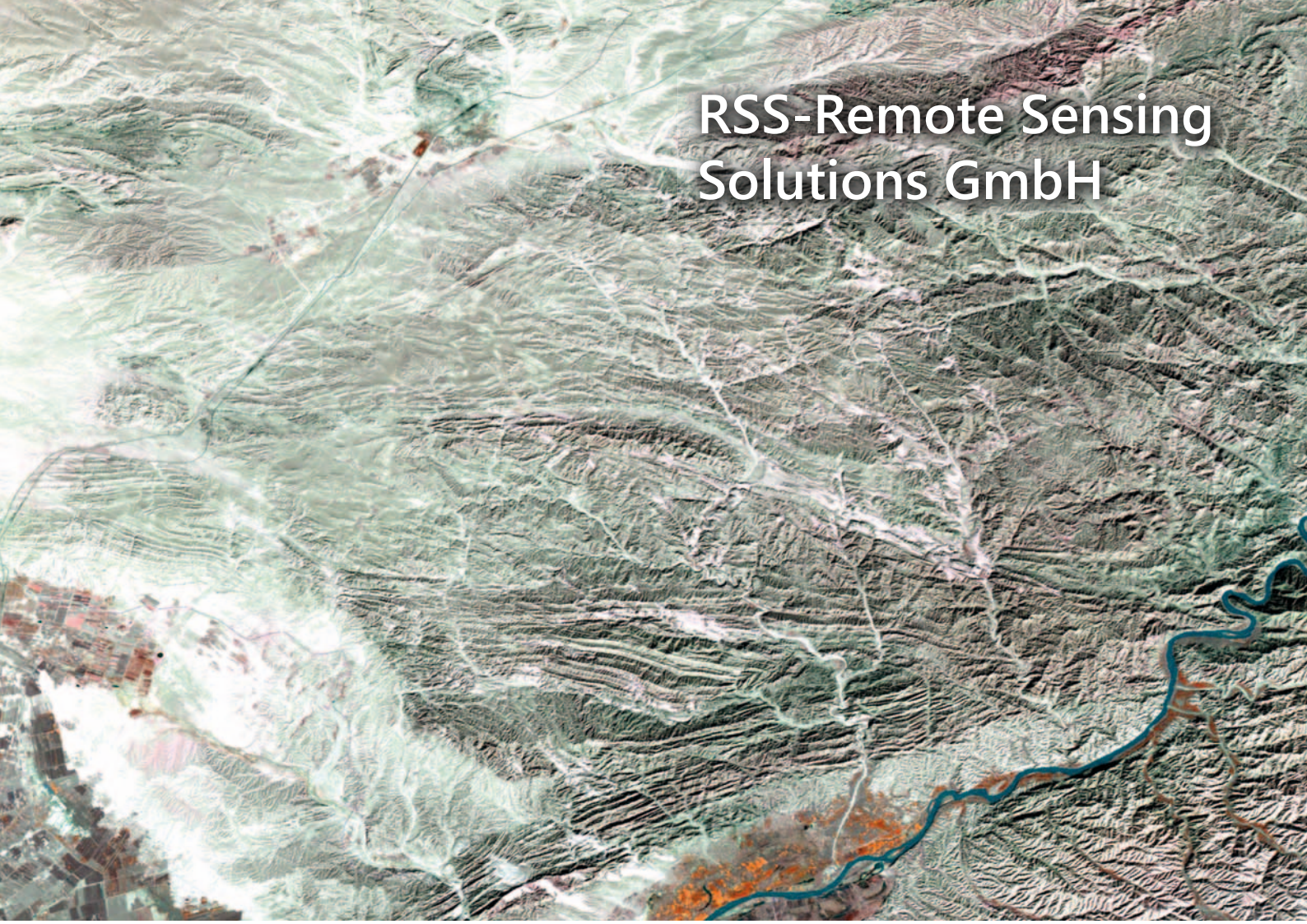
