

AlliGator Source Code Documentation

Antidoc v3.1.0, X. Michalet

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Chapter 1. Project description

AlliGator: Fluorescence Lifetime Imaging Data Analysis

This software reads fluorescence lifetime imaging (FLI) datasets from different sources (.sdt, .ptu, .bin, PicoStar or SPAD512S image series, SwissSPAD hdf5, etc.) and provide tools to analyze them by nonlinear least-square fit (NLSF), maximum likelihood estimation (MLE) or phasor analysis.

online repository: <https://github.com/smXplorer/AlliGator> online manual: <https://alligator-distribution.readthedocs.io/>

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Chapter 2. Libraries

This section describes the libraries contained in the project.

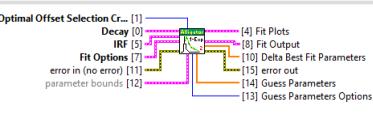
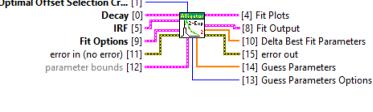
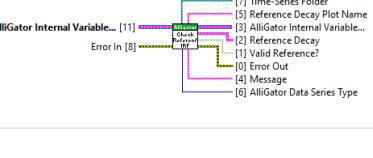
2.1. AlliGator Decay Fit.lvlib

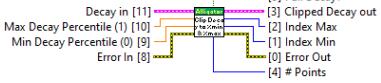
Responsibility: VIs used to fit decays to 1-Exp or 2-Exp models.

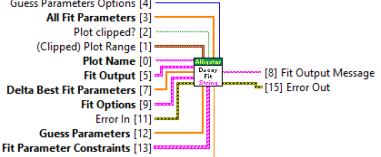
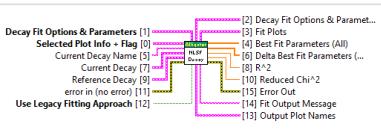
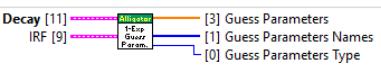
Version: 1.0.0.0

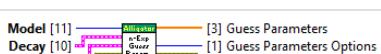
2.1.1. Functions

Table 1. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator 1-Exp + IRF Fit v2		Legacy code for 1-Exp decay fit.			
AlliGator 2-Exp + IRF Convolution Fit v2		Legacy code for 2-Exp decay fit.			
AlliGator All ROIs Decay Fit Non-Interactive (Fast + Individual IRF) v2		Performs multi-ROIs NLSF decay fits for the selected ROIs. Each ROI has its own associated IRF.			
AlliGator All ROIs Decay Fit Script		Series of actions triggered by the All ROIs NLSF Analysis:Interactive (Slow) Analysis menu item.			
AlliGator All ROIs Decay Fit		Fits all ROI decays with the selected model, using a common IRF for all ROIs.			
AlliGator Best of All (weights) String	Weighted Fit [1] ————— [0] Weighted Fit	String to append to the fit output sent to the Notebook in the case of a "Best of All" option, to specify which fit was the best (weighted or unweighted).			
AlliGator Check Decay Reference		Obtains the relevant IRF (either common or local) for the subsequent task.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Clip Decay for Fit		<p>Clips the decay according to the Min and Max Decay Percentile parameters provided.</p> <p>If the decay range is $[I_{\min}, I_{\max}]$ and the decay percentiles are (f_{\min}, f_{\max}) in $[0, 1]$, we look for:</p> <ul style="list-style-type: none"> - starting from the location of the maximum (presumably the peak location) and moving forward, the point at which: $I_i < I_{\min} + f_{\max}*(I_{\max} - I_{\min}) = F_{\max}$ <ul style="list-style-type: none"> - starting from the last point and moving backwards, the point at which: $I_i > I_{\min} + f_{\min}*(I_{\max} - I_{\min}) = F_{\min}$			
AlliGator Convert Decay Fit Parameter Constraints v2		<p>Returns constraints for all parameters of the model, even if the user only specified a few (or none at all).</p> <p>This VI assumes that the Fit Parameter Constraints involve tau, and returns values with the same assumption.</p> <p>Look for constrained parameters. If present, replace default constraints (-Inf, Inf) by new ones, except for the offset, which is set to the guessed value (or zero if not provided).</p>			
AlliGator Convert New to Legacy Fit Parameter Constraints	All Parameter Constraints [1]  [0] Parameter Bounds	version conversion for Fit Parameter Constraints .			
AlliGator Create Fit Parameter Plots Script	XYGraph in [11]  Current ROI Name [10] [3] AlliGator Script	Creates as many empty parameter plots as there are parameters.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Decay Fit Output String		Creates decay fit output string.			
AlliGator Enforce Lifetime Positivity		Constrains lifetime parameters to be positive (replacing them by zero otherwise).			
AlliGator Fit Decay		VI implementing single decay fit with either a single or double exponential model with IRF convolution (or in the absence of IRF, without convolution).			
AlliGator Fit Termination Criteria & Quality Metrics Output String	[AlliGator Fit.lvlib:AlliGator Fit Termination Criteria & Quality Metrics Output String.vi]	Creates a string describing the fit termination criteria and quality metrics.			
AlliGator Get 1-Exp Guess Parameters		<p>Determines Guess Parameters for a 1-Exp fit according to the user-specified choices:</p> <ul style="list-style-type: none"> * Last valid fitted parameters: If the number of available last valid fitted parameters is correct, uses those, otherwise use the estimated parameters. * User-provided parameters: If a parameter is provided by the user, uses it, otherwise uses the estimated parameter. * User-provided (normalized) parameters: If a normalized-parameter (amplitude or baseline) is provided by the user, uses it, otherwise uses the estimated parameter. * Numerically estimated parameters: Use the numerically estimated parameters. 			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get 2-Exp Guess Parameters		<p>Determines Guess Parameters for a 2-Exp fit according to the user-specified choices:</p> <ul style="list-style-type: none"> * Last valid fitted parameters: If the number of available last valid fitted parameters is correct, uses those, otherwise use the estimated parameters. * User-provided parameters: If a parameter is provided by the user, uses it, otherwise uses the estimated parameter. * User-provided (normalized) parameters: If a normalized-parameter (amplitude or baseline) is provided by the user, uses it, otherwise uses the estimated parameter. * Numerically estimated parameters: Use the numerically estimated parameters. 			
AlliGator Get Fit Options & Parameters	[AlliGator Decay Fit.lvlib:AlliGator Get Fit Options & Parameters.vi]	Gets Decay Fit Options & Parameters.			
AlliGator Get Fit Output Options		Gets Fit Output Options.			
AlliGator Get Guess Offset		<p>Used to get an offset parameter when no constraint is provided:</p> <ul style="list-style-type: none"> - if "Use last valid fitted parameters", use it. - otherwise, if a guess offset parameter is available, use it, else use zero. 			
AlliGator Get Last Fitted Parameters		Returns Last Fitted Parameters as well as Last Decay Max - Min .			
AlliGator Get n-Exp Guess Parameters		Get numerically estimated Guess Parameters for 1-Exp or 2-Exp models.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Tabulated Results Header (Decay Fit)		Creates the header line for the ASCII output of decay fit parameters.			
AlliGator Is Decay Valid		Checks whether the input Decay is valid, i.e. is non-zero, does not contain NaN and has more than one element.			
AlliGator n-Exp + IRF Fit v4		Fits the provided decay to 1-Exp or 2-Exp model. This VI assumes that All Parameter Constraints involve tau (rather than the square root of lifetime) and returns values with the same assumption.			
AlliGator Update Decay Fit Results (Stats)		Stores basic statistics (algorithm, Chi2/N, R2 and RMSE, where N is the number of evaluation points) for a successful fit. This is used when the "Use All" fit method option is selected, and allows picking the best result out of the 3 methods (LS, LAR, Bisquare)			
Draw CI Band from CI Plots		Connects the last two plots of a XY Graph to draw a CI band around the fitted plot. This needs to be used right after the two CI plots have been drawn.			
Fit Plots Cluster to Array		No description found (add content in vi description)			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.1.2. Library Constant VIs

