



AUTOMATED WILDFIRE MAPPING

May 2022

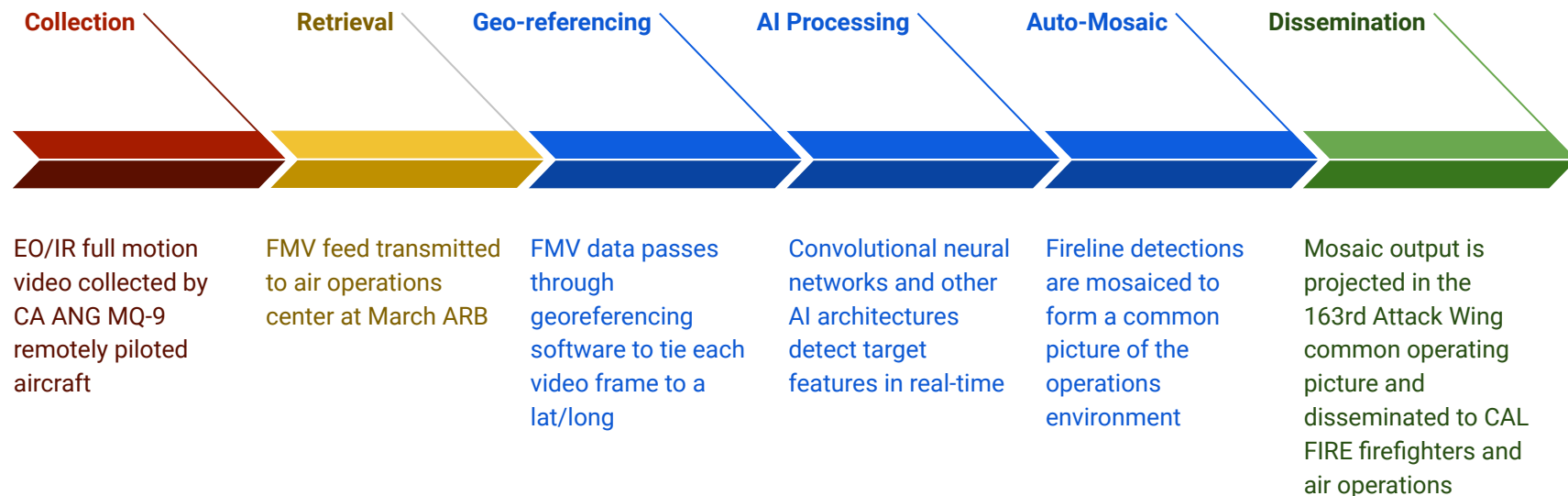
Project History



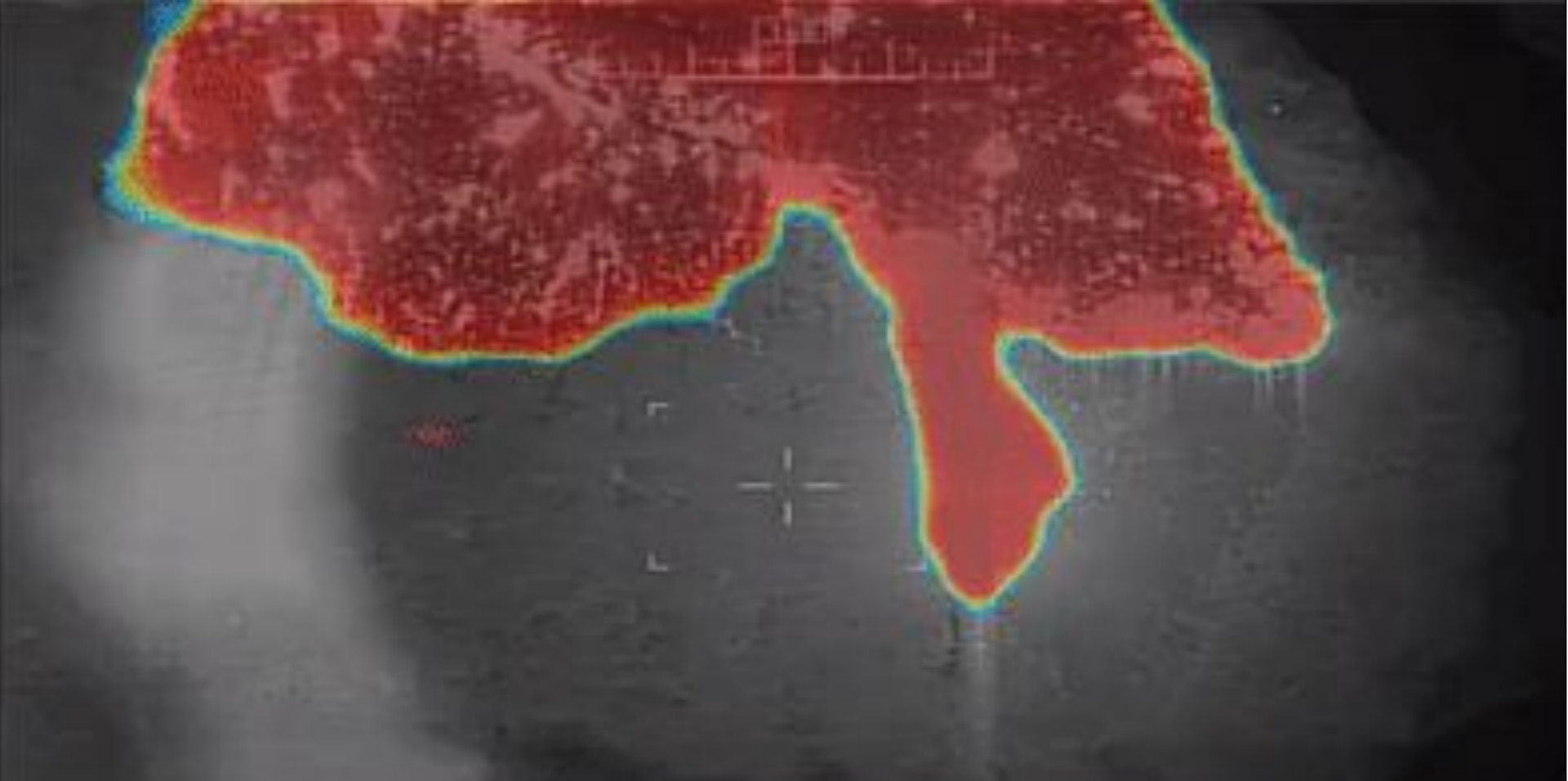
- In 2018, CrowdAI was the first hire by the newly-established Joint Artificial Intelligence Center to build “FireNet”
- Since 2019, FireNet has automatically detected wildfire from thermal sensors hosted on the MQ-9 drone flown by CA ANG
- Fire detections are mosaiced in near-real-time to map firelines, which are shared to first responders with CAL FIRE
- In 2020, Congress divested disaster response from the JAIC; however,
- Through the 2021 fireseason, FireNet’s automated production workflow was used continuously by CA ANG and CAL FIRE for situational awareness to protect lives and property

