

# TrendMiner: Embedded Notebooks & Machine Learning model tags

## Bringing the Data Scientist In the Loop

TrendMiners Embedded Notebooks closes the gap between the Process Experts and Data Scientist through seamless integration of Python notebooks within the TrendMiner application.

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### # About

The vision behind the TrendMiner Data Analytics platform has always been to provide the process and asset expert with robust self-service analytics capabilities to make these personas Analytics Enabled. Over the years, these analytics enabled engineers have shown an increased interest in going even beyond that level of analytics maturity, further closing the gap with the data scientist in central troubleshooting groups.

For this Analytics Expert user persona, we're now introducing python notebook functionality embedded within TrendMiner to offer a more advanced experience beyond the robust built-in functionalities TrendMiner is known for, including capabilities to operationalise the data science results to the entire organisation as visualisations on a dashboard or as virtual tags with historical and live-updating data values.

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### # Offering

**Embedded Python Notebooks:** Provide users a tool to work with a data-set prepared in Trendminer inside a Python environment that is supported by the well-known libraries and packages such as Pandas, NumPy, SciPy and SciKit-Learn.

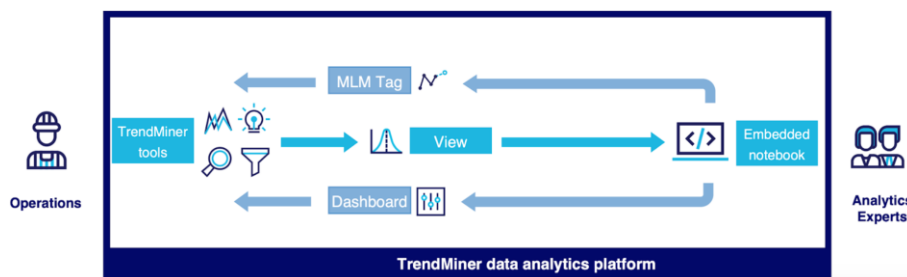
Advanced Visualisations	Enhanced Analytics	Machine Learning
<ul style="list-style-type: none"><li>• Histograms</li><li>• Boxplots</li><li>• Heatmaps</li><li>• Parallel Coordinates</li></ul>	<ul style="list-style-type: none"><li>• SPC Charts</li><li>• Statistical Analytics</li><li>• Reporting</li><li>• </li></ul>	<ul style="list-style-type: none"><li>• Predictions</li><li>• Anomaly Detection</li><li>• PCA</li><li>• Classifications</li></ul>

**Notebook tiles:** Enhance your DashHub dashboards by embedding your visualizations or results inside a DashHub Notebook tile empowering others in the organisation to get even better insights

Commented [VN1]: make it a bit stronger: "empowering others in the organisation to get even better insights."

**Machine Learning Model (MLM) tags:** Deploy and operationalise your models as a Machine Learning Model (MLM) tag inside TrendMiner. The MLM tags act as any other tag in TrendMiner and can thus be used in any other TrendMiner functionality such as searches, monitoring,....

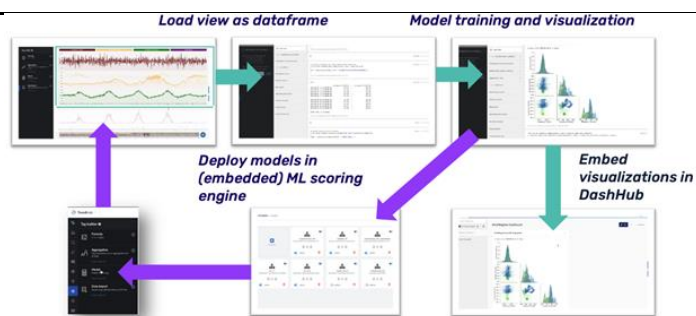
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# Process



<b>STEP 1: PREPARE</b>	Use the built-in TrendMiner tools to prepare your data of interest.
<b>STEP 2: LOAD</b>	Load in data from saved TrendHub Views inside a Python Notebook.
<b>STEP 3: SCRIPT</b>	Create advanced visualisations or train your models using Python.
<b>STEP 4: OPERATIONALISE</b>	Embed visualisation in <i>DashHub</i> or deploy models as <i>Machine Learning Model</i> tags.

