BORDER SECURITY SYSTEM – 2022-2023

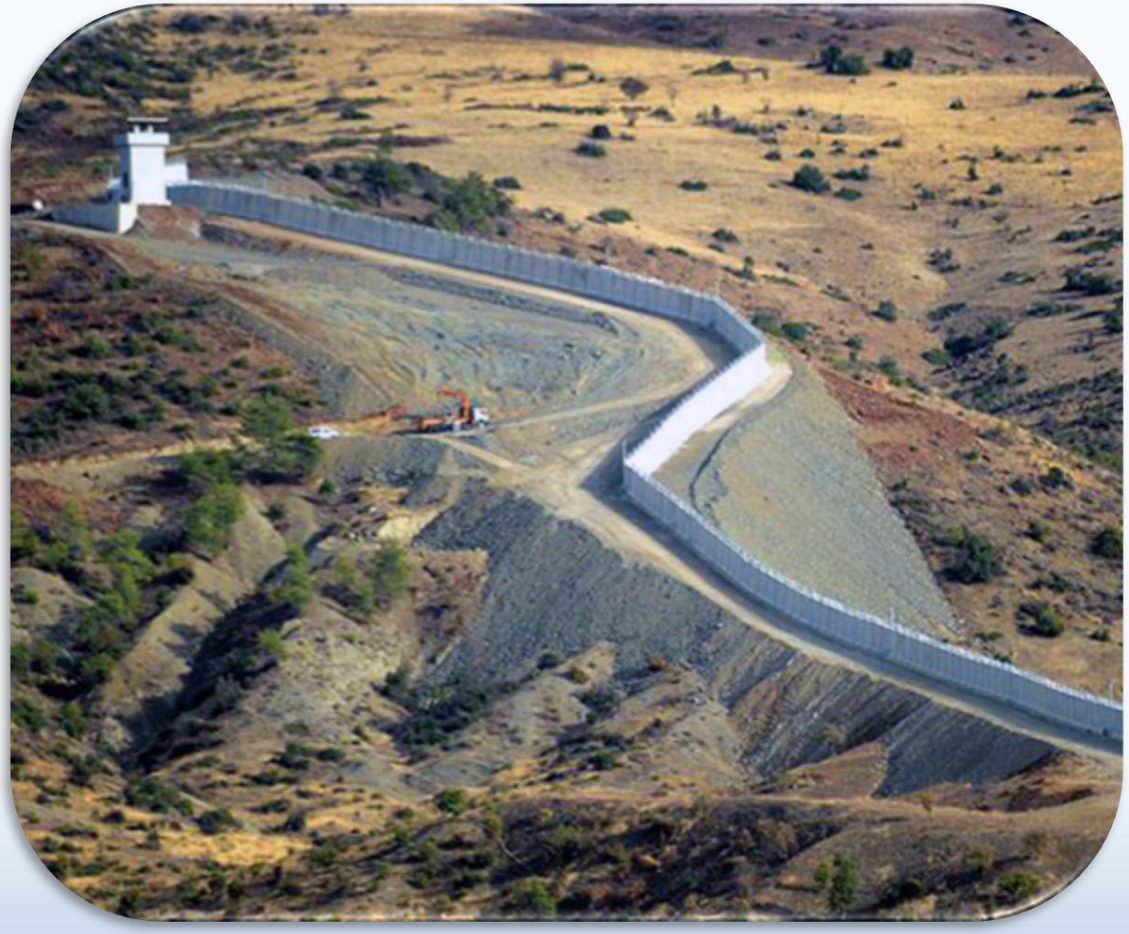
MAKBİM TEKNOLOJİ

Border Security Solution

About the project ;
From 2011, when the civil war started in Syria which directly reflected the instability in the region since the border wall as Turkey's measures have started to knit. When the walls are completed, the Great Wall will be the third wall in the world in terms of length, after the wall planned to be built on the US-Mexico border. The following elements are planned for the safety of the line created.

- Razor Wire
- PTZ Cameras
- Thermal Cameras
- Infrared Sensors
- Video Analysis Systems
- Special Lighting Solutions
- Lighting and Alarm Automations

- ***The border security project was carried out in the border area of Ardahan, Ağrı and Iğdır provinces and was completed in April 2020.***



Border Security Solution

General Purposes

- Terrorist Activities
- Refugee Activities
- Smuggling Activities

Border Security Solution

Project Processes;

Considering the processes of the project, in the first application, human movements at the border were determined by sensors. Considering the implementation of the project for different provinces in the future, it was decided to use thermal cameras and smart analysis software, as the use of sensors in environmental conditions will create a disadvantage.

