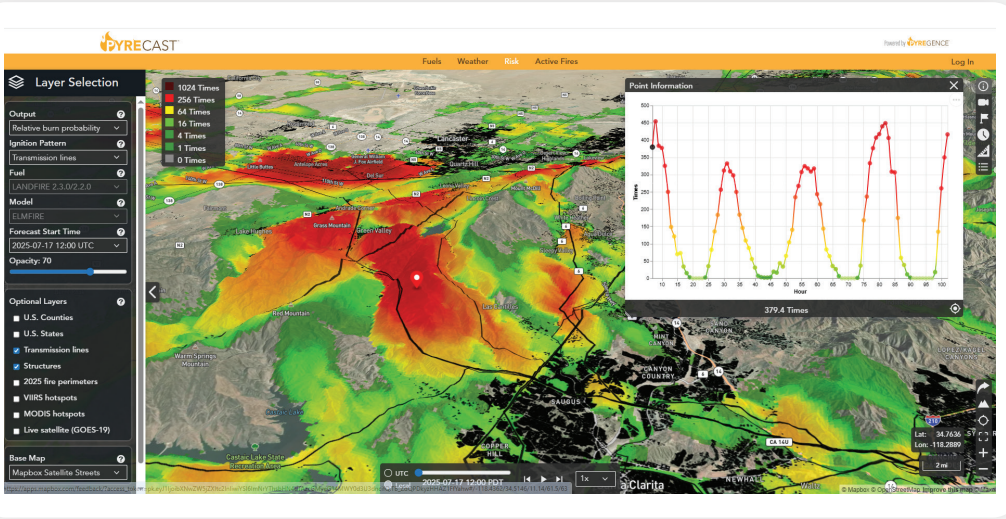
PYRECAST™

Industry Solutions

Why Choose PyreCast for Your Wildfire Situational Awareness Platform?



Transparent. Predictive. Actionable

PyreCast is more than a tool - it's a trusted partner in wildfire resilience. We combine transparent science, mission-driven service, and cutting-edge technology to protect communities, ecosystems, and infrastructure.

Built on Open Science, Backed by Credibility

PyreCast is built on a foundation of peer-reviewed, transparent science. Utilities can inspect, validate, and trust our models - supporting risk-informed decisions and regulatory compliance. Our approach to open science builds trust with both stakeholders and ratepayers.

Public-Mission Driven, Not Profit-Motivated

PyreCast is developed by a mission-aligned science consortium, not a for-profit vendor. We prioritize public safety, environmental protection, and scientific progress - not investor returns. Our values align with utility wildfire mitigation goals.

Enterprise-Ready, Cost-Effective

PyreCast offers powerful situational awareness capabilities at a public-good price. We enable utilities of all sizes to deploy cutting-edge forecasting tools without compromising on other critical mitigation investments.

Leading the Science of Wildfire Behavior Modeling

Our platform integrates the latest in fire behavior modeling, ignition forecasting, live fuel moisture analysis, and dynamic climate-informed simulations. PyreCast continuously evolves to meet the growing complexity of wildfire risk.

Modular, Flexible, and Integratable

With a microservices-based architecture, PyreCast can integrate into utility dashboards, GIS systems, and incident management tools. Whether as a stand-alone solution or API feed, PyreCast adapts to your operational ecosystem.

Purpose-Built for Utility Use

From de-energization planning to real-time operations and pre/post-event analysis, PyreCast is tailored for utility wildfire mitigation needs. We support decision-making at both strategic and tactical levels.

> "The suite of tools available on PyreCast places important weather, risk and active fire spread forecasts into one platform. As a Fire Behavior Analyst and career Fire Chief and Fuels Manager, the PyreCast real-time forecasting tool is user-friendly, powerful and the forefront of technology for decision makers. Among other things, PyreCast provides near instant access to a multi-view web map, weather, vegetation/fuels, topography, risk analysis', and near-term wildfire spread predictions."
>
> **Taro Pusina (Federal Wildfire Behavior Analyst, US Forest Service)**

PYRECAST™ Comparison

Competitive Comparison - Why Choose PyreCast for Your Wildfire Situational Awareness Platform?

The table below summarizes core features of PyreCast and highlights why each one is especially important for utility real-time operations, safety-driven power shutdown decisions, and long-term wildfire mitigation strategy. In summary, a wildfire behavior model with these features equips electric utilities to stay ahead of fast-changing wildfire conditions. It blends rigorous science with practical, real-world data integration to support decisions that safeguard communities, protect critical grid infrastructure, and build long-term resilience in an era of growing wildfire challenges.

	PYRECAST	Wildfire Risk Platforms	Asset & Vegetation Intelligence Providers
Multiscale Fire & Smoke Modeling (Accounts for climate trends, human factors, and weather) Combines broad climate outlooks with local fire behavior. Helps utilities foresee seasonal risk trends and minute-to-minute fire activity, improving both long-range planning and immediate response.	✓	●	●
High-Resolution Weather Inputs (WRF-based) Uses finely detailed weather data to drive fire models. Yields more accurate, location-specific predictions of fire behavior – critical for real-time decisions like PSPS timing, as well as for planning resource staging in complex terrain.	✓	●	●
Probabilistic Structure & Asset Risk Provides probabilities of structure exposure or asset loss instead of single estimates. Empowers utilities to weigh the odds of extreme outcomes, supporting more defensible shutoff calls during red flag days and smarter investments (e.g. fortifying high-risk circuits) over the long term.	✓	●	●
Real-Time Data Integration (Satellites, drones, IoT sensors) Continuously updates model predictions with real-world data feeds. New fire ignitions, shifting winds, or on-the-ground observations are quickly reflected in the tool. For utility operators, this means faster detection of threats and the ability to adapt on the fly – whether that's initiating a rapid outage for safety or rerouting crews to where they're needed most.	✓	●	●
Ensemble/Uncertainty Outputs Delivers a range of possible scenarios (best-case to worst-case). Utilities can see the confidence or spread in forecasts. If most scenarios show danger, act immediately; if uncertainty is high, prepare accordingly. This leads to more nuanced, risk-aware operational planning and avoids blind-spots from single-run models.	✓	●	○
WUI Fire Simulation (Wildland-Urban Interface modeling) Shows how fires could spread into neighborhoods and affect infrastructure. Guides utilities in pinpointing at-risk communities and assets, informing proactive grid de-energization and targeted hardening efforts to protect lives and property.	✓	○	○
Fire-Smoke Coupling and Air Quality Forecasts Predicts smoke spread and air quality impacts from fires. Allows utilities to manage not just flames but also evacuation and public health aspects such as adjusting crew deployment, issuing smoke alerts, or coordinating with agencies during smoky conditions.	✓	○	○
Open Data & Transparent Models Built on open datasets and visible science, which boosts credibility. Utilities and regulators can trace how predictions are made, making it easier to justify decisions to stakeholders and incorporate model outputs into regulatory wildfire mitigation plans with confidence.	✓	○	○