Commented [VN2]: prepare?

Commented [VN3]: Operationalise



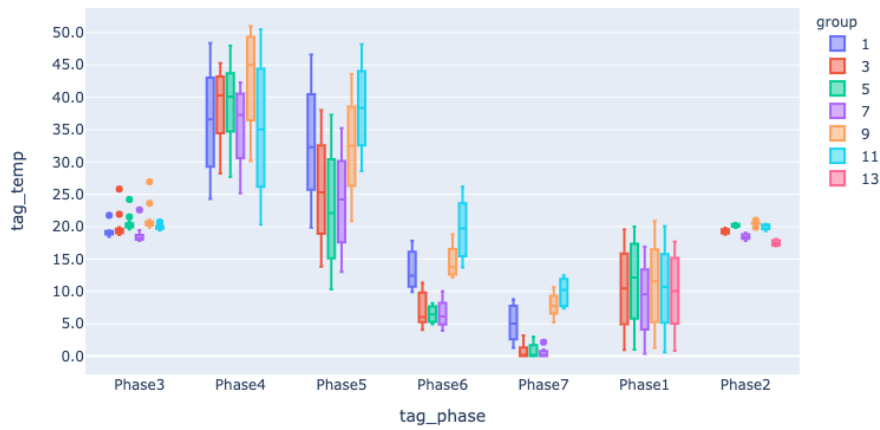
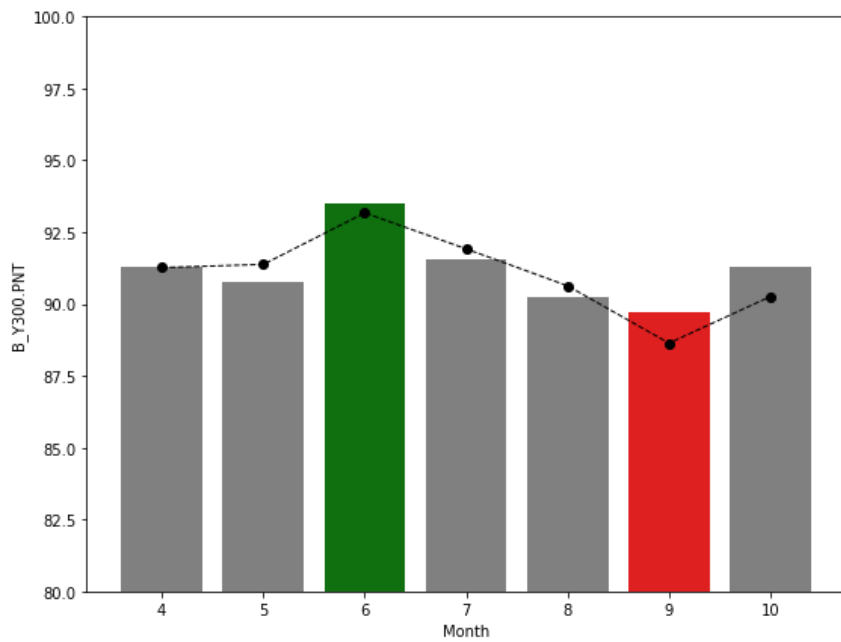
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# Try it out!

