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Daybook Data Manager gives access to:
- The display of your analysis results along a timeline,
- The tracking of specific metrics and alerts, based on pre-defined tolerance thresholds,
- The centralization of the quality control data and events about a system.

I. TIMELINE MANAGEMENT

In the Monitoring tab, the timeline displays the evolution of specific metrics over time (*cf.* Figure 1).
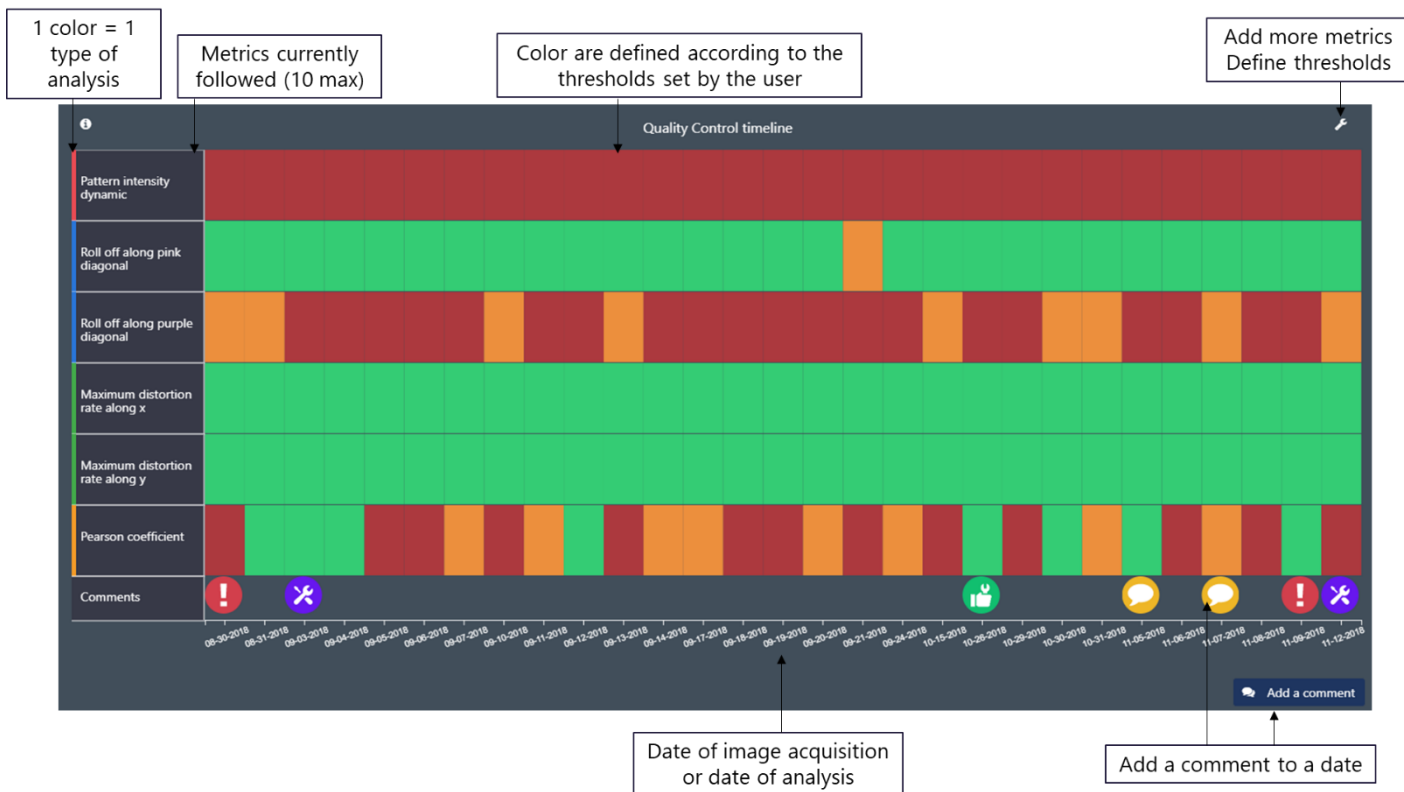

Figure 1 Display of the timeline.

1. DISPLAY YOUR ANALYSIS RESULTS ON THE TIMELINE

1- How to add a result in the timeline?

All the data displayed on the timeline come from the analyses previously carried out in Daybook Analysis.

When a valid Daybook Data Manager license has been registered, the results (from Daybook Analysis results pages) can be transferred into Daybook Data Manager thanks to the "Save in Data Manager" button.

Figure 2 Transfer of results from Daybook Analysis to Daybook Data Manager.

