



# USER'S MANUAL

*CometeTrend*

Last update: 18/09/2015  
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## Revision Sheet

Release No.	Date	Revision Description
Rev. 0	18/09/15	User's Manual Created
Rev. 1	27/01/2017	Add function like write data file and load configuration file

## Developers of the application

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# APPLICATION NAME ...USER'S MANUAL

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## **1 THE MAIN FUNCTION OF COMETETREND**

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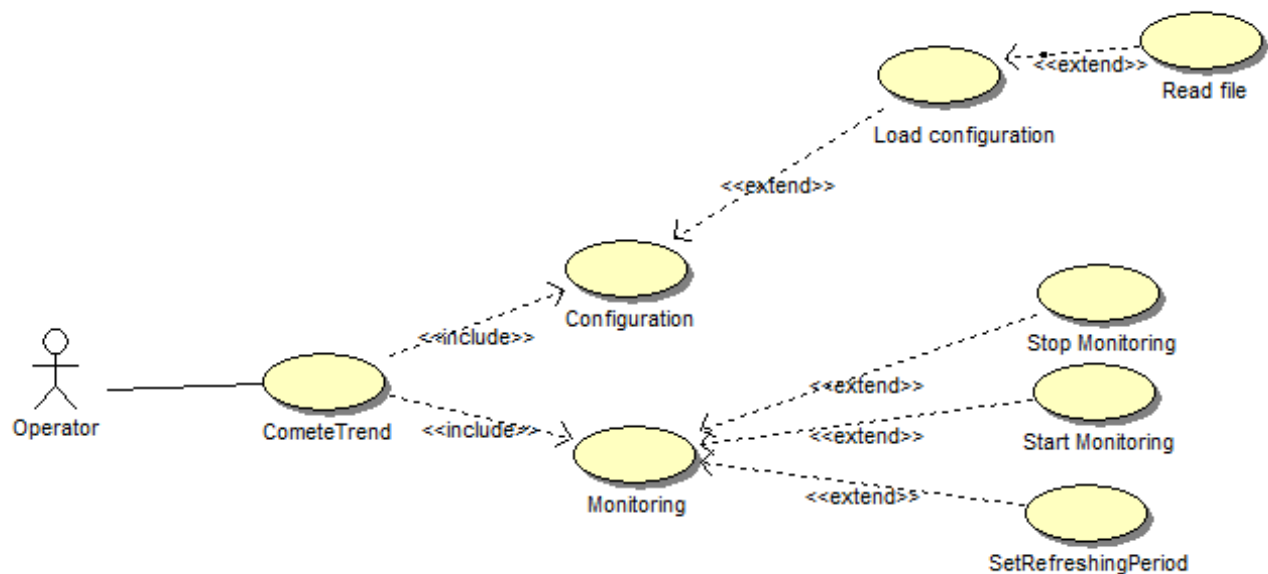
## 1.1 The main function of CometeTrend

CometeTrend contains different mode of function it can:

- This application uses the same configuration files that ATKTrend application.
- Write data file (like ATKTrendFiler application)
- Load data file generate by ATKTrendFiler

So CometeTrend displays curves values of TANGO attributes. Using the graphic library "Comete".

### Use case of (Application Name...):



## 1.2 The devices with which it works

The application works with: The main function of CometeTrend is to read ATK files.

