Subject: FW: Your ALFAM2 data--new format and questions

From: Sasha Hafner <saha@kbm.sdu.dk>

**Date:** 06/17/2015 12:44 PM

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

### Sasha Hafner

Associate Professor Institute of Chemical Engineering, Biotechnology and Environmental Technology University of Southern Denmark Niels Bohrs Allé 1 5230 Odense M

Tel. +45 65 50 92 16 Cell +45 26 79 97 58 Email saha@kbm.sdu.dk

🔛 cid:image001.jpg@01CF9969.7B8B8270

From: William Burchill [William.Burchill@teagasc.ie]

Sent: Tuesday, October 28, 2014 5:29 PM

To: Sasha Hafner

Subject: RE: Your ALFAM2 data--new format and questions

Hi Sasha,

Thanks for your email and all the information. I would be happy talk to you about the experiment section of the excel sheet. I will try to have it completed before the meeting on Thursday. I will hopefully make the dinner on Wednesday evening. I will ring you if I can't make it. I'm looking forward to meeting you.

Kind regards,

William.

From: Sasha Hafner [mailto:saha@kbm.sdu.dk]

**Sent:** 28 October 2014 8:25

**To:** Gary Lanigan **Cc:** William Burchill

Subject: RE: Your ALFAM2 data--new format and questions

Dear Gary and William,

Gary, thank you for the updated spreadsheet. I ran it through the error check, and everything looks good! I will ask for some additional details on experiments, but this is a minor issue that William and I can discuss and we can sort it out later.

William, probably you already have this information, but <u>here is a map</u> with directions from the train station to the hotel and the building where we will be meeting. There should be taxis at the train station (although it is a short walk), and the staff at the hotel can advise on the best way to get to the university. I've taken a bus before but am not sure of the details. It may be a bit far to walk. Let me know if you need any additional information.

Best regards, Sasha

#### Sasha Hafner

Associate Professor Institute of Chemical Engineering, Biotechnology and Environmental Technology University of Southern Denmark Niels Bohrs Allé 1 DK-5230 Odense M

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# UNIVERSITY OF SOUTHERN DENMARK. DK

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From: Gary Lanigan [mailto:Gary.Lanigan@teagasc.ie]

**Sent:** Saturday, October 25, 2014 02:06

**To:** Sasha Hafner **Cc:** William Burchill

Subject: RE: Your ALFAM2 data--new format and questions

Dear Sasha

Please find the spreadsheet attached. I think all your queries have been dealt with. Note changes have been highlighted in yellow. Would it be possible to forward directions to William. He arrives on 29<sup>th</sup> and is staying at Hotel Bargentum so its not too far from the university. Sorry I cant make it, I really enjoyed our last meeting but this H2020 is paying the bills!!

Regards Gary

Dr. Gary J. Lanigan,

Principal Research Officer (Gaseous Emissions and Climate Change),

Teagasc,

Johnstown Castle Research Centre,

Wexford, Ireland,

Phone: +353 53 9171216

From: Sasha Hafner [mailto:saha@kbm.sdu.dk]

**Sent:** 23 October 2014 13:13

To: Gary Lanigan

Subject: RE: Your ALFAM2 data--new format and questions

Hi Gary,

OK, great, I'm glad you found the problem.

Do I understand you correctly that William will come to the Lüneburg meeting next week? If so, send me his email address so I can add him to the list and send details.

Best regards, Sasha

#### Sasha Hafner

Associate Professor
Institute of Chemical Engineering, Biotechnology and Environmental Technology
University of Southern Denmark
Niels Bohrs Allé 1
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From: Gary Lanigan [mailto:Gary.Lanigan@teagasc.ie]

**Sent:** Thursday, October 23, 2014 00:45

To: Sasha Hafner

Subject: Re: Your ALFAM2 data--new format and questions

Hi Sasha

Have finally just tracked down the problem .... In some cases the wrong column data had been transposed in 'measurement time' instead of hourly flux ... The columns were beside each other so clearly that's mistake occurred.. Will finish combing thru tomorrow.... My postdoc William will be going as I've a Horizon 2020 meeting that's clashing

Regards Gary

Sent from my iPhone

On 20 Oct 2014, at 13:45, "Sasha Hafner" < saha@kbm.sdu.dk > wrote:

Dear Gary,

Just a short note to check in on these changes/additions to your ALFAM2 data. I know it is

probably hard to find the time to do it. But are you able to get me the new version within a day or two?

