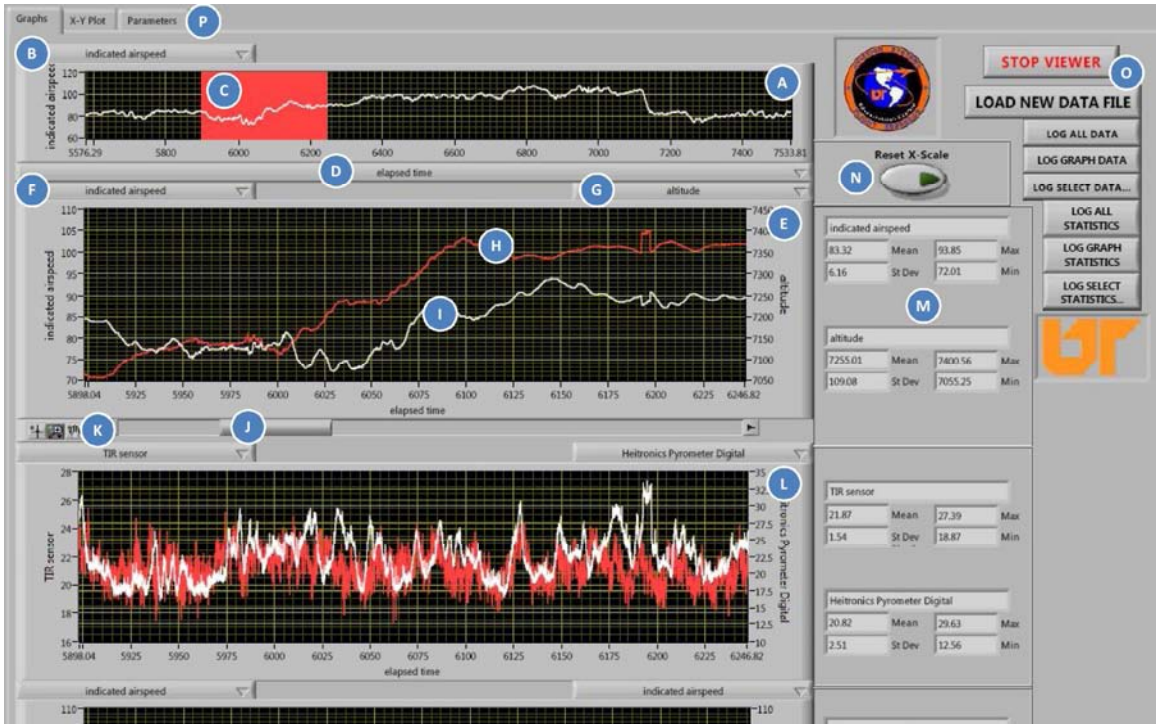
GRAPHS TAB



A. Strip chart
   - Displays an x-y plot of two user-defined parameters ((B), (D)) for the entire data file

B. Strip chart y-parameter
   - Defines parameter to plot on the y-axis of the strip chart

C. Zoomed area of data file
   - Highlights area of data file into which the primary plot (E) and the secondary plots (L) are zoomed

D. Strip chart x-parameter
   - Defines parameter to plot on the x-axis of the strip chart

E. Primary plot
   - Displays two user-defined parameters ((F), (G)) against the x-parameter defined in the strip chart (D). This primary plot controls the x-scale zoom of the secondary plots (L) and the region highlighted in the strip chart (C)

F. Primary plot y-parameter 1
   - Defines parameter to plot in white on the left y-axis of the primary plot (I)

G. Primary plot y-parameter 2
   - Defines parameter to plot in red on the right y-axis of the primary plot (H)

H. Primary plot data 2
   - Data defined by primary plot y-parameter 2 (G)

I. Primary plot data 1
   - Data defined by primary plot y-parameter 1 (F)

J. Primary plot scroll bar
   - Moves zoomed area defined in primary plot (E) backwards and forwards through data file.

K. Primary plot zoom tools
   - LabVIEW native zoom tools for the primary plot (E)

L. Secondary plots (3)
- Displays two user-defined parameters per plot against the x-parameter defined in the strip chart (D). The x-scale of these plots is controlled by the primary plot (E)