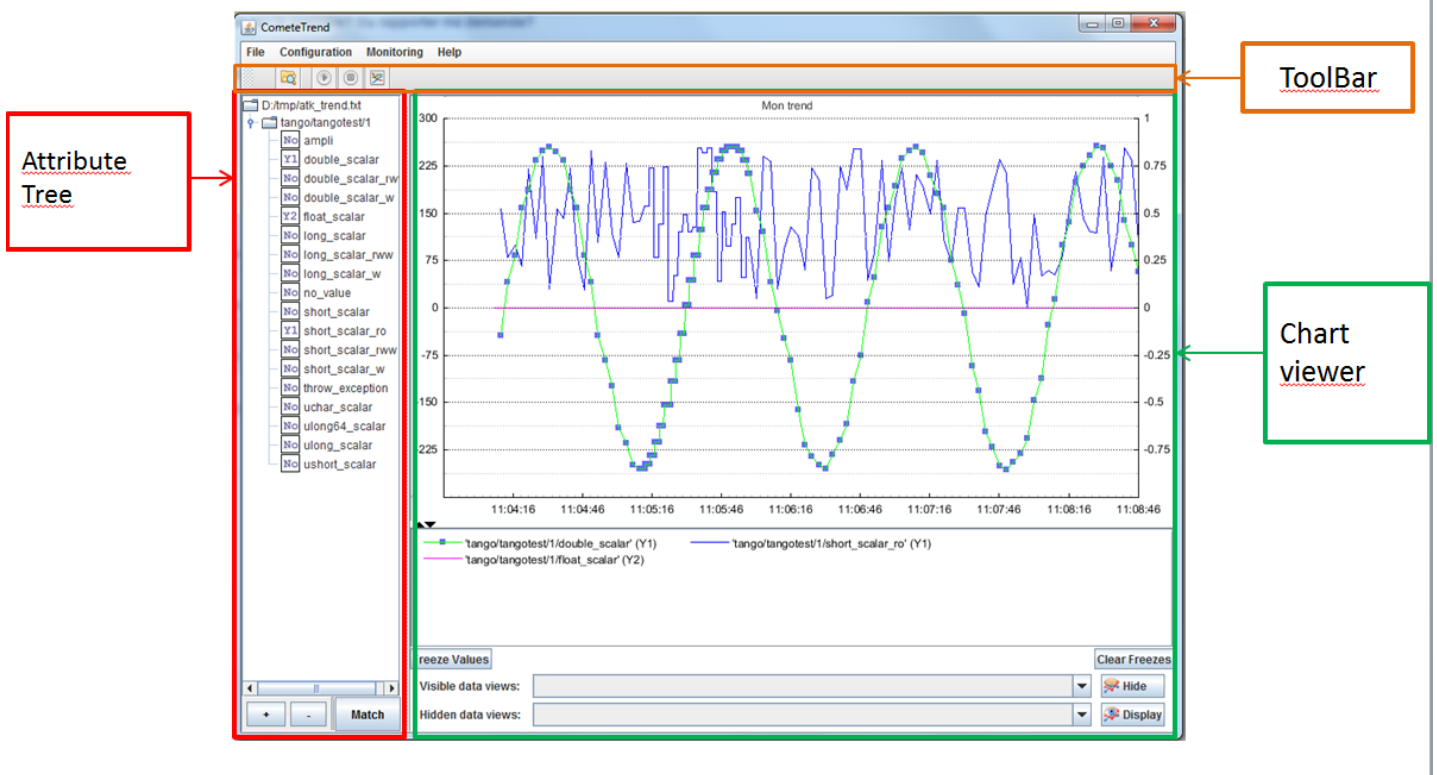
## 1.3 The beamline using this application

Beamline using the application: All beamline can use this application.

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## **2 APPLICATION DESCRIPTION**

## 2.1 Application description



**The ToolBar** is shortened. Can I use the button start, stop, change frequency and load file.

**The Attribute Tree** let's see the attribute that contains the ATKTrend file.

**The Chart viewer** is the chart where you can viewed the attribute(s) selected.

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### **3 OPEN A ATKTREND FILE**



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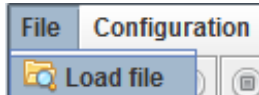
## 3.1 Open a ATKTrend file

- To open an ATK file, you must click on the “Load file” button. And selected ATK file and open it.

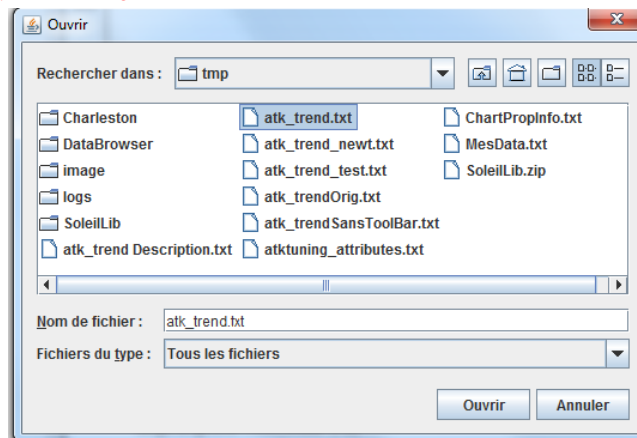
→ 1 - Button « Load file » on the ToolBar



