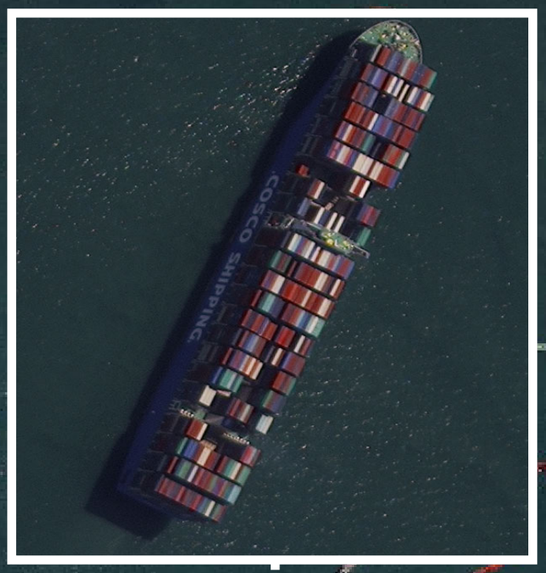
Mapping in the Far Distance



9

REMOTE SENSING

Introduction

Satellite imagery, capturing data without making physical contact, is one of the remote sensing methodologies and is typically independent of conventional labor forces.

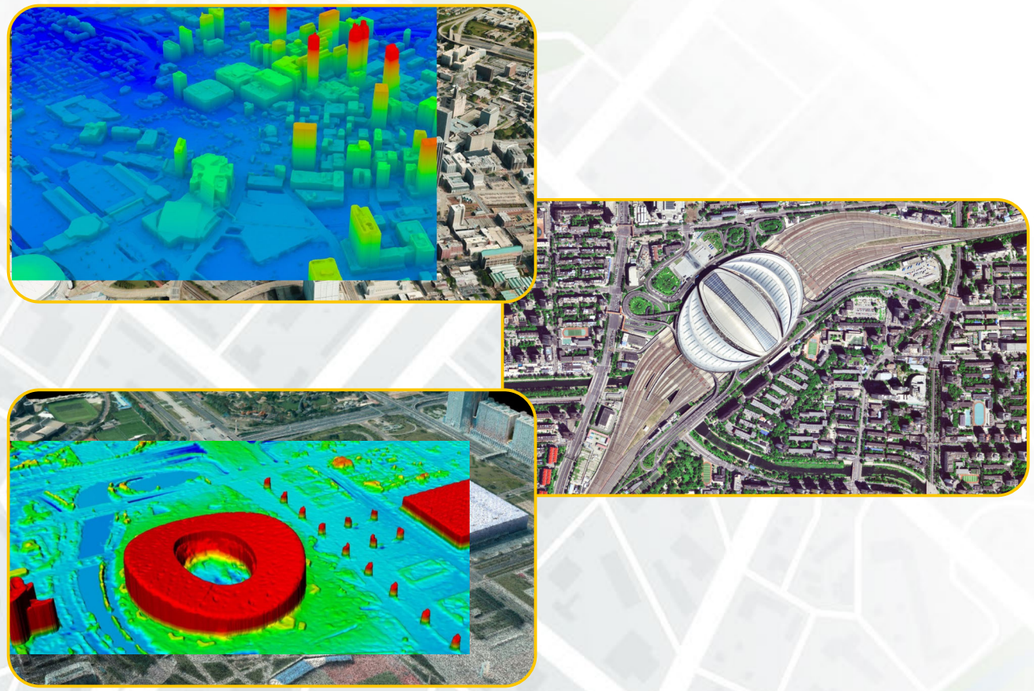
When the area of interest is indeed very large, for instance, hundreds of square kilometers or even bigger, low-altitude UAV photogrammetry shall not be applicable due to comparably low efficiency. Still, such data is expected to be acquired frequently sometimes. In this case, satellite imagery could be a perfect solution in terms of cost performance. On the other hand, a combination of airborne (either UAV or manned aircraft) and satellite-based data acquisition would better handle some complicated projects.

Satellite images have many applications in agriculture, geology, forestry, biodiversity conservation, regional planning, education, intelligence, and warfare. Images can be in visible colors and other spectra. There are also elevation maps, usually made by radar imaging.

To meet the diverse needs of the market, we have been engaged in this business for years. Large territories with periodic studies usually come with this convincing methodology.

