AQAST Investigator Project, 2012-2013

**PI:** Bryan Duncan, NASA  
**Other personnel:** Yasuko Yoshida, SSAI & NASA, Tracey Holloway (U. Wisconsin)  
**AQ management partners:** Jennifer Hains, MDE (Maybe she doesn’t know that she’s my AQ management partner, but I certainly bug her enough.)  
**Project duration:** June 1, 2012 – May 31, 2013

**Title:** "How to" manual for evaluating model results with satellite observations/Accessibility of satellite data for AQM users

**Problem to be solved:** A persistent complaint of users of NASA data products for AQ applications is that the data are difficult to manipulate and time-consuming to process and comprehend.

**Project description:** We propose to develop a "How to" manual for evaluating model results with satellite observations with the intent to increase the accessibility of satellite data for AQM users. (Our proposed work for the coming year will benefit from the results of our Tiger Team project, “Create an objective “A QAST Recommendations for Air Quality Satellite Missions” document for NASA mission planners” in which Ana Prados and I are surveying data users to identify barriers for the effective use of NASA data by AQ folks.) As a first step, we will develop a “How to” manual for OMI NO₂, as this data product is popular with the AQ community. We will discuss issues, such as those associated with precision and averaging kernels/scattering weights, and we will identify potential pitfalls. We will work closely with the OMI Science Team (Nick Krotkov, Lok Lamsal, Eric Bucsela, etc.) in this work. We will also work closely with Tracey Holloway and her project to develop a user-friendly website for AQ folks to use OMI NO₂ data.

**Deliverables:**

- “How to” user manual for OMI NO₂.

**Expected AQ management outcomes:**

- Enhanced use/proper use of satellite data for the AQ community.