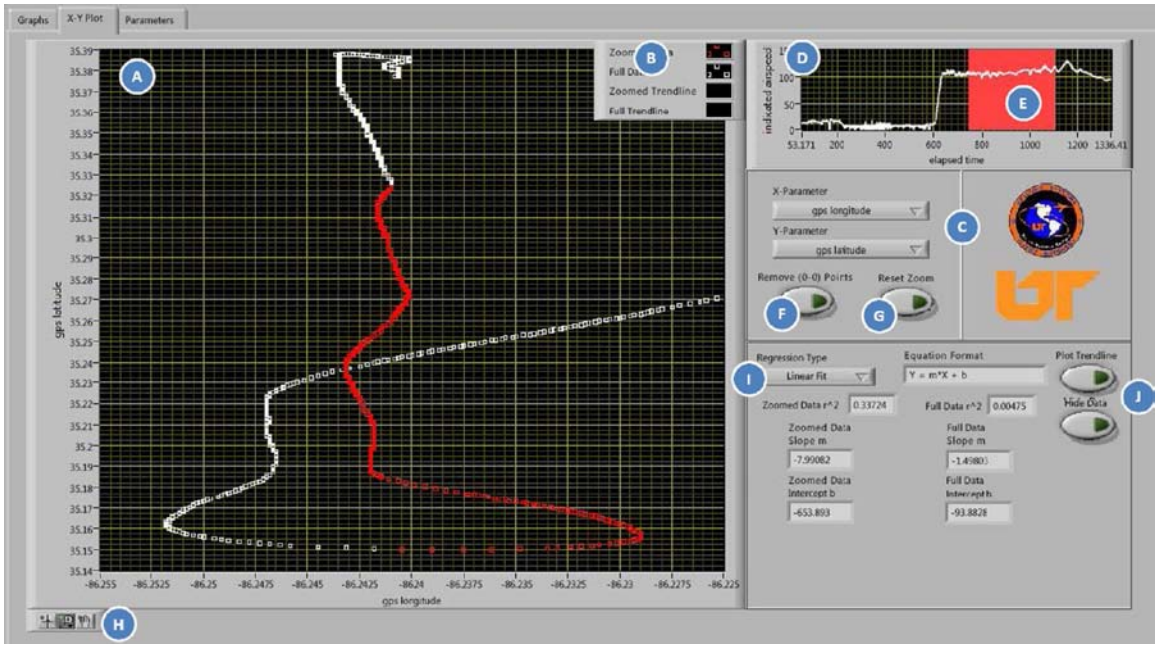
M. Plot statistical data
- Displays basic statistical data for the parameters selected in primary and secondary plots ((E), (L)). The statistical analysis corresponds to the range of data highlighted in the strip chart (C)

N. Reset x-scale of primary and secondary plots
- Resets x-scale of primary and secondary plots to span entire data file. This control duplicates functionality of the native LabVIEW auto-scale tool (K)

O. Operational and logging controls
- STOP: Stops VI
- LOAD NEW DATA FILE: Prompts user to select new tab-delimited text data file to load into viewer.
- LOG ALL DATA: Logs all data from file within selected range highlighted in strip chart (C). Will prompt user to name text file to be saved.
- LOG GRAPH DATA: Logs parameters selected in primary and secondary plots ((E), (L)) over data range highlighted in strip chart (C). Will prompt user to name text file to be saved.
- LOG SELECT DATA…: Logs parameters selected on "Parameters" tab (P). Prompts user to select the parameters desired to be logged. Will prompt user to name text file to be saved.
    - ◊ At least one parameter must be selected, and there must be an active selection box (though not necessarily selected) for every parameter. An easy way to ensure this is the case is to click SELECT ALL PARAMETERS or DESELECT ALL PARAMETERS prior to customizing the parameters to be logged; this ensures there is an active selection box corresponding to every parameter in the data file.
- LOG ALL STATISTICS: Logs statistical data for all parameters in the data file over the range highlighted in the strip chart (C). Allows user to annotate statistical data. Allows user to select either a new text data file or append logged data to an existing file.
- LOG GRAPH STATISTICS: Logs statistical data for parameters selected in primary and secondary plots (M) over the range highlighted in the strip chart (C). Allows user to annotate statistical data. Allows user to select either a new text data file or append logged data to an existing file.
- LOG SELECT STATISTICS…: Logs statistical data for parameters selected on "Parameters" tab (P). Prompts user to select the parameters desired to be logged. Allows user to annotate statistical data. Allows user to select either a new text file or append logged data to an existing file.
    - ◊ At least one parameter must be selected, and there must be an active selection box (though not necessarily selected) for every parameter. An easy way to ensure this is the case is to click SELECT ALL PARAMETERS or DESELECT ALL PARAMETERS prior to customizing the parameters to be logged; this ensures there is an active selection box corresponding to every parameter in the data file.

P. Tab Control
- Allows user to cycle between Graphs, X-Y Plot, and Parameters Tabs

X-Y PLOT TAB



A. X-Y plot
   - Displays two user-defined parameters (C) in a Cartesian plot.

B. X-Y plot format control
   - Allows the user to customize the method the data is displayed.

C. X-Y plot parameters
   - Defines x- and y-parameters for x-y plot.

D. X-Y plot strip chart
   - Displays data from strip chart on Graphs Tab

E. Zoomed area of data file
   - Highlights area of data file into which the primary plot and the secondary plots on the Graph Tab are zoomed. Plot 0 (B) corresponds to this data range.