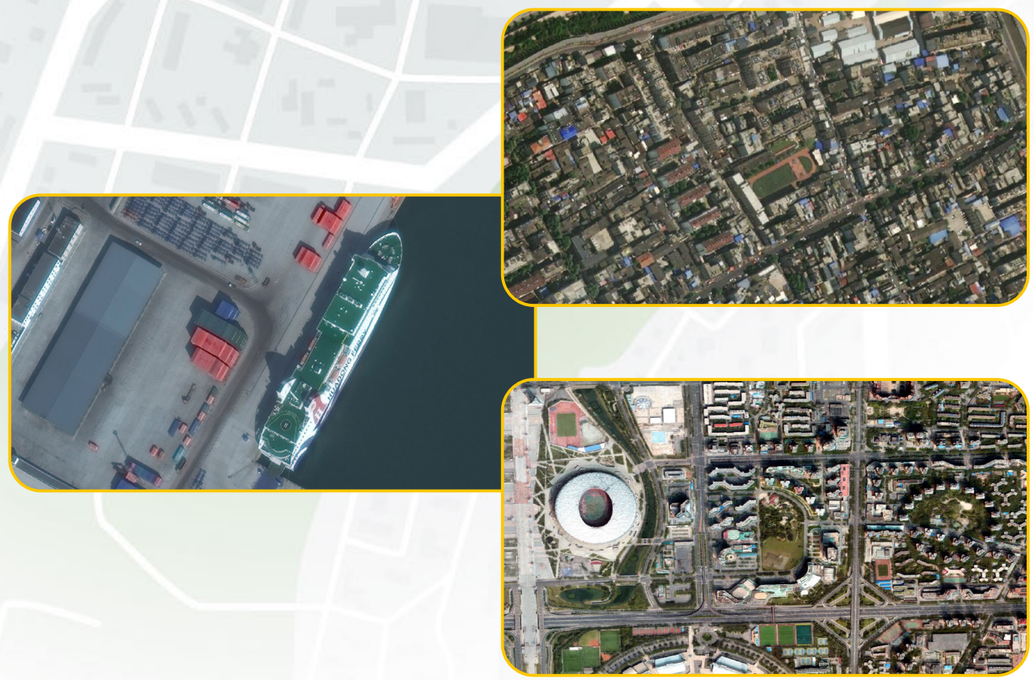
Conventional Satellite Imagery

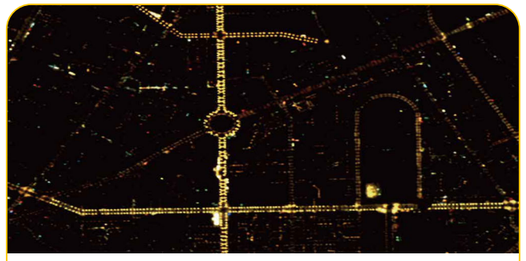
- multiple satellite sources (from USA, France, Korea, China, etc.), like WorldView-1/2/3/4, GeoEye, QuickBird, Gaofen-1/2, Jinlin-1, Superview-1, Beijing-2/3, Ikonos, Pleiades, Kompsat-1/2/3, etc.
- a variety of resolution options, 1.0/0.8/0.5/0.4/0.3 m available
- panchromatic or multi-spectral (4/8/16 bands), ortho-ready or stereo pair, archive or on-demand tasking collection
- Gaofen-3 and Superview-1 that deliver 1/3m InSAR data for land subsidence and other geological disasters monitoring, city risk control, etc.
- raw data or finished products (like DSM, DEM, DOM, orthomosaic, 3D models) available upon request
- professional software to deal with multi-source data from optical satellites, radar satellites, etc.



Cloud-based Satellite Image Basemap

- high-resolution orthophoto map could be obtained directly through satellite imagery web base
- L4 orthorectified imagery (based on DEM correction and bundle adjustment with GCPs) and L5 orthomosaic (based on seamless mosaicking and color unification)
- Map4Latest and Map4Tasking available, ground resolution up to 0.3 m
- Complies with analysis-ready data in terms of radiometric and geometric rectifications, color and mosaic correction, etc.
- Yearly global sub-meter coverage, monthly land surface change detection, and weekly or even daily monitoring





night-lighting imagery

traffic flow study

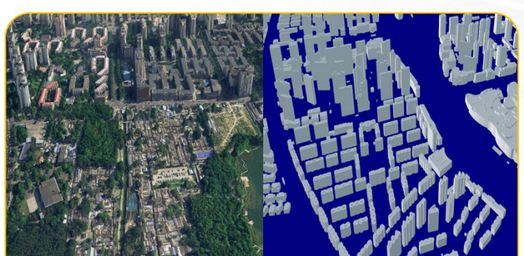
raw imagery 30cm resolution

raw imagery 30cm resolution

dam overview

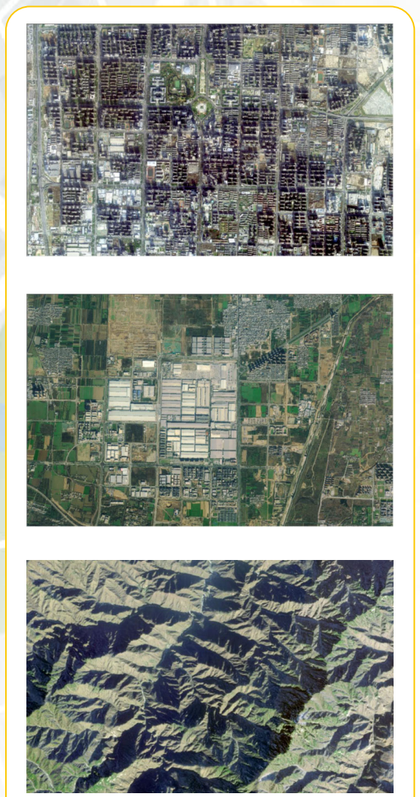
harbor overview

3D mesh processed from stereo mapping



3D mesh and building clay model

raw imagery, 50cm
ground resolution



final product, true DOM,
more impressive