NOTE No Constant VIs Found

2.2. AlliGator Decay Preprocessing.lvlib

Responsibility: Handles decay pre-processing functions.

Version: 1.0.0.0

2.2.1. Functions

Table 2. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Create Head & Tail Bounding Cursors	[AlliGator Decay Preprocessing.lvlib:AlliGator Create Head & Tail Bounding Cursors.vi]	Creates a Head (HE) and a Tail (TS) cursor in the Decay Graph to be used for the definition of the decay end (the "Head" part) and start (the "Tail" part) when performing decay extrapolation.			
AlliGator Extrapolate Decay		Extrapolates a truncated decay by trying to fit an exponential to the tail part and connect it to the head part .			
AlliGator Find & Plot Threshold Crossing Position	[AlliGator Decay Preprocessing.lvlib:AlliGator Find & Plot Threshold Crossing Position.vi]	Find the location where the decay reaches the provided thresholf (from below), returns that position and adds it to the last plot in the Lifetime & Other Parameters Graph .			
AlliGator Find & Plot Zero-Crossing Position v2	[AlliGator Decay Preprocessing.lvlib:AlliGator Find & Plot Zero-Crossing Position v2.vi]	Finds the zero-crossing location for the last decay in the Decay Graph using the provided Shift and adds it to the last plot in the Lifetime & Other Parameters Graph .			
AlliGator Find Cross-Correlation Shift		Computes the shift of the last plot in the Decay Graph maximizing the cross-correlation of that plot and the Reference Decay and adds this value to the last plot in the Lifetime & Other Parameters Graph .			
AlliGator Get Background Subtraction Parameters		Obtains or stores information about Background Subtraction Parameters from Settings.			
AlliGator Get-Set Decay Preprocessing Options & Parameters	[AlliGator Decay Preprocessing.lvlib:AlliGator Get-Set Decay Preprocessing Options & Parameters.vi]	Get/Set Decay Pre-processing Options & Parameters (Settings).			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get-Set Decay Preprocessing Parameters		Get/Set Decay Pre-processing parameters.			
AlliGator Preprocess Decay v3		Applies the different selected pre-processing steps on the provided decay in the specified order.			
AlliGator Store Cursor-defined Head & Tail Fractions	[AlliGator Decay Preprocessing.lvlib:AlliGator Store Cursor-defined Head & Tail Fractions.vi]	Sets the head and tail fractions for decay extrapolation based on the corresponding cursor locations. If one cursor is missing, the current fraction is preserved.			
AlliGator Subtract Background from Decay Curve v3		Subtracts background from a decay based on selected options.			
AlliGator Update Background Subtraction Indicators		Updates background subtraction indicators in the Decay Graph panel.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.2.2. Library Constant VIs

NOTE No Constant VIs Found

2.3. AlliGator Decay Processing.lvlib

Responsibility: All functions related to decay processing (but not decay PRE-processing).

Version: 1.0.0.0

2.3.1. Functions

Table 3. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Decay Shift to Plot		Adds timestamp and decay shift to internal variables when computing a new decay.			
AlliGator All ROIs Average Lifetimes		Computes an approximate average lifetime for all ROI decays, based on the integral under the curve and IRF information.			
AlliGator Compute Decay Average Lifetime		Computes an estimate of the average lifetime of a decay using the formula $\langle\tau\rangle = \langle\tau\rangle_F - \langle\tau\rangle_{IRF}$ where F is the decay and IRF is the IRF. This calculation involves estimating the location of the rising time for both IRF and decay. When the option "Use Local IRF" is selected and a Decay Location is provided, the corresponding local IRF (if it exists) is used.			
AlliGator Compute ROI Decay		Extracts the ROI pixel intensities for the different gate images, rejecting pixels not satisfying the intensity-based or peak-intensity based criteria. A different (faster) approach is used for single-pixel ROIs.			
AlliGator Computer IRF t_0 and Mean Lifetime		Computes an estimate of the average lifetime of the IRF and the location of the rising time.			
AlliGator Decay Graph Get-Set Process Plot Target		Get: Check which plot(s) to process, and add/remove checkmarks accordingly. In this case, the Menu reference is mandatory. Set: based on user selection, set which plot(s) to process. In this case, the Plot(s) to Process input is mandatory (Single Plot, Selected Plots, All Plots), but not the Menu .			
AlliGator Extrapolate Multiple Plots		Extrapolated the selected plots.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Decay Average Lifetime		Computes estimated average lifetime for the selected plot.			
AlliGator Get Decay Peak Constraints		Get Decay Peak Constraints.			
AlliGator Get Decay Time Axis v2		Get decay time axis.			
AlliGator Get Pixel Count Constraints		Get intensity constraints.			
AlliGator Get Process Plots Indices		Get indices of plots to be processed.			
AlliGator Get ROI Decay UI		Computes the decay at the provided ROI and adds the computed intensity (sum of all gates) and estimated background to two separate plots in the Intensity Time Trace Graph .			
AlliGator Get ROI Decay		Extract decay from provided ROI (see exception below) and apply pre-processing steps if applicable. Data and metadata are stored internally for further analysis.			
		Option: instead of providing a ROI (which implies a Source Image dataset), a Decay can be provided, which will not be pre-processed but stored as is, with no additional metadata.			
AlliGator Get ROI Intensity Array v4		Gets the intensity array for the provided ROI.			
AlliGator Get Selected Plots and Reference Decay		Get selected plot indices and reference decay.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Tabulated Results Header (Average Lifetimes)		Builds string to output results of average lifetime calculation.			
AlliGator New Decay Plot Name	Current Folder [2] ————— [7] New Decay Name	Builds name for new decay plot.			
AlliGator Only Show Last Decay		Returns option of showing only the last plot.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.3.2. Library Constant VIs

