



Greater Los Angeles Wildfires

Gray Sky Response

From the period of January 7–31, 2025, a series of 5 destructive wildfires impacted the greater Los Angeles area. The fires were spurred on by excessive Santa Ana winds that reached up to 100 mph in some areas with heavy drought conditions. The first major fire, the Pacific Palisades fire, began on Tuesday, January 7 around 10 a.m., and within just hours, it had spread to over 200 acres, threatening multiple homes and starting the first wave of evacuations. The Eaton Fire in Altadena began that same day in the evening around 6 p.m. near the San Gabriel Mountains and within hours, evacuation notices were given.

With how quickly these fires were spreading and considering the weather environment that existed to fan the growth and spread of the flames, our Gray Sky team was immediately activated that day to start monitoring the wildfires. The LA Fires presented unique challenges including high winds, heavy smoke, and limited air space to collect due to fire operations.

Planes were finally cleared to begin collecting imagery on January 10 over the hardest hit areas of the Pacific Palisades and Eaton Fire areas. The first collection covered approximately 360 km² with oblique, ortho, and multispectral imagery.

Collection Stats

Number of Captures

Pacific Palisades: 5
Eaton: 4
Hurst: 3
Sunset: 3
Kenneth: 1

Damage Assessment

Total number of structures analyzed: 827,149

Total homes destroyed: 16,867



3 planes engaged



Multi-day collection



Damage assessment on properties



Net Collection
2,049 km²
Gross Collection
5,498 km²



High-res Oblique, Ortho, and Multispectral imagery available



7.5–10cm resolution

A second collection was scheduled for the following day, January 11, to capture additional imagery for the Kenneth Fire, Sunset Fire, and Hurst Fire areas, including additional collections again for the hard-hit areas of Pacific Palisades and Eaton Fire zones.

Over the next two weeks, we would add additional collections to the mix: Pacific Palisades area with ortho imagery on January 13; Pacific Palisades, Hurst, Sunset, and Eaton with ortho imagery on January 21.

Once all fires were near total containment, we made the decision to fly one last time over the entire area, capturing the Palisades, Hurst, Sunset, and Eaton areas in high-resolution ortho imagery to ensure full collection of the thousands of impacted properties in these communities. This was completed on February 2.