Computer Vision Automated Workflow

A low-touch, automated pipeline frees users to optimize their time







CrowdAI FireNet built for JAIC and CA ANG

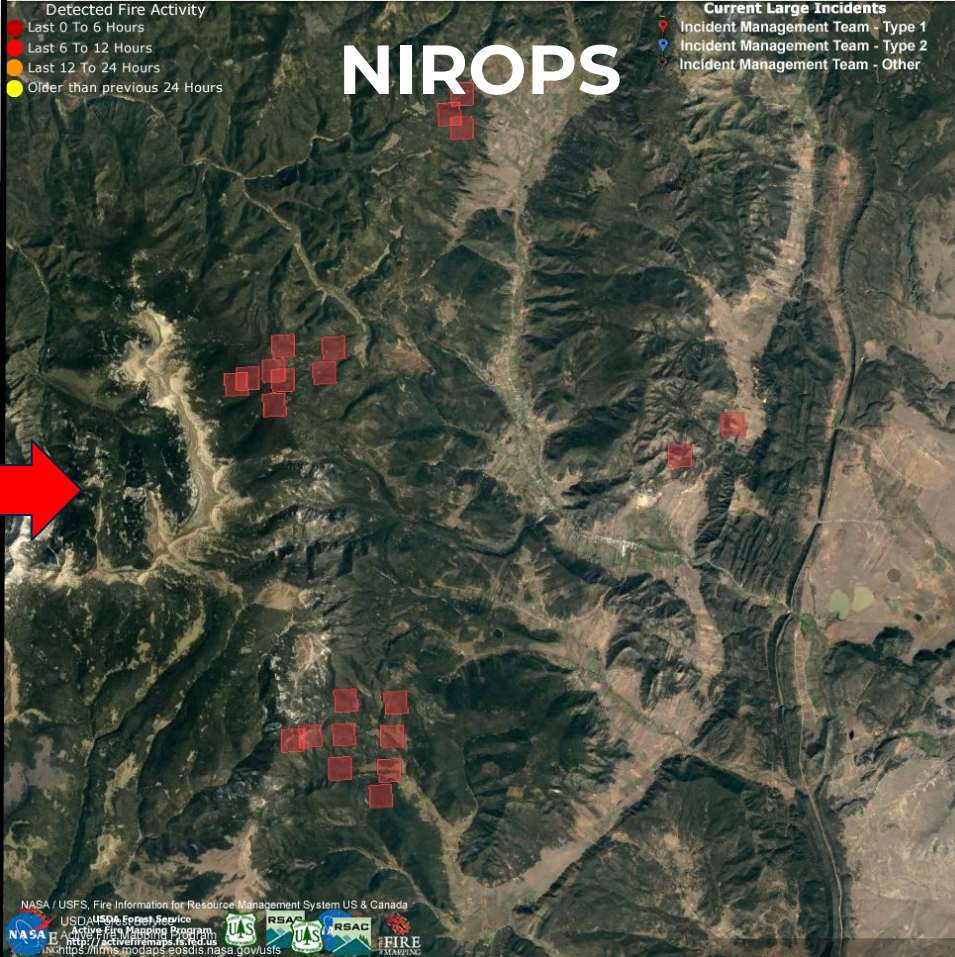
Distribution Statement A: Approved for Public Release

FireNet



Members of the 163d ATKW using FireNet

NIROPS



What people are saying

1. JAIC Blog | [The JAIC Is Supporting National Guard Efforts to Combat Destructive Wildfires](#)
2. WIRED Magazine | [The National Guard's Fire-Mapping Drones Get an AI Upgrade](#)
3. VICE Magazine | [Spotting Wildfires Is Slow, Manual Work. AI Could Change That](#)
4. NeurIPS | [FireNet: Real-time Segmentation of Fire Perimeter from Aerial Video](#)
5. NVIDIA Blog | [Startup Uses Satellite Imagery to Assess Hurricane, Fire Damage](#)

* This page contains hyperlinks