We now offer existing TrendMiner customers to join us in our **Data Scientist In The Loop TRIAL program** which enables you to:

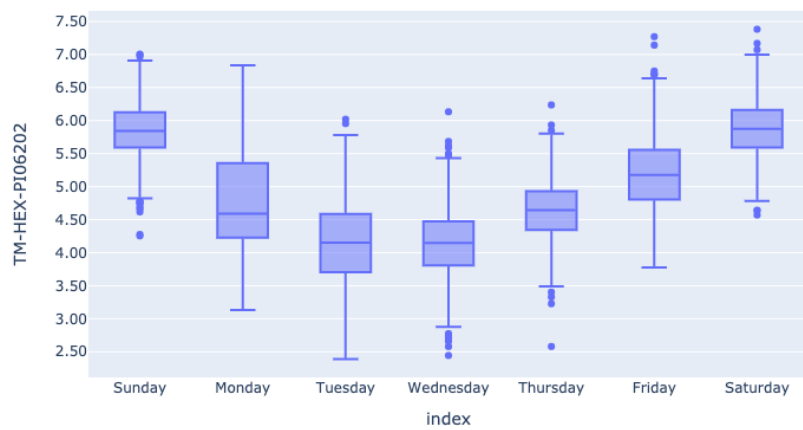
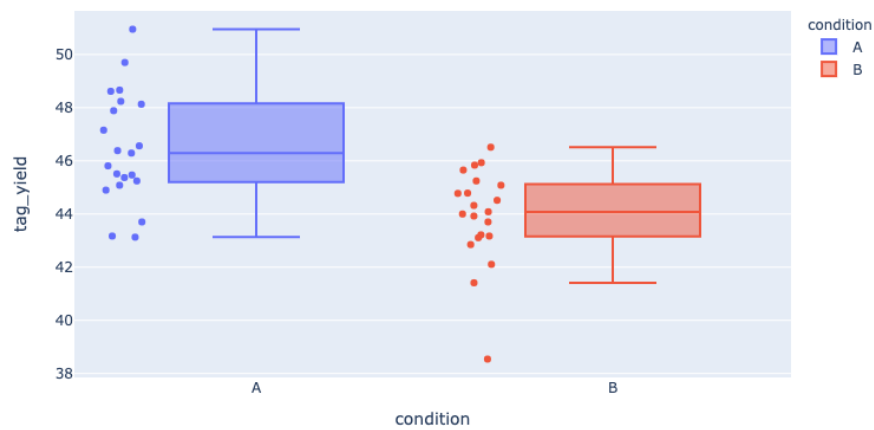
- Evaluate the Embedded Notebooks functionality for a limited amount of time.
- Provide feedback to the TrendMiner team for future improvements.

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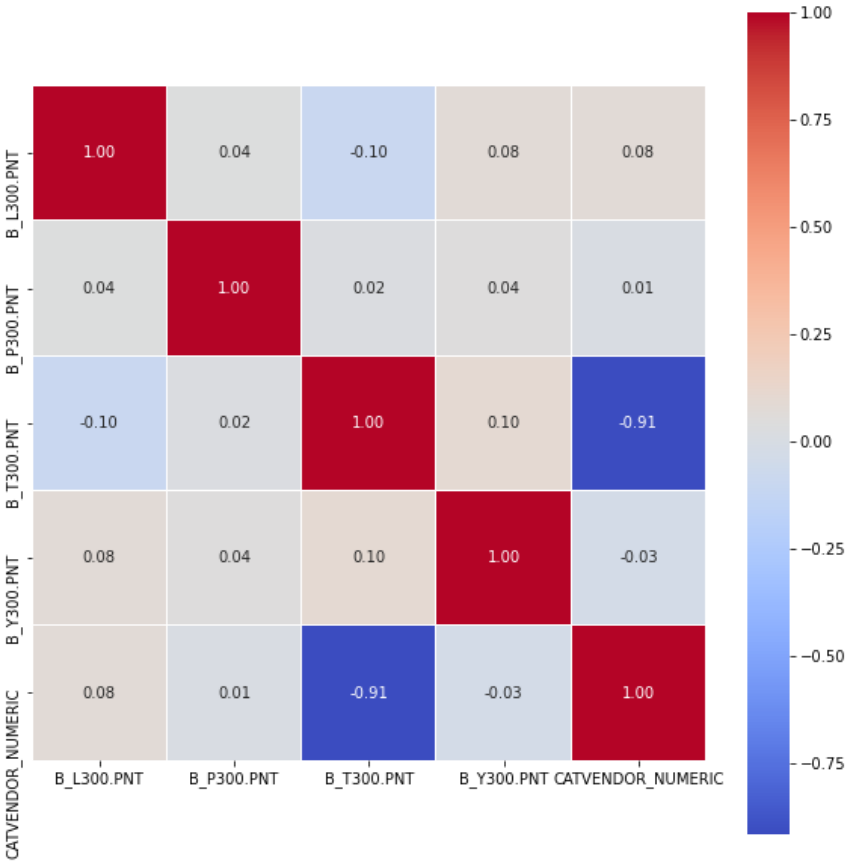
Sign up for a FREE trial - [info@trendminer.com](mailto:info@trendminer.com)

