**TEMPO data distribution roadmap discussion guide**

TEMPO data products at all levels are freely available to all, with the only caveat being potential bandwidth limitations. SAO will produce L1, L2, and higher level data. L1 and L2 will be in HDF-5 format, including metadata, on the as-measured grid.

* These data products will be archived and distributed by the LaRC ASDC.
* EPA/ASDC will support an RSIG web interface to a server at the ASDC to provide subsetted, reformatted, etc. data products to the community (currently, the minimal needs for the TEMPO instrument project to supply); RSIG will remap products onto the CMAQ Lambert conformal grid.
* TEMPO and Advanced Baseline Imager (ABI) synergies will be pursued in collaboration with the NOAA Air Quality Proving Ground.
	+ TEMPO NO2 products and combined TEMPO/ABI AOD products will assessed to determine potential benefits in support of the National Air Quality Forecasting Capability (NAQFC),
* LaRC ASDC can provide additional data products and services in addition to Earthdata discovery and access; custom subsetting, OPeNDAP access and ArcGIS capabilities (temporal, spatial, and variable slices). GIBS (global imagery browse services), LANCE, and WorldView distribution channels require additional effort.
	+ L2 and higher NRT data can be made available through LANCE. This service requires approval by the LANCE UWG, an ICD, data in specific formats, and dual hardware strings.
	+ Properly formatted NRT browse data sent to GIBS can be made available through the EOSDIS Worldview portal
* The GES DISC will also supply access to services such as Mirador and Giovanni
	+ NASA Giovanni will access TEMPO data from the ASDC and provide services including visualization analysis and access
	+ Giovanni will provide additional access through Mirador
* SPoRT may be a resource for data users and the format guru. This may include:

Coordinating feedback between products developers, the Science Team, and users for day-1 readiness using pre-flight, synthetic TEMPO data. These are provided by SAO, with support from GMAO, to the user community to gain familiarity with TEMPO, and the SAO team to refine products in anticipation of NRT data products after launch.

* + Transition experimental products to end users via WMS/ArcGIS capabilities
	+ Provide training on obtaining and using products in collaboration with ARSET (pointing users to RSIG/LANCE, Worldview, GIBS as resources for data after launch)
* The AQAST and HAQAST teams will provide expertise in atmospheric composition in order to data products at levels 2 and higher reflect the best current knowledge of atmospheric composition.

Kelly, Brad, Jay, and Jim

I modified the data distribution roadmap to better reflect how things are most likely to happen and our two experiences with getting products into LANCE and GIBS.

**A simpler data path is better**. The ASDC should be doing the distribution of publicly available files. That is our job. I don’t know why SAO thinks they can do that. They can certainly make the pre-release data available to the science guys for vetting, but once it is declared good to go, the data goes to the DAAC for its formal release. This release process involves the whole coordinated set of activities to get landing pages, announcements, associated documentation, DOIs all ready. Any data products that are sent to the GES DISC tools like Mirador or Giovanni need to come from the ASDC.  We typically feed Giovanni through the OPeNDAP tool.

The RSIG portal is attached to the ASDC, not SAO.

There is much work to be done on the Data Management Team side (or whatever the team that develops and executes the PGEs at SAO is called)  to get products into GIBS/WorldView and the NASA LANCE NRT system. There are hoops to jump through with the LANCE UWG and the possibility of getting additional funding to support at least the hardware required by submitting a cost estimate. I went through the process with MISR and Dan Ziskin has made it through with MOPITT. I the end, it is good, but it requires some effort.

Unfortunately, I will be out of the office during the discussion tomorrow.

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* These data products will be archived and distributed by SAO and (TBD) simultaneously at the LaRC ASDC.
* EPA/ASDC will support an RSIG web interface to a server at SAO for providing subsetted, etc. data products to the community (currently, the minimal needs for the TEMPO instrument project to supply); RSIG will remap products onto the CMAQ Lambert conformal grid.
* TEMPO and Advanced Baseline Imager (ABI) synergies will be pursued in collaboration with the NOAA Air Quality Proving Ground.
	+ TEMPO NO2 products and combined TEMPO/ABI AOD products will assessed to determine potential benefits in support of the National Air Quality Forecasting Capability (NAQFC).
* LaRC ASDC may provide additional data products; subsetting and ArcGIS capabilities (temporal, spatial, and variable slices), GIBS (global imagery browse services), linkage to Earthdata, LANCE, and the GES-DISC Giovanni.
	+ Earthdata will make L2 and higher data available through LANCE.
	+ EOSDIS will also make NRT data available through Worldview.
	+ The GES DISC Unified User Interface will also supply access to the Simple Subset Wizard, Mirador, and Giovanni.
* NASA Giovanni will access TEMPO data from the SAO or ASDC portal and provide products including visualization analysis and access.
	+ Giovanni will provide additional access through Mirador and the Earthdata Simple Subsetting Wizard.
* SPoRT may be a resource for data users and the format guru. This may include:

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