In order to meet the demands of monitoring and managing the systems perceived by these systems, additional software and hardware were designed and produced, and field-appropriate solutions were produced.

Special Designs

Lighting System;

Special Design Led Projectors

- Brightness level can be adjusted.
- Industrial Design
- Long Life
- Led Flasher

Special Design Pole

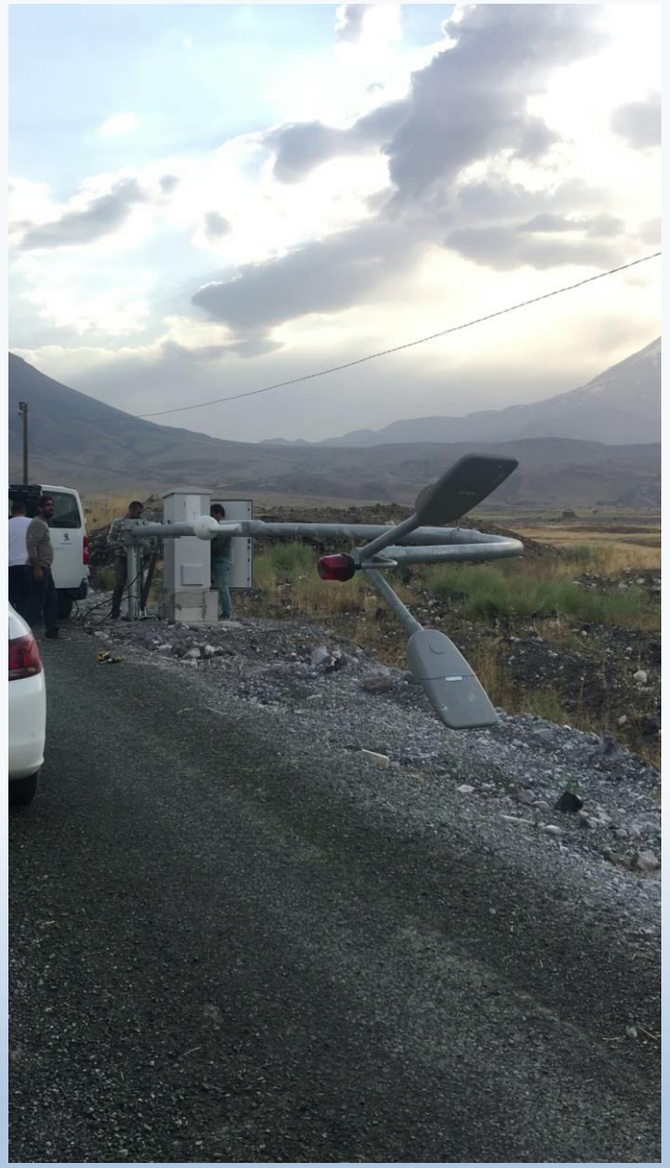
- Design suitable for harsh weather conditions
- Can be tilted 90 degrees for service

