Dear CODIS Administrator:

Thank you for agreeing to alpha-test the **O**pen **S**ource **I**ndependent **R**eview & **I**nterpretation **S**ystem (OSIRIS) program. This pre-release version can analyze and graphically display .fsa files for the following kits:

Identifiler
Cofiler
Profiler Plus

We believe it will work with all ABI capillary-based analytical platforms. At present, the only user-set options are file, kit and RFU choices. We have preset peak heights/widths, heterozygous imbalance, artifact tolerance etc. to resemble "typical" database qc protocols.

With your assistance and feedback, future versions will allow users to set all desired variables. In addition to telling us what features/limits you would like to be able to customize to your laboratory's protocols, you will be assessing the robustness of the program's analytical capabilities, reporting bugs, and critiquing its usability. You can expect there to be an additional pre-release de-bugged version incorporating many of your feature suggestions for you to review. Future versions of this program will have an automatic installer.

We appreciate your time and effort in developing this quality assurance tool for the DNA profiling community. A belated but heartfelt special thanks to ADFS, FDLE and the DNA Unit at the Family Assistance Center in Baton Rouge, LA and John Butler and his team for their early collaboration and endless patience with us!

Please don't hesitate to contact us for any reason. forensics@ncbi.nlm.nih.gov

Sincerely,

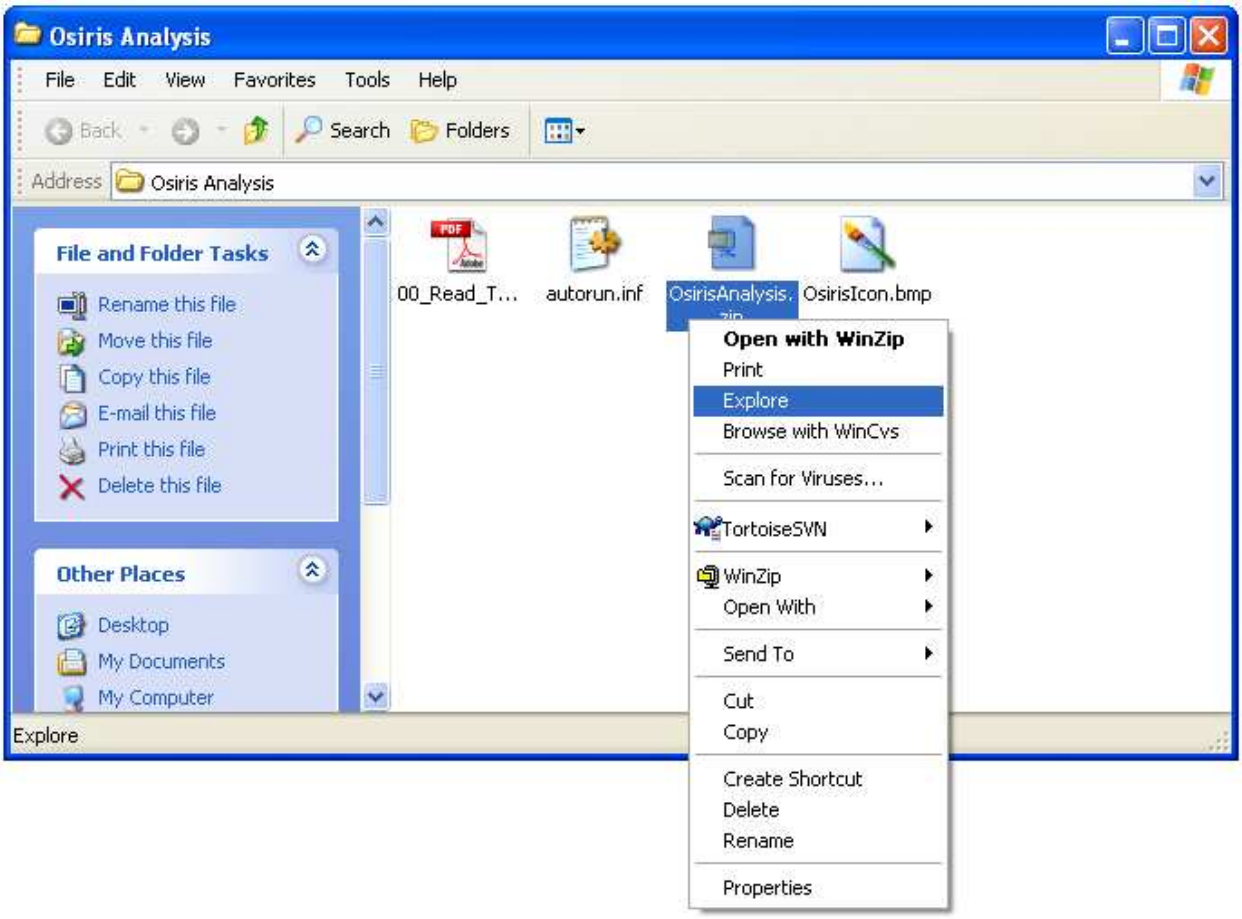
Team OSIRIS

Steve Sherry, Lisa Forman Neall, Rob Goor and Doug Hoffman

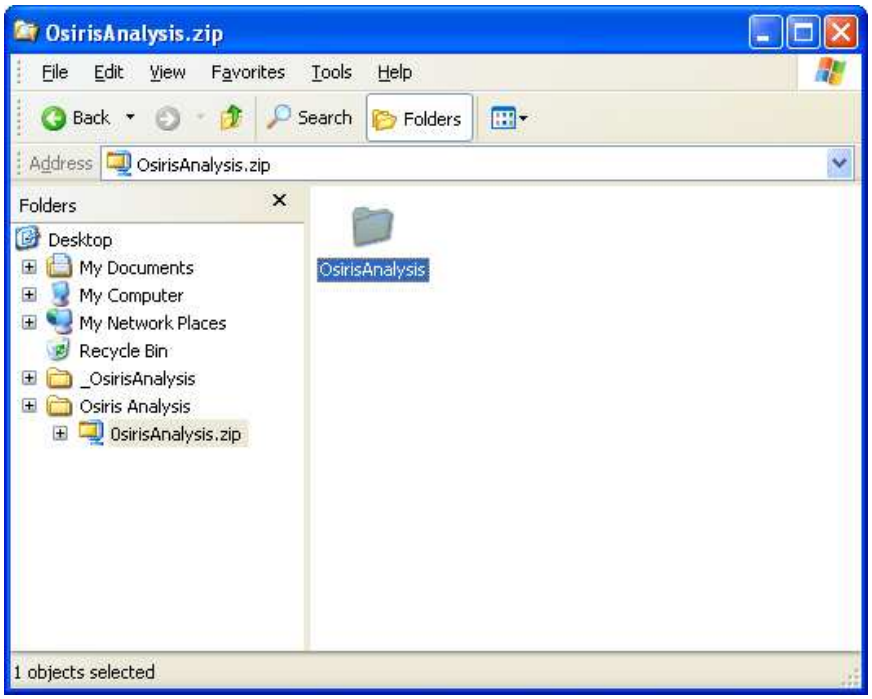
SCROLL DOWN FOR INSTRUCTIONS

Instructions for Installing the Osiris Program.

Explore the file OsirisAnalysis.zip using Windows Explorer. Right Click on the file and select "Explore" from the pop up menu as shown below:



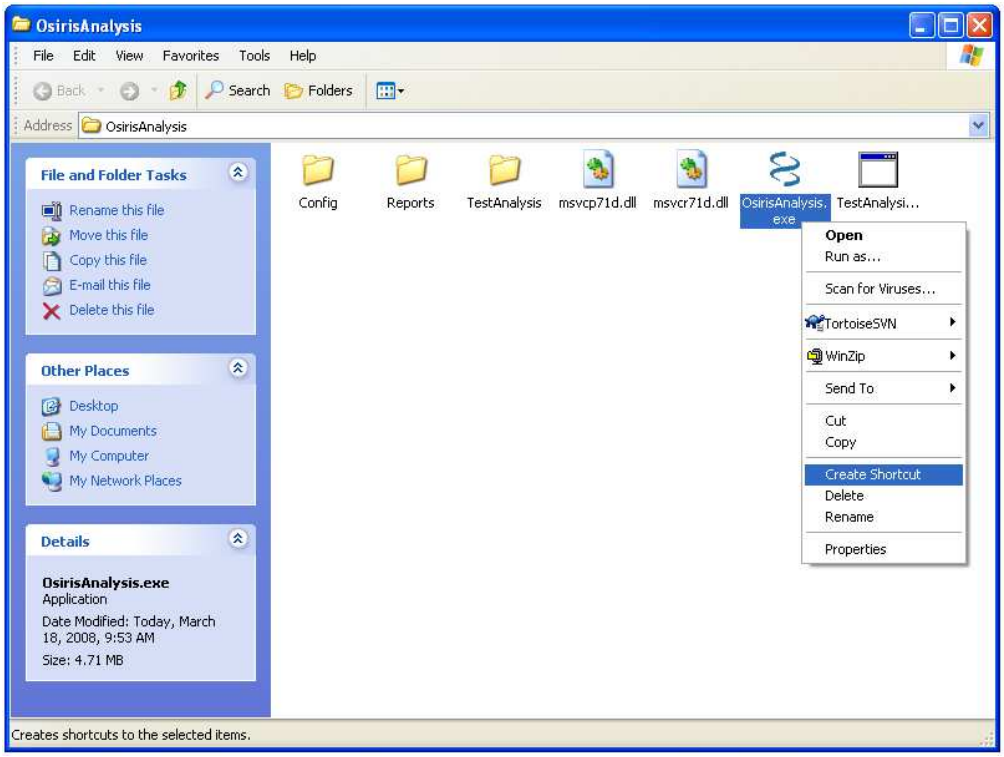
A new window containing a folder named "OsirisAnalysis" should appear as shown below:



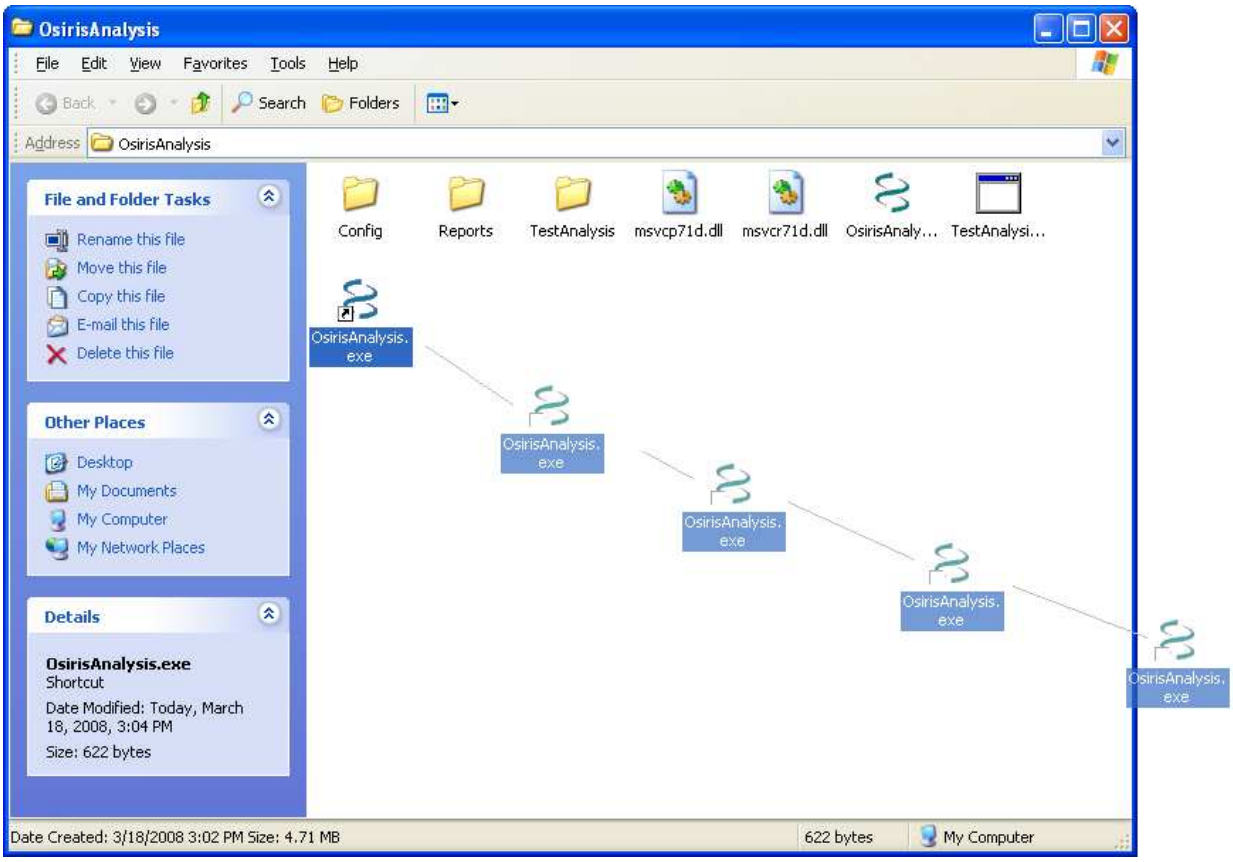
Click on the OsirisAnalysis Folder and Drag it to your Window Desktop. This will copy the files to your hard drive.

To create an Icon on your Window desktop:

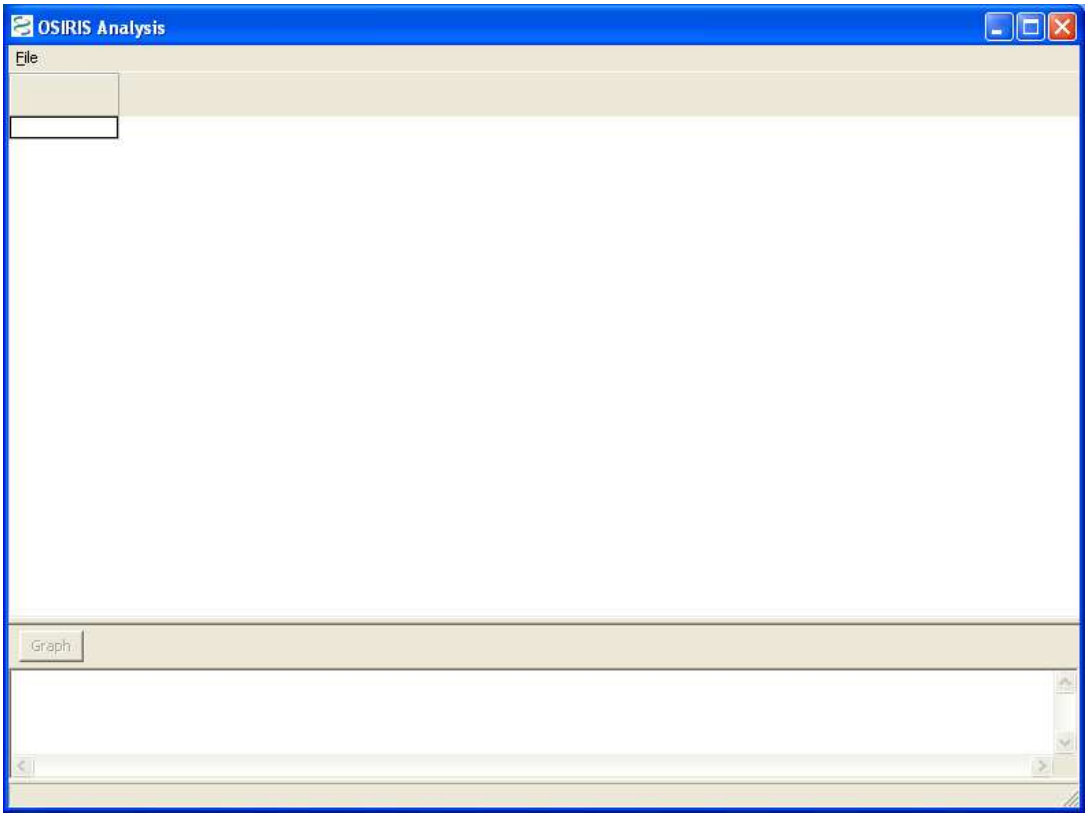
Double click on the new OsirisAnalysis folder you just dragged and dropped on your desktop and look for the Osiris Program file, OsirisAnalysis.exe. This has a double helix icon. Right-click on it and select "Create Shortcut" as shown below:



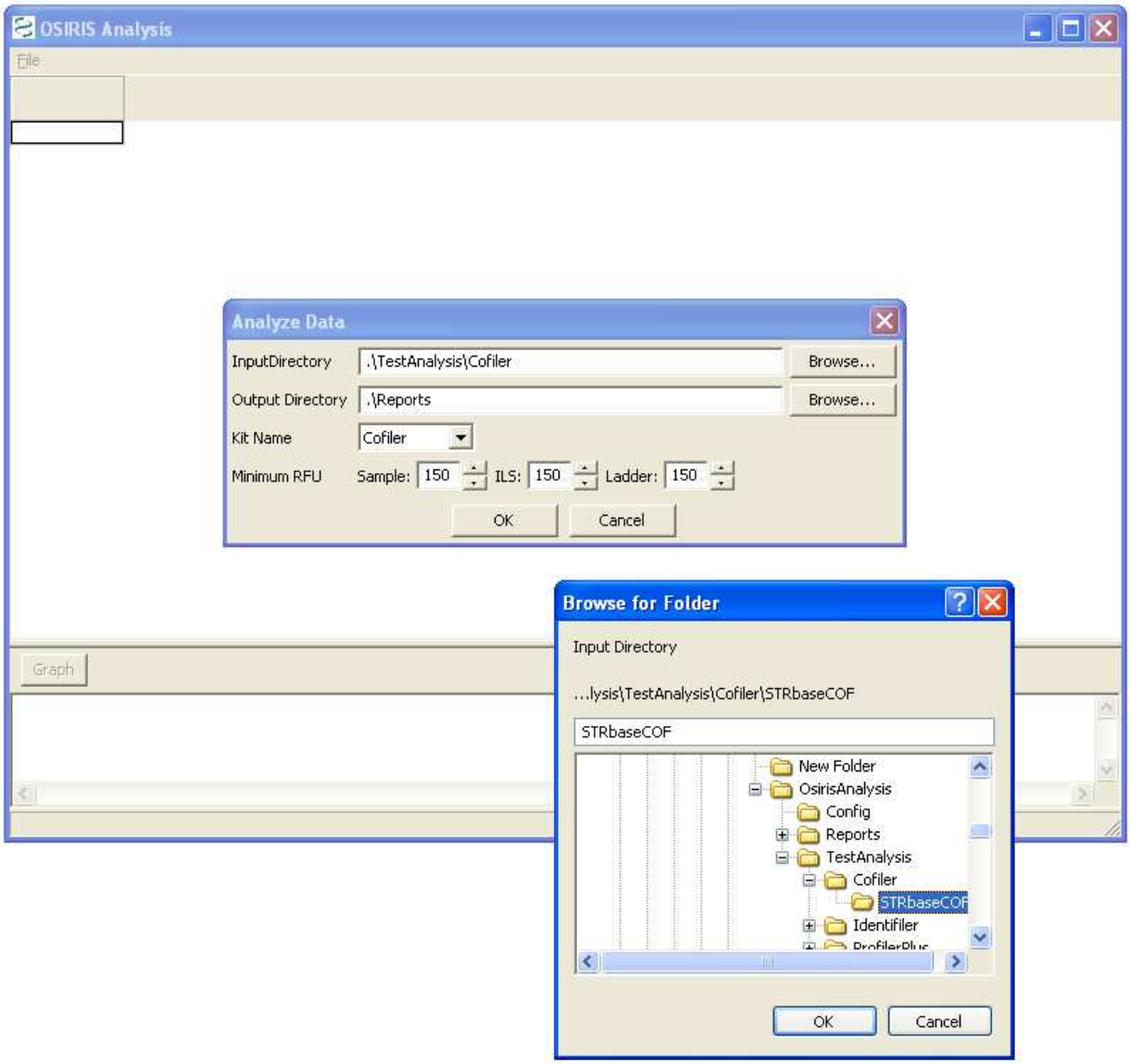
A new icon with a double helix will appear. Drag this icon to your Windows Desktop as shown:



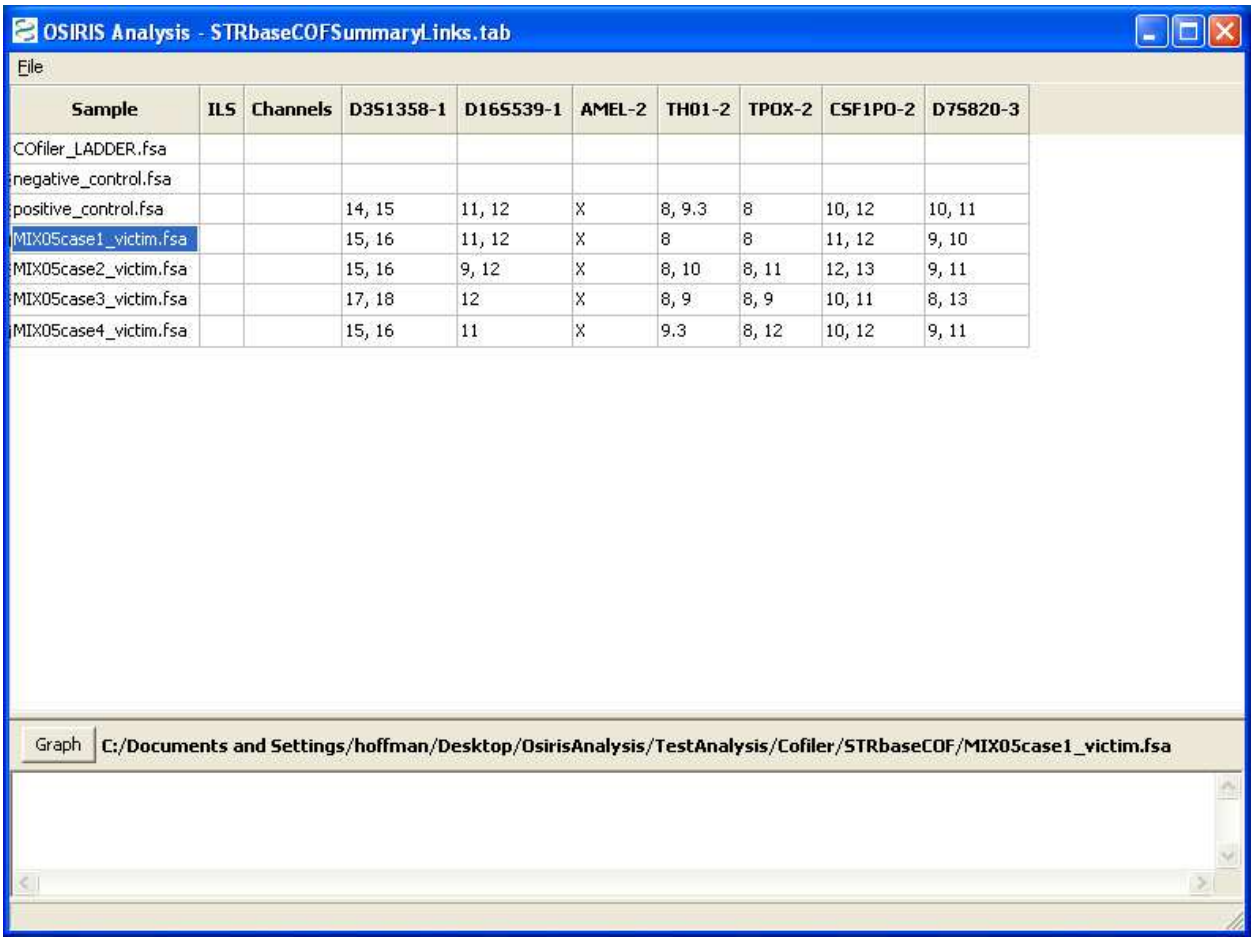
To run the OsirisAnalysis program, simply double-click the new icon on the desktop and a window should appear as shown below:



To analyze data, select “Analyze Data” from the “File” menu on the menu bar. A window will appear for setting the few parameters currently available. To select the input (.fsa) files for analysis, enter the name of the input folder or click on ‘Browse…’ to search for one. This is illustrated below:



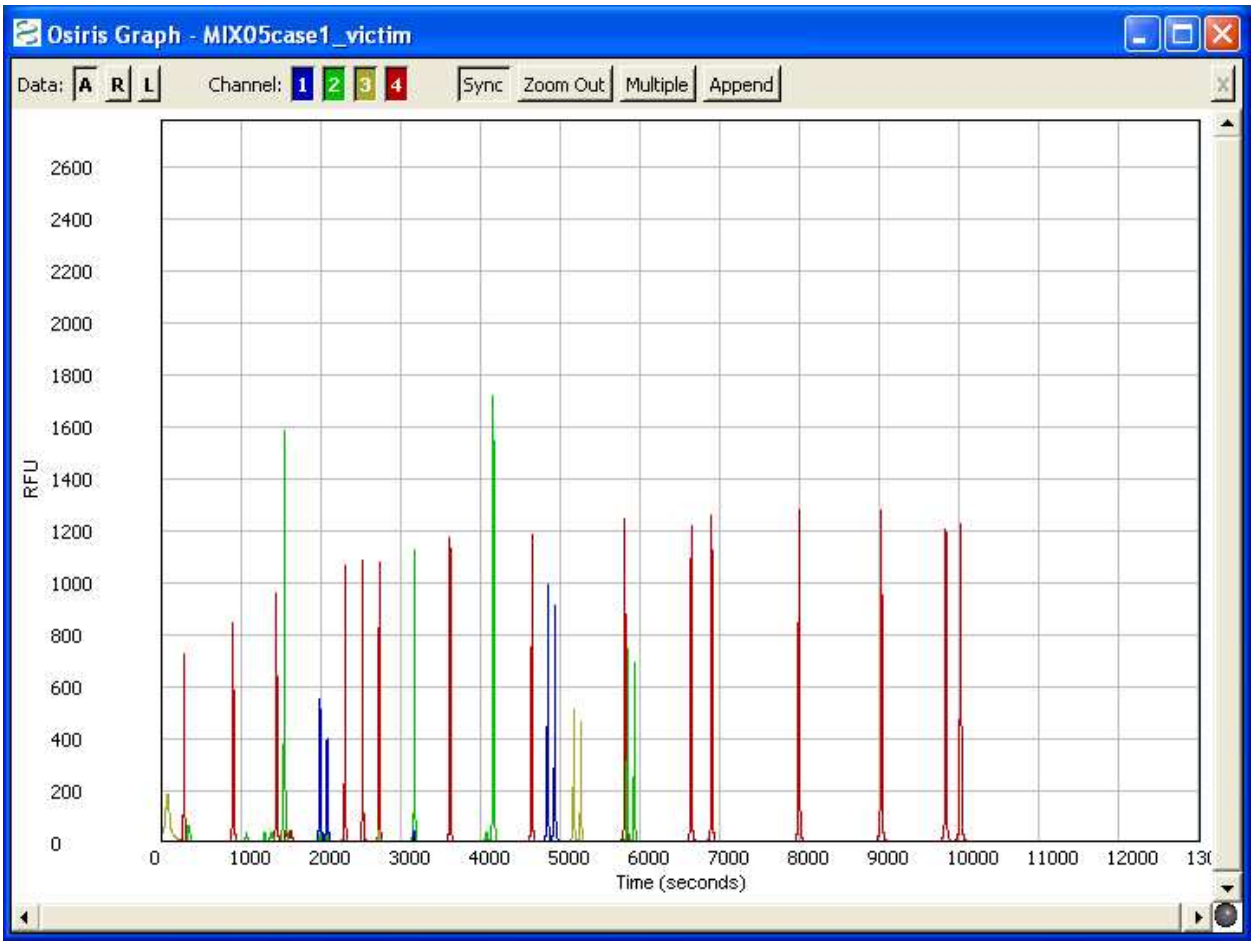
After a folder is selected, Select "OK" to run the analysis. When the analysis is finished, the data will appear in a grid as follows:



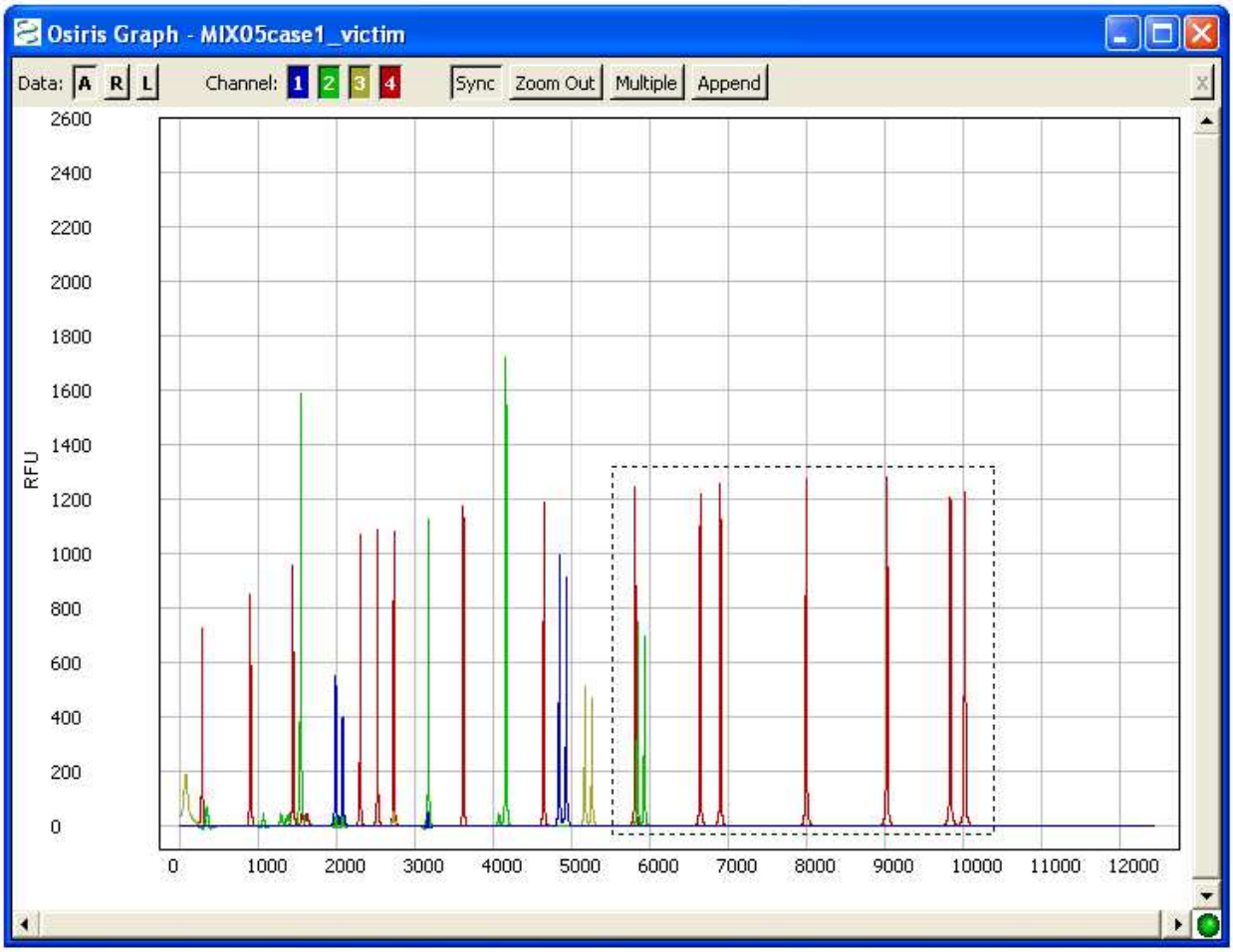
Sample	ILS	Channels	D3S1358-1	D16S539-1	AMEL-2	TH01-2	TPOX-2	CSF1PO-2	D7S820-3
COfiler_LADDER.fsa									
negative_control.fsa									
positive_control.fsa			14, 15	11, 12	X	8, 9.3	8	10, 12	10, 11
MIX05case1_victim.fsa			15, 16	11, 12	X	8	8	11, 12	9, 10
MIX05case2_victim.fsa			15, 16	9, 12	X	8, 10	8, 11	12, 13	9, 11
MIX05case3_victim.fsa			17, 18	12	X	8, 9	8, 9	10, 11	8, 13
MIX05case4_victim.fsa			15, 16	11	X	9.3	8, 12	10, 12	9, 11

