

## Meeting Presentations and Conference Proceedings

- Drury S.A., Pryden D., Funk T.H., Nuss P.W., and Raffuse S.M. (2010) The Interagency Fuels Treatment Decision Support System. Paper presented at the *3rd Fire Behavior and Fuels Conference, Spokane, WA, October 25-29* by Sonoma Technology, Inc., Petaluma, CA, and Joint Fire Science Program, Boise, ID (STI 910902-4014).
- Wheeler N., Funk T., Raffuse S., Drury S., Nuss P., Unger K., Yahdavi L., Pryden D., Healy A., Haderman M., Chinkin L., Cissel J., and Rauscher H.M. (2010) A new decision support system based on a service-oriented architecture. Paper presented at *the 9th Annual CMAS Conference, Chapel Hill, NC, October 11* by Sonoma Technology, Inc., Petaluma, CA, Joint Fire Science Program, Boise, ID, and Rauscher Enterprises LLC, Leicester, NC (STI 3896).
- Raffuse S.M., Healy A.N., and Pryden D.A. (2010) BlueSky Playground - a new method for interactively exploring smoke impacts. Presented to the *Yosemite Fire Science Symposium, Yosemite, CA, April 28* (STI-3858).
- Strand T., Larkin N.K., O'Neill S.M., Raffuse S., Solomon R., Sullivan D.C., and Pryden D.A. (2008) The BlueSky smoke modeling framework. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 14-18*.
- Raffuse S., Pryden D., Larkin N., Strand T., Solomon R., and Sullivan D. (2009) Merging satellite-detected wildfire information with ground reports for improved fire and smoke modeling in emergency response. Poster presented at the *AGU Fall Meeting, San Francisco, CA, December 14-18*, by Sonoma Technology, Inc., Petaluma, CA, and USDA Forest Service AirFire Team, Seattle, WA (STI-3775).
- Sullivan D.C., Raffuse S.M., Pryden D.A., Craig K.J., Reid S.B., Wheeler N.J.M., Chinkin L.R., Larkin N.K., Solomon R., and Strand T. (2008) Development and applications of systems for modeling emissions and smoke from fires: the BlueSky smoke modeling framework and SMARTFIRE. Paper presented at the *17th International Emissions Inventory Conference, Portland, OR, June 5*, by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Forest Service, Seattle, WA (STI-3378).
- Raffuse S.M., Sullivan D.C., Chinkin L.R., Pryden D.A., Wheeler N.J.M., Larkin N.K., Solomon R., and Soja A. (2007) Integration and reconciliation of satellite-detected and incident command-reported wildfire information in the BlueSky smoke modeling framework. Presented at the *6th Annual CMAS Conference, Chapel Hill, NC, October 1-3*, by Sonoma Technology, Inc., Petaluma, CA, the U.S. Forest Service AirFire Team, Seattle, WA, and the National Institute of Aerospace, Hampton, VA (STI-3227).

## Formal Reports

- Craig K.J., Raffuse S.M., and Pryden D.A. (2010) BlueSky Framework version 3.1 installation guide and testing procedures for the Canadian Wildland Fire Information System extensions. Prepared for Environment Canada's Meteorological Service of Canada: Prairie and Northern Region, STI-909057-3830-FR, April.
- Raffuse S.M., Pryden D.A., Sullivan D.C., Larkin N.K., Strand T., and Solomon R. (2009) SMARTFIRE algorithm description. Paper prepared for the U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Forest Service, AirFire Team, Pacific Northwest Research Laboratory, Seattle, WA STI-905517-3719, October.
- Larkin N.K., Raffuse S.M., Pryden D.A., Healy A.N., Unger K.D., Strand T.M., and Solomon R. (2009) Conversion of the BlueSky Framework into collaborative web service architecture and creation of a smoke modeling application. Final report prepared for the Joint Fire Science Program, September 30.

- Dye T.S., Chan A.C., Gray E.A., Reed J.E., and Pryden D.A. (2008) AIRNow-International (AIRNow-I) draft specifications document. Software specifications prepared for the U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-905403.06-3282, May.
- Pryden D.A., Gray E.A., and Ovard C.D. (2005) AIRNow/AirQuest web service documentation. Software documentation prepared for the U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA, STI-905101.02-2829-SD, September.
- Ludewig S.A., Dye T.S., Gray E.A., and Pryden D.A. (2003) Functional design specification document for the AirShare web site. Prepared for Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-903680-2445-DSD, November.

