Satellite imagery Applications

Satellite imagery technology, (SIT), can be used as a convenient and effective way to plan and manage your project, saving you time, resources and money.

Due to its cost-effectiveness, SIT is now used by most project managers throughout the world to provide greater insight into a project in terms of accuracy, and decision making, by using other important variables not readily available with conventional planning tools.

For example, Satellite imagery aids industries, projects and applications by mapping, surveying, image fusion, change detection and land cover classification etc. It also helps to plan projects and monitor natural and man-made disasters.

How can satellite imagery help you?

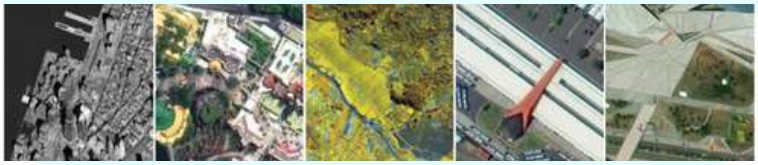
- Helps you to view a large area in a snapshot for quick macro decision-making and evaluation.
- Reduces the requirement to hire resources for on-ground mapping and other conventional analysis requiring manpower
- Gives quick solutions to many unanswered problems
- Cost-effective compared to analyzing manually
- Images can be accurately repeated to provide better historical perspectives.
- Satellite Imagery technology provides for a vast data set of variables which would provide for better decision making
- Can extract features and hidden patterns not visible to the human eye

Common Applications

- Agriculture monitoring/management
- Defense/Military operations
- Engineering and construction
- Environmental water Conservation
- Forest/Land Use Management
- GIS and RS Education
- Health and Human Services
- Land Developments
- Mapping requirement
- Mining/Earth observations
- Natural Resources Management and Environmental Monitoring
- Oceans and Coastal Monitoring
- Plantation/Estate Management
- Public Safety
- Transport management
- Urban and Regional planning
- Water Management

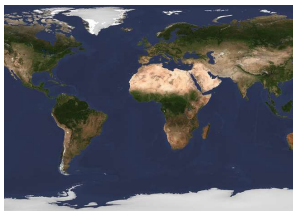
Common Industries

- Agriculture
- Defense & Intel.
- Energy
- Forestry
- Government
- Humanitarian Orgs.
- Location-Based Svcs
- Mining
- Oil and Gas
- Utilities



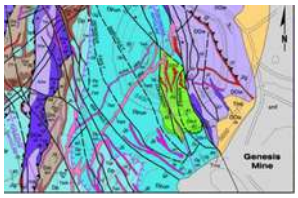
Real life examples of Satellite imagery applications

As a base map for your graphical reference to assist planners and engineers



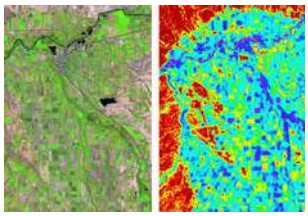
Due to Satellite maps being location-based, it is easy to communicate well-structured data and render a complete picture of an area. This information can be used to help the government on decision-making processes, civil defence operations and macro and micro city or country planning. Therefore, using satellite imagery as a backdrop to these projects is very important and effective.

Exploration and extracting mineral deposits



At the preliminary stages of mineral exploration, the potentiality of mineral availability is a critical factor. Conventional methods such as on-ground surveying are time-consuming and a waste of additional resources. By using satellite imagery, mapping of mineral potential zones has become quicker and more effective.

Agriculture development



Satellite imagery helps agriculture systems by acquiring and generating different types of agricultural maps and resource data. Apart from gathering statistics on crops, range land, livestock and other resources, it also helps to take key decisions such as planning the crop yield ahead of time, the crop types to be grown and extrapolating how much harvest can be achieved.

Disaster mitigation planning and recovery

When disaster is struck, emergency responders would be able to assess the proximity and size of the disaster and make faster and more accurate rescue and relocation decisions by analyzing satellite imagery. It also helps to assess the level of damage a disaster has caused enabling reconstruction planning. . Sometimes analysis of Satellite imagery can provide a warning of a potential pending disaster, enabling people to relocate themselves to safety.

Civil & local government planing

Mapping and monitoring human activity such as population, construction of buildings, and vehicle traffic helps the government to make decisions on land management and law enforcement, thus creating safe and thriving communities.