NOTE No Constant VIs Found

2.4. AlliGator IRF.lvlib

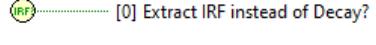
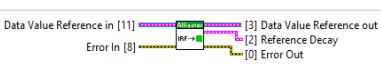
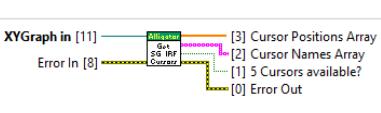
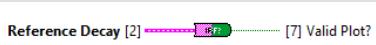
Responsibility: Handles IRF-related functions.

Version: 1.0.0.0

2.4.1. Functions

Table 4. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator All ROIs IRF Analysis		Extracts the decays from all ROIs and stores them as IRFs for subsequent NLSF analysis.			
AlliGator Clear Local IRFs		Clears the internal variable-sored local IRFs.			
AlliGator Compute Optimal IRF v2		Extract IRF from provided decay using deconvolution and finding the minimal metrics.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Create Cursors for Square Gated IRF Fit		Creates 5 cursors (tr1, tr2, tf1, tf2 and ten) used to define the different transitions between domains in a square gate.			
AlliGator Extract IRF Instead of Decay Flag		Get the value of the option "Get IRF instead of Decay".			
AlliGator Fit IRF String		Create the Notebook string specifying what kind of IRF was used in the fit. 			
AlliGator Fit IRF to Cubic Spline + Sine		Fits the provided plot by a sum of a sinus function and a cubic spline.			
AlliGator Fit to Logistic Square Gated IRF		Fits the decay to a logistic square gate.			
AlliGator Fit to Model IRF		Fit the selected plot to a Gaussian convolved with a single-exponential decay.			
AlliGator Fit to Tilted Logistic Square Gated IRF		Fits the selected decay to a tilted logistic square gate.			
AlliGator Get IRF Values & Locations	[AlliGator IRF.lvlib:AlliGator Get IRF Values & Locations.vi]	Gets the array of stored IRF Values as well as the IRF Locations .			
AlliGator Get Optimal IRF from Decay v2		Extract IRF from single-exponential decay by deconvolution and optimization of the time constant.			
AlliGator Get Reference Decay		Gets the internally stored reference decay.			
AlliGator Get Square Gated IRF Analysis Cursors		Gets locations and names of the 5 cursors needed to define the regions of a square gate fit.			
AlliGator Is IRF Valid		Checks that the Reference Decay is a valid plot.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Load Local IRFs		No description found (add content in vi description)			
AlliGator Save Local IRFs		No description found (add content in vi description)			
AlliGator Save-Load Local IRFs		No description found (add content in vi description)			
AlliGator Script All ROIs IRF Analysis		Interactive script computing the decay for all ROIs and storing them as IRFs for subsequent NLSF analysis.			
AlliGator Sort Cursors for Square Gated IRF Fit		Sorts 5 cursors by name (if they exist) corresponding to the 5 boundaries between regions in a square gate.			
AlliGator Square Gated IRF Fit Cursors String		Creates string describing the boundaries between regions in a square gate.			
AlliGator Thresholded IRF		Sets IRF values below threshold to 0.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.4.2. Library Constant VIs

NOTE No Constant VIs Found

2.5. AlliGator Global Decay Fit.lvlib

Responsibility: VIs handling global decay fit operations

Version: 1.0.0.0

2.5.1. Functions

Table 5. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Parameter Original Indices		No description found (add content in vi description)			
AlliGator Global 1-Exp + IRF Convolution Fit v3		No description found (add content in vi description)			
AlliGator Global 2-Exp + IRF Convolution Fit v2		No description found (add content in vi description)			
AlliGator Global Decay Fit Output String		No description found (add content in vi description)			
AlliGator Global Fit Decay Pre-conditioning		No description found (add content in vi description)			
AlliGator Global Fit Decays		No description found (add content in vi description)			
AlliGator Plot Global Fit Parameters		No description found (add content in vi description)			
AlliGator Plot Selected Global Fit Parameters		No description found (add content in vi description)			
AlliGator Post Global Fit Script		No description found (add content in vi description)			
AlliGator Unscramble All Global Fit Plots		No description found (add content in vi description)			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.5.2. Library Constant VIs

NOTE No Constant VIs Found

2.6. AlliGator Accumulated Dataset.lvlib

Responsibility: Handles dataset summation tasks (sum or average).

Version: 1.0.0.0

2.6.1. Functions

Table 6. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Dataset to Accumulated Dataset		Adds the Current Dataset to the Accumulated Dataset , if and only if the number of gates and channels are the same as those of the first dataset in the series. If not, the Current Dataset is skipped.			
AlliGator Add Image to Accumulated Image		Adds a single New Image (gate image) to the Accumulated Image Sum (for that gate). If the current Dataset Index is 0 (first dataset in the Series), the Accumulated Image Sum is cleared first.			
AlliGator Clear Dataset Series Sum		Clears the data structures associated with the Accumulated Dataset and resets the internal variable Is Displayed Image Accumulated to False.			
AlliGator Get Temp Accumulated File Name		Builds name of accumulated or averaged dataset displayed in AlliGator's title bar.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Script Sum All Datasets in Folder		Launches a series of steps loading each dataset in a series (including background correction) and adding them to a reset accumulated dataset. This script is followed by the usual series of steps after a new dataset is loaded (display, phasor plot update, phasor ratio or map overlay in image source and/or image ROI highlight in phasor plot).			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.6.2. Library Constant VIs

NOTE No Constant VIs Found

2.7. AlliGator Action Engine.lvlib

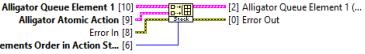
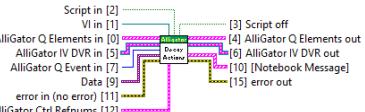
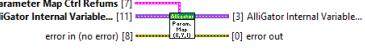
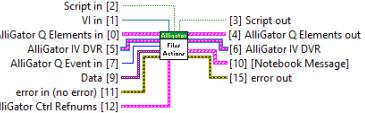
Responsibility: Handles AlliGator Event Queue, dispatching events to different handlers according to their category.

