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?
    o Ozone Stratospheric Intrusion Exceptional Events – Gail Tonnesen
    o Idaho Smoke Management Operational Forecasting – Jacob Wolf
    o Use of satellite products for operational wildfire smoke forecasting and retrospective exceptional events analysis – Sara Strachan
    o 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
    o Gail Tonnesen, EPA R8
    o Amber Potts, Wyoming DEQ
    o Amanda Brimmer, Denver/Northern Front Range RAQC
    o Jeremy Neustifter, Colorado APCD
    o 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