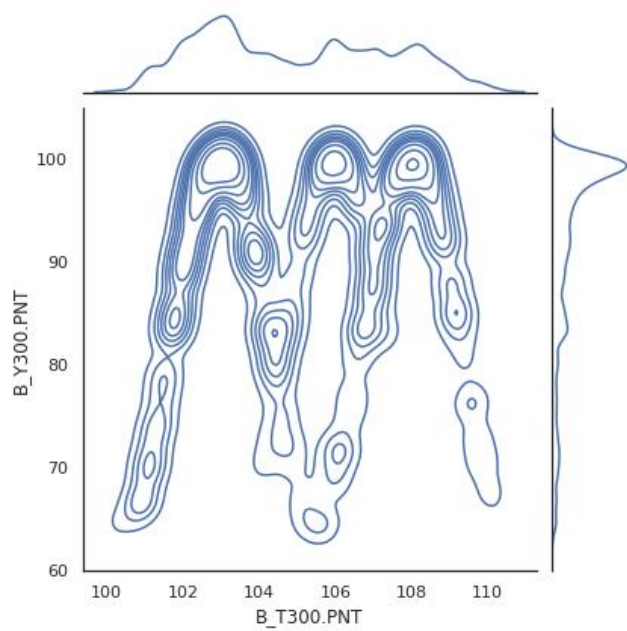
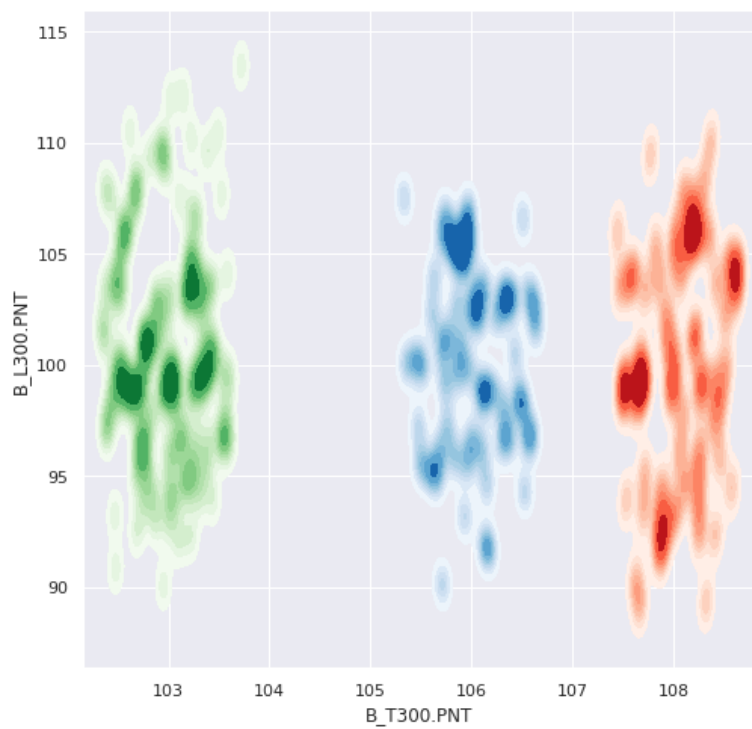


