ATLAS

Quickstart Guide
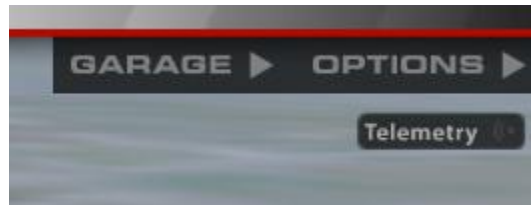
Getting started with iRacing telemetry

Saving telemetry to disk

iRacing now has the ability to save vehicle telemetry to disk any time you are driving in a session. To arm the telemetry system press **'alt-L'** on your keyboard at any time, you do not need to be in your car.

Once armed, an icon will appear on your display indicating that the telemetry system is activated.

When you enter your car, the icon will light up to indicate that telemetry is being saved out to disk.
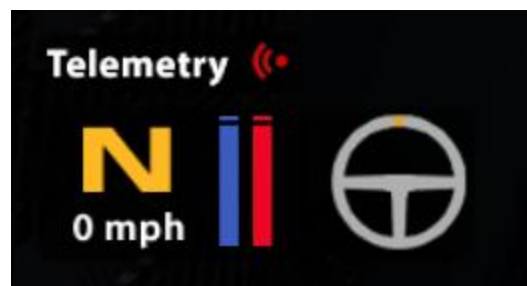
Every time you enter your car, a new telemetry file will be saved to your **[My Documents]\iRacing\telemetry** folder.

Setting up McLaren ATLAS

You can use McLaren ATLAS to view the log files after your session is complete.

First you will need to download and install ATLAS from the resources pane on the iRacing member site. You can reach it from this url: http://membersmedia.iracing.com/atlas/ATLAS.msi

You will also need to download the iRacing ATLAS session data from the resource pane as well. You can access it from the following url:
http://membersmedia.iracing.com/atlas/iRacing_ATLAS_plugin.zip

Unpack the iRacing ATLAS importer and copy the *iracingSession.dll* into *[Program Files (x86)]\McLaren Electronic Systems\ATLAS 9\SessionDLLs*.

You may also want to use the included sample workbook and function list. Copy the contents of the ATLAS *9* directory into your *[My Documents]\McLaren Electronic Systems\ATLAS 9* sub directory.

Configuring ATLAS

The first time you launch ATLAS, you will need to make some small configuration changes.

First open the options dialog from the **'Tools->Options'** menu. Select the **'Standard'** tab and change the default data path to point to your **[My Documents]\iRacing\telemetry** folder.

Then close the dialog with the OK button.

This folder may not exist until you have created your first telemetry file.
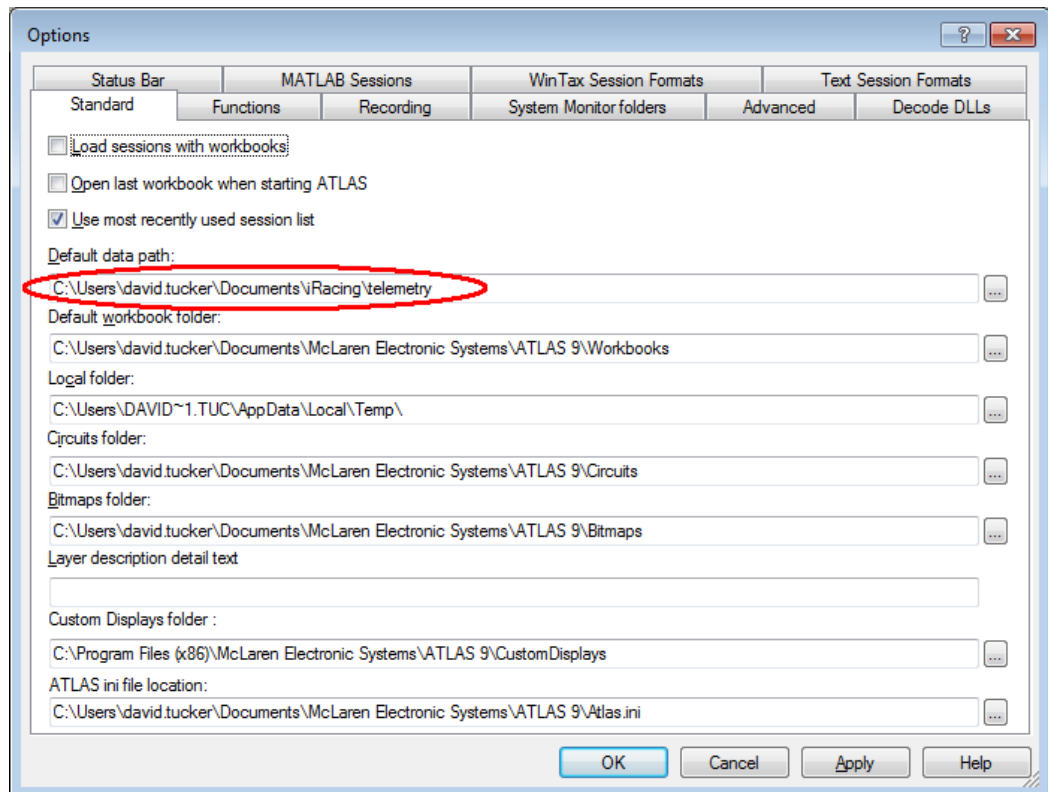
Loading a workbook