Many channels can be created within Daybook Data Manager. Each channel has its own timeline.

Note: A channel is a set of settings (excitation and emission wavelengths, illumination power, detector exposure time and/or gain, etc.) defined for a system configuration.

- **The result is not displayed in the timeline**

➢ If the result does not appear in the timeline after clicking on "Save in Data Manager":

We recommend refreshing the data thanks to the "Refresh data" button in the Monitoring tab of Data Manager, at the top right-hand corner.

➢ If the result still does not display:

We recommend verifying that the metrics corresponding to the result (see below "Metrics in the timeline") are amongst the displayed metrics.

- **Date in the timeline**

Daybook Data Manager will position the analysis result in the timeline according to the acquisition date saved in the image's metadata. If the image's metadata do not contain an acquisition date, the result will be placed at the date of analysis performed by Daybook Analysis.

- **Metrics in the timeline**

Each analysis has a list of associated metrics.

The timeline can display up to 10 metrics at the same time.

To see how to add more metrics on the timeline display, please refer to chapter 3 "Track metrics and set quality thresholds".

ANALYSIS NAME	METRICS WE RECOMMEND MONITORING
FIELD NON-UNIFORMITY	Primary metrics Centering accuracy Roll-off of the pink diagonal profile Roll-off of the purple diagonal profile Coefficient of variation
FIELD DISTORTION	Primary metrics Maximum distortion rate along X Maximum distortion rate along Y
LATERAL CO-REGISTRATION INACCURACY	Primary metrics Pearson correlation coefficient Maximum of the vector magnitudes
LATERAL RESOLVING POWER	Primary metrics Lateral resolving power at zero contrast SNR
INTENSITY RESPONSE 4X4 AND 2X16	Primary metrics Intensity minimum Intensity maximum Pearson correlation coefficient of the actual intensity response
STAGE REPOSITIONING REPEATABILITY STAGE DRIFT DURING TIMELAPSE STAGE DRIFT DURING Z-STACKING	Primary metrics Maximum of the drift magnitudes along X wrt reference position Maximum of the drift magnitudes along Y wrt reference position
LINE SPREAD FUNCTION	Primary metrics FWHM of the left curve in the horizontal profile FWHM of the right curve in the horizontal profile FWHM of the left curve in the vertical profile FWHM of the right curve in the vertical profile
SPECTRAL RESPONSE	Primary metrics Partial correlation coefficient
POWER METER	Primary metrics Power average Power stability

2- How to remove a result from the timeline?

The results can be removed from the timeline.

Manage tests On the Monitoring tab, click on the "Manage tests" button. You will access the list of all your systems, system configuration, channels and the associated tests.
Tests can be deleted one by one or as a complete Quality Point regrouping several tests.

2. ADD COMMENTS

Comments can be useful to keep trace of a specific event: write a warning, add a note, register the visit of the maintenance technician, etc.

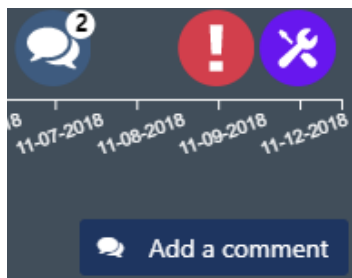**Note:** Comments will not be exported into the PDF reports.

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Figure 3 Comments on the timeline.

On the Monitoring tab, click on the "Add a comment" button (*cf.* Figure 3). A window will appear in which you can select the date, the concerned item (system, system configuration or channel), the type of comment (Maintenance, Note, Warning, Other) and the author (optional).
This will display the comment at the bottom of the timeline.

When several comments are allocated to the same date, a bubble will show the number of comments (*cf.* Figure 3). Clicking on the bubble will display all the comments linked to this date.
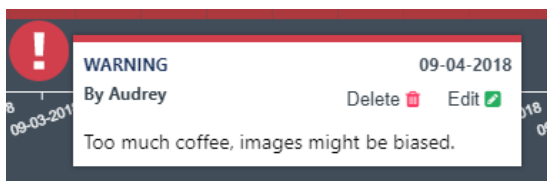

Figure 4 Edit or delete a comment

To edit or delete a comment, click on its bubble (*cf.* Figure 4).

3. TRACK METRICS AND SET QUALITY THRESHOLDS

The timeline gives a visual indication on the status of your metrics, thanks to a red-orange-green color range. The color changes depending on values the user has previsouly set as tolerance thresholds for each metric.

1- <u>Add a metric and define</u>

Click on the button, at the top right-hand corner of the timeline.

