FIRESCOUT

About Our Service

Wildfire Detection AI that Never Sleeps

FireScout Fact Sheet

FIRESCOUT

Mission and Values

FireScout provides 24/7/365 Wildfire Detection That Never Sleeps. It can detect wildfires in minutes, integrates seamlessly into existing alert systems, offers a very low cost of deployment and the highest accuracy available.

Partnership & Customer

Infrastructure
Johnson Controls, ALERT Wildfire

Utilities
PG&E, SDG&E, NV Energy

Government
Sonoma County, REDCOM

Key Metrics

309
Cameras Monitored

1000+
Cameras Available

94,000 mi^2
Area Covered

Up to **15 miles**
Early Detection Distance

99%
Accuracy

24/7
Detection

Key Features

> Event Information
> Playback
> Fire Direction
> Select Event Type

> Recent Log
> History Log
> Night Detection
> Timeout

Key Personnel

Bow Rodgers
President & Co-founder

Robert Grey
Sales Manager & Co-founder

Yoon Jin Choi
Product Owner

MinKook Cho
Director of R&D

Problem Definition

Wildfire Problem

- **2K+ fires ignited** by California's 3 largest utilities (2014-2017)

- **$11.4B of economical California damages** in average (2016-2020)

- Destructive wildfires pose threats to **water supply, air quality** and other environmental factors


Market Problem

- **New installation** of HW is needed

- The detection time is **not fast enough**

- The services are **not user friendly**

- **No use of AI,** or show **low performance**

Solution Impact

FIRESCOUT

AI Early Detection

Reduce Large Wildfires

Reduce fatalities, destruction

Climate change leads
to a growth in large fires
→ Reducing environmental destruction
aids in **slowing climate change**

Save money used
to rebuild the ecosystem

Economical Benefits

Save up to **$8.2B per year**

Reduce Environmental Destruction

Reduce smoke emissions and carbon dioxide, improve air quality and water supply

FireScout
# AI-based Early Wildfire Detection

Early-stage smoke and fire detection from connected FHD cameras.
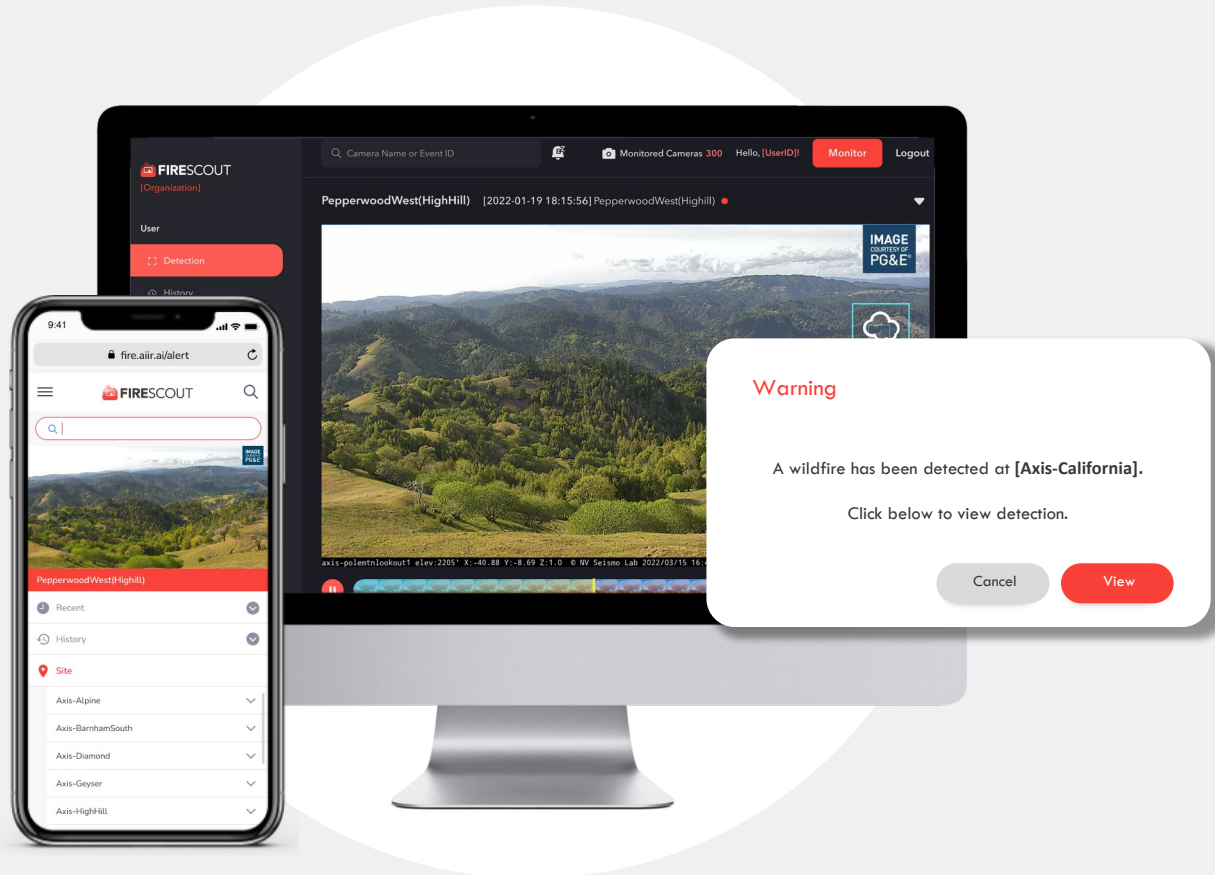
The primary objectives of FireScout's algorithm are to:

- Detect smoke or fire as soon as visible within the camera frame

- Detect smoke and fire before CCTV operators or the general public report the fire

- Alert a human capable of directing emergency response

Actual product performance footage. Clips taken directly from product dashboard. Currently monitoring 309 cameras 24/7.
New version to be updated on May 2nd.
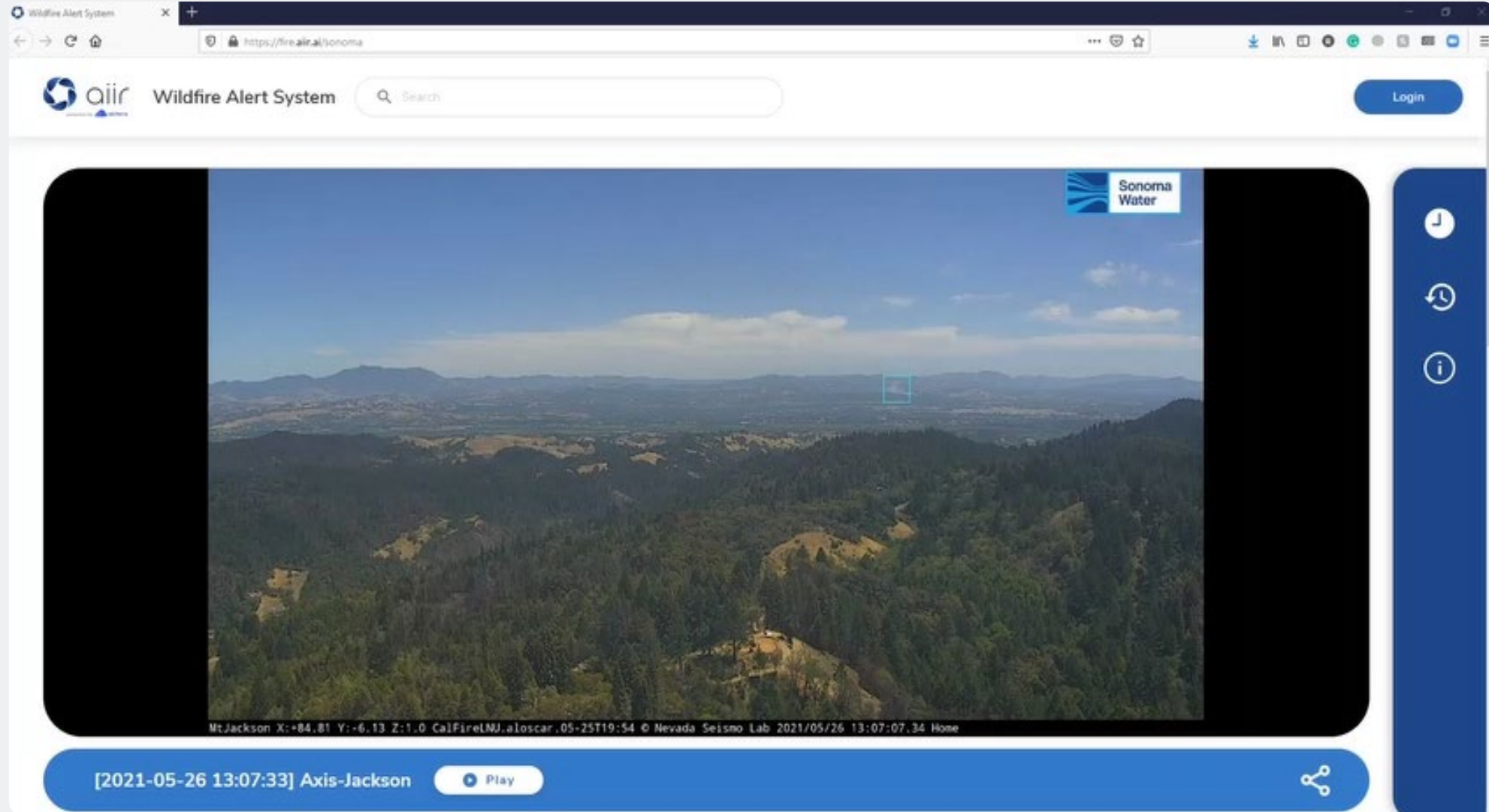
Wildfire Alert System Overview