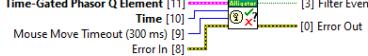
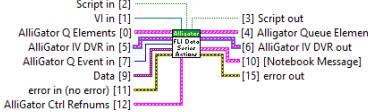
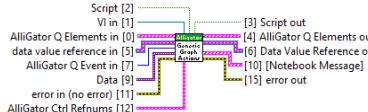
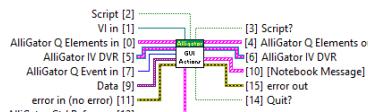
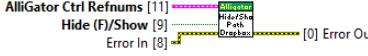
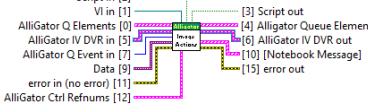
Version: 1.0.0.0

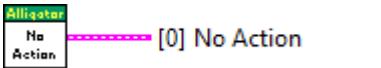
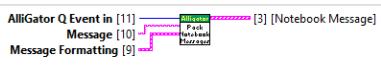
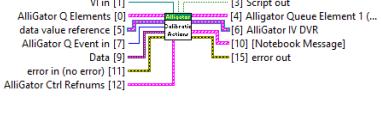
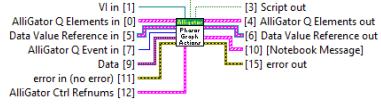
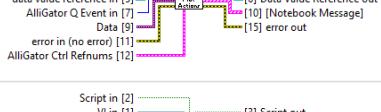
2.7.1. Functions

Table 7. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Action Loop		AlliGator action dispatcher. Each action array is handled as a package, each action in the array being sent to the appropriate category (Files, Image, Phasor Graph, etc.).			
AlliGator Add Action Array to Stack		One of the two options of the polymorphic AlliGator Add Action(s) to Stack VI . Appends (or prepends) an array of actions to the current ones being processed or about to be queued.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Single Action to Stack		<p>One of the two options of the polymorphic AlliGator Add Action(s) to Stack VI.</p> <p>Appends (or prepends) a single action to the current ones being processed or about to be queued.</p>			
AlliGator Check for Abort	AlliGator Q Elements [1] —————— [0] AlliGator Q Elements	<p>Checks whether there is any Abort action in the input AlliGator Q Elements.</p> <p>If so, remove all other action items.</p>			
AlliGator Current Event	AlliGator Q Event in [2] —————— [7] AlliGator Q Event out Get(F)/Set [4]	Get/Set current AlliGator action being processed.			
AlliGator Decay Analysis Actions		Processes AlliGator decay-related actions.			
AlliGator Display Current Decay Fit Parameter Map (X,Y, I)		Displays last mouse position and true decay fit parameter map value at that location.			
AlliGator Display Current Parameter Map (X,Y, I)		Displays last mouse position and parameter map value at that location.			
AlliGator Event to Event Category	AlliGator Q Event [8] —————— [2] Event Category	Extracts the category an AlliGator Q Event belongs to, in order to dispatch this event to the proper handler.			
AlliGator Event to String	Add Ellipsis (...) [5] AlliGator Q Event [8] —————— [2] String	Converts AlliGator Q Event enum to the corresponding string.			
AlliGator Files Actions		Processes AlliGator files-related actions.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Filter Event		Stores User Event's Action information (type, time and timeout). If a previous event is stored, compare time interval to time out. If the time since the last event of the same type is shorter than the timeout, ignore that event. If not, enqueue the event and update the time/timeout information.			
AlliGator FLI Dataset Actions		Processes AlliGator FLI Dataset-related actions.			
AlliGator FLI Dataset Series Actions		Processes AlliGator FLI Dataset Series-related actions.			
AlliGator Generic Graph Actions		Processes AlliGator generic graph-related actions.			
AlliGator Get First Event		Returns the first event (action + data) in the AlliGator Q Elements input array in AlliGator Q Event and the remaining events in the AlliGator Q Elements output array. If there is a GUI:Abort element in the array, or if the abort flag is raised, returns a single GUI:Abort as AlliGator Q Event and an empty array as AlliGator Q Elements output array.			
AlliGator Get Phasor Plot(s) & Intensit(ies)	[AlliGator Engine.lvlib:AlliGator Get Phasor Plot(s) & Intensit(ies).vi]	No description found (add content in vi description)			
AlliGator GUI Actions		Processes AlliGator GUI-related actions.			
AlliGator Hide Path Drop Boxes		No description found (add content in vi description)			
AlliGator Image Actions		Processes AlliGator source image-related actions.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Initialize Images	 [AlliGator IV DVR [11] —> AlliGator IV DVR [3] AlliGator IV DVR Phasor Plot Display [10] —> error in (no error) [8] —> error out [0]	Initializes AlliGator image structures.			
AlliGator Initialize Internal Variables	 Graph References [11] —> AlliGator [1] —> Internal Variables [0] —> [1] Message [1] —> [0] error out State Indicators [10] —> AlliGator [1] —> Internal Variables [0] —> [1] Message [1] —> [0] error out AlliGator version [9] —> AlliGator [1] —> Internal Variables [0] —> [1] Message [1] —> [0] error out error in (no error) [8] —> error out [0]	Initializes AlliGator internal variables.			
AlliGator Intensity Actions	 Script in [2] —> Vi in [1] —> AlliGator [1] —> AlliGator Q Elements [0] —> [3] Script out [3] AlliGator Q Elements out [4] AlliGator IV DVR.out [5] AlliGator IV DVR.in [6] AlliGator IV DVR.out [7] AlliGator Q Event in [7] —> Data [9] —> AlliGator [1] —> AlliGator IV DVR.out [6] AlliGator IV DVR.in [5] AlliGator IV DVR.out [10] [Notebook Message] [11] error out [12] AlliGator Ctrl Refnums [12] —> [15] error out [15]	Processes AlliGator intensity time trace-related actions.			
AlliGator Lifetime & Other Parameters Actions	[AlliGator Engine.lvlib:AlliGator Lifetime & Other Parameters Actions.vi]	Processes AlliGator intensity time trace-related actions.			
AlliGator No Action Event	 AlliGator [1] —> [0] No Action [0]	Returns a no-op event.			
AlliGator Package Notebook Messages	 AlliGator Q Event in [11] —> AlliGator [1] —> Pack Message [0] —> [3] [Notebook Message] [10] —> Message Formatting [9]	Formats Notebook message by adding AlliGator Action header and style.			
AlliGator Parameter Map Actions	 Script in [2] —> Vi in [1] —> AlliGator [1] —> AlliGator Q Elements [0] —> [3] Script out [3] AlliGator Q Elements out [4] AlliGator Queue Element 1 (...) [5] data value reference [5] —> AlliGator Queue Element 1 (...) [6] Data Value Reference out [6] AlliGator Q Event in [7] —> Data [9] —> AlliGator [1] —> AlliGator IV DVR.out [6] AlliGator IV DVR.in [5] AlliGator IV DVR.out [10] [Notebook Message] [11] error out [12] AlliGator Ctrl Refnums [12] —> [15] error out [15]	Processes AlliGator decay fit parameter map-related actions.			
AlliGator Phasor Calibration Actions	 Script in [2] —> Vi in [1] —> AlliGator [1] —> AlliGator Q Elements [0] —> [3] Script out [3] AlliGator Q Elements out [4] AlliGator Queue Element 1 (...) [5] data value reference [5] —> AlliGator Queue Element 1 (...) [6] Data Value Reference out [6] AlliGator Q Event in [7] —> Data [9] —> AlliGator [1] —> AlliGator IV DVR.out [6] AlliGator IV DVR.in [5] AlliGator IV DVR.out [10] [Notebook Message] [11] error out [12] AlliGator Ctrl Refnums [12] —> [15] error out [15]	Processes AlliGator phasor calibration-related actions.			
AlliGator Phasor Graph Actions	 Script in [2] —> Vi in [1] —> AlliGator [1] —> AlliGator Q Elements [0] —> [3] Script out [3] AlliGator Q Elements out [4] AlliGator Queue Element 1 (...) [5] data value reference [5] —> AlliGator Queue Element 1 (...) [6] Data Value Reference out [6] AlliGator Q Event in [7] —> Data [9] —> AlliGator [1] —> AlliGator IV DVR.out [6] AlliGator IV DVR.in [5] AlliGator IV DVR.out [10] [Notebook Message] [11] error out [12] AlliGator Ctrl Refnums [12] —> [15] error out [15]	Processes AlliGator phasor graph-related actions.			
AlliGator Phasor Plot Actions	 Script in [2] —> Vi in [1] —> AlliGator [1] —> AlliGator Q Elements [0] —> [3] Script out [3] AlliGator Q Elements out [4] AlliGator Queue Element 1 (...) [5] data value reference [5] —> AlliGator Queue Element 1 (...) [6] Data Value Reference out [6] AlliGator Q Event in [7] —> Data [9] —> AlliGator [1] —> AlliGator IV DVR.out [6] AlliGator IV DVR.in [5] AlliGator IV DVR.out [10] [Notebook Message] [11] error out [12] AlliGator Ctrl Refnums [12] —> [15] error out [15]	Processes AlliGator phasor plot-related actions.			
AlliGator Phasor Ratio Actions	 Script in [2] —> Vi in [1] —> AlliGator [1] —> AlliGator Q Elements [0] —> [3] Script out [3] AlliGator Q Elements out [4] AlliGator Queue Element 1 (...) [5] data value reference [5] —> AlliGator Queue Element 1 (...) [6] Data Value Reference out [6] AlliGator Q Event in [7] —> Data [9] —> AlliGator [1] —> AlliGator IV DVR.out [6] AlliGator IV DVR.in [5] AlliGator IV DVR.out [10] [Notebook Message] [11] error out [12] AlliGator Ctrl Refnums [12] —> [15] error out [15]	Processes AlliGator phasor ratio-related actions.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Queue Non Empty Events		<p>Removes consecutive duplicates of any kind of AlliGator action to leave a single copy of each in the array of enqueued AlliGator events.</p> <p>The same action can appear several time, as long as the different copies are separated by a different action.</p>			
AlliGator Queue		Returns the AlliGator Action queue.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.7.2. Library Constant VIs