More metrics can be added:
- either one by one: click on the "Add new metric" button,
- either as a metrics template: To save configuration time for the user, we have defined a template of metrics that includes pre-defined thresholds. They are issued from our experience, gathered from the litterature and/or recommended by experts.
  If you are familiar with the usual metrics values of your system, we recommend to modify the tolerance thresholds accordingly and save them as your own metrics template.
  If you do not know the usual metrics values of your system, we recommend to start monitoring them, to gain understanding on how your system usually behaves, and then to set the torelance thresholds accordingly.
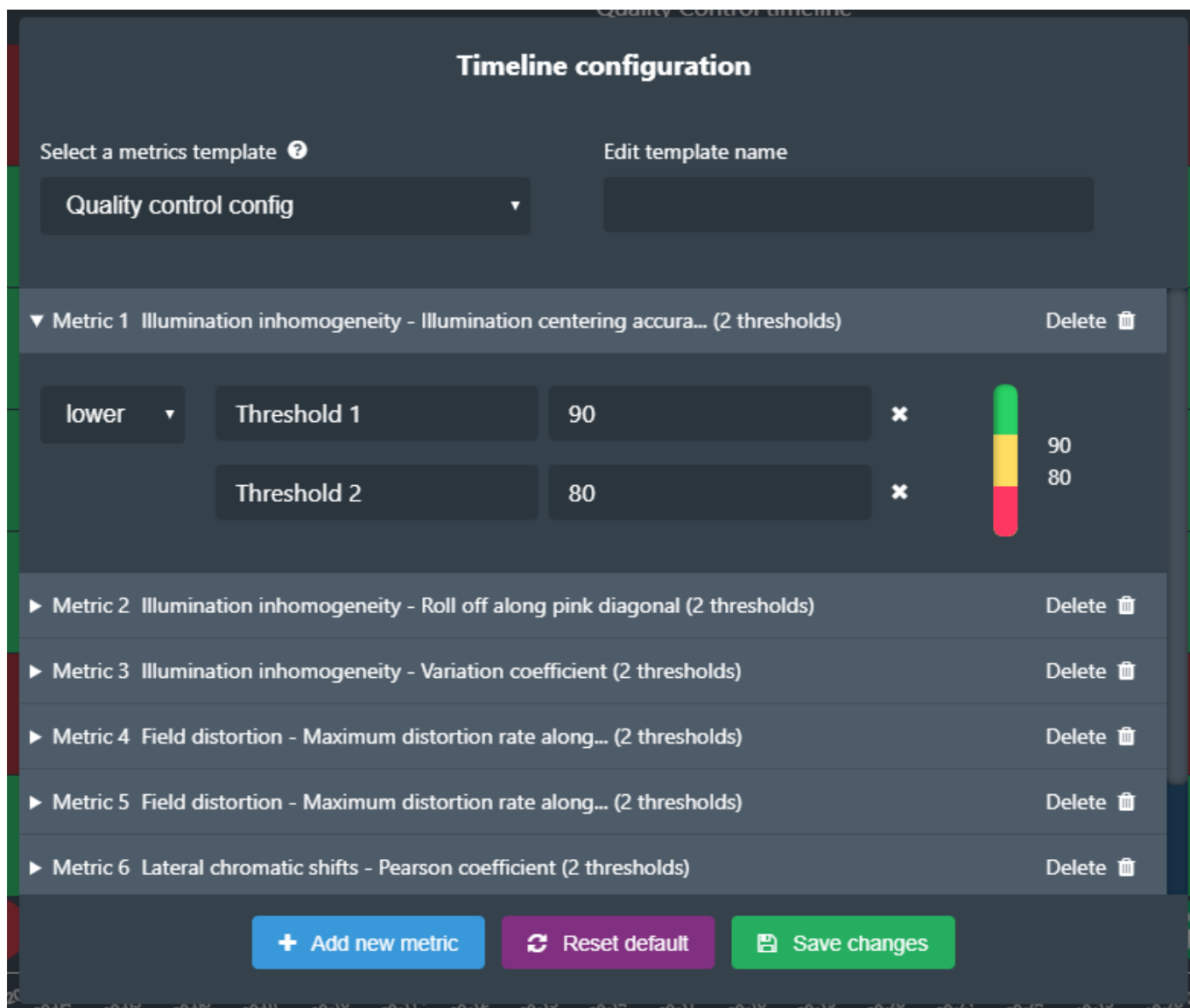
Figure 5 Configuration of metrics and tolerance thresholds.

