Subject: Re: Checking your ALFAM2 data

From: Voylokov Polina <pvoylokov@bcgn.grignon.inra.fr>

Date: 05/12/2016 04:01 PM

To: "Sasha D. Hafner" <saha@kbm.sdu.dk>

CC: Genermont Sophie < sophie.genermont@grignon.inra.fr>, Benjamin LOUBET

<benjamin.loubet@grignon.inra.fr>

Hello Sasha,

I hope you are doing well. I was wondering if I could have a little bit more time to look over the data and get back to you with my findings at the end of next week?

I have found one error so far:

The TAN of experiment NEU-09, project Nitroeurope-FP7 (4.2 g/kg NNH4 fresh matter). We have TAN as 1.26 g/kg NNH4 (fresh matter). This is consistent with our original data of 7.6% DM and 16.6 g/kg NNH4 (dry matter). So that makes roughly 51.7 kgNNH4/ha that were spread, for a %losses of about 60%.

Aside from that, there was a small issue but I doubt it would affect results much. For experiments Derval (44), LaChap (44), Trevarez (29), NEU 2008 and NEU 2009 the doses were all originally in m3/ha and not tons. However in the first three cases the densities are so close to 1000kg/m3 that it does not make a difference, and in the last two there would be a small difference (possibly insignificant - we took density to be 1025 kg/m3, making the doses in t/ha 23.6 and 39 for NEU 08 and 09 respectively (as opposed to 24.2 and 40 m3/ha)

I have not yet looked at experiment LI_1994 but I will try to get back to you as soon as I can.

Thanks Have a good day Polina

Le 30/04/2016 21:04, Sasha D. Hafner a écrit :

Dear all,

As mentioned earlier, a few or you have found errors in the draft database or reminded all of us of the importance of checking data before finalizing the database. So I would like your help in double- or triple-checking the data you submitted. I am sharing three types of files for error checking:

1. Emission rate and cumulative emission for each plot. These are in the

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"Emission plots" folder, files are named by institute code, e.g., "201.pdf" is for institute 201. Of the three types of files, these are the most detailed. You can see emission rate and cumulative emission plotted for each individual plot, along with information on the data file source and details on the experiment and weather. The text in the cumulative emission plot shows final relative loss (% of applied TAN).

- 2. Strip chart plots of 48 hr and final cumulative relative emission. These are also in the "Emission plots" folder, but all institutes are in a single file named "strip_charts.pdf". You can find your institute abbreviation and code in the plot title.
- 3. Text summary of plot counts and variables. Look in the "Text summaries" folder, where files are named by institute code, e.g., "201.txt" is for institute 201. The first section gives counts of plots based on location, slurry type, and other factors. Then comes trial duration and relative emission data, and finally summaries of 57 variables that correspond to those you entered in the template (there have been some unit conversions and spelling changes). For numeric variables, you will see a description, units, and then minimum and maximum values, along with some other info. For factors, like slurry type, you will see counts of the number of observations for each level.

Can you take a look at the three files for your institute sometime in the next two weeks and let me know if you see any errors? These files are all in the same shared folder as are the database files (here). You should be able to access these files without a Dropbox account. Please let me know if you have any trouble. In particular, can you look for:

- * Unit errors (units are listed for each numeric variable in the text file)
- * Missing data (e.g., I missed some factor levels somehow and so you see many observations with missing values, listed at NA in the text file)
- * Reasonable emission values (reasonable values in the text file, cumulative emission in the strip chart, and familiar patterns in the emission rate and cumulative emission plots)
- * Incorrect grouping or splitting (I had some errors in grouping multiple plots together early on--these should show up as high trial durations in the text file and strange-looking emission rate/cumulative emission plots)

Send me an email message whether or not you find any errors. If you do find errors, do not make changes to the Excel file that you sent me--chances are I've already made corrections and am working with a newer version. Instead let me know and I will send you the current version (or fix them myself).

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Here are the institute codes:

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Code Institute Country
201 AAFC
              CA
202 ADAS-RR UK
203 ARDC
              \mathsf{C}\mathsf{A}
204 AT
              DK
205 AU
              DK
206 CAU-LU
              DE
207 INH-HAFL CH
208 INRA
              FR
209 MU
              IT
210 NMI
              NL
211 SDU
              DK
212 TEAGASC
              ΙE
213 USDA
              US
214 WUR
              NL
101 ADAS
              UK
102 AUN
              N0
103 CRPA
              IT
104 DIAS
              DK
105 IGER
              UK
106 IMAG
              NL
107 IUL/FAT
              CH
108 JTI
              SE
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Thank you for all your help so far, and I'm sorry to ask for more!

Best regards, Sasha

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