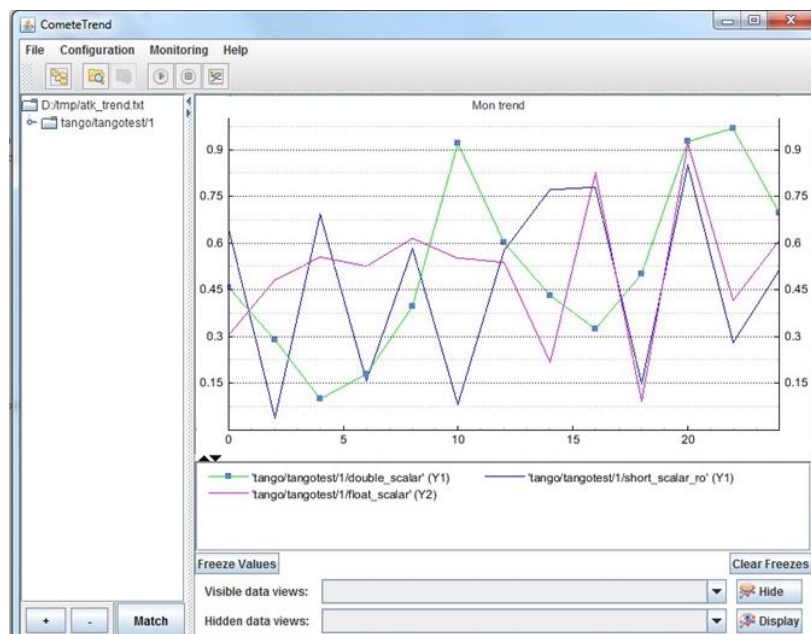
→ 2 - Button « Load file » in the Menu



→ 3 - Selected ATK file



→ 4 - The ATK file is opened



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### Example of ATKTrendFile :

```
graph_title:'Mon trend'
label_visible:true
label_placement:4
label_font:Dialog,0,12
graph_background:0,180,0
chart_background:0,255,0
title_font:Dialog,0,18
display_duration:300000.0
precision:0
toolbar_visible:true
tree_visible:true
date_visible:false
creation_date:05/01/2015
window_pos:421,158
window_size:823,648
show_device_name:1
refresh_time:3000
min_refresh_time:0
refresh_interval_trend:1000
xvisible:true
xgrid:false
xsubgrid:false
xgrid_style:1
xmin:0.0
xmax:100.0
xautoscale:true
xscale:0
xformat:0
xtitle:'null'
xcolor:0,0,0
xlabel_font:Dialog,0,11
xfit_display_duration:true
y1visible:true
y1grid:true
y1subgrid:true
y1grid_style:1
y1min:0.0
y1max:100.0
y1autoscale:true
y1scale:0
y1format:0
y1title:'null'
y1color:0,0,0
y1label_font:Dialog,0,11
y1fit_display_duration:true
y2visible:true
y2grid:false
y2subgrid:false
```

---

```
y2grid_style:1
y2min:0.0
y2max:100.0
y2autoscale:true
y2scale:0
y2format:0
y2title:'null'
y2color:0,0,0
y2label_font:Dialog,0,11
y2fit_display_duration:true
dv_number:18
dv0_name:'tango/tangotest/1/ampli'
dv0_selected:0
dv0_linecolor:255,0,0
dv0_linewidth:1
dv0_linestyle:0
dv0_fillcolor:192,192,192
dv0_fillmethod:2
dv0_fillstyle:0
dv0_viewtype:0
dv0_barwidth:10
dv0_markercolor:255,0,0
dv0_markersize:6
dv0_markerstyle:0
dv0_A0:0.0
dv0_A1:1.0
dv0_A2:0.0
dv0_labelvisible:true
dv0_clickable:true
dv0_labelColor:0,0,0
dv1_name:'tango/tangotest/1/double_scalar'
dv1_selected:2
dv1_linecolor:0,255,0
dv1_linewidth:1
dv1_linestyle:0
dv1_fillcolor:192,192,192
dv1_fillmethod:2
dv1_fillstyle:0
dv1_viewtype:0
dv1_barwidth:10
dv1_markercolor:102,102,255
dv1_markersize:6
dv1_markerstyle:2
dv1_A0:0.0
dv1_A1:1.0
dv1_A2:0.0
dv1_labelvisible:true
dv1_clickable:true
dv1_labelColor:0,0,0
```