Let's start off by loading up the default **'iRacing Example MX5.wbk'** file by selecting **'File->Open'** from the menu. This will bring up a series of charts, and configure the track definitions for you. Later we will cover the steps needed to create a workbook from scratch.
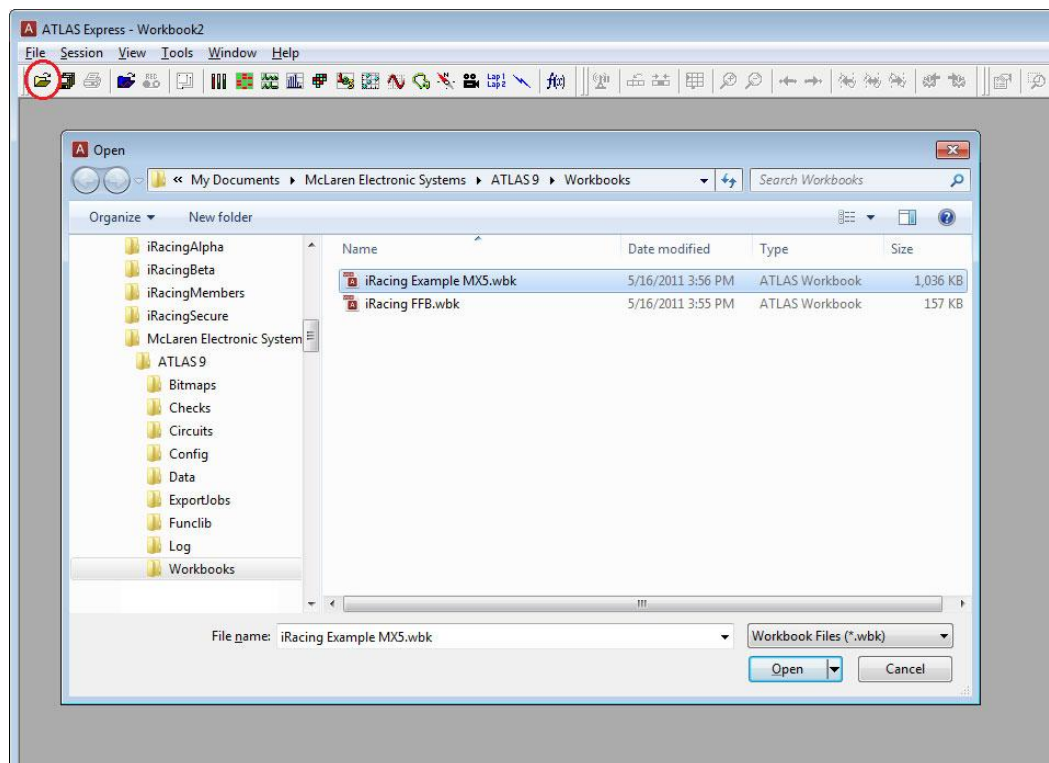

Once your workbook is loaded, you need to load up some data to view.

To do this select the menu option **'Session->Load'.**
You will need to select the **'iRacing binary telemetry'** file format from the drop-down on the left and then pick one of the **.ibt** telemetry files that you have previously generated from the iRacing simulator and click open.

