## **Forest Ecology**

From: Ruth D Yanai <rdyanai@syr.edu>
Sent: Monday, June 23, 2014 10:07 AM

**To:** Forest Ecology

**Subject:** Fwd: Soil Moisture Data

**Attachments:** Calcium Moisture Data.zip; ATT00001.htm

Begin forwarded message:

From: Joseph Kendrick < joseph.alexander.kendrick@gmail.com >

**Subject: Re: Soil Moisture Data** 

**Date:** June 22, 2014 12:20:43 PM EDT **To:** Adam Wild <a href="mailto:adamdwild@gmail.com">adamdwild@gmail.com</a>>

Cc: Justin T Turlip < itt246@nyu.edu>, Ruth D Yanai < rdyanai@syr.edu>

Hi Adam (and Ruth and Justin),

Here's a zip of the EM50 logger data as it stood at the end of last summer. All of the work I did for the HB meeting is based on the files labeled June. June files labeled clean have had obviously erroneous data (NA, negative values, obscenely high values, and periods of rapid fluctuation) deleted. June files labeled bad had little or no useable data. July files were taken off the loggers at the end of the summer and not cleaned, but should be in much better shape since the wires were all repaired by that point (though there were still a few little glitches, as I recall). There are also a couple of files from 2012 that should be archived online by Lily and Michelle with their sap flow stuff.

I don't think I did any more writeup-style work for this after the HB meeting. However, when I was collecting moisture data for Shinjini I ran a couple more t-tests and found that for the plots I did the CA plots were all significantly drier than their respective controls. This was only for a handful of plots and the measurements we took during July; you might want to see if you can get the full germinant subplot moisture data set form Shinjini and see if you can get anything good out of that.

You can glance over the data and see if that informs a particular depth, but given how little of it was useful its hard to say. I would predict that any treatment effect would be most pronounced at a shallower depth where there is more fine root mass, and of the two analyses I was able to run only the shallower one was significant.

Feel free to be in touch with any further questions. I'm glad to see this project is being picked up again, and I'm happy to chime in or lend a hand on anything that might be needed. I'm doing field work in the UP through the end of this month, so my internet access is limited, but I should still be reasonably communicative. After that I don't have anything going on until I start my real job at the end of August, so will be easy to reach.

-Joe

On Fri, Jun 20, 2014 at 8:52 PM, Adam Wild <a description wrote: Hi Joe,

We have a student this summer who is interested in continuing the work you did on the soil moisture from last year. Could you resend us the data from last year? Craig is hiking the PCT and we can't get a hold of Mark Green, even when he is not in Japan. Did you have a final report from it later in the season that you did not present at the HB meeting?

We are thinking of adding soil moisture sensors in the N and P plots of a couple stands. Do you remember if there was a depth that was better than any of the others? We are limited by the sensors and loggers that we have and my thought was to just do one depth but thought you may know better.

Thanks!

Adam