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**WETLabs Fluorometer calibration field benchmark check procedure with Diet Sprite and Diet Coke**

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**Marshall Swartz** <mswartz@whoi.edu>  
To: Steve Jackilee <jalickee@uw.edu>  
Cc: Marshall Swartz <mswartz@whoi.edu>

Mon, May 12, 2014 at 4:11 AM

Steve,  
Ian and I have discussed how to best do a quick reliable quantitative calibration check for the WETLabs chlorophyll- $\alpha$  fluorometer. Here is his reply to me after I said I needed a reason to put my Diet Coke bills on an expense account! Best part is that the procedure really does work. See the WETLabs website for a photo-documented procedure, and the attached papers for more detail. I benchmark the FLNTU and FLNTURTDs when they first return to me from calibration, and then can use that as the mid-point reference for the SSSG to compare in the field. Now if our ships would only recognize that Diet Sprite and Diet Coke is a scientific need and supply it like IOS standard water, we'd be set.  
Marshall

----- Original Message -----

**Subject:** Calibration papers  
**Date:** Tue, 21 Jan 2014 17:27:01 -0800  
**From:** Ian Walsh <ian@wetlabs.com>  
**To:** Marshall Swartz <mswartz@whoi.edu>, Marshall Swartz <marshall.swartz@gmail.com>

Howdy Marshall,

Great to chat with you.

I was able to get my computer to unfreeze with a stern look and threat to reboot.

I have attached Alan Earp's paper and Ivona Cetinic's paper.

Alan's is quite thorough. I think his results bolster the case for Diet Coke and Diet Sprite, but he was looking for a full range check and I think a single mid to low point and blank is sufficient for regular monitoring.

Ivona's is great because in a classic grad student solution she built a big box to put her Slocum gliders in and filled it with Diet Sprite.

ian

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Ian Walsh

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**2 attachments**

 **Earp et al 2011 - Optics Express.pdf**  
1521K

 **cetinic\_etal\_OpticsExpress\_2009.pdf**  
965K