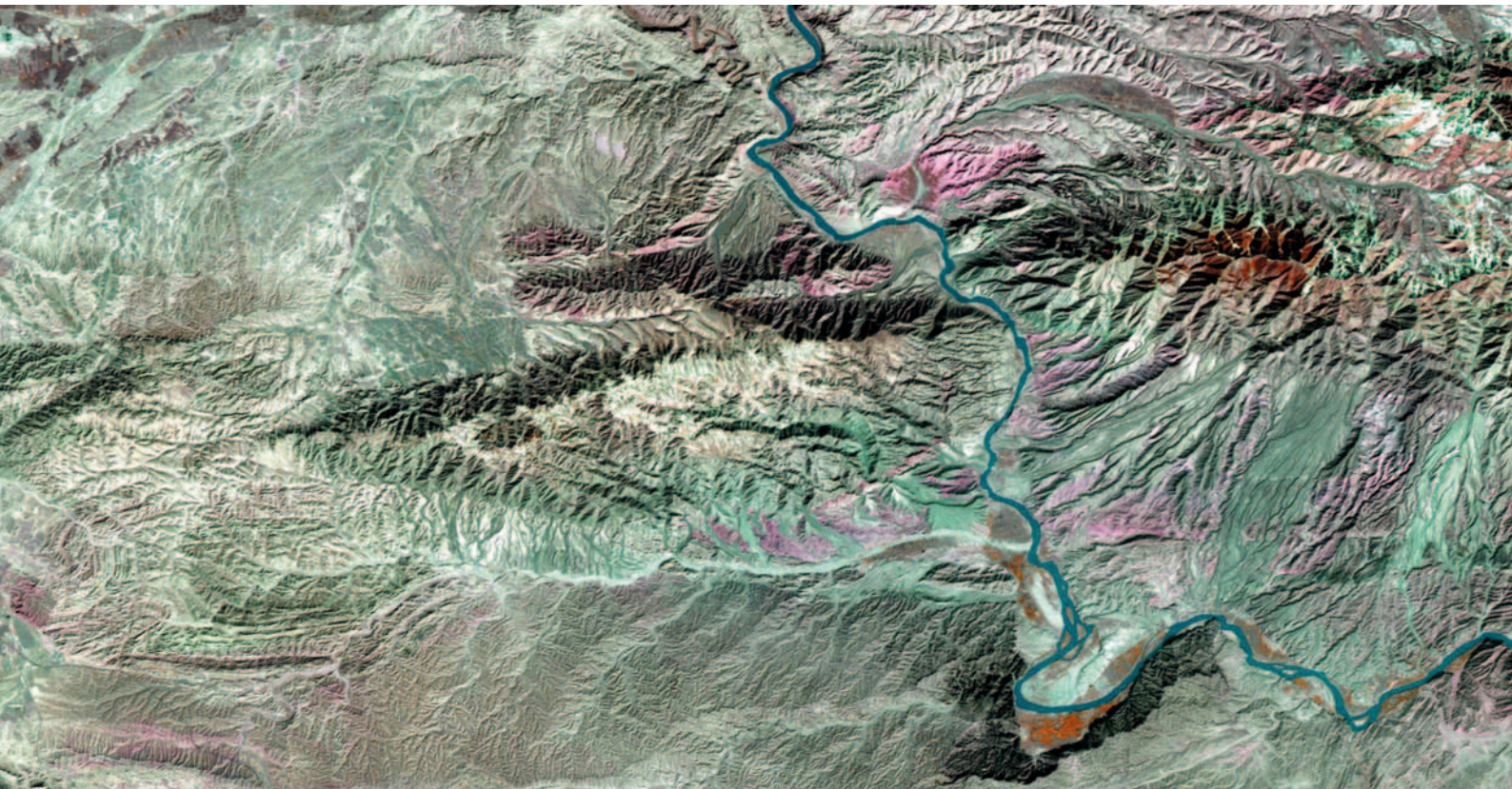


