

Chimney Fire Prediction Application

Input Validation Middleware

Validate Date

Validate Area

Chimney Fire Prediction

Calculate Spatial Terms

Calculate Temporal Terms

Multiply Terms

Create API Response

Add Prediction Result

Add Geometry Info

Send API Response

HTTP GET Request for Prediction

Shapefiles

House Type Density

RDATA

Spatial Overlapping

R script

Temporal Coefficients

Past Weather Data

JSON

Area Geometry

GeoJSON

HTTP 200 OK: Prediction Result as Payload