F. Remove 0-0 points in x-y plot
   - Allows user to remove any points where both X = 0 and Y = 0

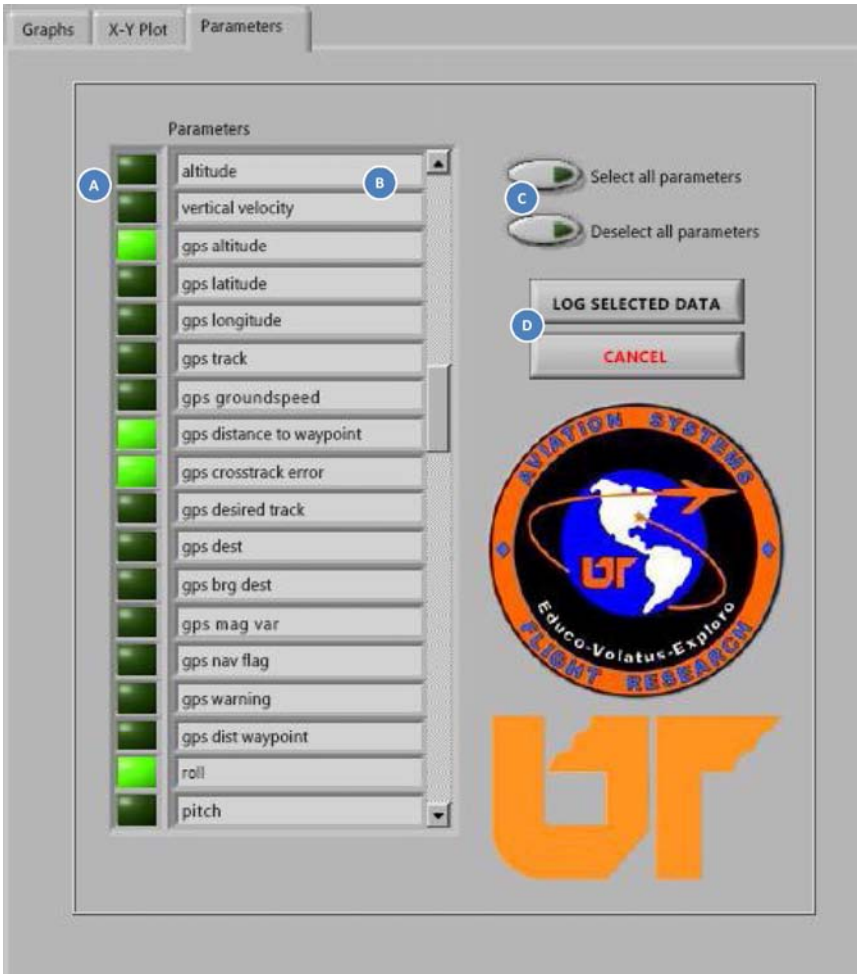
G. Reset zoom of x-y plot
   - Resets x- and y-scale of x-y plot to span entire data file. This control duplicates functionality of the native LabVIEW auto-scale tool (H).

H. X-Y plot zoom tools
   - Native LabVIEW zoom tools for the x-y plot.

I. Regression tools
   - Allows user to select regression type for fitting of x-y data to both the complete data set and the data highlighted in the strip chart. Choices include linear, polynomial, exponential, power, and logarithmic fits. Equation coefficients are displayed for the regression method selected.

J. Show/Hide data and trendline controls
   - Controls whether trendlines determined from regression analysis (I) are visible on plot and whether raw data is visible on plot. The line and point style of the trendlines are controlled with the plot format control (B).

PARAMETERS TAB



A. Parameter selection box
   - Controls what parameters are selected to log when LOG SELECT DATA… or LOG SELECT STATISTICS… is clicked. A bright green box indicates the parameter is selected, and a dark green box indicates the parameter will not be logged. At least one parameter must be selected to allow logging.
     - ◊ There must be an active selection box for every parameter; if the selection box is grayed out, the box is not active. Clicking SELECT ALL PARAMETERS or DESELECT ALL PARAMETERS will ensure that there is an active box for every parameter.

B. Parameter name
   - Displays parameters that can be logged by selecting LOG SELECT DATA… or LOG SELECT STATISTICS… These parameters correspond to the header (first line) of the loaded data file

C. Select/Deselect all parameters
   - Allows user to select or deselect all the parameters for logging.

D. Logging controls
   - Once desired parameters are selected, allows users to log data. These controls are only visible when the LOG SELECT DATA… or LOG SELECT STATISTICS… buttons is pushed on the Graphs Tab. Canceling the data logging returns the user to the Graphs Tab.