

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans Discovery 2023-2025
Data Response

PG&E Data Request No.:	CalAdvocates_042-Q002		
PG&E File Name:	WMP-Discovery2023-2025_DR_CalAdvocates_042-Q002		
Request Date:	April 9, 2024	Requester DR No.:	CalAdvocates-PGE-2025WMP-06
Date Sent:	April 12, 2024	Requesting Party:	Public Advocates Office
PG&E Witness:		Requester:	Holly Wehrman

QUESTION 002

Page 1021 of PG&E's 2023-2025 WMP R4 states, in response to ACI PG&E-22-05,

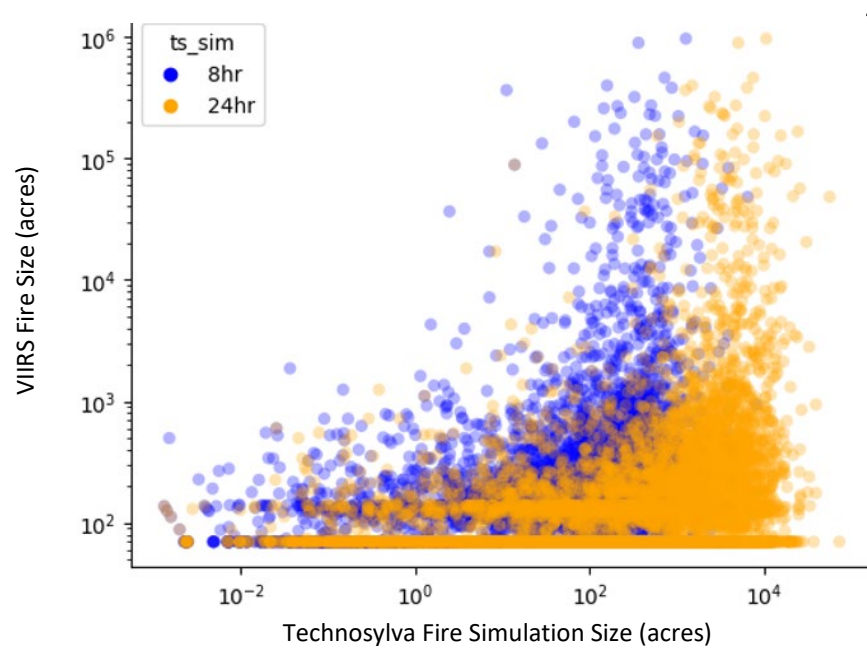
In general, 24-hour simulations result in higher impacts as simulated fires are more likely to reach highly populated areas despite decreasing reliability on the weather forecasts as time progresses, and unknown suppression effectiveness over time. Sensitivity analysis is continuing, and PG&E will be able to provide results in 2023 that quantify the effectiveness of shorter versus longer simulation durations.

- a) Describe the result of the sensitivity analysis discussed above.
- b) Provide any written results, reports, or other output of the sensitivity analysis discussed above.

ANSWER 002

- a) PG&E ran comparisons of both 24-hour and 8-hour simulations for historical fires in the VIIRS dataset (fires detected from space in California above latitude 35.5, not restricted to fire season). The plot below is a comparison between actual acreage burned measured via satellite (y axis) against simulated acreage burned by Technosylva (x axis) for 24-hour and 8-hour simulations. Every dot represents a historic fire and a paired Technosylva simulation. The correlation between acres burned and Technosylva simulated acres burned is slight. Please see below for the output of this analysis.