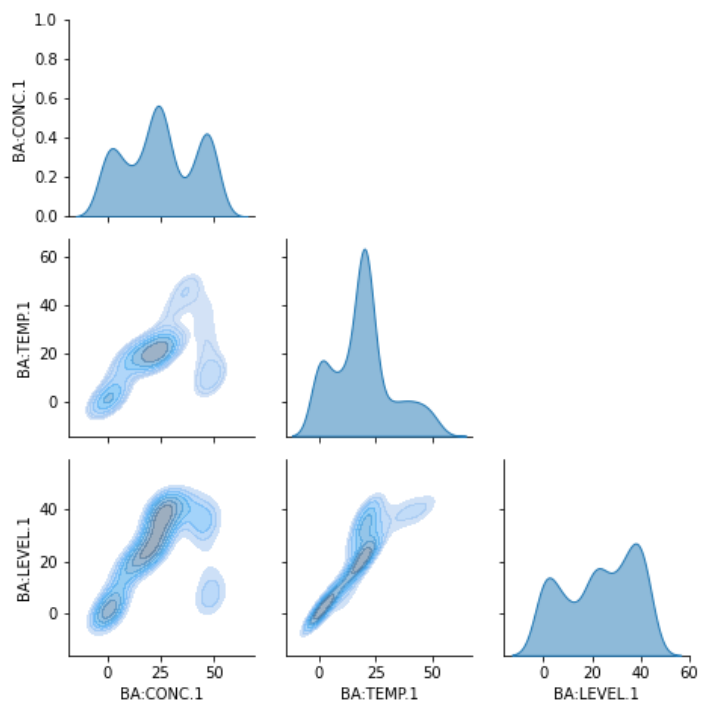
**Commented [VN4]:** if you would add some more visalusions, i would prioritize the boxplot, the joint plot, the pump curve and the SPC chart

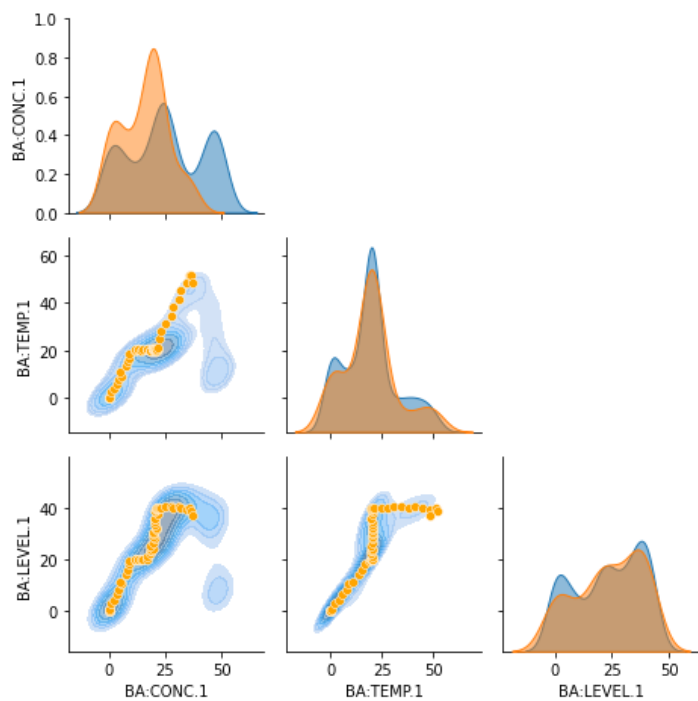


Correlation Heatmap









Pump Characteristic Curve