For now let's load the **'mx5 cup_okayama full 2011-05-13 10-29-42.ibt'** sample telemetry file.
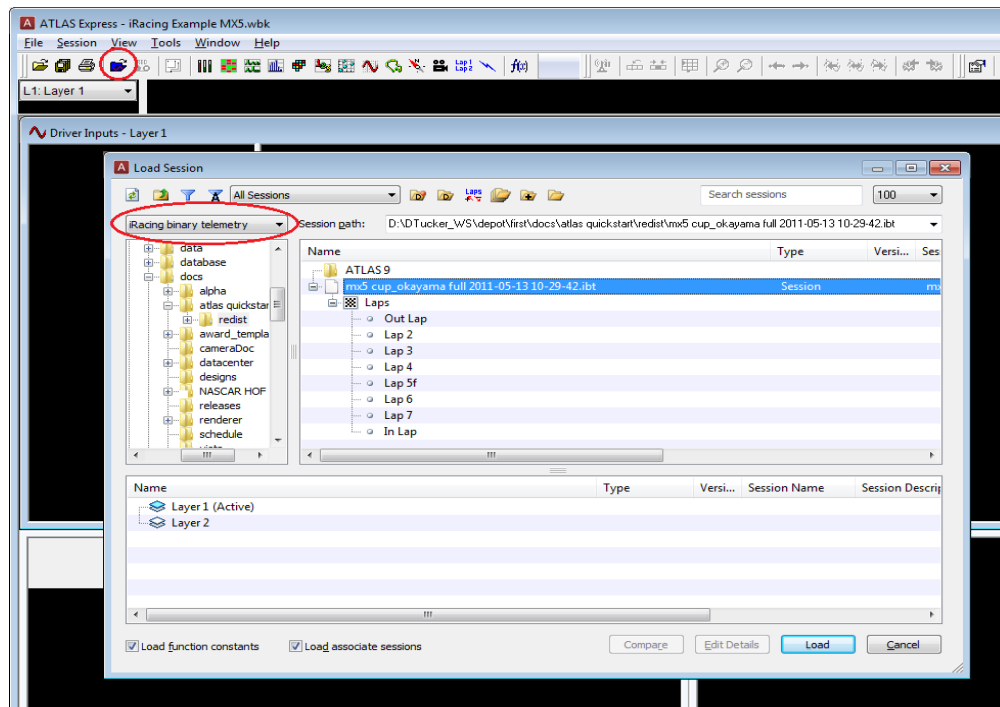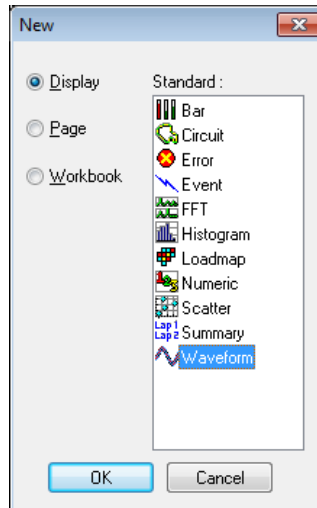
Your workbook should now look something like this.

Atlas comes with an extensive online help system. We recommend spending some time with it in order to better understand this sophisticated application.

Customizing your workbook

To get started plotting data let's put up a simple waveform (graph). Click `'File->New'` and select Waveform from the list of options.