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## **4 WRITE DATA FILE**

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## 4.1 Write data file without graphical interface

To write the data in data file, it is necessary to have a configuration file like this:

```
# GeneratedFileName
D:\tmp\TrendFiler\datatrendfile.txt
# RefreshingPeriod
3000
# DateFormat
yyyy/MM/dd HH:mm:ss.SSS

!# DataSeparator
!# WindowBounds
!200,200,200,200

# AttributeList
tangotest1/double_scalar
tangotest1/ampli
tangotest1/boolean_scalar
tangotest1/short_scalar
tangotest1/long_scalar
tangotest1/long64_scalar
tangotest1/ulong64_scalar
tangotest1/ushort_scalar
tango/tangotest/2/ampli
tango/tangotest/2/short_scalar
```

This configuration file contains:

- # GeneratedFileName: The path and name of the generated data file.
- # RefreshingPeriod: The frequency of the refresh period.
- # DateForme: You can choose the format of the date in the data file.
- # DataSeparator: You can change the data separator.
- # AttributeList: This is the list of attributes you want to write to the data file.
- # WindowBounds: You can change window bounds.
- “!”: You can use “!” for comment one line in the configuration file.

In argument when you launch CometeTrend application:

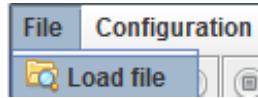
```
CometeTrend      -nogui      -/./myconfiguraton file
```

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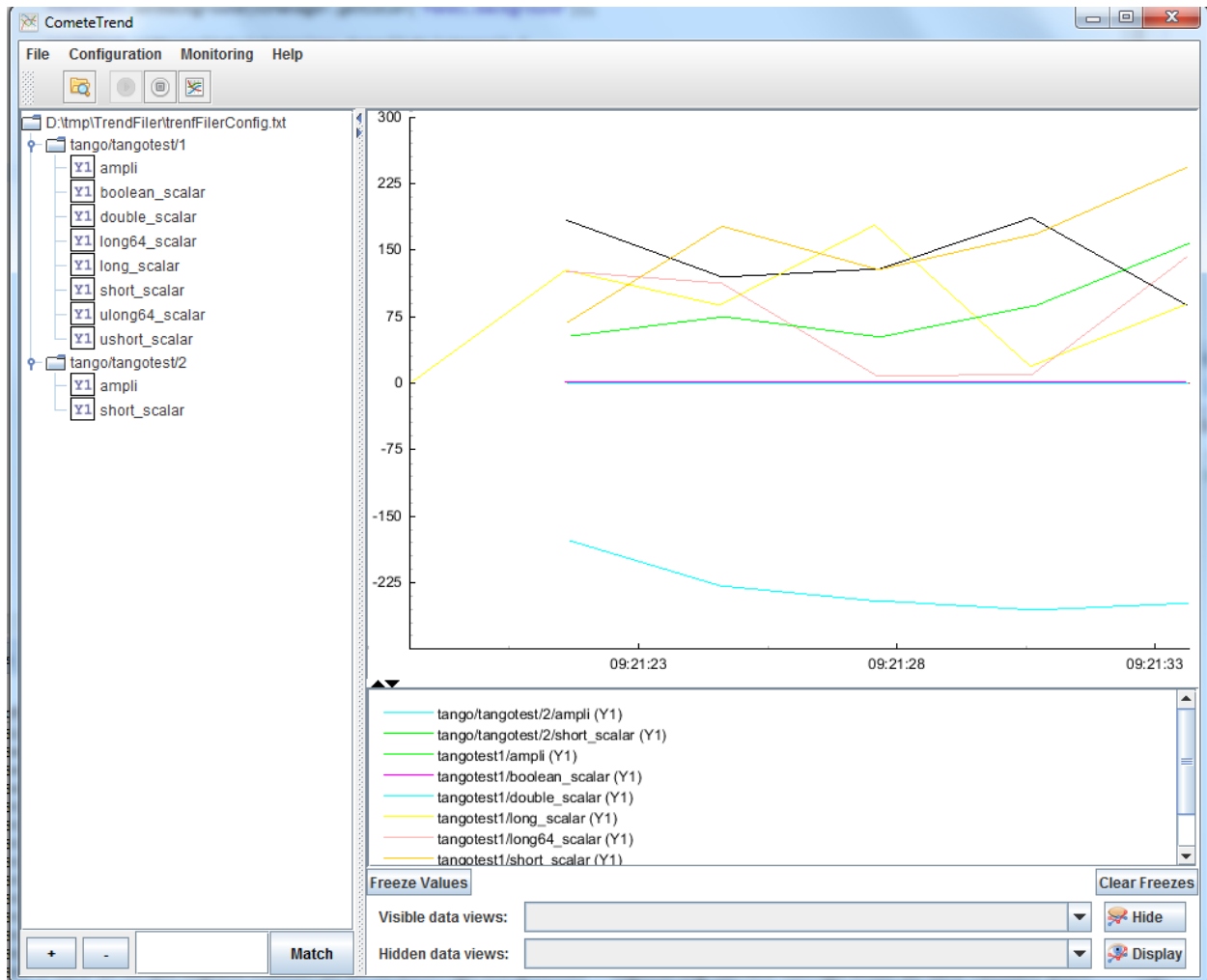
## **5 LOAD CONFIGURATION FILE WITH GRAPHICAL INTERFACE**