Also, are you planning on attending the meeting next week? If so, will you attend the dinner the evening before (Wednesday 29 Oct) at 20:00?

Best regards, Sasha

### Sasha Hafner

Associate Professor
Institute of Chemical Engineering, Biotechnology and Environmental Technology
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From: Gary Lanigan [mailto:Gary.Lanigan@teagasc.ie]

**Sent:** Thursday, October 02, 2014 10:28

**To:** Sasha Hafner

Subject: RE: Your ALFAM2 data--new format and questions

Hi Sasha

I'll get around to this over the next day or soand have it back by Monday

Regards Gary

Dr. Gary J. Lanigan,

Principal Research Officer (Gaseous Emissions and Climate Change),

Teagasc,

Johnstown Castle Research Centre,

Wexford, Ireland,

Phone: +353 53 9171216

From: Sasha Hafner [mailto:saha@kbm.sdu.dk]

**Sent:** 02 October 2014 07:51

To: Gary Lanigan

Subject: RE: Your ALFAM2 data--new format and questions

Dear Gary,

I hope your travel to South Africa went well.

Sorry to add to the list of questions, but there are two blocks of data in the spreadsheet that cannot be separated based on the information provided. They are rows 143-149 and 171-177. Based on project name, experiment, plot number, treatment, and replicate, rows 143 and 171 seem to be for the exact same plot, and so in our analysis they are grouped together, when in fact they are from two different measurement periods (April and September). If they are from two different locations, then the field name (column D) information could be used to separate them. If they are indeed from the same exact plots at different times, we will need some other way to separate them, perhaps by adding more information to the experiment name, e.g., "3 spring" and "3 autumn", or to the treatment, e.g., "2,5 spring". Or, if you can add application start for each plot (column BE), that could be used to separate them as well.

To make things easier, here is a complete list of the questions I've sent. Most important problems:

- 1. Apparent high emission. Can you take a look at the blocks that start in rows 143, 136, 115, 31, and 199, for example?
- 2. Unique plot info needed for blocks in rows 143-149 and 171-177 (described above)

### Details that need to be added:

- 1. Publication info if data have been published. Create codes for column B in the first worksheet (e.g., 1, 2, 3. . .) and then give the citations in the fourth worksheet ("Publications")
- 2. Replicate number (column G). (There were two columns for replicate number in ALFAM1, and I'm not sure how they were interpreted by each contributor.)
- 3. Any information for the "Location" block in the first worksheet (columns I through K) would be great if you have it.
- 4. Measurement technique (column P). The earlier template just had "micromet" but here you have more flexibility. You can add values that are not yet available in the "Lists" worksheet.
- 5. Other data for the "Ammonia emission" block in columns Q through T.
- 6. More details for Crop type (column BO) for rows 226 and below. It was just "growing crop" from ALFAM1. You can add a new option in the "Lists" worksheet.
- 7. In the "Experiments" worksheet, briefly describe your experiments.
- 8. Lastly, in the "Treatments" worksheet, briefly describe the treatments applied in each experiment. Note that you can use names instead of numbers for the treatments if you like, but they must then be changed in the "Emission" worksheet.

Best regards, Sasha

### Sasha Hafner

Associate Professor Institute of Chemical Engineering, Biotechnology and Environmental Technology University of Southern Denmark Niels Bohrs Allé 1 DK-5230 Odense M

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<image001.jpg>

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From: Gary Lanigan [mailto:Gary.Lanigan@teagasc.ie]

Sent: Wednesday, September 24, 2014 03:17

To: Sasha Hafner

Subject: RE: Your ALFAM2 data--new format and questions

Will dio sasha yes your estimation is An error!