This will bring up a blank chart. In order to be useful we need to add in some variables for this waveform to log. Select your blank waveform and click `'View->Properties'`. This will bring up the Properties dialog.
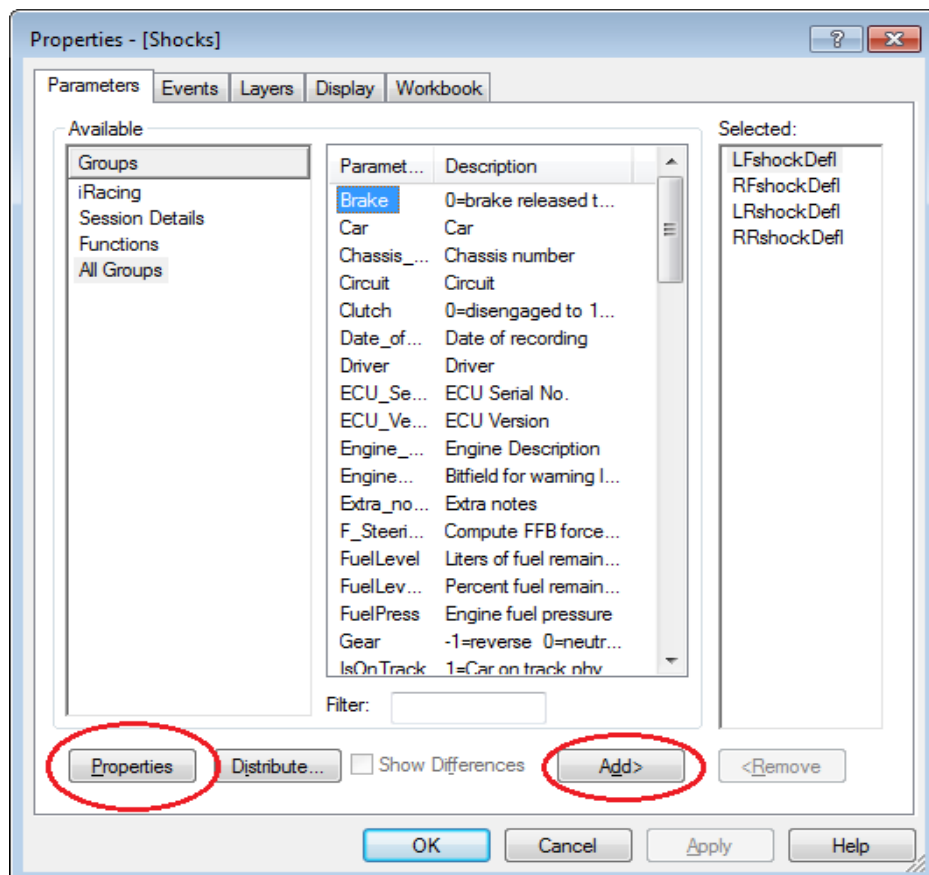
Variables in the iRacing group come straight from the telemetry data we loaded earlier. Variables in the Functions group have been processed through a user defined function. Simply select a variable in the parameters list and hit the add button. You may also select one or more variables and click on the properties button to modify the displayed resolution and min/max scaling of the parameter.
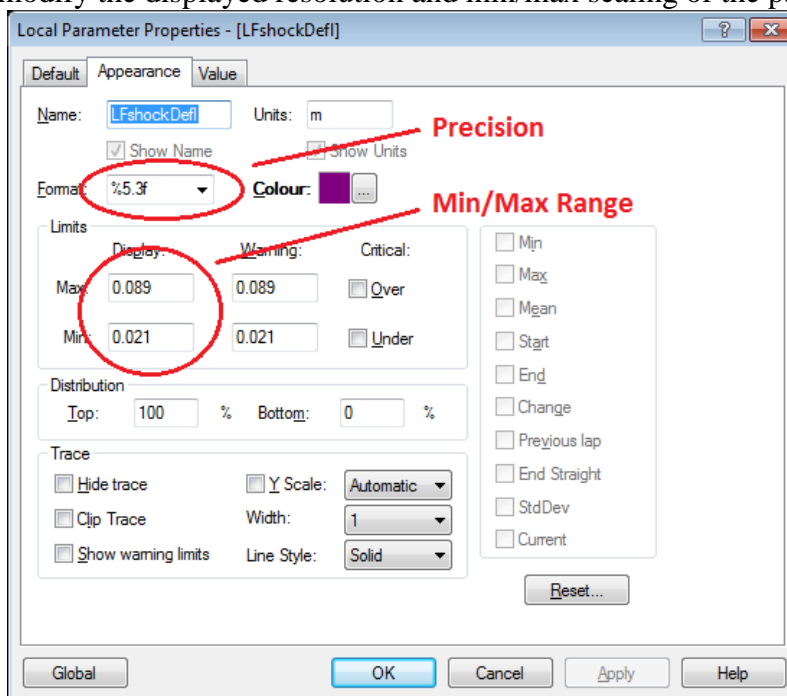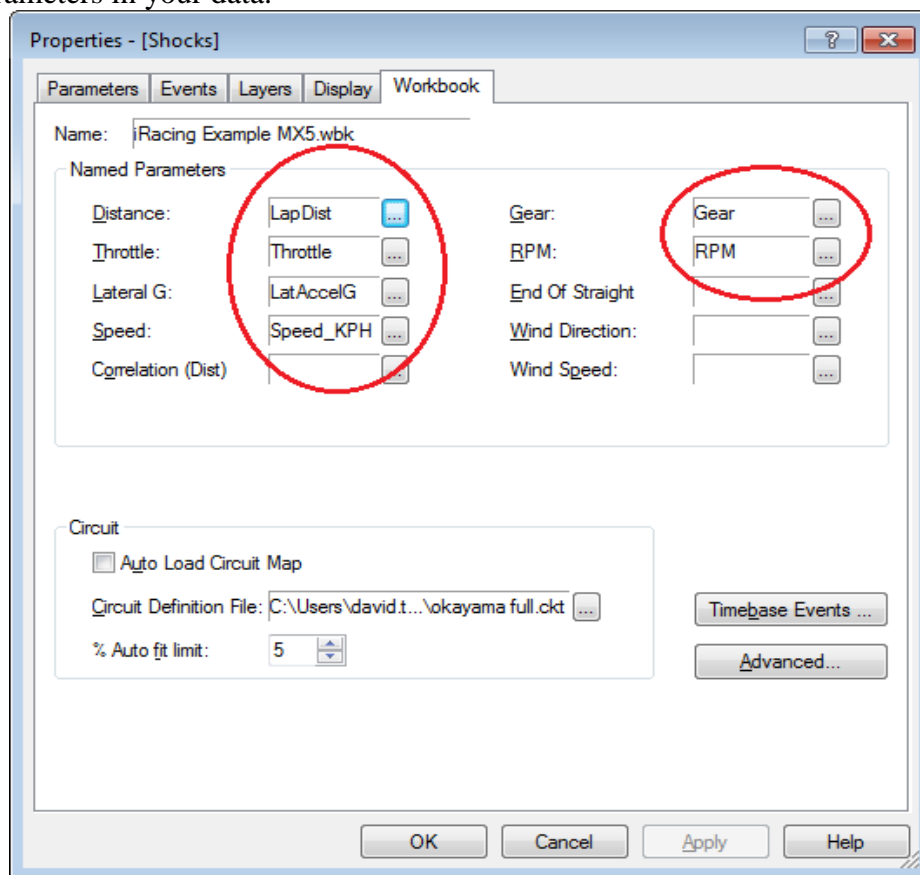