A simple 4-step process provides wildfire detection in under 1 minute.
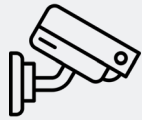
Firespotting Cameras

Send image data to the cloud
Provided by ALERT Wildfire

ALERT Wildfire

AI in the Cloud

Deep-learning algorithms **detects smoke**, sends wildfire alerts for confirmation

Human-in-the-Loop

1 person per 150 cameras filters AI results for false alarms, **confirms alerts**
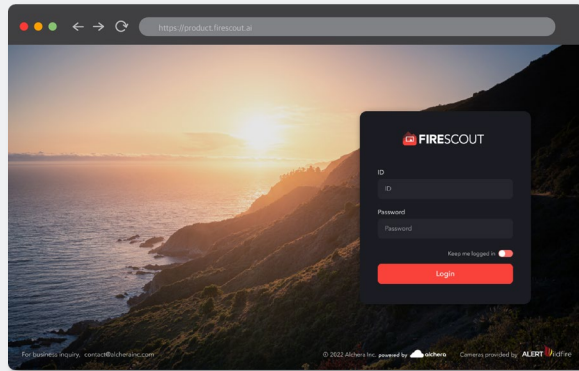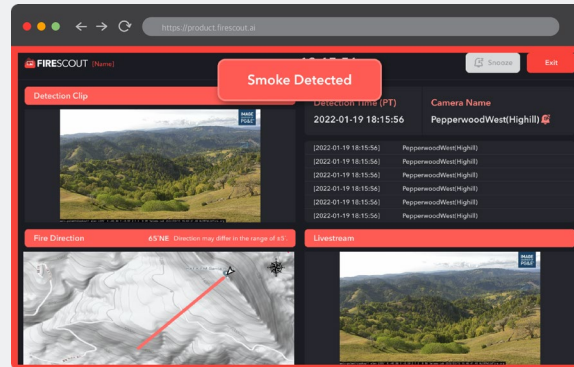
Immediate Alert

Human-confirmed fires populate on dashboard, triggers an **alert to users** by SMS, e-mail
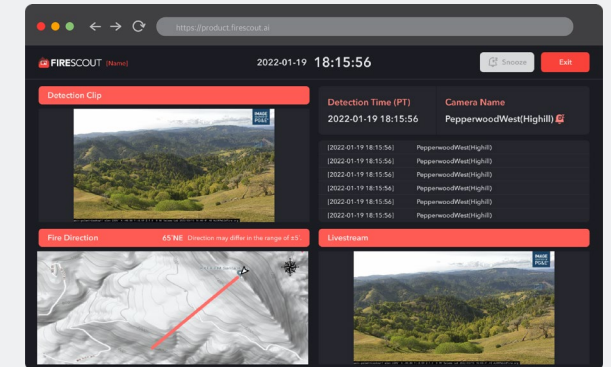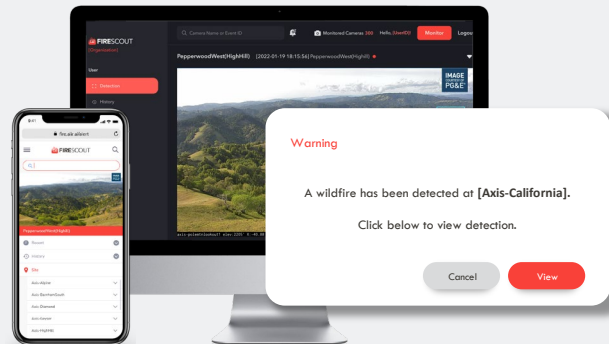
User Experience

