

Subject: RE: Peer Review of Agency Final Draft Radiometer Guidance; Friendly Reminder

From: Clinton MacDonald <Clint@sonomatech.com>

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To: Bob Baxter <bbaxter@tbsys.com>, "Elleman.Robert@epamail.epa.gov"

<Elleman.Robert@epamail.epa.gov>, "Wong.Herman@epamail.epa.gov"

<Wong.Herman@epamail.epa.gov>

CC: "ware@radiometrics.com" <ware@radiometrics.com>, "clive.lee@kippzonen.com"

<clive.lee@kippzonen.com>, "phils@psc Clean Air.org" <phils@psc Clean Air.org>,

"michael.gravier@alaska.gov" <michael.gravier@alaska.gov>, "kdurkee@aqmd.gov"

<kdurkee@aqmd.gov>, "mgilroy@mbuapcd.org" <mgilroy@mbuapcd.org>,

"victor.cassella@kippzonen.com" <victor.cassella@kippzonen.com>, "ken@minisodar.com"

<ken@minisodar.com>, "dbgemmill@verizon.net" <dbgemmill@verizon.net>,

"wilker@co.clark.nv.us" <wilker@co.clark.nv.us>, "jdennison@slrconsulting.com"

<jdennison@slrconsulting.com>, "Mikel.Dennisk@epamail.epa.gov"

<Mikel.Dennisk@epamail.epa.gov>

Dear Dr. Elleman, Mr. Wong, and Mr. Baxter:

STI conducted a brief review of the "Quality Assurance Guidance for the Collection of Meteorological Data Using Passive Radiometers" document and submit to you the comments below for your consideration. Please note, while STI has extensive experience auditing meteorological equipment, we have only limited experience operating, calibrating, and maintaining microwave radiometers.

1. We are pleased that you are producing a quality assurance guidance document for radiometers.

2. A layman's description of how the instrument works, including the difference between zenith and off-zenith measurements, how well the instrument performs under all weather conditions (e.g. strong inversions, etc.), and data processing (e.g. use of neural networks (NN) and climatological data for NN training) would be helpful.

3. Section 6.6.2, Performance Audit and Comparison Procedures would benefit from a list of steps, in addition to or in lieu of the paragraph description of the steps.

4. We suggest that users be given more latitude when, how, and if to audit the instruments in order to promote the deployment and use of the instruments. For example, if circumstances permit, comparing the radiometer data to data from a collocated or nearby Radio Acoustic Sounding System (RASS) for some period of time could be very useful. The collocated transfer standard approach has been successful in field audits of sonic anemometers.

5. As with most highly technical instruments, to enable wider use, we suggest that guidance be given that allows for an average meteorologist to perform audits.

6. Change "being" to "been" in the first sentence on the bottom of page 18 (Section 6.2.2).

Please call me if you have any questions.

Clinton P. MacDonald
Manager, Meteorological Measurements and Analysis
Sonoma Technology, Inc.
1455 N. McDowell Blvd., Suite D
Petaluma, CA 94954
707-665-9900
707-665-9800 fax
www.sonomatech.com

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