NOTE No Constant VIs Found

2.8. AlliGator Camera Noise Influence on Lifetime.lvlib

Responsibility: No description found (add content in lvlib description)

Version: 1.0.0.0

2.8.1. Functions

Table 8. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Dataset ICCD Parameters		No description found (add content in vi description)			
CV ICCD Data Plot		No description found (add content in vi description)			
CV Power Law Fit		No description found (add content in vi description)			
ICCD Noise Data Viewer		No description found (add content in vi description)			
Power Law Fit with Offset		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
Reshape ICCD Parameter Table		No description found (add content in vi description)			
Reshape ICCD Parameters Table Row		No description found (add content in vi description)			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.8.2. Library Constant VIs

NOTE No Constant VIs Found

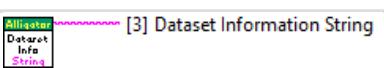
2.9. AlliGator Dataset Information Window.lvlib

Responsibility: VIs handling Dataset Information displayed to the user.

Version: 1.0.0.0

2.9.1. Functions

Table 9. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Build Dataset Information String		Creates Dataset Information String based on internal variables and settings.			
Alligator Dataset Information Window		Window displaying the dataset information extracted from internal variables and settings.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.9.2. Library Constant VIs

NOTE No Constant VIs Found

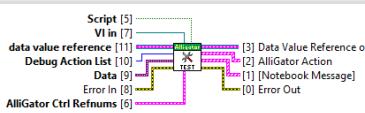
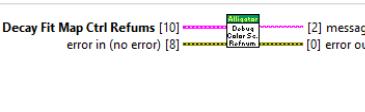
2.10. AlliGator Debug.lvlib

Responsibility: features under test and accessible via the **DEBUG** menu item (when exposed).