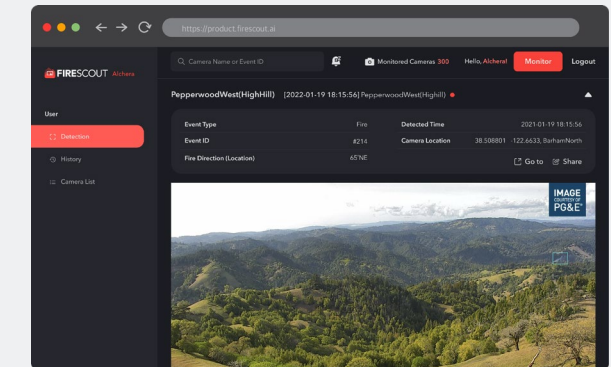**Real-time Monitoring**

01 Log-in

02 Receive Alerts

03 Review Alerts

Real-time Alerting
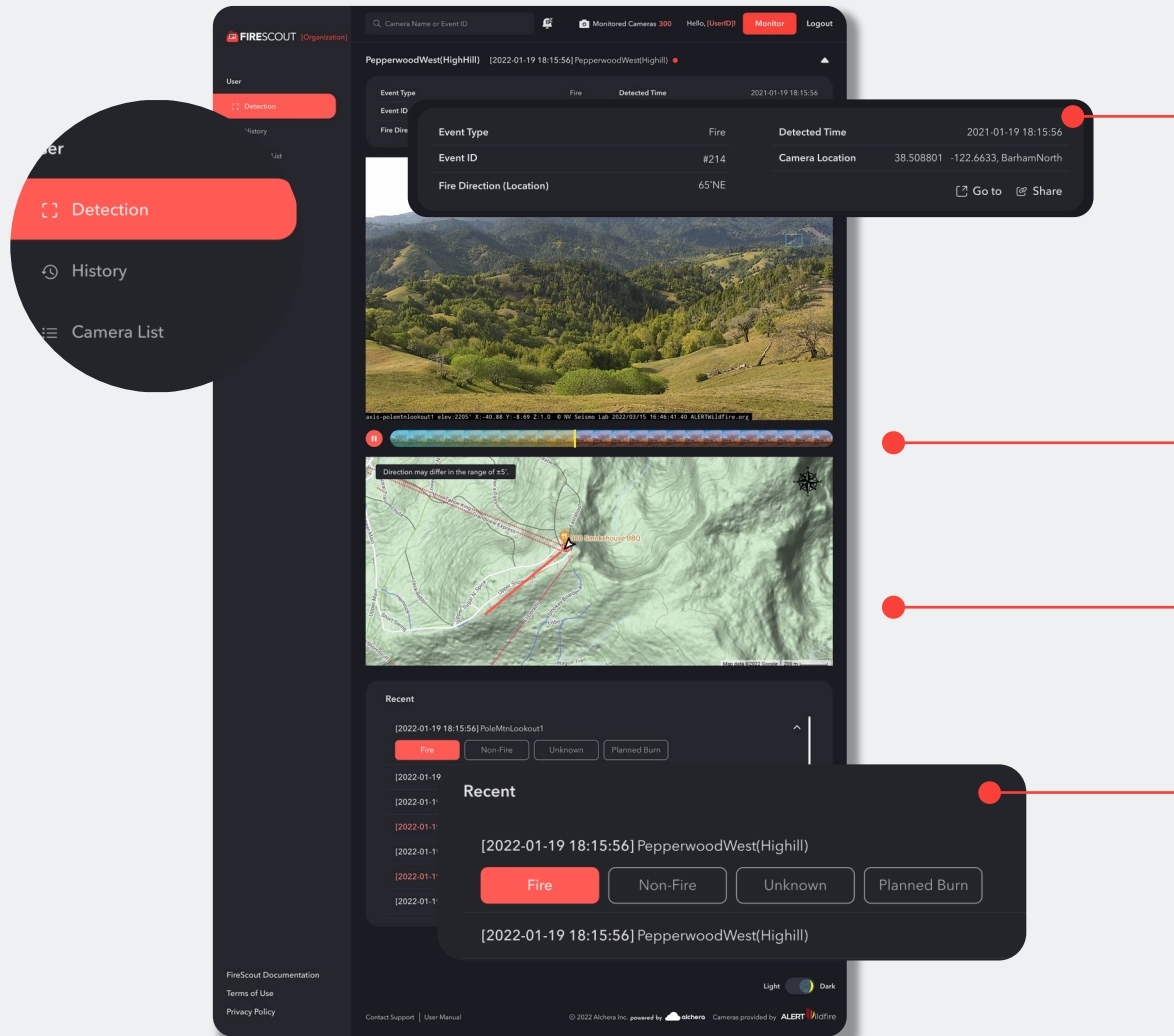
01 Receive SMS/Email Alerts