When a cell is highlighted in yellow, the data did not meet expected parameters. Click on the highlighted cell and the data issue is reported in the lower screen. The loci names include the channel number (dye) for that specific kit.

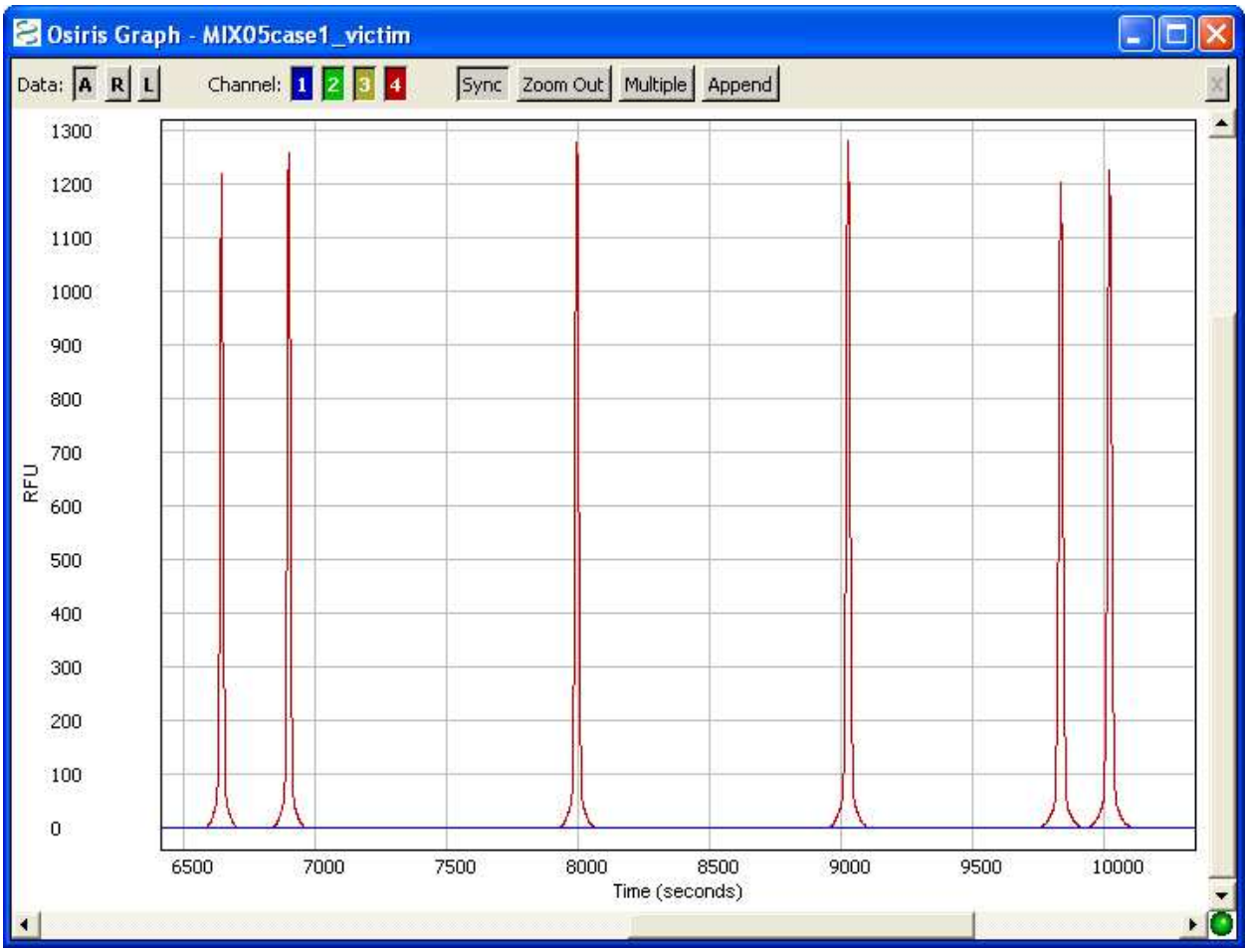
To view a plot of the channel data, click on any row on the grid and click on the “Graph” button below the grid. A new window will appear as follows:



These data can be zoomed by drawing a rectangle around the desired region using the mouse:



When the mouse button is released, the new view will be displayed as follows:



The buttons across the top of the plot are used as follows:

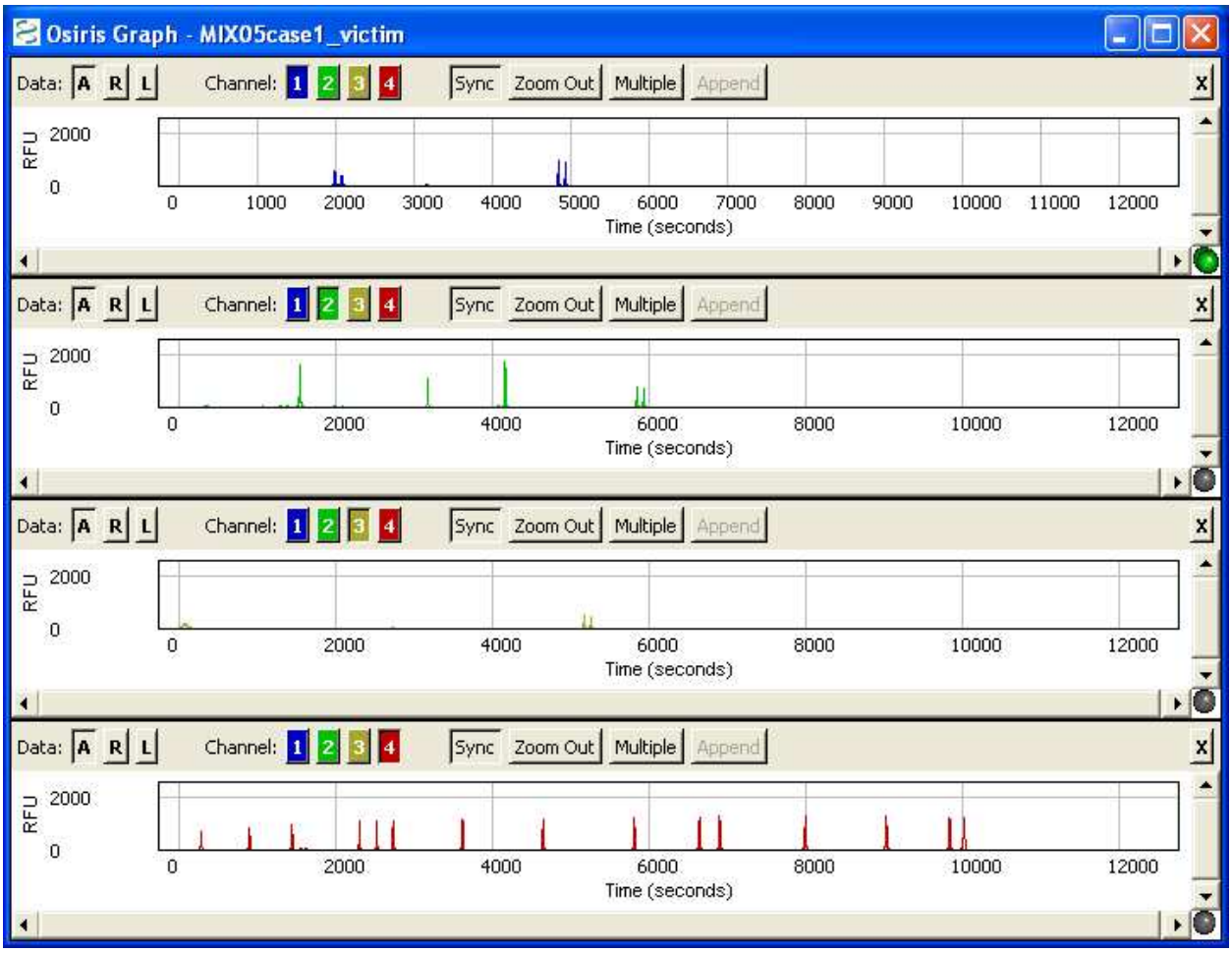
A, R, and L, are for toggling Analyzed, Raw, and Ladder Data, respectively.

The colored buttons each with a number are used for toggling the channel (dye) data.

The ‘Sync’ button is used to synchronize the axes when viewing multiple plots in one window. See below.

“Zoom Out” will zoom the axes to their original state.

“Multiple” will display multiple plots with one channel per plot as shown below:



"Append" will add a new plot directly below the current plot. Note that the number of plots in a window is limited to the number of channels.

The "X" button on the far right will remove the plot, but only if there is more than one plot displayed.

If you have any questions, contact us at forensics@ncbi.nlm.nih.gov