Field Cabinet

- Design suitable for harsh weather conditions

Network Equipments

Electrical Equipments



Special Designs

Automation Control Board

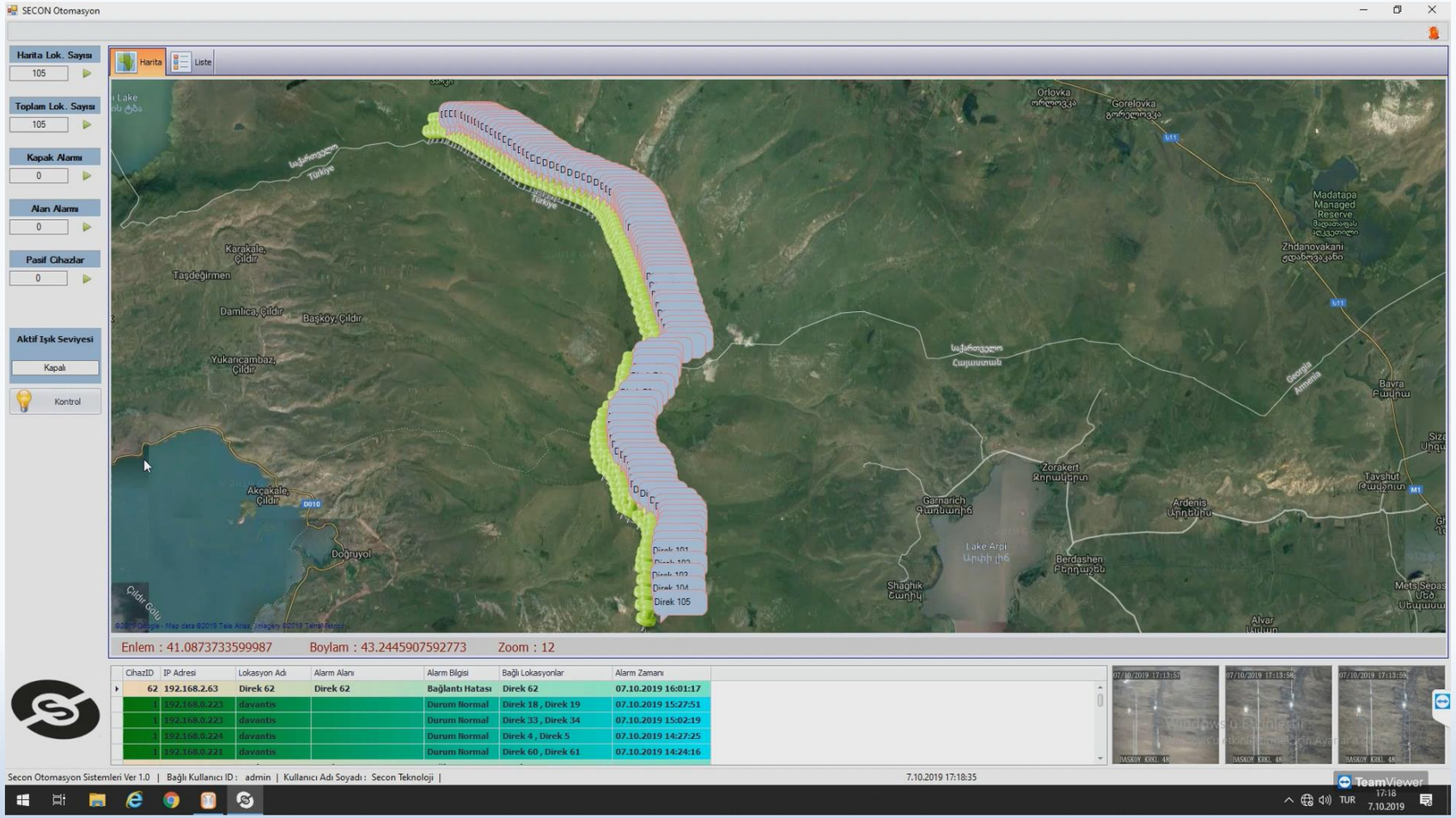
Automation Board

- 2x Led Projector Control
- 1x Flasher Control
- 1x Cover Switch (Sabotage)
- 1x RJ45 Network Connection
- 1x 5v Power Input

Thermal Control Board

- Makes Processor Movements to the Monitor.

Special Designs



Secon Alarm Management and Lighting Automation Control SW

- Lighting Automation
- Flasher Control
- Alarm Management
- PTZ Camera Integration
- Alarm Record / Take Photo
- Multi Control Structure
- System Reporting
- Special User Interface

Özel Tasarımlar

Secon Monitoring & Management Platform

- Network Recorders
- 55’’ Monitor / Display
- Workstation PC
- Android Joystick
- Industrial Network Equipments
- UPS