Version: 1.0.0.0

2.10.1. Functions

Table 10. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator DEBUG Actions		<p>VI implementing the successive debugged features as individual cases.</p> <p>One feature can be tested per session, and is hardwire-selected.</p>			
AlliGator Test Decay Fit Parameter Map Color Scale Refnum		Builds the selected fit parameter map image.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.10.2. Library Constant VIs

NOTE No Constant VIs Found

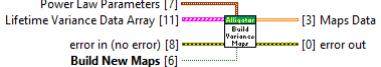
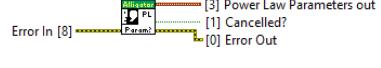
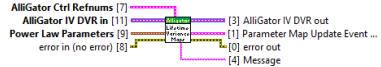
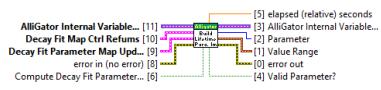
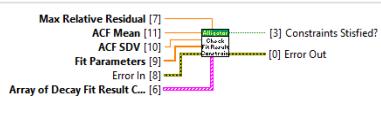
2.11. AlliGator Decay Fit Parameter Map.lvlib

Responsibility: VIs related to the Decay Fit Parameter Map

Version: 1.0.0.0

2.11.1. Functions

Table 11. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute Lifetime Variance Map (Core)		No description found (add content in vi description)			
AlliGator Compute Lifetime Variances		No description found (add content in vi description)			
AlliGator Enter Power Law Parameters Dialog		Lets the user enter the power law parameters describing the $CV_{\tau}(I)$ dependency, where I is the pixel intensity and CV_{τ} is the lifetime coefficient of variation obtained from calibration measurements.			
AlliGator Lifetime Variance Maps Calculation		No description found (add content in vi description)			
AlliGator Apply Fit Result Constraints		No description found (add content in vi description)			
AlliGator Build Decay Fit Parameter Map		Builds the selected fit parameter map image.			
AlliGator Check Activated Decay Fit Result Constraints		Checks whether any constraint is activated.			
AlliGator Check Fit Result Constraints		Checks whether the fit parameters and derived quantities verify all the provided constraints.			
AlliGator Check ROIs		Checks whether the sinternally stored ROIs exist, and if not, use the user-loaded ones.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Convert Decay Range Options		Converts percentiles unit.			
AlliGator Decay Fit Parameter Map Actions		Processes AlliGator decay fit parameter map-related actions.			
AlliGator Decay Fit Parameter Map Context Menu Handler		Decay Fit Parameter Map contextual menu handler.			
AlliGator Decay Parameter Range Mouse Move Event		Handles mouse move event in the Decay Fit Parameter Map display range control.			
AlliGator Decay Parameters Map Mouse Up Event		Handles Mouse Up event in the Decay Fit Parameter Map image.			
AlliGator Export ROI(s) NLSF Parameters as ASCII File		Exports Decay Fit Parameter Map data to an ASCII file.			
AlliGator Fit Results Constraints Window		No description found (add content in vi description)			
AlliGator Get Decay Fit Parameter Map Data Wrapper		Returns selected fit parameter's map.			
AlliGator Get Decay Fit Parameter Map Data		Fills in matrix with fit parameter wherever it has been computed, NaN otherwise.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Local Fit Results String		Builds Decay Fit Parameters string.			
AlliGator Get Single ROI Message Start		Builds single-ROI Decay Fit Parameters header string.			
AlliGator Load IRFs & Fit Data (Map) HDF5 File v0.6	[AlliGator Decay Fit Parameter Map.lvlib:AlliGator Load IRFs & Fit Data (Map) HDF5 File v0.6.vi]	Loads Decay Fit Parameter Map and associated metadata.			
AlliGator Load IRFs & Fit Data Map v1	[AlliGator Decay Fit Parameter Map.lvlib:AlliGator Load IRFs & Fit Data Map v1.vi]	Old version of Load Decay Fit Parameter Map.			
AlliGator New NLSF Parameter Map Resolution		Map resolution conversion. If Is Full Image Parameter Map is true, returns the input resolution parameters. If not, returns -1.			
AlliGator NLSF Parameters to Coordinates		Extracts ROI coordinates from the Decay Fit Parameters array for all ROIs in the map.			
AlliGator Overlay Decay Fit Parameter Map in Original Image		Overlays the Decay Fit Parameter Map on the Source Image.			
AlliGator Plot Decay Fit Parameter vs Intensity Scatterplot v2		Creates scatter plot of selected parameter vs intensity for all ROIs and sends it to the Lifetime & Other Parameters Graph .			
AlliGator Plot Fit Parameter 2 vs Parameter 1		Creates scatter plot of selected parameter vs intensity for all ROIs and sends it to the Lifetime & Other Parameters Graph .			

Name	Connector pane	Description	S.	R.	I.
AlliGator Plot Fit Parameter Scatterplot		Send the selected Decay Fit Parameter Map data to a single plot in Lifetime & Other Parameters Graph .			
AlliGator Post-Fit Parameter Map Update		Updates Decay Fit Parameter Map image and Profile Plot window.			
AlliGator Read IRFs & Fit Data HDF5 File Metadata	[AlliGator Decay Fit Parameter Map.lvlib:AlliGator Read IRFs & Fit Data HDF5 File Metadata.vi]	Reads Decay Fit Parameter Map metadata from HDF5 file.			
AlliGator Remove Duplicate Fit Result Constraint		No description found (add content in vi description)			
AlliGator Residuals or ACF needed		No description found (add content in vi description)			
AlliGator ROI Descriptors Selection		No description found (add content in vi description)			
AlliGator Save All Decay Fit Parameter Maps to ASCII		Saves the Decay Fit Parameter Map 2D array to an ASCII file.			
AlliGator Save Decay Fit Parameter Map Image		No description found (add content in vi description)			
AlliGator Save Decay Fit Parameter Map to ASCII		Saves single Decay Fit Parameter Map data into an ASCII file.			
AlliGator Save IRFs & Fit Data (Map) HDF5 File v0.6	[AlliGator Decay Fit Parameter Map.lvlib:AlliGator Save IRFs & Fit Data (Map) HDF5 File v0.6.vi]	Saves Decay Fit Parameter Map and associated metadata to an HDF5 file.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Save-Load IRFs & Fit Data (Map)	[AlliGator Decay Fit Parameter Map.lvlib:AlliGator Save-Load IRFs & Fit Data (Map).vi]	Load/Save Decay Fit Parameter Map & Metadata from/to HDF5 file.			
AlliGator Select Decay Fit Parameter Scatterplot Type		Dialog to select parameter 1 and parameter 2 to be computed for a Phasor Plot of the Phasor Graph.			
AlliGator Update Decay Fit Parameter Map Palette		Updates the color palette of the Decay Fit Parameter Map image.			
AlliGator Used ROIs String		No description found (add content in vi description)			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.11.2. Library Constant VIs

NOTE No Constant VIs Found

2.12. AlliGator Decay Statistics.lvlib

Responsibility: Handles the Decay Statistics Graph.