In addition to adding parameters to your waveform, the properties dialog can also be used to format the charts display. Select the display tab to add in a track circuit map, or change the line styles, among other things.
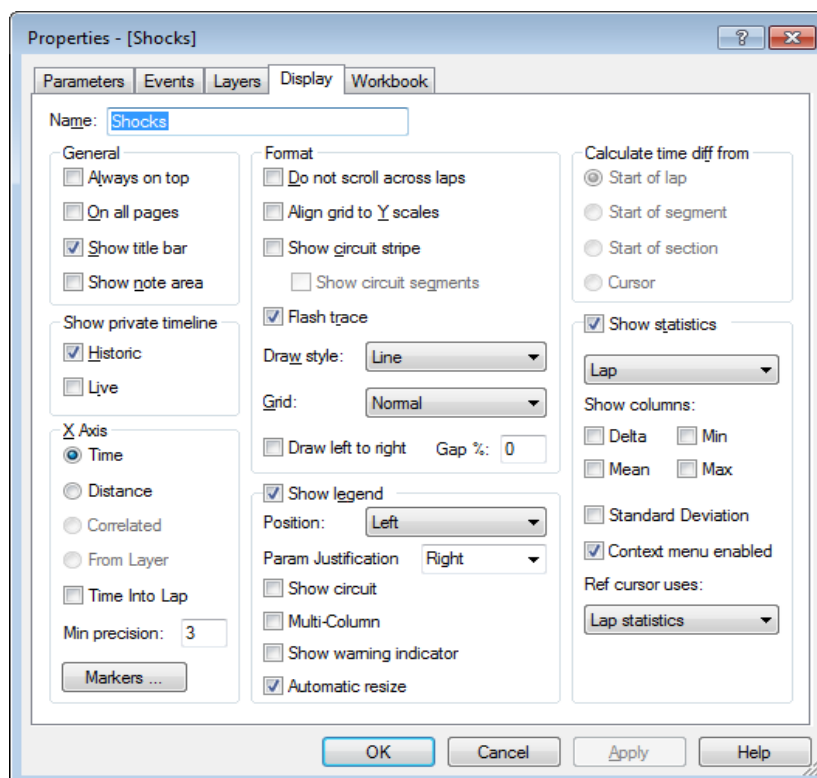
Advanced Topics

If you are creating a new workbook, you will want to go into the workbook tab and point ATLAS at some of the parameters in your data.


It is especially important that you set up the Distance and Speed parameters. These together let ATLAS display your data in distance mode instead of time mode. Distance mode plots all data against the distance around the race track. This is very useful when comparing data from one run to the next.
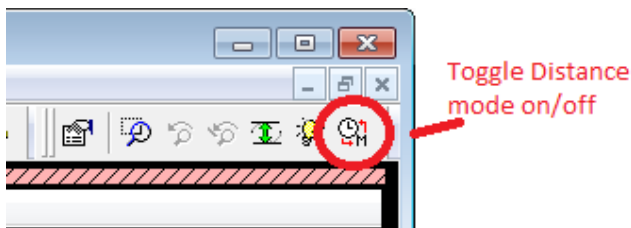