## 5.1 Load configuration file with graphical interface

You can open a configuration file like in 4.1 with the graphical interface. Open the file with the button “Load file”:



But when you use this function to open a configuration file, it does not generate a data file. You can see in the chart the value of the attributes. Like this:



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## **6 LOAD DATA FILE GENERATE WITH ATKTRENDFILER (OR COMETETREND)**



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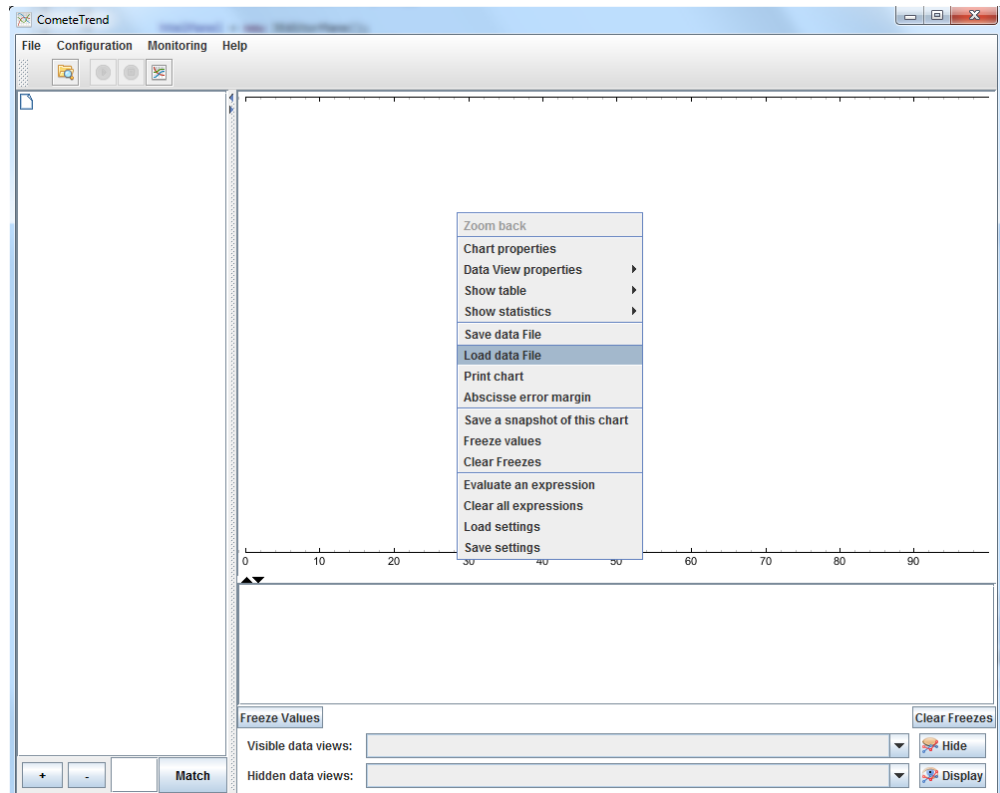
## 6.1 Load data file generate with ATKTrendFiler (or CometeTrend)