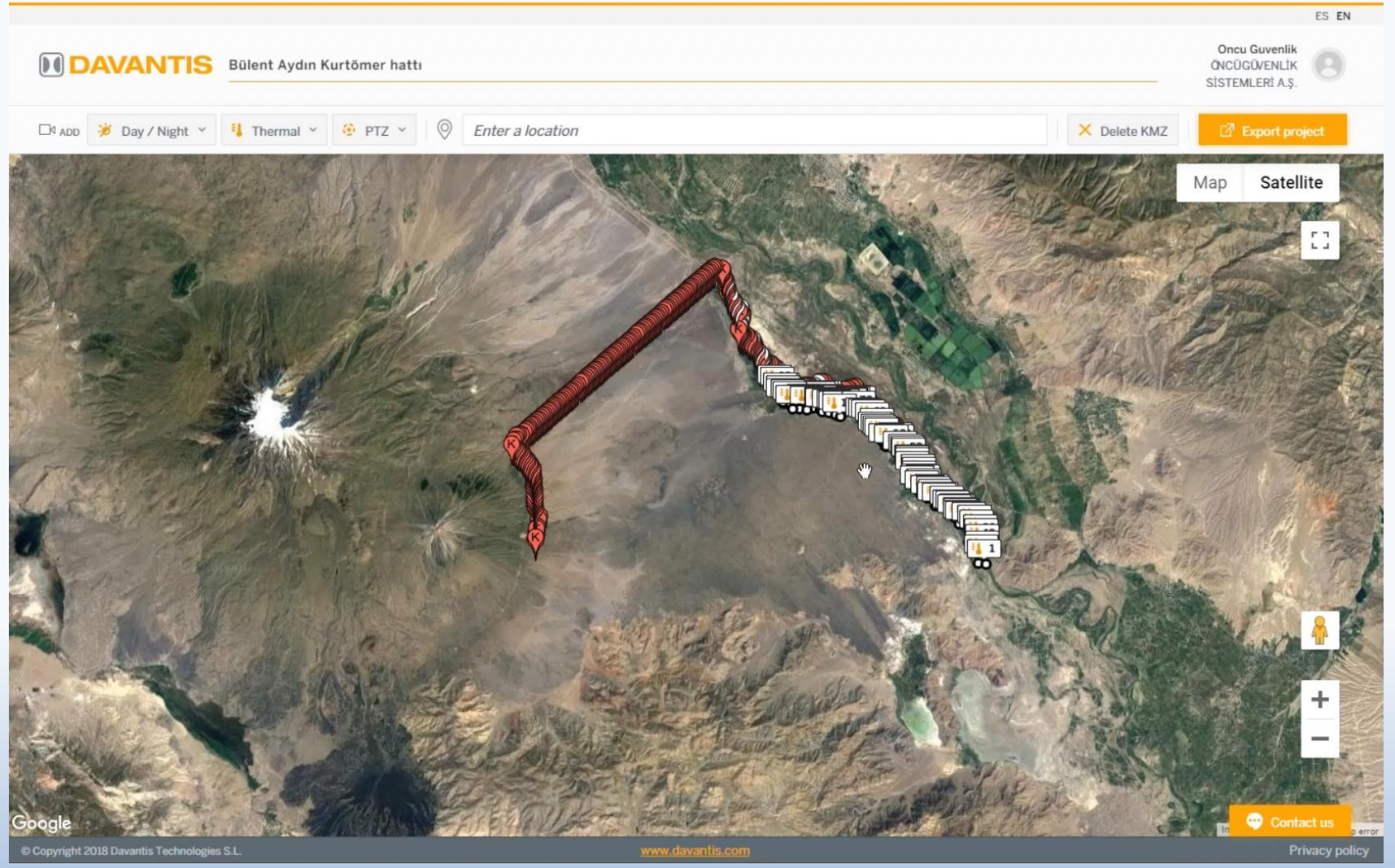
Hikvision Perimeter Security Solutions

- 25-35-50mm Thermal IP Cameras
- Darkfighter PTZ IP Cameras
- 64 Channel / 16 Channel NVR Devices
- LCD Keyborad

Davantis Video Analysis System

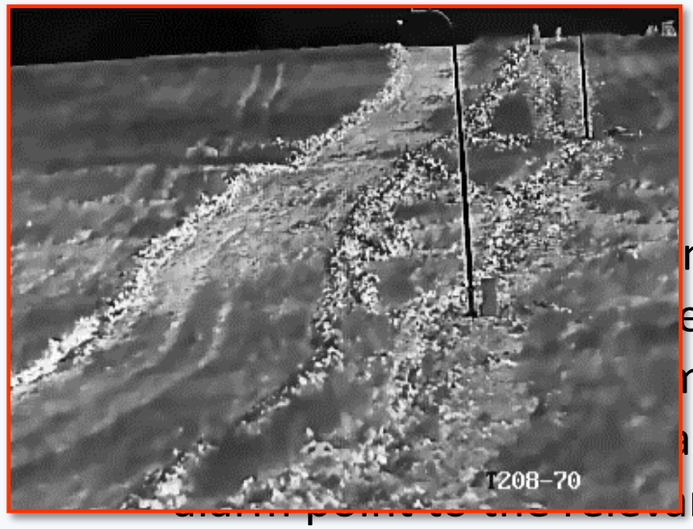
- Davantis LR(Long Range) Video Analysis Server
- AI & Deep Learning Algorithm
- Thermal Camera Support
- 3. Party Software Integration (SECON)

Special Designs



In the project designs, the field applications were planned in advance by using special project design tools.