At the bottom of the Load Session dialog notice that there are two layers available. You can load up two session files at the same time for quick comparison and analysis. Simply double click on the layer you want to load the session file into, then select the session file you want to load and hit the load button.
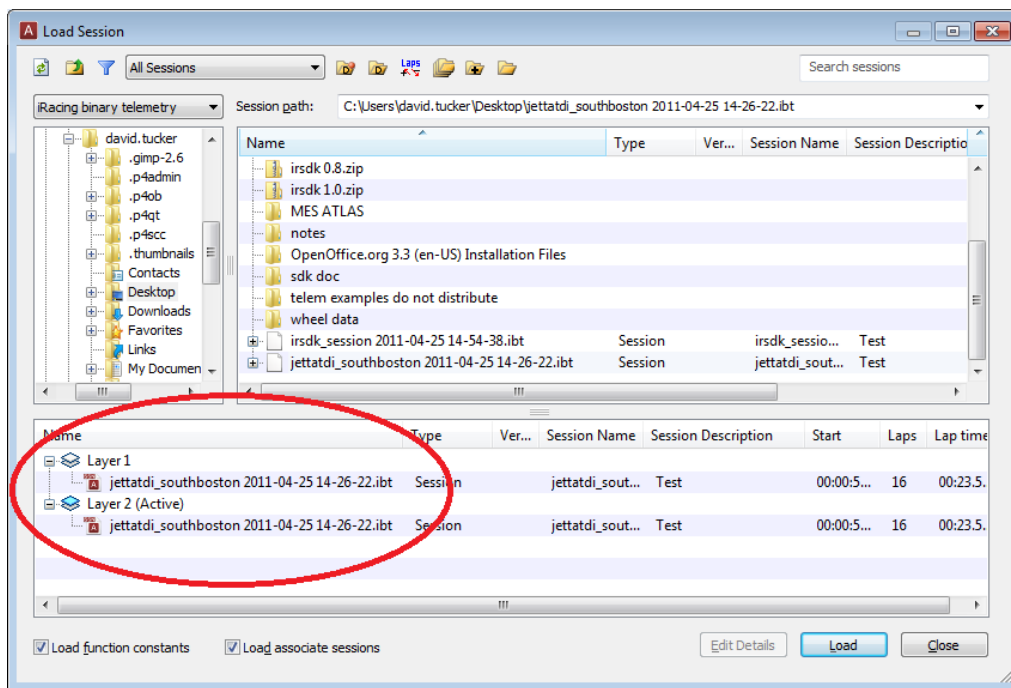
