

# CLEARSKY-FETS RERUN TOOL

2009-2010

Developed by Andrew Fink of the  
Pennsylvania State University

\*FETS - Fire Emissions Tracking System\*

# Goals

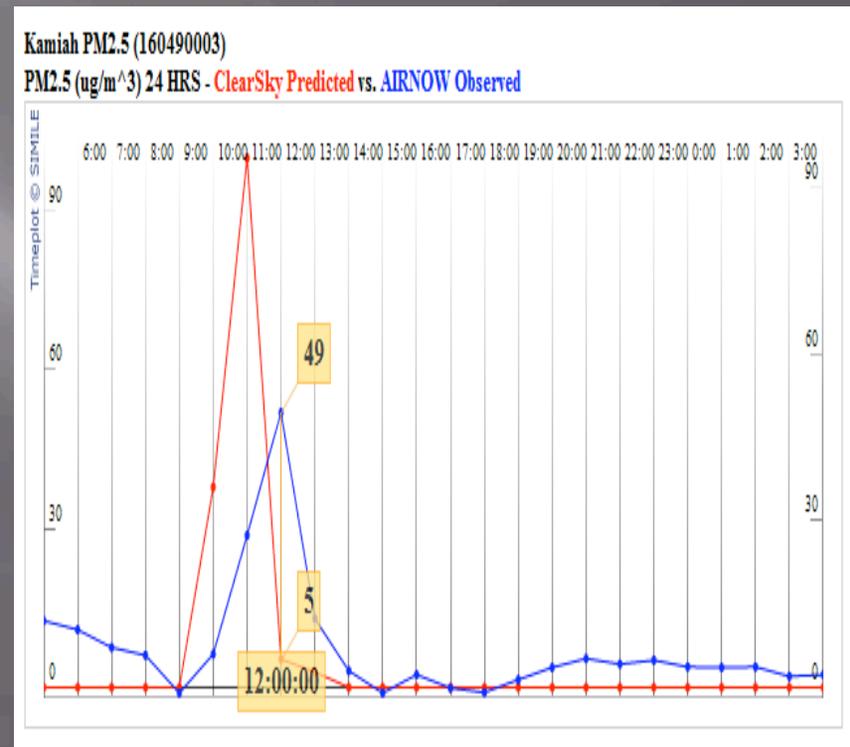
- ▣ Evaluate ClearSky performance
  - Compare actual PM 2.5 concentrations with ClearSky-modeled PM 2.5 concentrations
  - ClearSky currently does not have this functionality!
- ▣ Provide useful forecasting/burn analysis tool for burn coordinators
- ▣ Expand ClearSky functionality

# How It Works

- ▣ Fire Emissions Tracking System (FETS) web service
  - Queried and returns data on previous day's agricultural burns
- ▣ ClearSky then re-run using the previous day's WRF meteorological data
- ▣ Connect to EPA AirNow database
  - Provides PM2.5 concentrations for Pacific-Northwest region
- ▣ Build database over time for evaluation of ClearSky performance on FETS-reported burns.

# User Interface

- Web Applet
- Currently only allows viewing of one site
- Working towards drawing graphs for each site in the ClearSky Nez Perce domain
- On the web...



# Looking Towards the Future

## LIMITATIONS

- ▣ Limited Data!
  - Only NezPerce so far!
- ▣ Review
  - Probably most meaningful to burn managers if they are able to review soon after burns take place.

## IMPROVEMENTS

- ▣ Adding ability to choose AirNow monitoring site by April 14, 2010.
- ▣ Implement for additional ClearSky domains.

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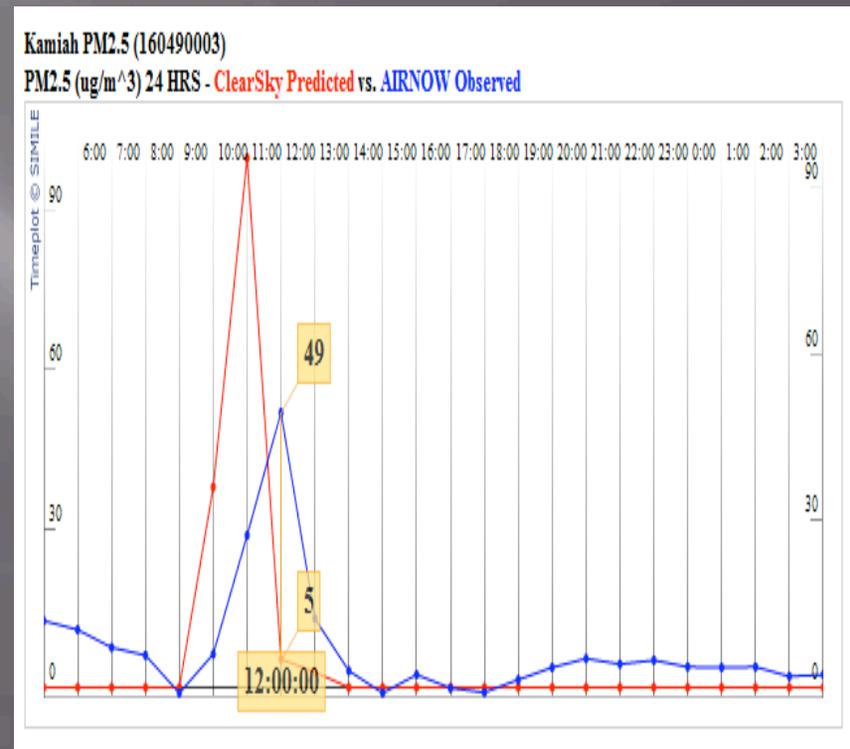
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