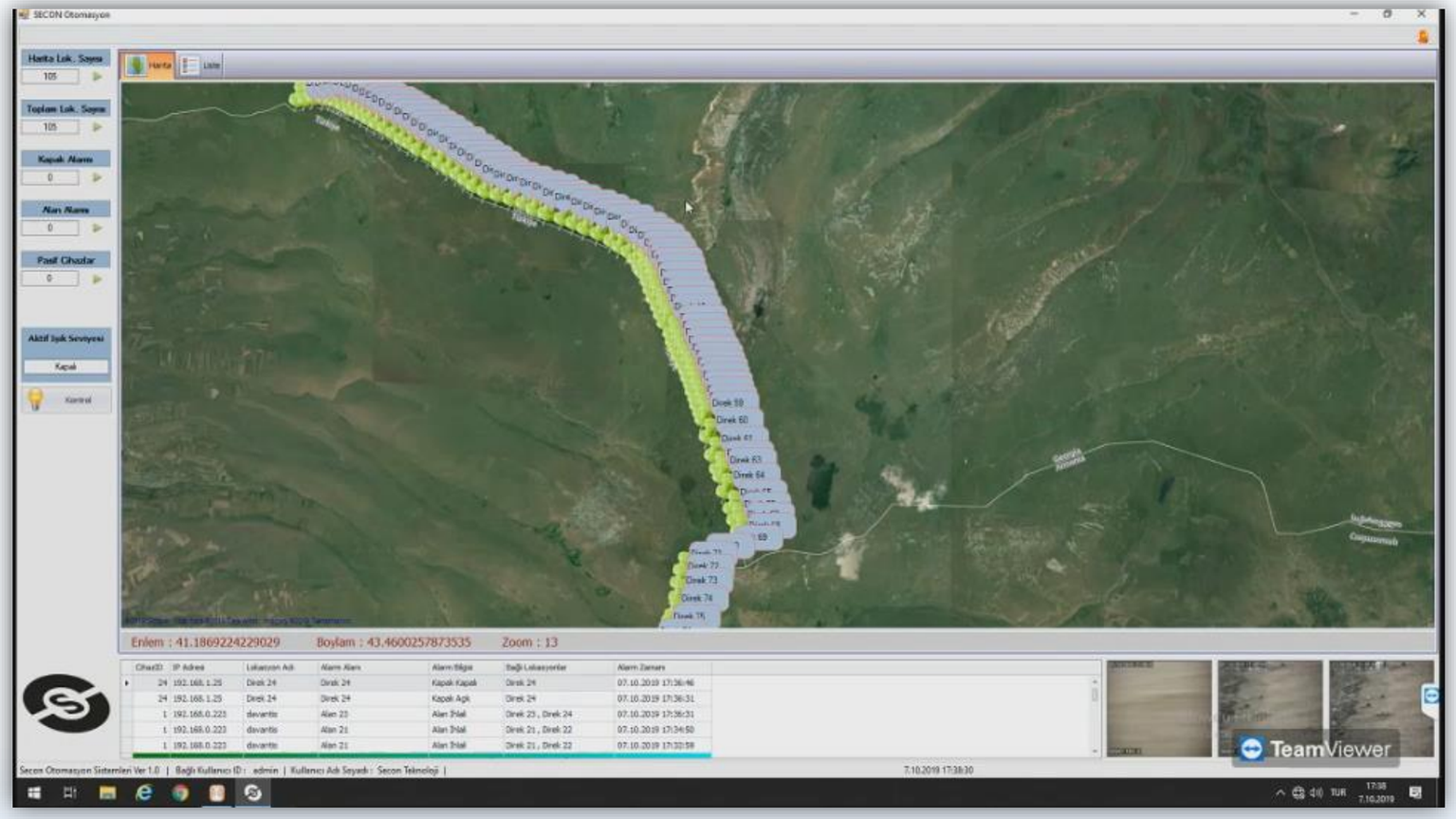
System Scenario



mal Cameras are analyzed 24/7.
ed on the created area, it
nation software.
ally rotates the camera of the
nt area, takes 3 pictures and saves them in the archive.

- The software simultaneously monitors the area where the alarm occurred. Lighting levels of the related poles are set as 100%.
- The flashers (start flashing) on the relevant two poles are activated. In this way, when viewed from a distance, the point where an alarm occurs can be detected by eye. (For patrol teams)

System Scenario



Field Cabinet / Cover Alarm

- When the doors of the cabinets in the field are opened, the control card sends an alarm signal to the center.
- Rotated to see the closest PTZ camera cabinet.
- The relevant field cabinet is monitored on the map.
- PTZ camera is recorded by taking 3 pictures.

