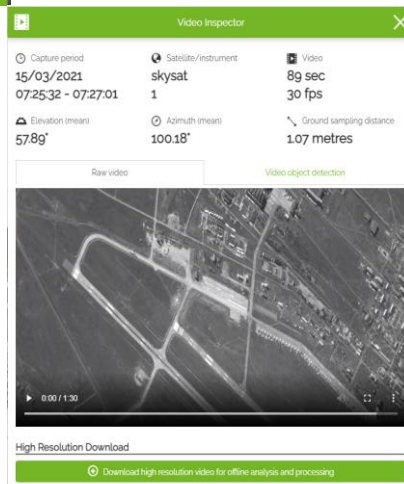


Airfield Monitoring Analytics

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 airports or airfields, to automatically detect the number and type of aircraft at that location, and in the military case, the state of readiness of the forces based there.

These demonstrated analytics include automated detection of intra-day changes at the airfield, automated detection and counting of aircraft at the site, automated classification of aircraft by type, automated extraction of movement vectors for those aircraft that are moving around the airfield, and assessing other infrastructure at the site, other military equipment, or analysis of movement of land vehicles around the airfield.





New Capabilities Developed

- Rapid revisit very high resolution (VHR) images of each demonstration AOI, acquired by Planet SkySat 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 of aircraft in each image of each airfield; for Akhtubinsk, this includes a breakdown by type of aircraft as well;
- VHR video of each demonstration AOI, acquired using Planet SkySat's video imaging capability;
- GEOINT products using AI on a short section of the VHR videos, identifying and providing a count of number of aircraft in the video, with bookmarks for times when a change in the number of aircraft was detected;
- HD terrain product generated from the VHR video.

Demonstration AOI's

- Akhtubinsk Airfield
- Benghazi Airfield