02 Click Alarm Link

03 Review & Take Action

Product Features

Event Information

provides detailed information about the event

Weather Information

provides real-time weather information for the camera region

Playback

shows the previous and following 4 minutes of video before/after the smoke was detected

Fire Direction

provides map view and directional information

Recent Log

shows all detections from all cameras from the past 72 hours

Select Event Type

records detection
event type for continual learning

Night Detection

detects smoke via IR image at night, allowing 24-hour coverage

History Log

shows all detections categorized by camera site

Monitor Mode

adds visual and audio effects when a new detection arrives

Timeout

allows user to pause alerts(not detections) for a given camera

More Coming Soon

location estimation of GPS-coordinate of fire

Product Features: Night Detection

Night detection AI has been deployed as a beta version over 309 cameras since November 2021 with multiple events verified by users. This feature completes the **wildfire detection that never sleeps.**

Night Detection Examples

FireScout Detection
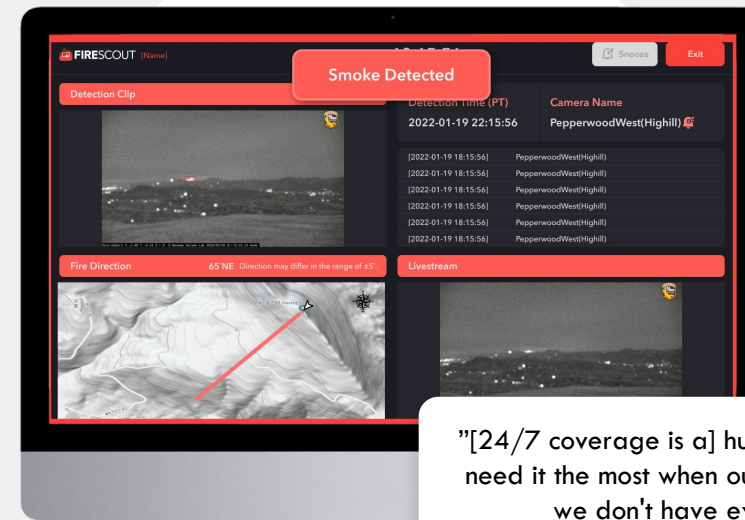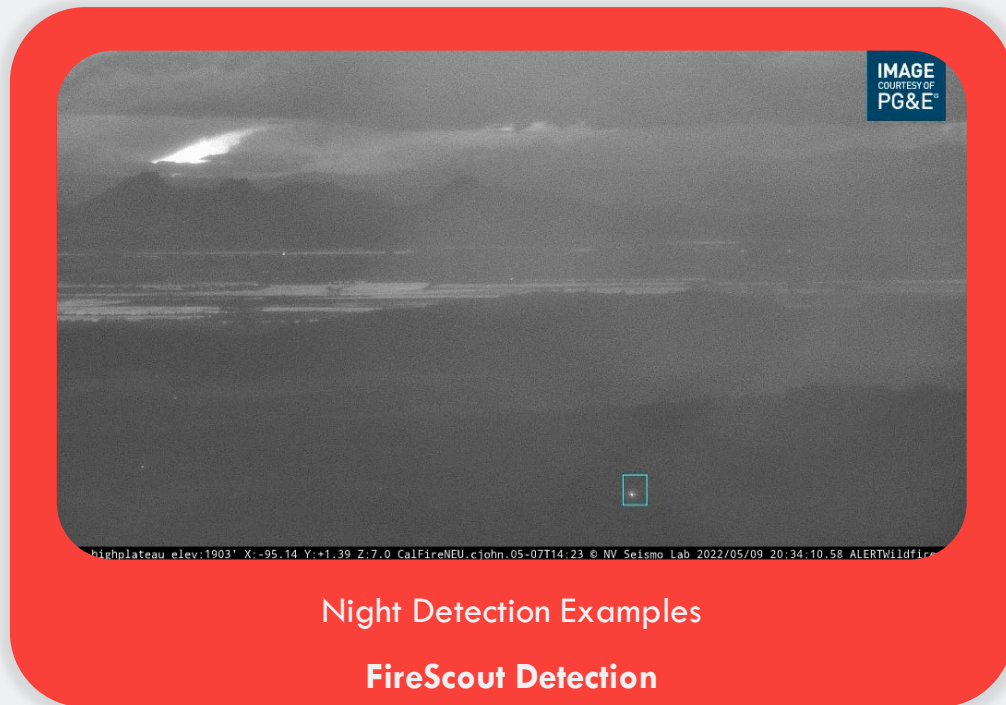
"[24/7 coverage is a] huge benefit, that's when we need it the most when our populace is asleep, and we don't have eyes out in the hills."