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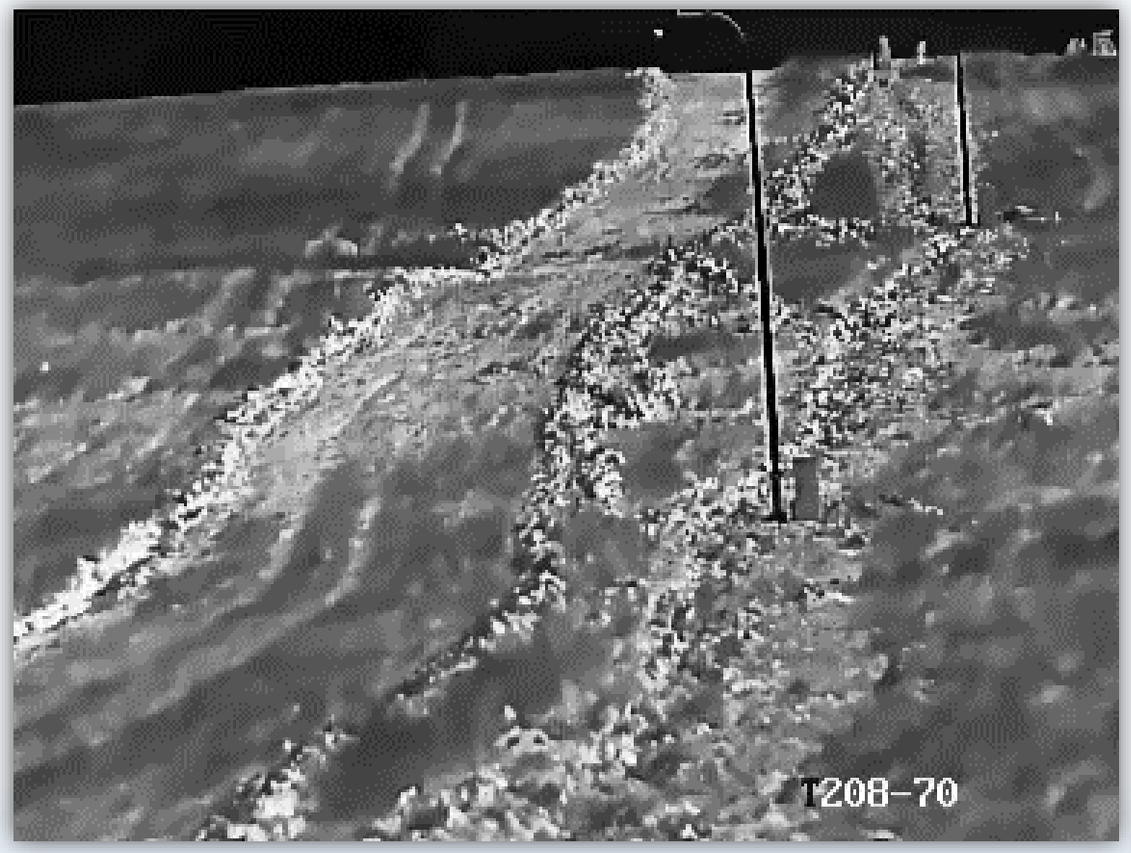
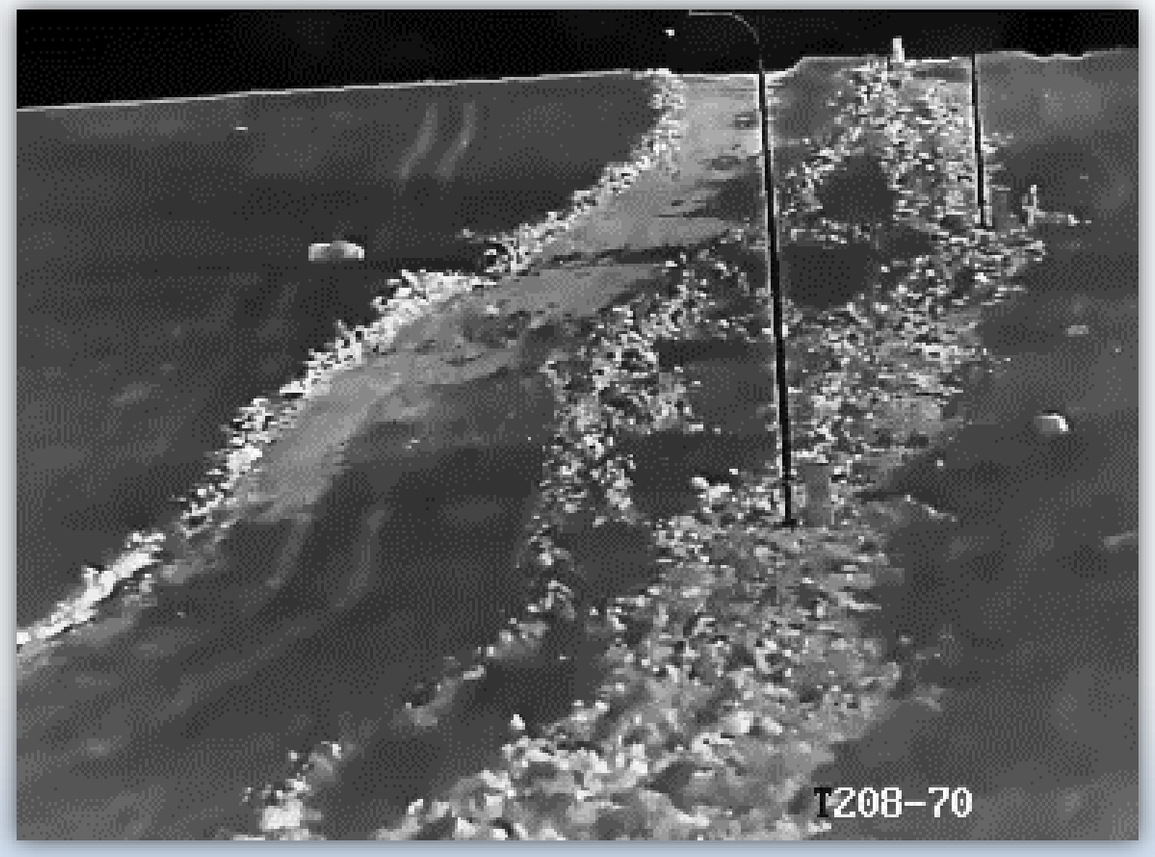
Davantis Client Software