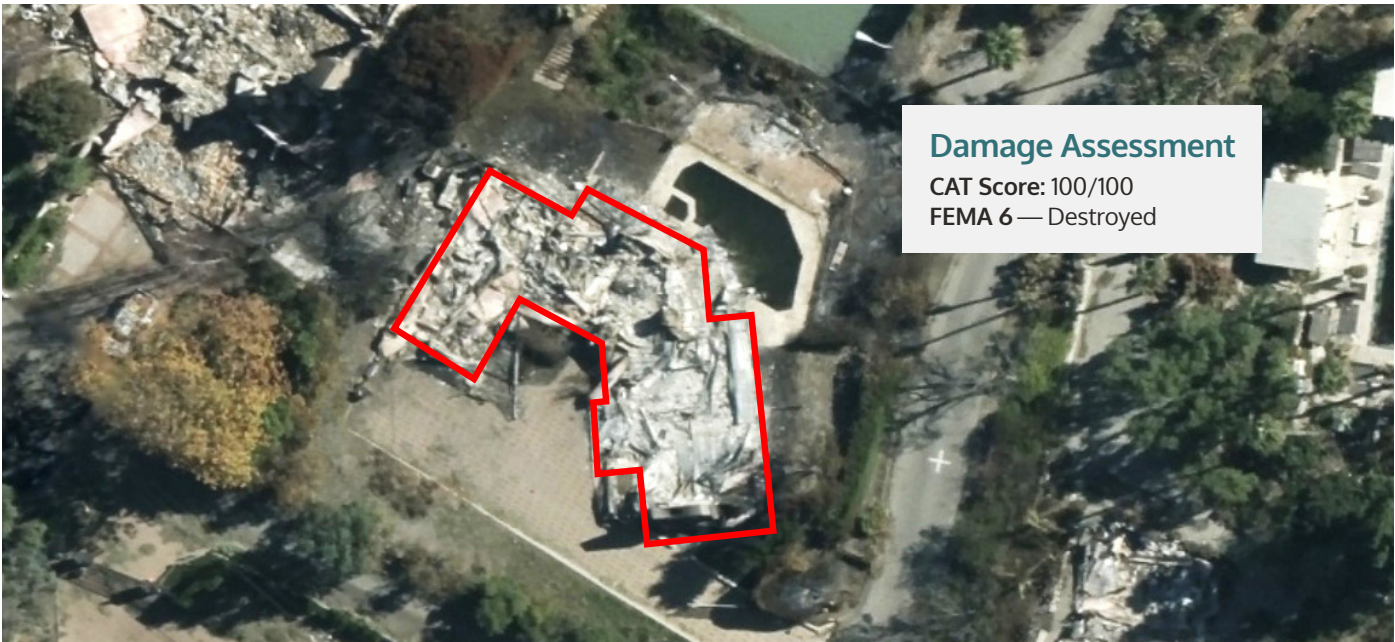
Damage Assessment on Home in Malibu, CA



Historical Imagery

Footprint area: 3338.97 ft²
Roof condition: 5/5
Roof material: metal
Roof discoloration: 0%
Roof shape: gable
Roof solar: yes
Tree cover over roof: 0%
Defensible space report:

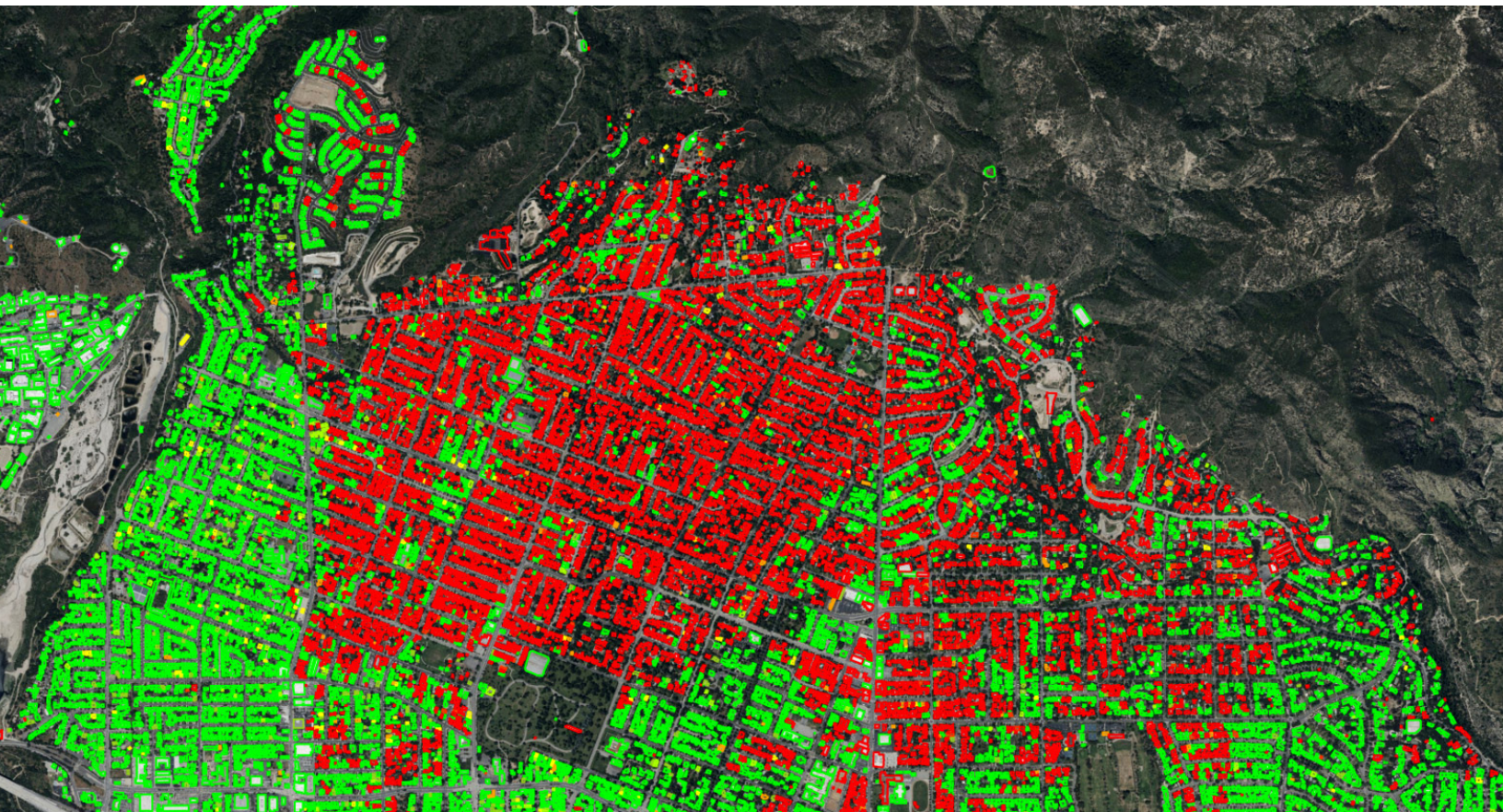
Trees	Buildings
0–5 ft: 46%	0–5 ft: 0%
0–30 ft: 39%	0–30 ft: 0%
0–100 ft: 45%	0–100 ft: 9%
0–200 ft: 43%	0–200 ft: 13%