2- Define a tolerance threshold for a metric

Each metric can have a maximum of two thresholds: a higher one and a lower one.
To change the threshold, click on the metric and modify the value (*cf.* Figure 5).
You can remove a threshold by clicking on the cross in front of it. You can add a threshold by clicking on the blue button "Add a threshold" (*cf.* Figure 6).
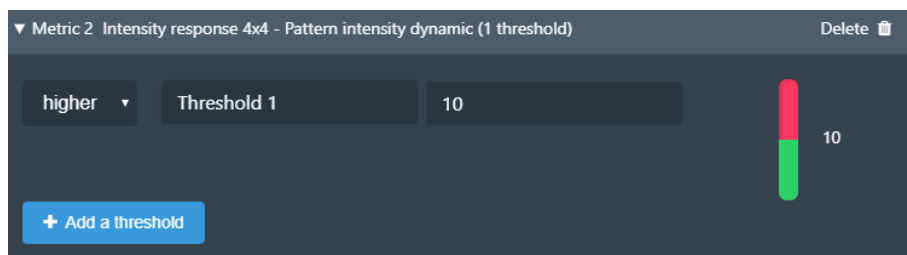

Figure 6 Add a threshold.

3- Remove a metric

You can remove each metric one by one from the timeline. Deleting a metric in the timeline will not affect the data in the database; you will be able to add it again later.

Click on the [wrench icon] button, at the top right-hand corner of the timeline. Click on the Delete button in front of the metric you would like to remove (*cf.* Figure 5).

II.   DATA EXPLORATION

There are two ways to view your system's data:
- Either as a dashboard through the "Monitoring" tab,
- Or as reports through the "Reports" tab.

1.   DISPLAY DATA CARDS

Results gathered from Daybook Analysis can be displayed below the timeline as "cards".
There are three types of cards:
- the "line chart card", which displays the evolution of a specific metric over time,
- the "table card", which displays a table of relevant parameters of an analysis,
- the "image card", which displays the results images generated by Daybook Analysis.
There is no limit in the number of cards that can be displayed.

[+ Add new card] On the Monitoring tab, click on the "Add new card" button, just above the timeline. You will access the list of analysis with the associated metrics that can be selected.
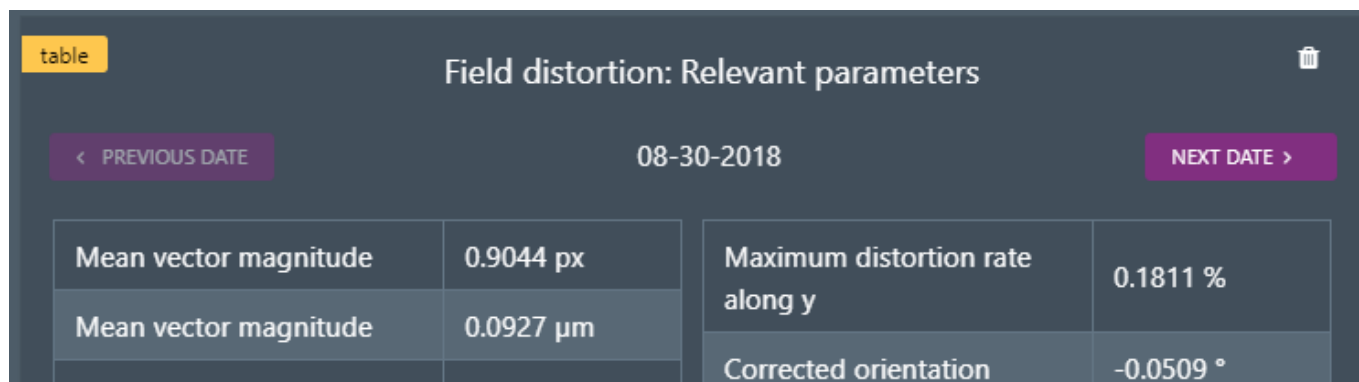
table	Field distortion: Relevant parameters		🗑
‹ PREVIOUS DATE		08-30-2018	NEXT DATE ›
Mean vector magnitude	0.9044 px	Maximum distortion rate along y	0.1811 %
Mean vector magnitude	0.0927 µm	Corrected orientation	-0.0509 °

Figure 7 Example of a table card.

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The new card will be added below the timeline.
Right-click on a card to save its content either as a "*.png" file (for line charts and images), , or as a "*.txt" or "*.csv" file (for tables).

To remove a card, click on the Bin icon, at the top right-hand corner of the table card. Removing a card will not affect the data in the database. You will be able to re-create the card later-on if needed.

2. ISSUE DATA REPORTS

Coming soon…

Encountered an issue or a question?
Please use the feedback button within the software
Or send a screenshot and your issue description at
customer@argolight.com

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