## **TEMPO Validation**

- Radiance and Spectroscopy plan in good shape
  —to be written by Kelly and SAO folks so the
  rest of us can review.
- Validation of Products at level of current LEO instruments
- 3. SZA
- 4. Resolution
- 5. Specific plans

## Validation Plans

- Level 1 (spectroscopy/slant column) algorithms defined). Validation plan defined.
- Level 2 conversion to vertical columns not yet defined. The edge between validation and science remains blurred.
- Agreement that we need surface, column and PBL for NO2, O3, H2CO in variety of locations to test aspects of the diurnally varying retrieval that depend on: albedo, BRDF, concentration/column, aerosol, and a priori lightning, fires, high isoprene emitters, fertilized agricultural lands, separation of strat and trop.
- High Spatial resolution aspects (surface network, GEOTASO, GCAS)
  - A variety of experiments should be pursued
- Campaigns in addition?
  - Small profiling aircraft (NO2, H2CO, O3, aerosol) with GEOTASO and surface reflectance
  - Mobile PANDORA
  - Lightning?

## Questions:

What locations?

Committee to provide oversight of PANDORA network. Priority to locations with ceilometers, sondes and surface observation. Given the EPA commitment to urban locations, priority to be given to background locations.

- How many?
- How long?