Example of data file generated:

```
Time (yyyy/MM/dd HH:mm:ss.SSS)    tangotest1/double_scalar    tangotest1/ampli    tangotest1/boolean_scalar    tangotest1/short_scalar
2017/01/25 09:03:19.423 -193.21    0.00 1 0.0
2017/01/25 09:03:20.482 -161.11    0.00 1 0.0
2017/01/25 09:03:21.544 -161.11    0.00 1 0.0
2017/01/25 09:03:22.574 -131.85    0.00 1 0.0
2017/01/25 09:03:23.602 -131.85    0.00 1 0.0
2017/01/25 09:03:24.629 -87.56     0.00 1 0.0
```

To read the data files it's possible to:

- Using the right mouse button on the chart. And select “Load data file”, then select your data file.



- In argument when you launch CometeTrend application:

CometeTrend -data -/..../pathofmydatafile

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## **7 CHOOSE FREQUENCY AND SHOW AND HIDE TOOLBAR/TREE**

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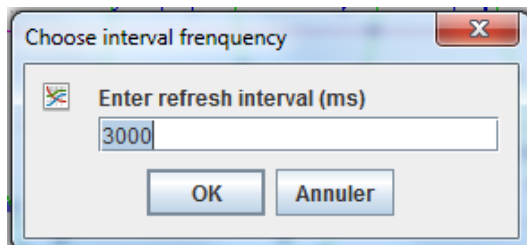
## 7.1 Choose the refresh interval frequency

- It is possible to change the refresh interval with the button “Choose frequency” in Menu.



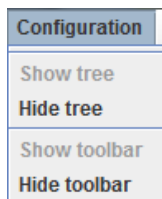
← Button « Choose frequency »

- A window will open. It will allow choosing the frequency of interval in milliseconds.

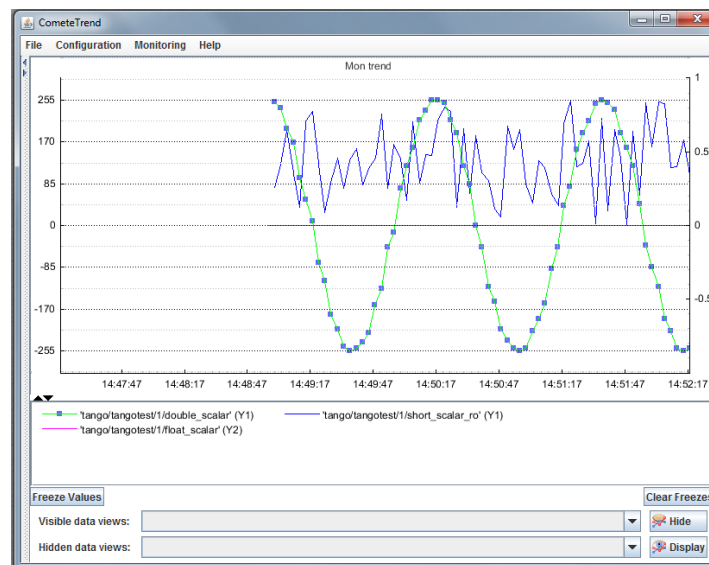


## 7.2 Show and hide ToolBar/Tree

- You can hide the Toolbar and the Tree in the Menu in “Configuration”.



- CometeTrend with the Toolbar and Tree hide



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## **8 START AND STOP FUNCTION**

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## 8.1 Start and stop the refresh interval

- The Toolbar contains buttons "START" and "STOP". The " STOP " button allows to stop the refresh of the curve. The "START" button allows to resume refresh before using the "STOP" button.



- If the application does not contain any ATK file to load the two buttons will be disabled.



- "STOP" button will be active just after a file loading. If the "STOP" button is activated the "START" button will be disabled.
- The "Choose frequency" button is disabled when the refresh is stopped. It is only possible to change the refresh rate when "START" is triggered.



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## **9 HELP DOCUMENTATION**

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## 9.1 Help documentation

- This documentation is available clicking on Help menu