RSS-Remote Sensing Solutions GmbH

RSS
Remote Sensing
Solutions GmbH

From Images to Information



RSS - Remote Sensing Solutions GmbH

Remote Sensing Solutions GmbH is one of the leading value-adding companies for earth observation in Germany.

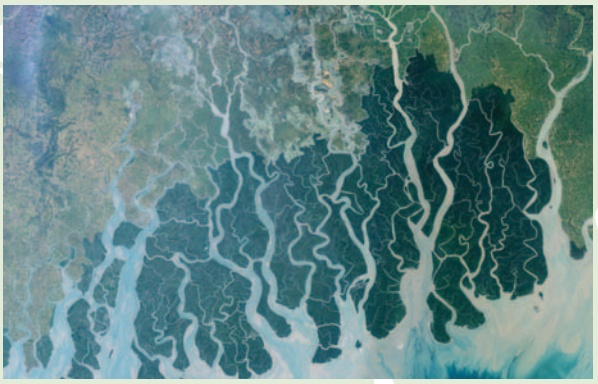
We support projects in the fields of environmental monitoring, forestry, nature conservation, agriculture and emergency prevention with innovative remote sensing and geographic information services.

Our clients benefit from customized solutions designed on the basis of profound expertise in a wide variety of applications combined with excellent knowledge in earth observation and GIS.

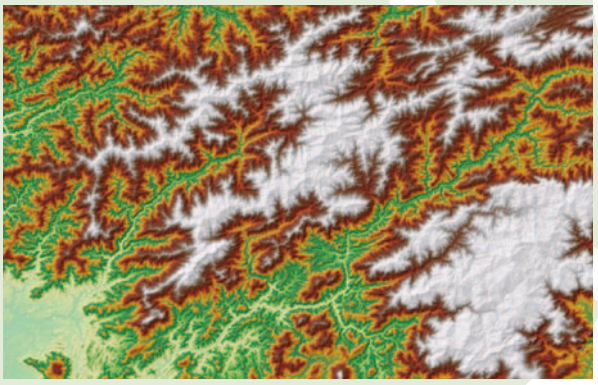
Close cooperation with universities and research facilities such as the German Space Agency (DLR) allows us to develop state-of-the-art technology to provide our clients with most advanced end-to-end remote sensing solutions.

Our clients come from the private and public sector such as the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), German Development Bank (KfW), European Space Agency (ESA), World Wildlife Fund For Nature (WWF), Fauna Flora International (FFI) and many more.

Multi-spectral GeoEye satellite image, 1.65 meter resolution



Multi-spectral Landsat ETM satellite image, 30 meter resolution



Digital elevation models

Applications

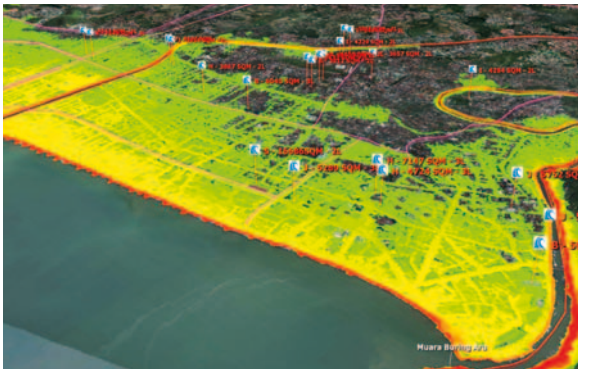
Environmental Monitoring

Continuous monitoring by remote sensing allows a detailed tracking of land cover changes and a surveillance of ecosystems. We provide accurate cartographic and statistical data on a wide variety of environmental parameters to improve the management of natural resources and to support the implementation and evaluation of nature conservation projects.