Version: 1.0.0.0

2.12.1. Functions

Table 12. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute Decay Statistics v2		Computes decay min & max histograms.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Recompute Decay Statistics Histograms		Rebins decay Min & Max histograms.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.12.2. Library Constant VIs

NOTE No Constant VIs Found

2.13. AlliGator Dual-Channel Datasets.lvlib

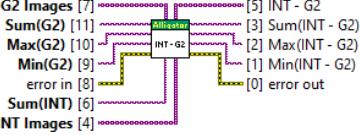
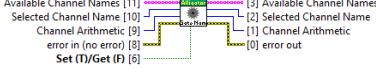
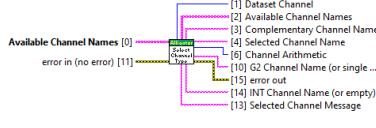
Responsibility: VIs handling dual-channel datasets

Version: 1.0.0.0

2.13.1. Functions

Table 13. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Channel Arithmetic Computation		If selected, computes the arithmetic combination of ING & G2 channel and stores it into the Dataset 1 structure. If no arithmetic operation is selected, the G2 channel is in Dataset 1 structure, INT in Dataset 2 structure.			
AlliGator Compute (1-G2_INT)xMean(INT) Images		Computes $(1 - G2/INT)^* <INT>$.			
AlliGator Compute G2_INTxMean(INT) Images		Computes $G2/INT * <INT>$.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute INT - G2 Images		Computes INT - G2.			
AlliGator Get Channel Names & Indices	[AlliGator Dual-Channel Datasets.lvlib:AlliGator Get Channel Names & Indices.vi]	Returns information on the dataset file's channel(s).			
AlliGator Get Selected, INT & G2 Channel Names	[AlliGator Dual-Channel Datasets.lvlib:AlliGator Get Selected]	Formats dual-gate channel name and returns selected channel.			
AlliGator Get- Set Channel Selection		Groups access to 3 different types of Dataset Information: - available channel names - channel name - channel arithmetic			
AlliGator Is Selected Channel First Channel		Identifies what type of channel is selected (First channel = TRUE: G2 or First channel = FALSE: INT). In the case of a single-channel dataset, the output is TRUE.			
AlliGator Select FLI Channel Type		Used when loading a new dataset. If the selected channel name is compatible, use it, if not either open a dialog (dual-channel dataset) or use the default (single-channel dataset).			
AlliGator Select FLI Dataset Channel Name		Dialog window to select which SS3 channel to display.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.13.2. Library Constant VIs

NOTE No Constant VIs Found

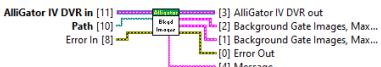
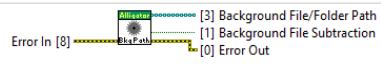
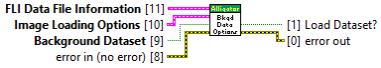
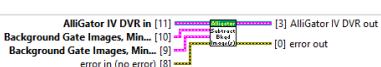
2.14. AlliGator Files.lvlib

Responsibility: Handles all types of dataset files used by AlliGator.

Version: 1.0.0.0

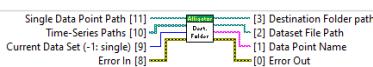
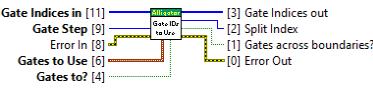
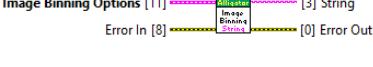
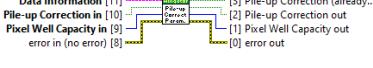
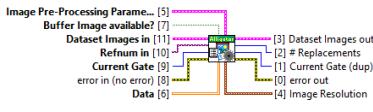
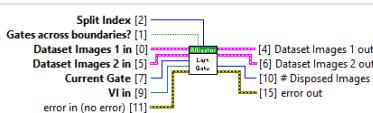
2.14.1. Functions

Table 14. Functions (non private scope only)

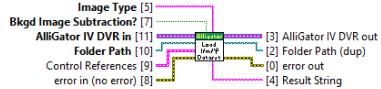
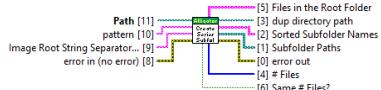
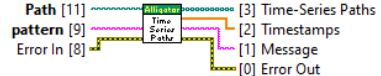
Name	Connector pane	Description	S.	R.	I.
AlliGator Build Background Dataset Information String		Builds background dataset information string.			
AlliGator Check Background Dataset Compatibility		Compares settings of FLI dataset and background dataset to check for their compatibility.			
AlliGator Get Background File Data v2		Get single- or dual-channel background image structures.			
AlliGator Get Background File or Folder		If Background File subtraction is selected, returns the background file path. If not, or no background file path is available, returns an empty path.			
AlliGator Get Load Dataset Action		Builds file/folder loading action.			
AlliGator Get-Set Background Dataset Options		Compares file parameters and loading options to previously stored one (if this is a background file). If no change, return FALSE to skip data loading, since we already have this data in memory.			
AlliGator Subtract Background Image(s) v4		Computes background-subtracted single- or dual-channel dataset image structures.			

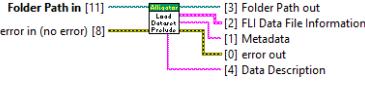
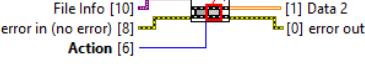
Name	Connector pane	Description	S.	R.	I.
AlliGator Update Background File Subtraction Information		Updates background file subtraction information.			
AlliGator Batch Dataset Export Window		GUI for batch .ptu datasets export to HDF5 files or folders of TIFF images.			
AlliGator Batch Export Status		Stores remaining batch export tasks list.			
AlliGator Export Dataset Script Core		Builds set of actions needed to export a single dataset.			
AlliGator Get-Set TIFF Series Options		Storage of options for dataset export to TIFF series.			
AlliGator Multiframe Loading Start		Sets parameters of multiframe loading script.			
AlliGator Script_Convert FLI Dataset to HDF5 or TIFF Series		Builds set of actions needed to export a single dataset as either a single frame or a multiframe series.			
AlliGator Close FLI Dataset Series		Disposes images and empties data structures corresponding to the loaded dataset series.			
AlliGator Close FLI Dataset		Disposes images and empties data structures corresponding to the loaded dataset.			
AlliGator Dispose Dataset Images		Disposes images corresponding to the loaded dataset.			

