



Western U.S. TEMPO Early Adopters Workshop *final agenda*

Dates: April 10-11, 2018

Venue and Directions: Elizabeth Hotel, Fort Collins, CO [map](#)

TEMPO information: <http://tempo.si.edu/> | [Fact Sheet](#)

Workshop Objectives

- Gather technical staff from state, tribal, local, and federal air quality mgmt. agencies in the West to interact with remote sensing experts from academia and federal agencies
 - Identify and plan applications of data from the TEMPO satellite platform
- Review and discuss TEMPO capabilities for western air quality assessment, analysis, & planning needs
 - What does TEMPO have to offer, how does TEMPO fit with other platforms?
 - Users and their expectations with practitioners' capabilities across different platforms and instruments?
 - What are possibilities and needs for integration of data results and tools for user applications?
- Discuss Inputs and Outputs - retrievals, processing, and applications of remote sensing data
- Discuss and specify attributes of "TEMPO-like" synthetic data needed for testing prior to launch.
- Discuss processing and delivery needs from NASA for operational forecasting, episode analysis, and trends evaluation by western air quality agencies.

April 10th – Walnut A Room

8:30 a.m. Welcome, Agenda Review, Introductions, Objectives – Tom Moore, Kelly Chance

9:15 [Overview of TEMPO](#) – Kelly Chance

10:00 **Break**

10:20 Data Producers and Users – short-format talks – Kelly Chance

- [Remote Sensing Information Gateway \(RSIG\)](#) – Brad Pierce for Jim Szykman
- [TEMPO Applications to Air Quality and Health](#) – Susan Alexander
- [Forecasting Ozone within Stratospheric Intrusions](#) - Brad Pierce
- [Challenges with Estimating Fire Emissions for Regional Air Quality Applications - A Brief Intro](#) – Evan Burgess
- [Intermountain West Data Warehouse Overview and Data Products](#) – Rodger Ames
- [Getting Experimental Data to End Users via Research to Operations Paradigm](#) – Emily Bernt and Aaron Naeger
- [Using NOAA observations for TEMPO validation and applications](#) – Greg Frost
- [NOAA Ozone Remote Sensing Observations and their Relevance to TEMPO](#) – Christoph Senff

12:00 p.m. **lunch on your own**

1:30 Discussion – data producers and users

2:00 [Inputs and outputs overview: TEMPO Products Overview](#) – Xiong Liu

2:30 [TEMPO Applications](#) and [Synthetic data](#) – Mike Newchurch and Chris Chan Miller





- 3:15 **Break**
- 3:30 [SAO and NASA delivery plans for TEMPO](#) – Brad Pierce
- Pamela Rinsland
- 4:10 [SpoRT R2O paradigm with LANCE/Worldview example](#) - Emily Berndt and Aaron Naeger
- 4:35 Discussion and wrap up for the day
- 5:00 to 7:00 CIRA-sponsored reception - Walnut B Room**

April 11th – Walnut A Room

- 8:00 a.m. Welcome, Agenda Review
- 8:15 Working TEMPO in with air quality assessment/mgmt. programs and data – Tom Moore
- Integrating multiple data sources
 - Program needs, tools to ingest data, where are the toolboxes now, what are people using?
 - [Ozone Stratospheric Intrusion Exceptional Events](#) – Gail Tonnesen
 - [Idaho Smoke Management Operational Forecasting](#) – Jacob Wolf
 - [Use of satellite products for operational wildfire smoke forecasting and retrospective exceptional events analysis](#) – Sara Strachan
 - [Assimilated Smoke Data for Air Quality Analysis](#) – Matt Mavko
- 9:45 **Break – Magic Rat**
- 10:10 Applying TEMPO and other remote sensing platforms’ data into the Clean Air Act-required air quality planning paradigm – panel discussion – Kevin Briggs
- [What do we need for air quality mgmt?](#) - Examples, Gaps and needs, Metadata, ease of use
 - Gail Tonnesen, EPA R8
 - Amber Potts, Wyoming DEQ
 - Amanda Brimmer, Denver/Northern Front Range RAQC
 - Jeremy Neustifter, Colorado APCD
 - Cindy Hollenberg, New Mexico AQB
- 11:10 Preparing for Breakout sessions - goals and reports – Tom Moore
- Breakout sessions outcomes
 - Meeting Outcome - a living paper describing workshop and data-production capabilities and how they meet user requirements: Authors - Aaron Naeger, Tom Moore, others
- 11:30 **lunch on your own**
- 1:00 p.m. [Breakout groups on Western air quality topics and data delivery](#)
- Ozone formation and transport – Brad Pierce
 - Smoke transport and air quality impacts – Matt Mavko
 - International and stratospheric intrusion transport – Gail Tonnesen
- 2:30 Group reports and Workshop WRAP-up – Kelly Chance and Tom Moore
- 3:00 Adjourn Workshop

