# PyCAMA - Support #14161

## Time dependent QC questionnaire

11/28/2018 12:46 PM - Maarten Sneep

| | | | |
|---|---|---|---|
| **Status:** | Feedback | **Start date:** | 11/28/2018 |
| **Priority:** | Normal | **Due date:** | |
| **Assignee:** | Jacques Claas | **% Done:** | 0% |
| **Category:** | | **Estimated time:** | 0.00 hour |
| **Target version:** | | | |

**Description**

Dear all,

I need your input to help us set up the time-dependent output on the level 2 quality control website. The real questions are in the attached questionnaire.docx file, which includes example pictures to show what is possible. If you want to check a certain plot for your own product, please let me know and I'll provide you with an example. You can use the attached Time-dependent-QC.xlsx file to provide your answers.

Also note the related issue #9321 which deals with the daily extractions. The time-dependent plots are based on the daily extractions.

I've set the due date to the end of this year, it would be nice is all ATBD authors can respond by then. Please forward this issue to anyone I've forgotten.

Kind regards,

Maarten

**Related issues:**

| | | | |
|---|---|---|---|
| Related to PyCAMA - Support #9321: Update configuration of PyCAMA for daily e... | **Closed** | **04/23/2018** | **12/31/2018** |

### History

**#1 - 11/28/2018 12:46 PM - Maarten Sneep**

*- Related to Support #9321: Update configuration of PyCAMA for daily extractions added*

**#3 - 12/14/2018 04:19 PM - Klaus-Peter Heue**

*- File Time-dependent-QC_O3.xlsx added*

Dear Maarten

We internally discussed what might be useful to monitor for total ozone.
Please find our suggestion in the attached excel sheet.

In the excel sheet you asked for support for tropospheric ozone, maybe we can discuss this by email?
Klaus-Peter

**#4 - 12/14/2018 04:28 PM - Maarten Sneep**

Klaus-Peter Heue wrote:

> Dear Maarten
>
> We internally discussed what might be useful to monitor for total ozone.
> Please find our suggestion in the attached excel sheet.

Thank you.

> In the excel sheet you asked for support for tropospheric ozone, maybe we can discuss this by email?
> Klaus-Peter

Yes, certainly. I'll send you a short message of what I'm looking for.

#### #5 - 12/18/2018 04:22 PM - Athina Argyrouli

*- File Time-dependent-QC_CLOUD.xlsx added*

The excel sheet for the CLOUD product is attached.

#### #6 - 12/18/2018 04:33 PM - Klaus-Peter Heue

Hi Maarten

There is one variable for the OFFL report we want to include here as well as in the daily reports (Support #9321), namely the "effective_albedo". Here may be the Zonal average would be interesting.

Klaus-Peter

#### #7 - 12/19/2018 01:48 AM - Deborah Stein Zweers

*- File Time-dependent-QC_AAI.xlsx added*

For UVAI it might be nice to have a row-time Hovmoller of scene_albedo_380 and scene_albedo_388

#### #8 - 12/19/2018 07:50 AM - Pepijn Veefkind

*- File Time-dependent-QC_JPV.xlsx added*

Attached are the inputs for the ozone profiling products.

#### #9 - 12/19/2018 09:31 AM - isabelle de smedt

*- File Time-dependent-QC (1)_HCHO.xlsx added*

Attached is the HCHO excel sheet.

Cheers

Isabelle

Maarten Sneep wrote:

> Dear all,

I need your input to help us set up the time-dependent output on the level 2 quality control website. The real questions are in the attached questionnaire.docx file, which includes example pictures to show what is possible. If you want to check a certain plot for your own product, please let me know and I'll provide you with an example. You can use the attached Time-dependent-QC.xlsx file to provide your answers.

Also note the related issue #9321 which deals with the daily extractions. The time-dependent plots are based on the daily extractions.