- Alarms can be viewed via software
- Past alarms can be viewed
- Alarm records can be back up
- Device settings can be made through the software

Border Security Solution





- Video Analysis Software real video clips from the field

Border Security Solution

- Video Analysis Software real video clips from the field

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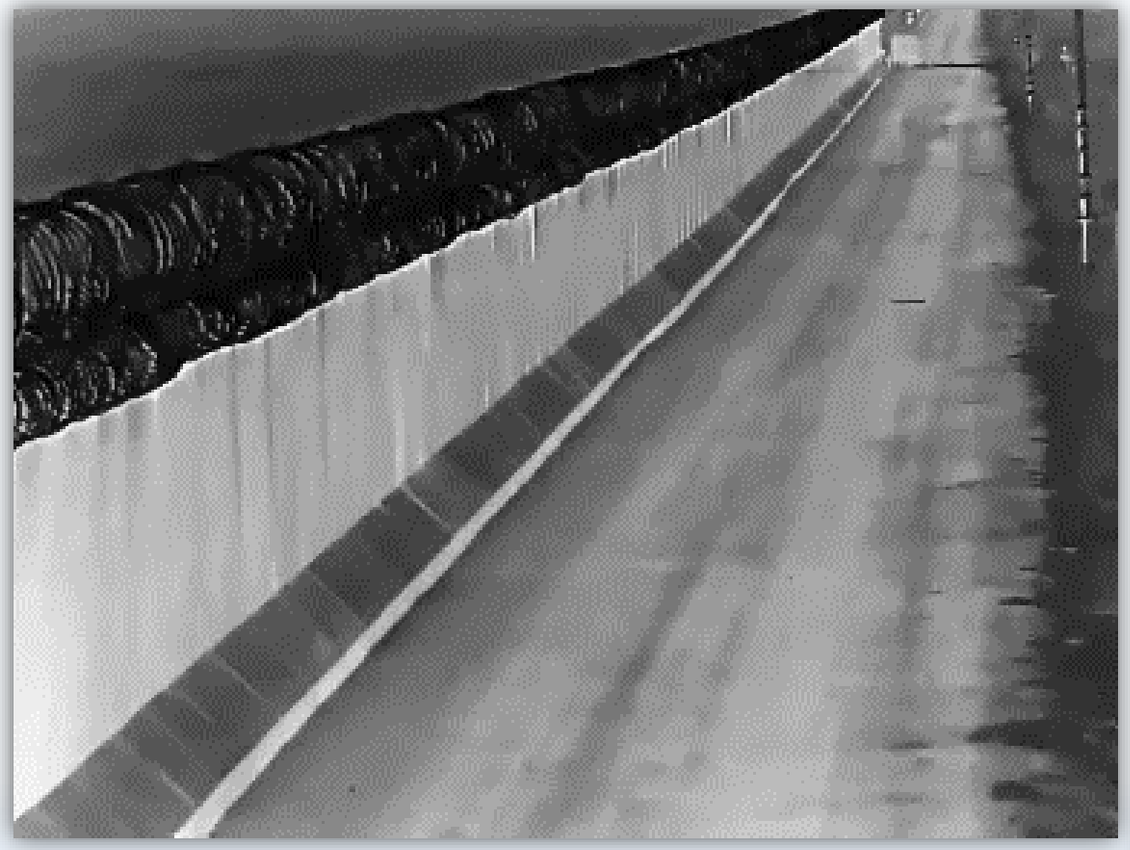

