The 3rd TEMPO Science Team Meeting, May 27-28, 2015
University of Alabama in Huntsville
National Space Science and Technology Center
320 Sparkman Drive, Huntsville, AL 35805 USA
256-961-7700 http://www.nsstc.uah.edu/nsstc/

Day 1

0830 Registration, breakfast, lunch order. UAH will collect for breakfast, snacks, and dinner.
0845 Introduction, and logistics (SAO & UAH) – Can we post slides?

0900 Welcome
UAH welcome (M. Newchurch and S. Christopher)
NASA HQ welcome (A. Pszenny)

TEMPO status and schedule
0930 Overview of TEMPO status (K. Chance, SAO)
0945 The TEMPO Instrument Project (W. Pennington, LaRC)
1000 TEMPO instrument status (D. Nicks, Ball Aerospace)

Status of other satellite instruments
1015 GEMS status (J. Kim, Yonsei U.)

1030 Break

1100 Sentinel 4 status (B. Veihelman, ESA; J. Kaminski, York U.)
1115 Sentinel 5P status (P. Veefkind, KNMI)

International activities
1130 Canadian activities with regard to TEMPO (C. McLinden, Environment Canada)
1145 Mexican activities with regard to TEMPO (M. Grutter de la Mora, UNAM)

1200-1300 Lunch @ NSSTC: Sandwich selection

Related programs and projects
1300 Tropospheric Ozone Assessment Report (TOAR, O. Cooper, NOAA)
1330 NOAA operational air quality prediction developments (I. Stajner, NOAA)
1400 Remote Sensing Information Gateway (RSIG, J. Szykman, EPA)

Retrieval issues
1430 Cloud retrievals (J. Joiner, GSFC & E. O'Sullivan, SAO, discussion leaders)
1500 NO₂ slant to vertical conversion (R. Martin, Dalhousie U., discussion leader)

1530 Break

1545 Tropospheric ozone retrievals (X. Liu and P. Zoogman, SAO, discussion leaders)
1630 LIDORT and VLIDORT RTM status (R. Spurr, RT Solutions)

Scientific discussions
1645 TEMPO science studies during and after commissioning (the “Green Paper,” K. Chance, discussion leader)*
1715 RTM and other modeling studies discussion: Adaptation and development of tools that may lead to implementation in OSSEs, GOES-R testbed, TEMPO plan for early adopters, etc. X. Liu will lead off with presentation of instrument/retrieval tools followed by discussion led by B. Pierce, J. Al-Saadi, M. Newchurch.

1800 Adjourn
1900 Dinner at US National Space & Rocket Center, 1 Tranquility Base, Huntsville, AL 35805; 256-837-3400
Day 2

0830 Breakfast, lunch order

0900 Validation
0900 Introduction, context, methods, and tools (M. Newchurch, UAH)
0915 Core validation requirements for the TEMPO PLRA, including schedule and milestones (D. Flittner, LaRC)
0945 Federated activities (J. Szykman, EPA)
1015 Discussion

1030 Break

1100 Modeled radiances, update and summary (B. Pierce, NOAA)
1130 Validation using Pandora instruments (J. Herman, UMBC)
1200 TEMPO draft H_2CO validation plan (J. Szykman, EPA, J. Herman, UMBC), including 15 min discussion
1230 Aircraft validation of OMI H_2CO (G. Abad, SAO)

1300-1400 Lunch @ NSSTC

1400 Student collaboration (M. Pippin, LaRC)
1430 Aircraft campaigns for potential TEMPO validation (J. Crawford, LaRC)
1500 ACAM/GCAS/Geo-TASO (X. Liu, G. Abad, SAO)
1530 TEMPO draft ozone validation plan (M. Newchurch, UAH), including 15 min discussion

1600 Break

1615 TEMPO draft NO_2 validation plan (R. Cohen, UC Berkeley), including 15 min discussion
1645 International collaboration including satellite intercomparison plans (M. Newchurch, UAH - discussion leader, J. Al-Saadi, LaRC, X. Liu, G. Abad, SAO)
1715 Other validation ideas/approaches. Draft validation plan. Next meeting venue/time. Any other business.

1745 Adjourn

Notes

*TEMPO science studies during and after commissioning is meant to be an open discussion of chemistry experiments to be done with TEMPO in addition to the usual hourly sequence of observations. It may also include discussion of how to adjust the observing schedule after commissioning to include time for such studies. Please come with suggestions.

There will be a room available for breakout sessions, e.g. on data processing and algorithms. Assume PC PowerPoint or pdf; bring on a USB drive.
As this is a progress meeting and not a formal symposium, please do not feel the need to overly polish or rehearse presentations, except to keep them to time.

We would like to post the slides. Please let us know whether yours may be posted publicly and whether they need edits beforehand.