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Kind regards,

Maarten

#### #10 - 12/20/2018 09:32 AM - Tobias Borsdorff

*- File Time-dependent-QC_CO_CH4.xlsx added*

Hi Maarten,

here our suggestions for the plots of CO and CH4

Greetings

Alba and Tobias

#### #11 - 01/08/2019 12:37 PM - Maarten Sneep

*- Due date deleted (12/31/2018)*

#### #12 - 01/08/2019 12:41 PM - Jos van Geffen

*- File Time-dependent-QC_NO2.xlsx added*

Here my suggestions for the NO2.

Perhaps Henk Eskes and/or Kai-Uwe Eichmann still want to add something to this.

#### #13 - 01/08/2019 12:55 PM - Maarten Sneep

Thank you all for supplying me with your feedback. I haven't received feedback for AER_LH, FRESCO, NP_BDx, and SO2___.

For AER_AI, CH4___, CO____, O3_TPR and O3__PR the provided feedback isn't clear as to which parameters are requested exactly for the line plot(s) or the rows image(s). Please clarify.

For HCHO__, NO2___, O3_TPR and O3__PR no time dependent histograms are requested, are you sure about that?

#### #14 - 01/08/2019 01:11 PM - Alba Lorente Delgado

Hi Maarten,

For CH4 line plots with mean, median, 16% and 84% percentile for all variables that are in black color (qa_value, methane_mixing_ratio,methane_mixing_ratio_precision, methane_mixing_ratio_bias_corrected, number_of_spectral_points_in_retrieval, chi_square_SWIR, chi_square_NIR, degrees_of_freedom, number_of_iterations, fluorescence). Row plot only for number_of_spectral_points_in_retrieval.

For CO, line plots with mean, median, 16% and 84% percentile for all variables that are in black color (qa_value, carbonmonoxide_total_column, carbonmonoxide_total_column_precision, number_of_spectral_points_in_retrieval, chi_square, degrees_of_freedom, number_of_iterations). Row plot only for number_of_spectral_points_in_retrieval.

Let us know if something else needs to be clarified.

Regards,

Alba and Tobias.

#### #15 - 01/08/2019 02:55 PM - Ping Wang

*- File Time-dependent-QC_FRESCO.xlsx added*

Hi Maarten,
I filled in the FRESCO and fluorescence variables for the time-dependent plots, see the attached file.

#### #16 - 01/08/2019 03:56 PM - Maarten Sneep

Alba Lorente Delgado wrote:

> Hi Maarten,
>
> For CH4 line plots with mean, median, 16% and 84% percentile for all variables that are in black color (qa_value, methane_mixing_ratio,methane_mixing_ratio_precision, methane_mixing_ratio_bias_corrected, number_of_spectral_points_in_retrieval, chi_square_SWIR, chi_square_NIR, degrees_of_freedom, number_of_iterations, fluorescence). Row plot only for number_of_spectral_points_in_retrieval.

I understood as much, but **which** parameter (minumin, maximum, ...) would you like to have plotted in the row plot?

> For CO, line plots with mean, median, 16% and 84% percentile for all variables that are in black color (qa_value, carbonmonoxide_total_column, carbonmonoxide_total_column_precision, number_of_spectral_points_in_retrieval, chi_square, degrees_of_freedom, number_of_iterations). Row plot only for number_of_spectral_points_in_retrieval.

Exactly the same question again.

Thanks.

#### #17 - 01/08/2019 04:14 PM - Alba Lorente Delgado

Hi Maarten,

For both CH4 and CO the mean in the row plot.

Thanks.

#### #18 - 01/08/2019 04:16 PM - Maarten Sneep

Alba Lorente Delgado wrote:

> Hi Maarten,
>
> For both CH4 and CO the mean in the row plot.

Thank you.

I will maintain the wavelength_calibration_offset_SWIR in the extraction, as this is the only monitor of the wavelengths in the SWIR that we have. We maintain this for instrument monitoring purposes to aide the L1 team.