Dr. Gary J. Lanigan,

Principal Research Officer (Gaseous Emissions and Climate Change),

Teagasc,

Johnstown Castle Research Centre,

Wexford, Ireland,

Phone: +353 53 9171216

From: Sasha Hafner [mailto:saha@kbm.sdu.dk]

**Sent:** 23 September 2014 12:30

To: Gary Lanigan

**Subject:** RE: Your ALFAM2 data--new format and questions

Dear Gary,

One other thing that I need some help with: some of your trials seem to have very high emission, in one case as high as 1200 kg N/ha (18 times TAN application). I think there is ether an error in my interpretation of the data or in the average flux values. Can you take a look at the blocks that start in rows 143, 136, 115, 31, and 199, for example? These are the worst cases. I am attaching the current version of the file, but if you have already started making changes to the earlier version, that is fine too.

Best regards, Sasha

### Sasha Hafner

Associate Professor Institute of Chemical Engineering, Biotechnology and Environmental Technology University of Southern Denmark Niels Bohrs Allé 1 DK-5230 Odense M

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## <image001.jpg>

### · DK- · Denmark · Tel. +45 6550 1000 · www.sdu.dk

From: Sasha Hafner

**Sent:** Tuesday, September 23, 2014 11:31

To: 'Gary.Lanigan@teagasc.ie'

Subject: RE: Your ALFAM2 data--new format and questions

Dear Gary,

Can you give me an estimate of when you think you will be done with the additions to your ALFAM2 file? Before the end of next week would be best but I can try to work with whatever you can do.

Best regards, Sasha

### Sasha Hafner

Associate Professor Institute of Chemical Engineering, Biotechnology and Environmental Technology University of Southern Denmark Niels Bohrs Allé 1 DK-5230 Odense M

Tel. +45 65 50 92 16 Cell +45 26 79 97 58 Email saha@kbm.sdu.dk

## <image001.jpg>

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From: Sasha Hafner

**Sent:** Tuesday, August 05, 2014 17:12

**To:** 'Gary.Lanigan@teagasc.ie'; 'Stan.Lalor@teagasc.ie' **Subject:** Your ALFAM2 data--new format and guestions

Dear Gary,

Thanks again for contributing the data—it is a very useful data set and will expand the comparisons of application methods that we can make. The file you sent was in the format of the old data base, so I copied/changed the data into the new template, and am attaching the resulting file here. It needs some additions, but nothing major.

- 1. Publication info if data have been published. Create codes for column B in the first worksheet (e.g., 1, 2, 3. . .) and then give the citations in the fourth worksheet ("Publications")
- 2. Replicate number (column G). (There were two columns for replicate number in

ALFAM1, and I'm not sure how they were interpreted by each contributor.)

- 3. Any information for the "Location" block in the first worksheet (columns I through K) would be great if you have it.
- 4. Measurement technique (column P). The earlier template just had "micromet" but here you have more flexibility. You can add values that are not yet available in the "Lists" worksheet.
- 5. Other data for the "Ammonia emission" block in columns Q through T.
- 6. More details for Crop type (column BO) for rows 226 and below. It was just "growing crop" from ALFAM1. You can add a new option in the "Lists" worksheet.
- 7. In the "Experiments" worksheet, briefly describe your experiments.
- 8. Lastly, in the "Treatments" worksheet, briefly describe the treatments applied in each experiment. Note that you can use names instead of numbers for the treatments if you like, but they must then be changed in the "Emission" worksheet.

Let me know if you have any questions or if you want to set up a call to go over the new template or to discuss anything else. Also, please confirm that you received this message—I'm not sure if all my messages are getting through.

Best regards, Sasha

#### Sasha Hafner

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