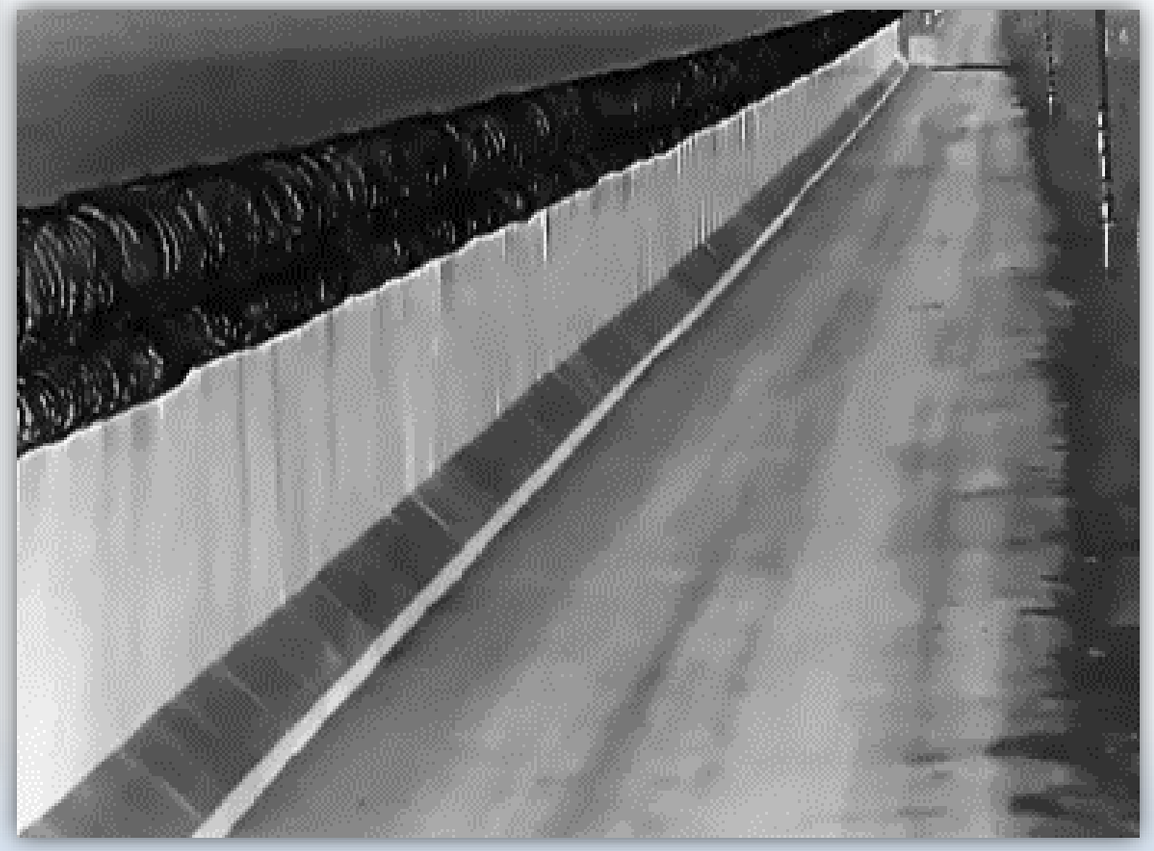

- Video Analysis Software real video clips from the field

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- Video Analysis Software real video clips from the field

Border Security Solution

- Real video clips from field

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Thank you…