Next, open the **Layers** tab and select **show overlays**. Finally you need to check the box next to the layer in order to tell ATLAS what layers to compare.
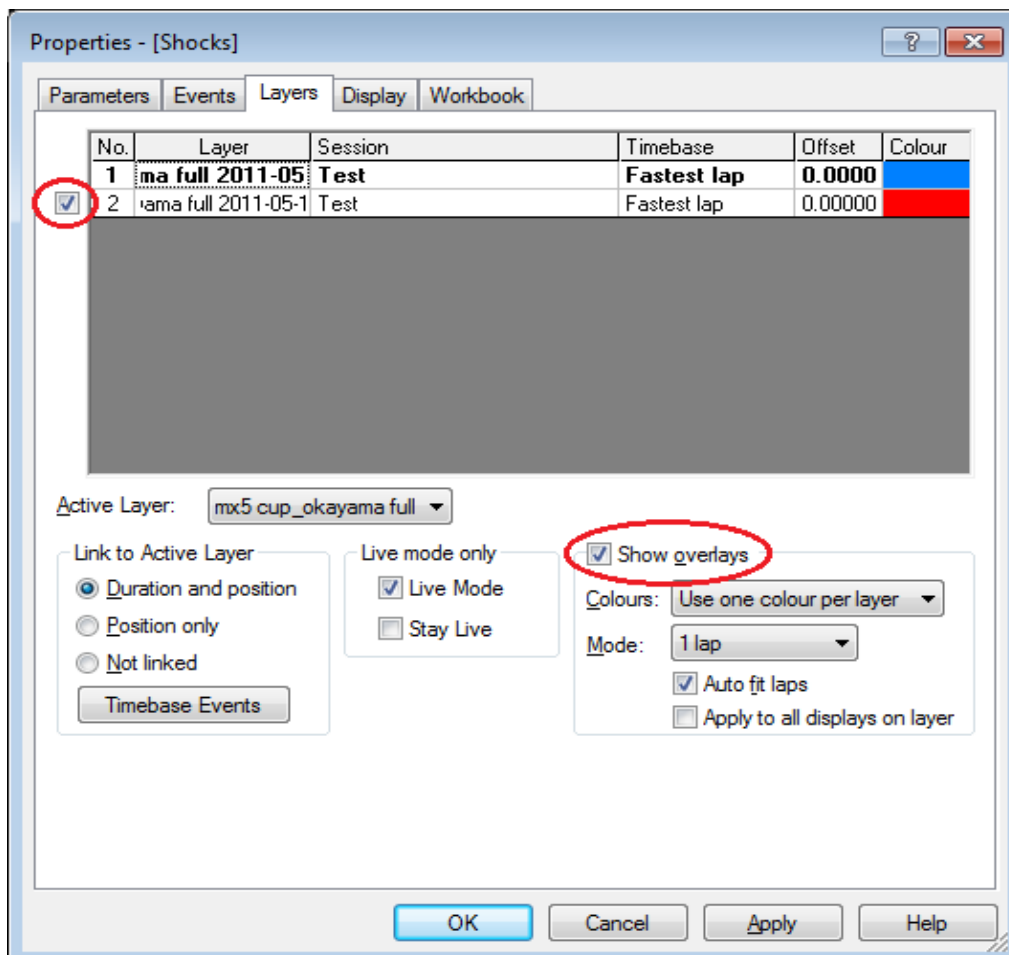
Now when you view your graph, you will notice that you can see two different sets of line. There is also a new variable called **TDiff** that shows you the difference in time between layer one and layer two.
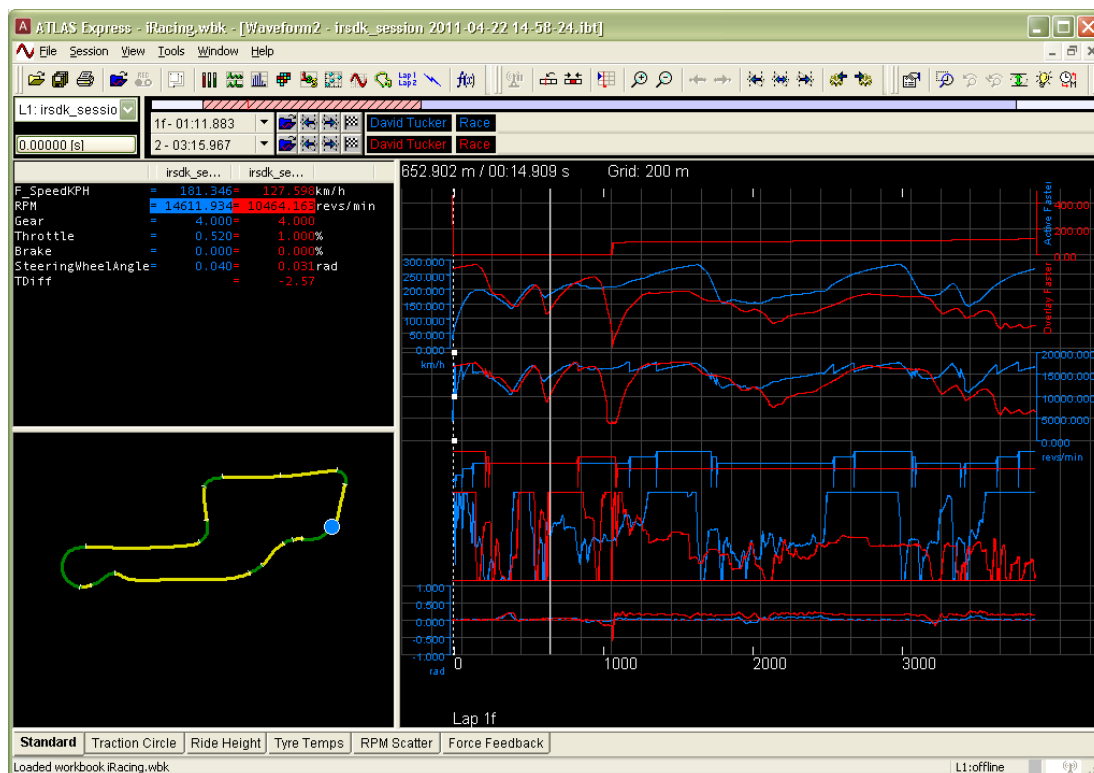