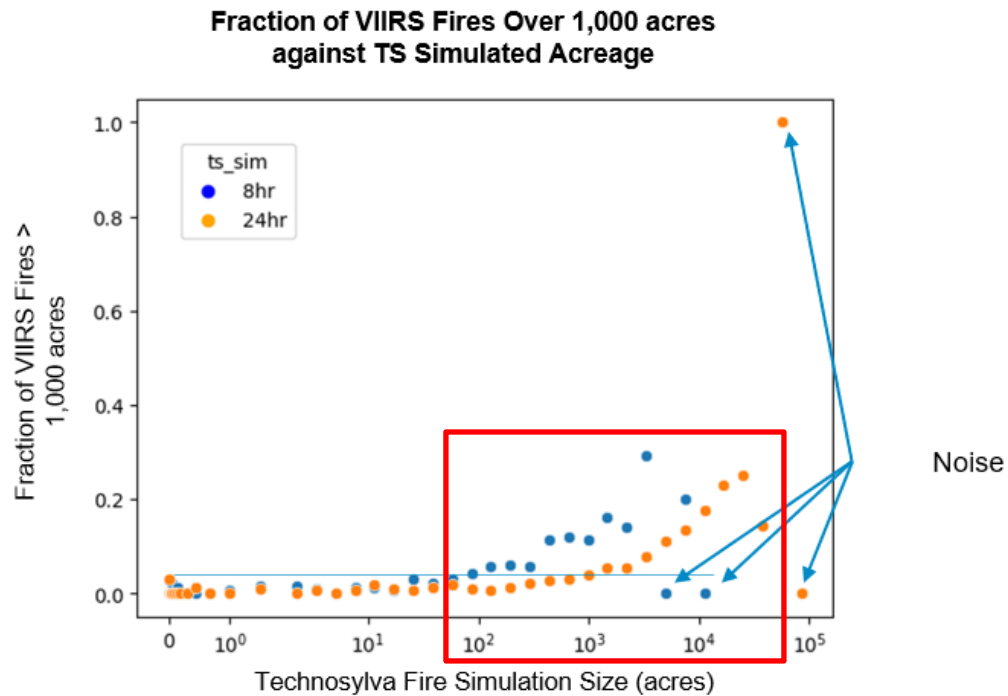
Acreage Comparison – VIIRS vs. TS



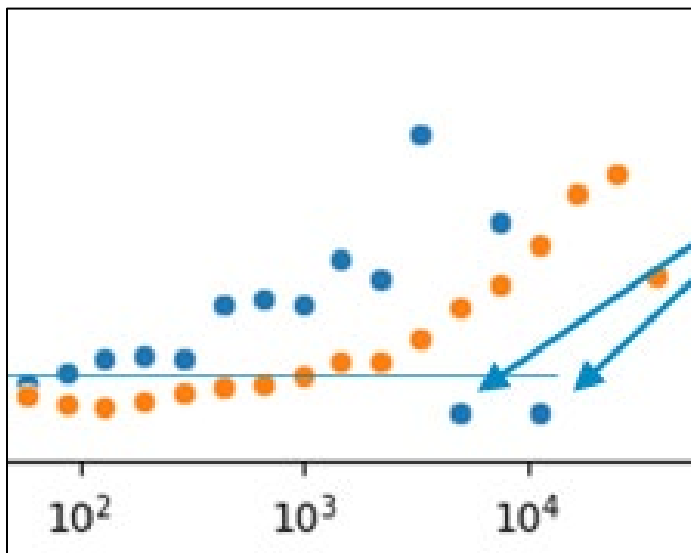
By binning the simulation acreage (x) values and averaging the historical acres (y) burned per bin, we can discern a more nuanced relationship. See below.

Both 8-hr and 24hr Technosylva simulations are predictive of historic wildfires

- Small simulation acreage generally correlates with actual fire size
- 24-hr simulation provides a smoother, more consistent prediction



Inset:



The trend in the orange dots (24-hr simulation) is smoother than the trend in the blue dots (8-hr) especially where the y-axis predictions rise above the blue line. WFC takes this to mean that 24-hr TS simulations >1000 acres are more reliably predictive of larger historical fires. This is the primary support for utilizing 24-hour simulations in the WFC.

b) Please see response to subpart a) above.