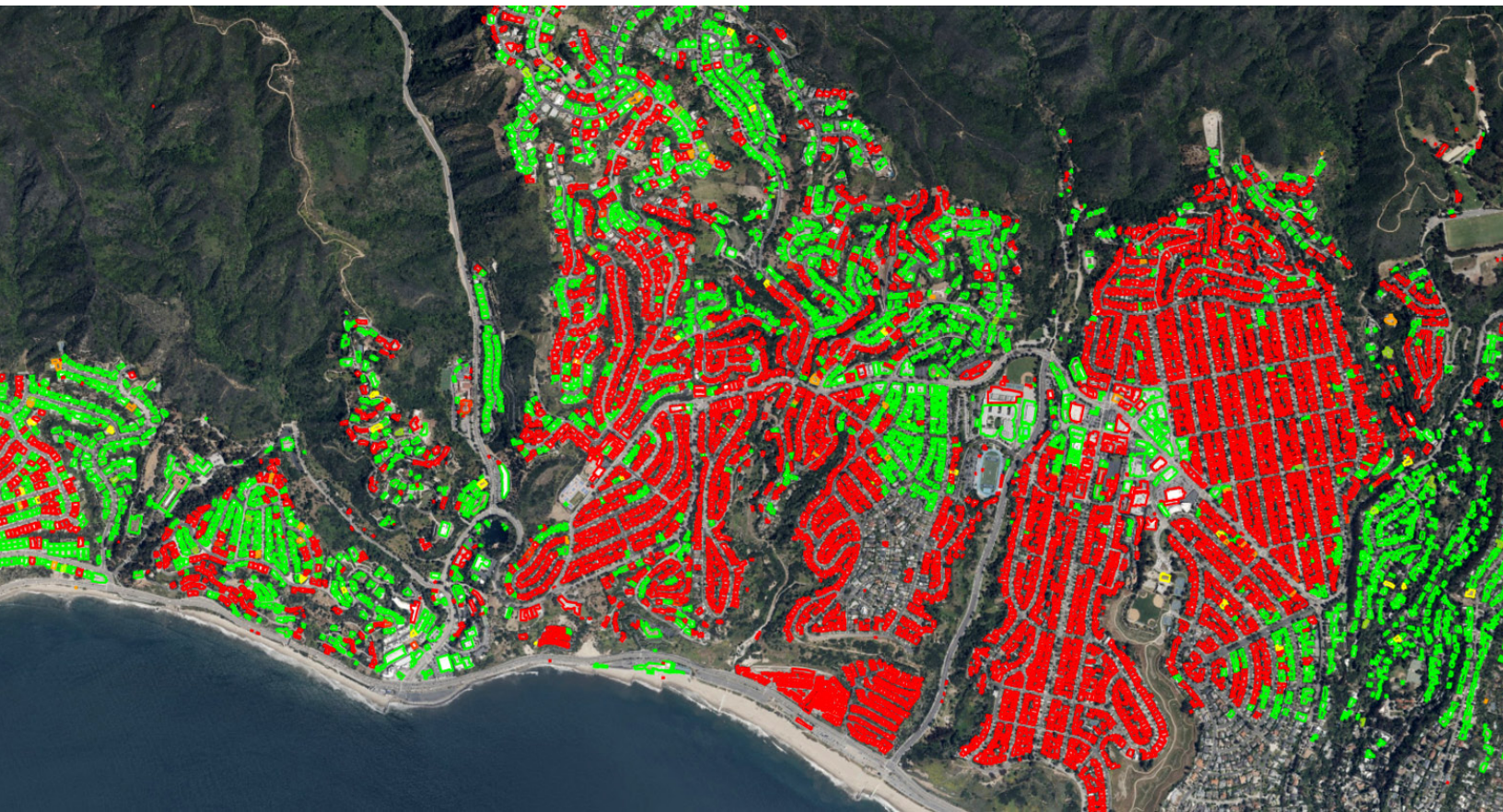
Damage Assessment

CAT Score: 100/100
FEMA 6 — Destroyed

Damage Assessments for Altadena, CA

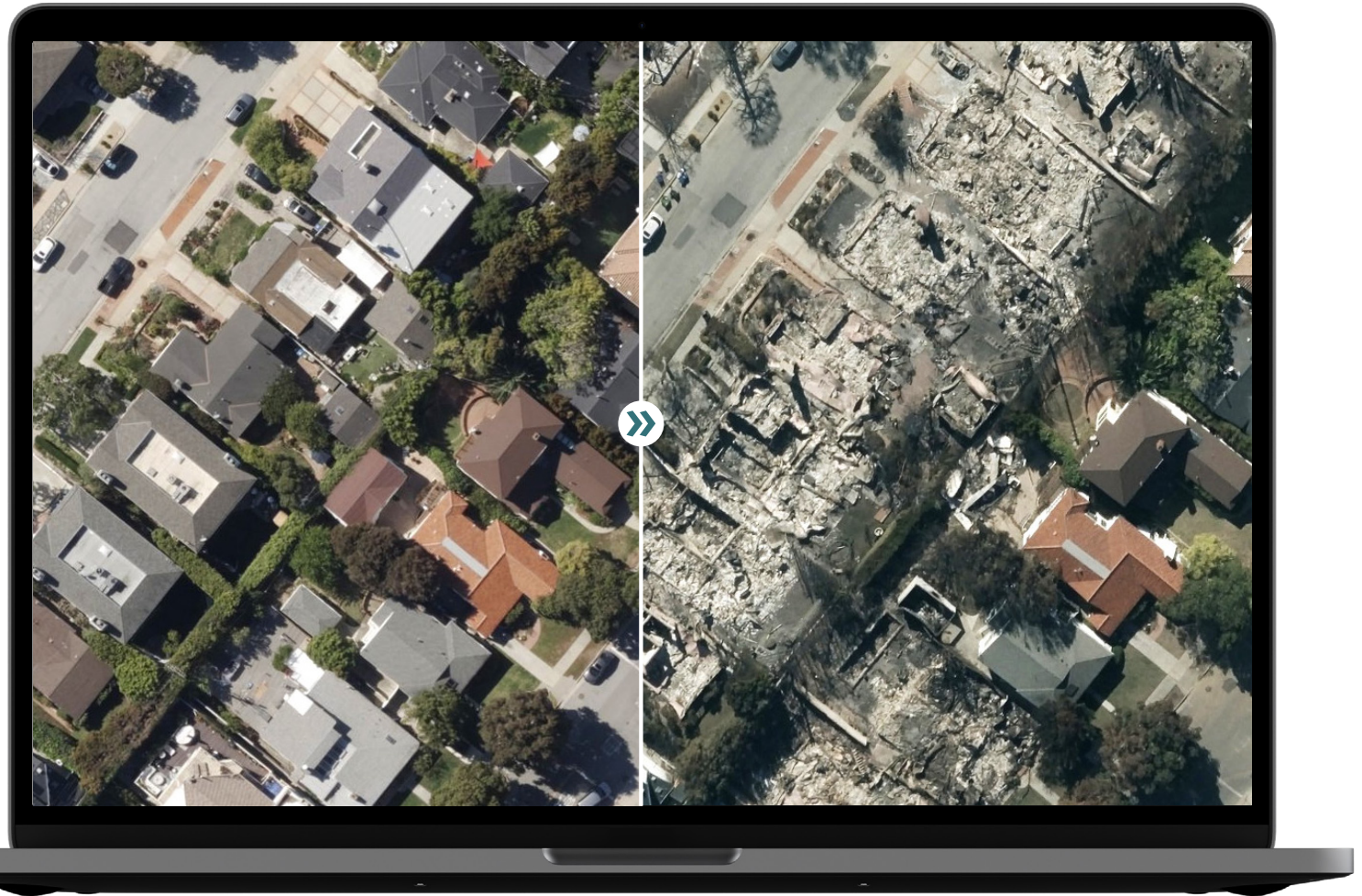


Damage Assessments for Pacific Palisades, CA



Before & After Comparison

California communities are significantly impacted by the level of destruction from these wildfires. Entire neighborhoods have been destroyed and it will take years to rebuild. But having access to what existed before can help both insurers and customers move forward with a better understanding of what it looked like and how it can be improved upon to protect properties in the future. Vexcel's historical library provides valuable before imagery for trusted comparisons against Gray Sky imagery. Plus, ongoing collections in the area will help show how the community is rebuilding over time, supporting not only an insurer's book of business but the needs of other Vexcel customers such as utility and telecom companies, as well as government entities.



Vexcel Gray Sky Program & Access

Vexcel has been responding to major disasters since its first event in 2017 with Hurricane Harvey in Texas. But long before a hurricane, a wildfire, or tornado touches down, weather is monitored continuously to track the potential for a Gray Sky response. Access to Gray Sky imagery is available through the Vexcel Viewer, Vexcel APIs, Vexcel Image Services for ArcGIS, and select partner sites.

Visit vexceldata.com/gray-sky to learn more.

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