This is very useful in measuring time gained or lost from lap to lap.

If you would like to build a Circuit Map from the data, click on **'Tools->Circuit Definition Editor'**. Select the **'Map** tab', and click on the **'Parameters'** button.
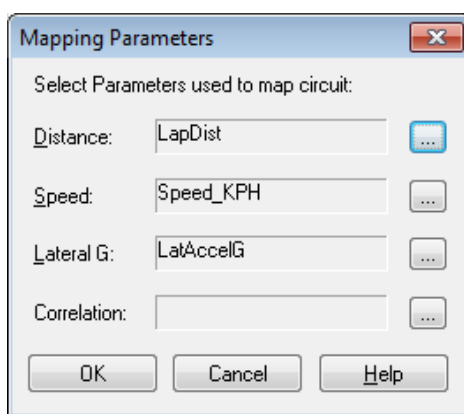
Set the Distance parameter to be **LapDistance**, the Speed parameter to the function **F_SpeedKPH** and the Lateral G parameter to the function **F_LatAccelG**, then hit OK. Now go back to the Map tab and adjust the offset until the track looks correct. In addition you may need to select the invert button to give the map the correct orientation.
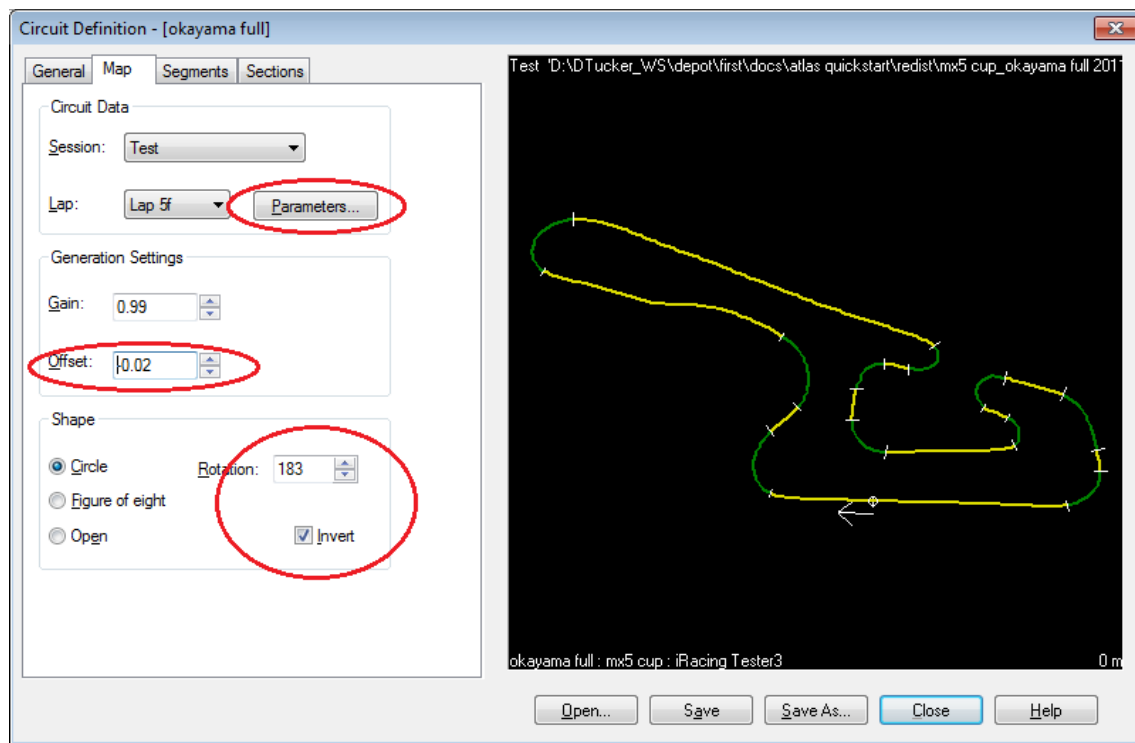
Once your map looks correct, go to the segments tab to define the straights and corners. Defining the straights and corners will let you navigate from corner to corner in the data.
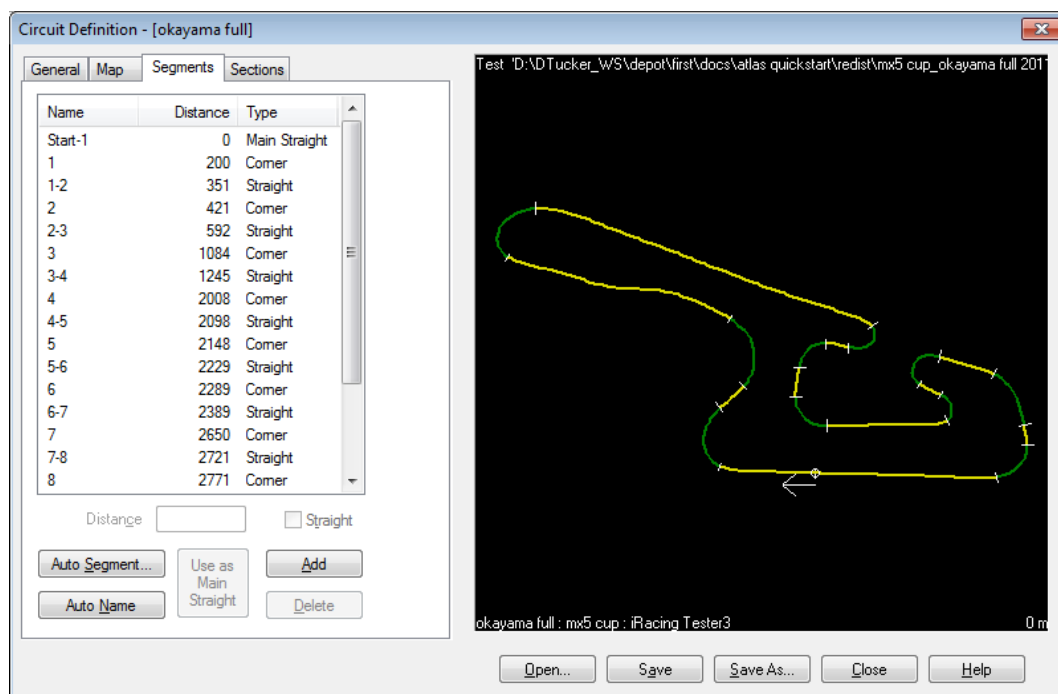
Finally, if you want to edit your own math functions, select `'Tools->Function->Edit'` to bring up the Function Editor Dialog.
When saving your functions be sure to put them in the `[My Documents]\McLaren Electronic Systems\ATLAS 9\Funclib` folder, or they will not be visible in the Parameters list.

Also be sure to specify a Name and Format string and a proper Display min/max value before saving the function.