#### #19 - 01/09/2019 09:51 AM - Nicolas Theys

*- File Time-dependent-QC_SO2.xlsx added*

Attached is the input for _SO2 (sorry for the delay).
Following Pascal's idea, it would be good to monitor directly the BG parameters to spot issues there. I don't know how exactly this could be done, as it is slightly different from other variables. Therefore I have not included the BG parameters in the xls sheet. Description is as follows:
window_1_north

```
plot vs field o3_grid


either plot one line for each row or generate mean over all rows


range: [-1,1]
```

window_1_south

```
plot vs field o3_grid


either plot one line for each row or generate mean over all rows


range: [-1,1]
```

window_2

```
plot vs lat_grid
```

```
either plot one line for each row or generate mean over all rows
```

```
range: [-1,1]
```

window_3

```
plot vs lat_grid
```

```
either plot one line for each row or generate mean over all rows
```

```
range: [-1,1]
```

Nicolas

**#20 - 01/11/2019 02:03 PM - Maarten Sneep**

*- File deleted (Time-dependent-QC.xlsx)*

**#21 - 01/11/2019 02:08 PM - Maarten Sneep**

*- File Time-dependent-QC.xlsx added*

Thank you all for your feedback so far. I've collected all comments and feedback.

Note: all crossed out variables will be removed from the *daily* reports. Please let me know if that is unintentional. I will continue to include some

variables that were crossed out because they provide unique instrument monitoring capabilities (SWIR wavelength offset for instance).

#### #22 - 01/16/2019 05:57 PM - Maarten Sneep

*- Target version deleted (PyCAMA 0.9.0)*

#### #23 - 01/29/2019 04:39 PM - Maarten Sneep

*- File deleted (Time-dependent-QC.xlsx)*

#### #24 - 01/29/2019 04:40 PM - Maarten Sneep

*- File Time-dependent-QC.ods added*

#### #25 - 03/20/2019 03:01 PM - Richard Siddans

*- File Time-dependent-QC_NPP.xlsx added*

Form for NPP cloud uploaded.
Note that there is no need to make plots for all of the (4) field of view for which radiances and cloud flag/fractions are available. It would be sufficient to make plots only for the 1st FOV.

#### #26 - 03/20/2019 03:12 PM - Maarten Sneep

Richard Siddans wrote:

> Form for NPP cloud uploaded.
> Note that there is no need to make plots for all of the (4) field of view for which radiances and cloud flag/fractions are available. It would be sufficient to make plots only for the 1st FOV.

Thank you. And yes, I had no intention to do all 4 of them.

#### #27 - 04/28/2020 09:59 AM - Maarten Sneep

*- Assignee set to Jacques Claas*

### Files

| | | | |
|---|---|---|---|
| questionnaire.docx | 5.67 MB | 11/28/2018 | Maarten Sneep |
| Time-dependent-QC_O3.xlsx | 27.7 KB | 12/14/2018 | Klaus-Peter Heue |
| Time-dependent-QC_CLOUD.xlsx | 43.8 KB | 12/18/2018 | Athina Argyrouli |
| Time-dependent-QC_AAI.xlsx | 43.3 KB | 12/19/2018 | Deborah Stein Zweers |
| Time-dependent-QC_JPV.xlsx | 45.4 KB | 12/19/2018 | Pepijn Veefkind |
| Time-dependent-QC (1)_HCHO.xlsx | 44.3 KB | 12/19/2018 | isabelle de smedt |
| Time-dependent-QC_CO_CH4.xlsx | 45.2 KB | 12/20/2018 | Tobias Borsdorff |
| Time-dependent-QC_NO2.xlsx | 10.7 KB | 01/08/2019 | Jos van Geffen |
| Time-dependent-QC_FRESCO.xlsx | 27.2 KB | 01/08/2019 | Ping Wang |
| Time-dependent-QC_SO2.xlsx | 44.8 KB | 01/09/2019 | Nicolas Theys |
| Time-dependent-QC.ods | 24.9 KB | 01/29/2019 | Maarten Sneep |
| Time-dependent-QC_NPP.xlsx | 43.5 KB | 03/20/2019 | Richard Siddans |