Monitoring of forest fires and risk forecast

Forestry

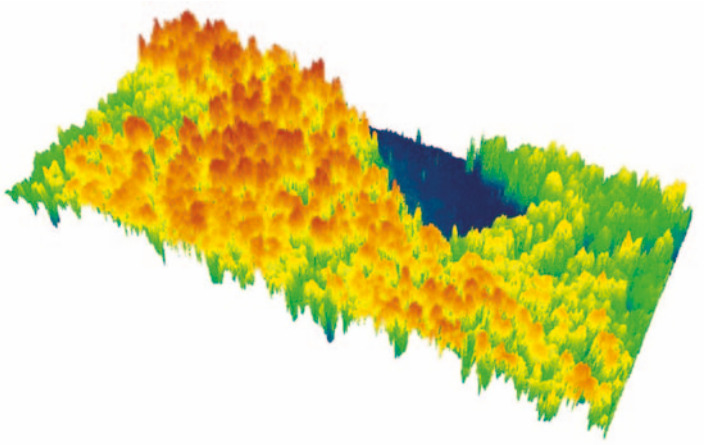
Our services range from detailed forest inventories to the estimation and monitoring of forest areas, biodiversity mapping, biomass assessment and the establishment of forest management plans.



Tsunami risk assessment

REDD+ Services

RSS is specialized in providing customized services for REDD+ (Reducing Emissions from Deforestation and Forest Degradation), ranging from carbon stock estimations using airborne LiDAR and satellite data, establishing reference emission levels, to the long-term monitoring of forest resources.



Biomass estimation using airborne LiDAR

Natural Hazards

RSS helps authorities by providing timely, precise and reliable data for prevention and mitigation. RSS has developed information systems e.g. to forecast forest fire risk or to predict potential damage caused by tsunami.

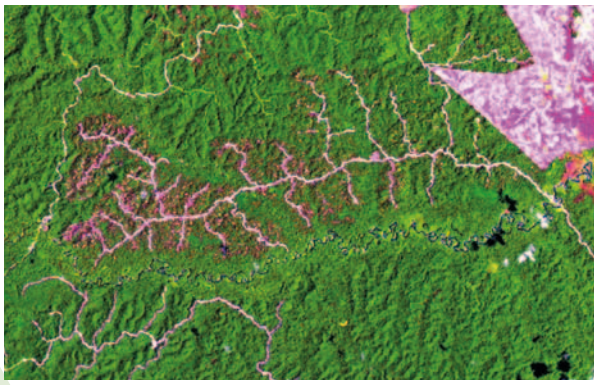
Agricultural Management

RSS supports farmers to optimize crop pruduction and land management. Crop growth anomalies are mapped with high resolution multi- and hyperspectral instruments. We recommend adjusted management practices to increase yield with reduced environmental impacts.

Optical Remote Sensing

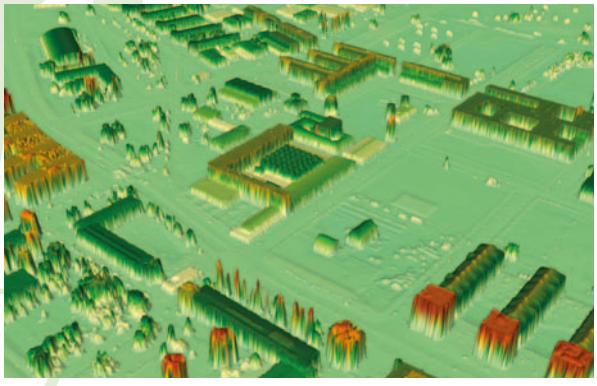
RSS services and applications make use of a wide range of multispectral satellite sensors such as WorldView, GeoEye, QuickBird, IKONOS, RapidEye, SPOT and MODIS. Spatial resolution ranges from 0.5m to 250m to meet regional and national monitoring requirements.
Highly automated data processing and sophisticated pixel- and object-based image analysis algorithms result in short production cycles and highest quality geodata products.