## **Software**

- Pryden D.A. (2009) AQI.dll, ConvertAQIGrid.exe, ConvertAQIPoints.exe, MakeGrid.exe, MakeNetCDF.exe, MakeShape.exe, ShapeToKML.exe, and TransformXML.exe for AIRNow Information Management System (IMS). Prepared for U.S. EPA (STI-905503).
- Reed J.E. and Pryden D.A. (2009) BlendRaster.exe, ConstructMap.exe, Dispatcher.dll: AIRNow Dispatcher distributed scheduling service, ExportCSV.exe, Interpolate.exe, and MakePolygons.exe for AIRNow IMS. Prepared for U.S. EPA (STI-905503).
- Gray E.A. and Pryden D.A. (2009) DispatcherDAL.dll for AIRNow IMS. Prepared for U.S. EPA (STI-905503).
- Gray E.A., Prouty J.D., and Pryden D.A. (2009) AIRNow IMS. User interface developed for the Bay Area Air Quality Management District, San Francisco, CA; South Coast Air Quality Management District, Diamond Bar, CA; and U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Petaluma, CA. STI-905503.
- Larkin N.K., Pryden D.A., Solomon R., Root M., Hourihan J., Rosenthal S., Strand T., Raffuse S., Reed J.E., Gray E.A., and Craig K.J. (2008) BlueSky Framework v. 3.0. Joint project prepared for the National Aeronautics and Space Administration, Washington, D.C., by the USDA Forest Service AirFire Team, Sonoma Technology, Inc., and Tweak, Inc. Available on the Internet at [www.getbluesky.org/framework.cfm](http://www.getbluesky.org/framework.cfm). STI-905028.
- Pryden D.A. and Raffuse S.M. (2007) SMARTFIRE: Satellite Mapping Automated Reanalysis Tool for Fire Incident Reconciliation. Prepared for NASA Applied Sciences Division (STI-905028) [www.getbluesky.org/smartfire](http://www.getbluesky.org/smartfire).
- Pryden D.A. (2006) AIRNow HYSPLIT RPC Service. Prepared for U.S. EPA (STI-905201).
- Pryden D.A. (2006) DataFlow System (STI distributed process scheduler) (STI-905201).
- Pryden D.A., Gray E.A., Ovard C.D., and Solomon R. (2006) BlueSky framework 2.1. System documentation prepared for the National Aeronautics and Space Administration (NASA), Washington, D.C., by Sonoma Technology, Inc., Petaluma, CA, and the U.S. Department of Agriculture (USDA) Forest Service, Seattle, WA, STI-905028.01-3096, December.
- Pryden D.A., Gray E.A., and Ovard C.D. (2005) AIRNow/AirQuest web service documentation. Software documentation prepared for the U.S. Environmental Protection Agency, Research Triangle Park, NC by Sonoma Technology, Inc., Petaluma, CA, STI-905101.02-2829-SD, September.
- Ludewig S.A., Dye T.S., Gray E.A., and Pryden D.A. (2003) Functional design specification document for the AirShare web site. Prepared for Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA, STI-903680-2445-DSD, November.

## Websites and Web Services

Ludewig S.A., Haderman M.D., Pryden D.A., and Healy A.N. (2008) EnviroFlash. Website developed for the U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA. Available on the Internet at [www.enviroflash.info](http://www.enviroflash.info). STI-905504.

Ludewig S.A., Haderman M.D., Pryden D.A., and Healy A.N. (2008) AIRNow-Tech. Website upgrade developed for the U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Inc., Petaluma, CA. Available on the Internet at [www.airnowtech.org](http://www.airnowtech.org). STI-905406.

Haderman M.D., Pryden D.A., and Healy A.N. (2008) BlueSky Gateway. Website developed for the USDA Forest Service AirFire Team by Sonoma Technology, Petaluma, CA. Available on the Internet at [www.getbluesky.org](http://www.getbluesky.org). STI-908052.

Healy A.N., Ludewig S.A., and Pryden D.A. (2007) Air Quality Impacts Planning Tool (AQUIPT). Website prepared for the U.S. Forest Service AirFire Team by Sonoma Technology, Inc., Petaluma, CA. STI-908016.

Ludewig S.A. and Pryden D.A. (2007) Metropolitan Washington air quality data. Dynamic web pages developed for the Metropolitan Washington Council of Governments by Sonoma Technology, Inc., Petaluma, CA. Available on the Internet at <http://air.mwcoq.org/>.

Ludewig S.A., Pryden D.A., Haderman M.D., and Healy A.N. (2007) Spare the Air Website and Air Alert System. Website and web service developed for the Sacramento Metropolitan Air Quality Management District, Sacramento, CA, by Sonoma Technology, Inc., Petaluma, CA. Available on the Internet at [www.sparetheair.com](http://www.sparetheair.com). STI-909004.

Haderman M.D., Pryden D.A., and Raffuse S. (2007) AIRNow Google Earth AQI feed. Web service developed for the U.S. Environmental Protection Agency, Research Triangle Park, NC, by Sonoma Technology, Petaluma, CA. Available on the Internet at [www.epa.gov/airnow/today/airnow.kml](http://www.epa.gov/airnow/today/airnow.kml).