- *KT McNulty, Executive Director of REDCOM Dispatch*

Partnerships & Customers

"Alchera's FireScout gives us a **really critical early jump** to get our eyes on a fire."

- Eric Sutphin, PG&E Hazard Awareness & Warning Center

"FireScout was the only provider in our RFP process that met all our specific needs."

- Sam Wallis, Sonoma County

Partnership: ALERT Wildfire

Our close partnership with ALERT Wildfire enables FireScout to be the market leader.
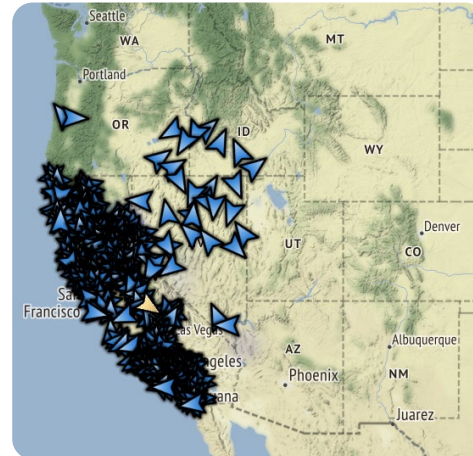
With PTZ cameras and microwave networks, ALERT Wildfire provides real-time fire monitoring across a growing network of **1000+ cameras.**

As an official partner, FireScout can expand and integrate seamlessly with the camera network.
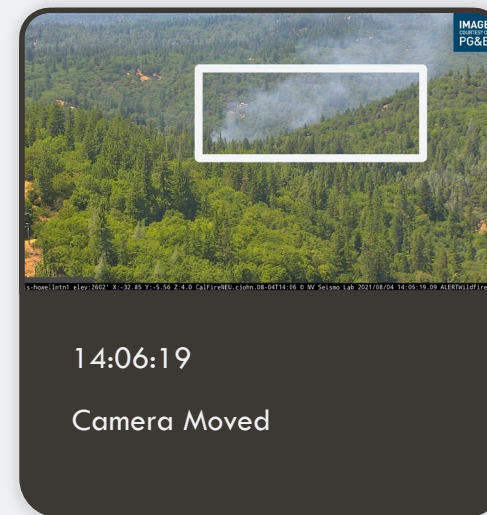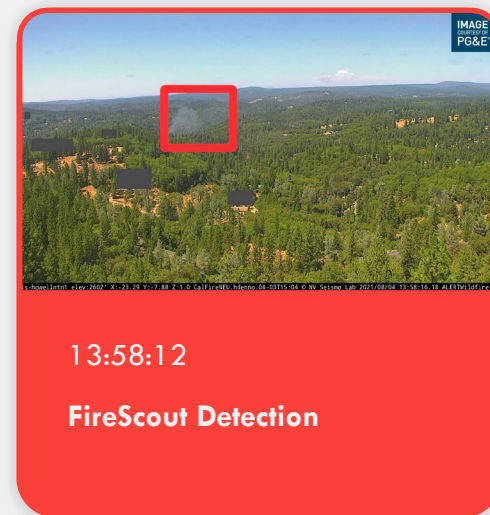
Network Partners

Coverage Area

Cameras

AXIS Q6055-E PTZ Network Camera

Success Case: PG&E

On August 4th 2021, FireScout detected the start of the devastating River Fire from Howell Mtn camera within **1 minute** of visible ignition.

13:57:04

First Visible Smoke

13:58:12

FireScout Detection

14:06:19

Camera Moved

08/10/2021

2,619 Acres Burned

"Alchera's AI got a positive hit **within a minute or so** of the fire start. Another minute later it's called in and put on IRWIN, and it took **another 8 minutes** to move the camera… positive news across the board, except it's a really bad fire."

- Graham Kent, ALERT Wildfire

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Thank You!

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