Energy Research and Development Division

Comprehensive Open-Source Development of Next Generation Wildfire Models for Grid Resiliency

Phase II - Near-term Risk Forecast Data Archive



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Introduction

The Pyrecast data archive consists of two primary components:

- 1. Several open-source repositories that run the Pyrecast web application (<u>https://pyrecast.org</u>) and associated data feeds,
- 2. Real-time outputs from the Pyrecast web application that can be accessed through the web application itself, APIs, or direct download from a web server.

Each of these components is discussed separately in the following sections.

Open-source repositories

Pyrecast is powered by software contained in the following open-source repositories that have recently been made public:

Description	URL
ELMFIRE fire spread model	https://github.com/lautenberger/elmfire
	https://elmfire.io
GRIDFIRE fire spread model	https://github.com/pyregence/gridfire
Pyrecast web application	https://github.com/pyregence/pyregence
Geosync helper scripts	https://github.com/pyregence/geosync

Real-time outputs

Real-time outputs from Pyrecast are available from the following online locations:

Description	URL
Web application	https://pyrecast.org
API – active fires	https://trinity.pyregence.org/geoserver/web/
API – all other layers	https://shasta.pyregence.org/geoserver/web/
Web server	https://data.pyrecast.org/

We have previously submitted (June 2022) a Risk Forecast User's Guide and a Risk Forecast Outputs document that explain how to access and use the above resources.