

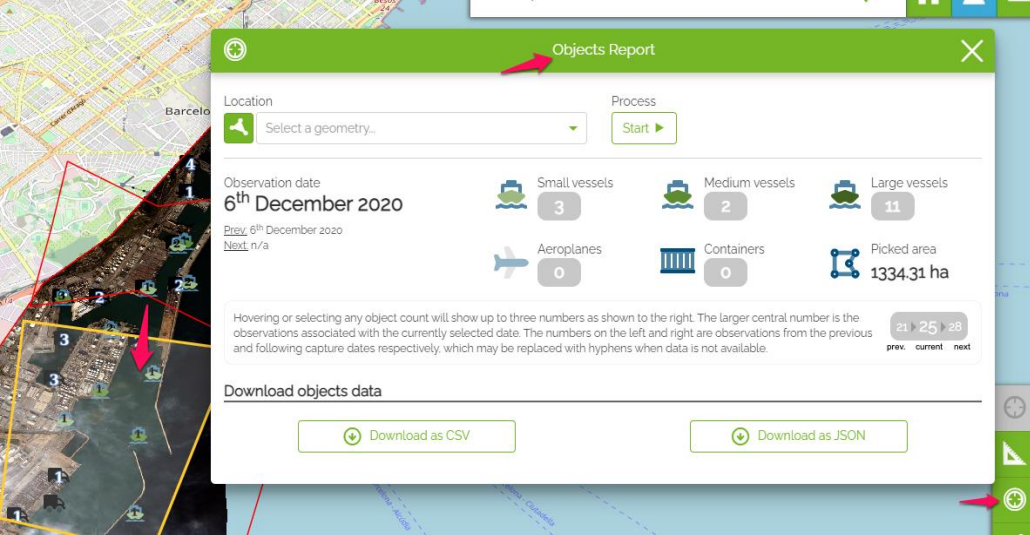


Port Monitoring Analytics

Earth-i has developed machine learning (ML) capabilities to demonstrate the value of applying advanced analytics to very high-resolution satellite imagery and videos for the monitoring of selected seaport facilities and to build up an understanding of activity levels at that location.

These analytics, available on the SPECTRUM platform, include automated detection of intra-day changes at the port, automated identification and counting of vessels at the port, automated classification of vessels by type, automated extraction of movement vectors for those vessels that are entering or leaving, and extending to assessment of port infrastructure, stockpiles of goods, or analysis of movement of vehicles at the port.



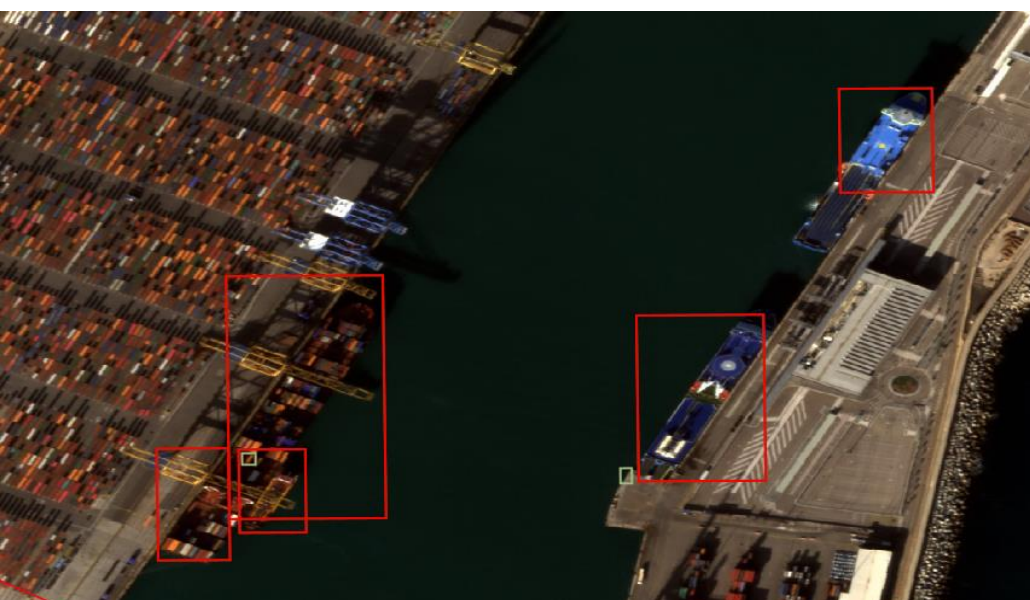


New Capabilities Developed

- Rapid Revisit very high resolution (VHR) images of each demonstration AOI, acquired by Planet SkySats using their intra-day revisit capability;
- High resolution SAR image of each demonstration AOI, acquired using Iceye;
- GEOINT products using AI on the VHR images, providing a count and classification of marine vessels in each image of each port;
- VHR video of each demonstration AOI, acquired using Planet SkySats video imaging capability;
- GEOINT products using AI on a short section of the VHR videos, identifying and providing a count of number of vessels in the video, with bookmarks for times when a change in the number of vessels was detected;
- HD terrain product generated from the VHR satellite video.

Demonstration AOI's

- Port of Barcelona
- Port of Benghazi
- Port of Misratah
- Port of Tripoli



<ul style="list-style-type: none"> ○ Capture period 23/10/2020 11:18:08 - 12:19:38 	<ul style="list-style-type: none"> ○ Satellite/Instrument skysat 1 	<ul style="list-style-type: none"> ○ Video 90 sec 30 fps
<ul style="list-style-type: none"> △ Elevation (mean) 54.90° 	<ul style="list-style-type: none"> ○ Azimuth (mean) 100.45° 	<ul style="list-style-type: none"> △ Ground sampling distance 114 metres

Raw video Video object detection

0:00 / 1:30

High Resolution Download