Land cover mapping – QuickBird



Forest monitoring – Landsat ETM

Agricultural yield estimation with multi- and hyperspectral sensors



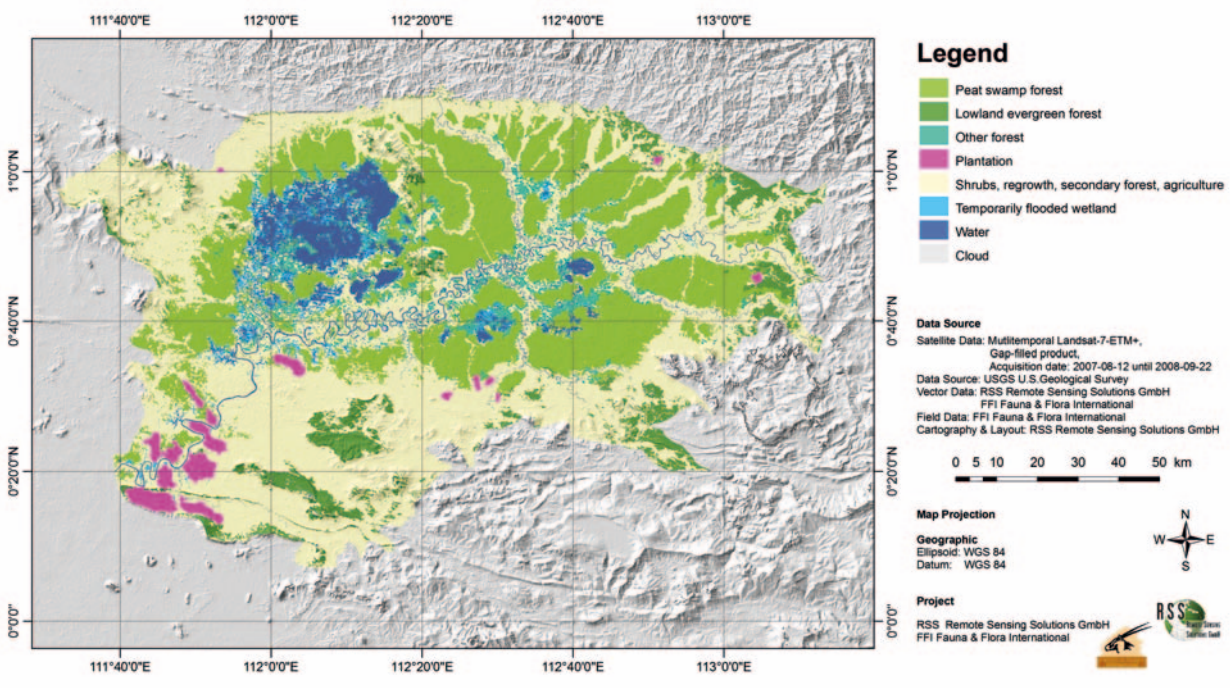
3D city models from LiDAR point clouds

Synthetic Aperture Radar (SAR)

The major advantage of SAR satellites is their capability to acquire data during cloudy conditions. This makes SAR suitable for applications which require timely data acquisition like after natural disasters (fire, floods, earthquakes) or regular monitoring and change detection. RSS staff are experts in SAR processing and served as principal investigators for TerraSAR-X, ERS, JERS, ALOS, ENVISAT and RADARSAT missions.

Aerial imagery and LiDAR

RSS conducts aerial surveys to acquire very-high resolution images and LiDAR data (Light Detection and Ranging). Our in-house computing cluster facilitates operational mass processing to create digital elevation models and 3D city models. LiDAR point clouds are analyzed for applications in forestry, hydrology and urban planning. Photogrammetry services include aerial triangulation, mosaicking, feature extraction and orthophoto generation. 3D data sets can be visualized in the Intra- and Internet using our highly efficient in-house software.



Our services:

- Satellite image processing and analysis
- Digital cartography and mapping
- Generation of digtal terrain models
- LiDAR processing and analysis
- Change detection and monitoring
- GIS-based spatio-temporal data analyses
- Customized geo-information systems
- Proprietary software development
- Photogrammetric processing
- 3D city modeling and visualization
- Field survey planning and sampling
- Capacity building and training-on-the-job

Your benefits:

- One-stop services from aerial surveys to satellite data processing and comprehensive analyses
- Customized solutions for your needs
- Quality assured ready-made products
- Highly automated processing for cost-efficient services
- Fast production and timely delivery
- Knowledge transfer for your projects

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