegal and Liberia
- 👤 Mittal Steel Liberia Ltd & Arcelor Mittal Mining Senegal SA
- 🕒 2007-2008

Expertise

3D Mapping, Airborne Laserscanning, Aerial images, ,

Contact

www.bsf-swissphoto.com

In 2007, BSF Swissphoto has been mandated by Arcelor Mittal Mining Senegal as well as Mittal Steel Liberia with several airborne data acquisition projects in Africa.

Using airborne laser scanning, BSF Swissphoto produced detailed digital surface and terrain models for an area of 500 km² in Liberia and of 1400 km² in Senegal. In both areas, iron ore mining operations have been launched.

In addition, more than 700 kilometers of projected railway lines providing access to the remote mining sites were surveyed. Besides the elevation data, digital orthophoto mosaics with 20-25 cm ground sampling distance were produced.

Aerial survey operations in remote areas on the African continent pose a number of challenges regarding flight permissions, (fuel) supply logistics, climate and foliage – all of which were successfully overcome to deliver the required products to our clients.

Our services

- ◆ Project management
- ◆ Flight permissions, Flight planning
- ◆ LiDAR and aerial image acquisition in Liberia and Senegal
- ◆ Georeferencing of the Lidar and image data
- ◆ Classification of the Lidar point cloud and generation of digital surface and terrain models
- ◆ Production of a digital orthophoto mosaic in 20-25 cm resolution
- ◆ Technical report