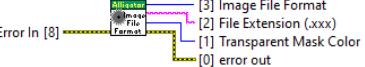
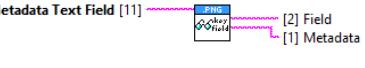
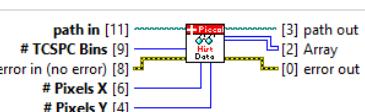
Name	Connector pane	Description	S.	R.	I.
AlliGator Add New Gate to Array, Sum , Min & Max Image	[AlliGator Files.lvlib:AlliGator New Gate to Array]	Adds the new Gate Image to the gate image array and use it to build the Min, Max and Sum images.			
AlliGator Add New Gate to Dataset Images		Adds new gate image to dataset image structure.			
AlliGator Check .bin File Type		Determines what type of binned dataset image this is (PicoQuant or EPFL Piccolo).			
AlliGator Check Available Buffer Image		Checks whether the buffer already contains an image structure for the new loaded gate image. If yes, returns it. If not, creates a new image structure.			
AlliGator Correct Dead Left Columns		Corrects for 1-every-other dead columns in the left half of a SPAD512S detector.			
AlliGator Create Gate Image if needed		Creates an image structure if needed.			
AlliGator Create Gate Image v2		Creates image structure(s) for the new loaded gate, if needed.			
AlliGator Create Max & Sum Images	[AlliGator Files.lvlib:AlliGator Create Max & Sum Images.vi]	Creates image structures for Sum, Min and Max images			
AlliGator Current Time Point		Returns the current dataset's timestamp, either from the stored array of timestamp or if it is empty, from the "Current Frame Timestamp" internal variable.			
AlliGator File Loading UI Update		UI update action(s) performed after loading a dataset.			
AlliGator Find FLI Dataset Paths		Analyze what type of files or folders the path contains.			

Name	Connector pane	Description	S.	R.	I.
AlliGator FLI Dataset Loading Core		Core VI handling loading the multiple gate images of a dataset as well as associated information and metadata. It dynamically calls a dataset-specific set of VIs to perform the actual loading.			
AlliGator Get Destination Folder		Returns the folder in which the current dataset is saved.			
AlliGator Get Gate Indices to Load		Gets the gate indices to load.			
AlliGator Get Gated Dataset Loading Options		Gets dataset loading options (structure + string) from stored settings.			
AlliGator Get Image & FLI Dataset Paths	[AlliGator Files.lvlib:AlliGator Get Image & FLI Dataset Paths.vi]	Gets FLI dataset paths (or image paths if the files are of that type).			
AlliGator Get Image Binning String		Get image binning options string.			
AlliGator Get Pile-up Correction Parameter		Reads from the metadata whether or not pile-up correction was already applied, and if so, does not repeat it.			
AlliGator Image Pre-Processing Step String Array to Enum List		Converts an array of strings corresponding to the user-defined image pre-processing operations into an array of enums.			
AlliGator Image Pre-processing		Applies selected preprocessing steps to a gate image.			
AlliGator Last Gate Loading		Last gate image loading actions and house-keeping.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Load Dataset or Series		Detects type of file loaded and generates the series of actions needed to load it.			
AlliGator Load First Dataset in FLI Dataset Series		Loads first dataset in a FLI dataset series.			
AlliGator Load FLI Dataset		Loads dataset of any kind, linking preparatory steps to the core VI.			
AlliGator Post Loading Action List		Generates series of actions to perform after a dataset is loaded (none if this is a single image file).			
AlliGator Script_Open Single FLI Dataset		Generates a series of actions to execute when loading a dataset. Series index is U32 as we want to read the first array element in case of a Single Dataset (index = -1 passed as parameter)			
AlliGator Select Folder		Generates series of actions needed to load a series of dataset or an image folder (with optional dialog is the folder path is empty).			
AlliGator Supported FLI Dataset Files	Alligator [5] Pattern String File Pattern [7] File Extensions	Returns a string of supported image file name patterns that can be used in a File Dialog (.hdf5; *.ptu; etc. and their uppercase variants) and an array of the same extensions (without the "" or "." characters).			
AlliGator Update Data File		If New File Path in is empty, returns Single Data Point Path instead. Update Data File? is always TRUE.			
AlliGator Update Fit Options Laser Period		If Use Data Information Laser Period is TRUE, updates the Laser Period in Fit Options (Settings).			
AlliGator Update Loaded Dataset Info		Updates Settings and Internal Variables after loading a new dataset.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get I-m-phi Dataset Phasor Harmonic Components		Converts FLIMBox data structure to one used internally in AlliGator.			
AlliGator Harmonic Orders String		Creates harmonic order string .			
AlliGator Load FLIMbox Data v0.3		Loads FLIMBox dataset.			
AlliGator Load I-m-phi Dataset		Loads a FLI dataset comprised of an intensity and phase image (FLIMBox).			
AlliGator Create Series Subfolders		Sorts image files into folders of images (to handle early flat data structure generated by Pi Imaging SPAD512S device).			
AlliGator Get FLI Image Folder Metadata		Tries different ways to extract FLI dataset metadata corresponding to different vendor formats.			
AlliGator Get Gate Image Series Folders		Reads valid folders of image in a time series.			
AlliGator Get ICCD Information		No description found (add content in vi description)			
AlliGator Get LaVision .set File Path		Tries to extract FLI dataset metadata corresponding to one of LaVision formats.			
AlliGator Get Time Series Time Stamps & Settings from RecSettings Files	[AlliGator Files.lvlib:AlliGator Get Time Series Time Stamps & Settings from RecSettings Files.vi]	Extract time stamps of individual point in a series of LaVision FLI datasets.			

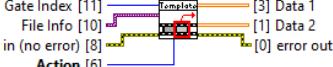
Name	Connector pane	Description	S.	R.	I.
AlliGator Get Time Stamps & Settings from .set File	[AlliGator Files.lvlib:AlliGator Get Time Stamps & Settings from .set File.vi]	Tries to extract FLI dataset metadata corresponding to one of LaVision formats.			
AlliGator Load FLI Folder of Images Dataset Prelude		Gets various information about a folder of gate images.			
AlliGator Load FLI Image Folder File Information		Creates FLI Dataset information structure & string needed to load the dataset.			
AlliGator Load Single Gate Image from Image Folder		Dynamically called VI to load a single gate image in a folder of gate images.			
AlliGator Read metadata.txt File		Tries to extract FLI dataset metadata from a _metadata.txt file generated by AlliGator.			
AlliGator Read RecSettings.txt File		Tries to extract FLI dataset metadata corresponding to one of LaVision formats.			
AlliGator Read set File		Tries to extract FLI dataset metadata corresponding to one of LaVision formats.			
AlliGator Clear Intensity Corrections		Clears intensity correction array (used for series with adaptive illumination).			
AlliGator Close Mask Image		Clears Mask Image structure.			
AlliGator Close White Light Image		Clears White Light Image structure.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Image File Format		Obtains image file format to save the image.			
AlliGator Load Single Image	 [3] AlliGator Internal Data DVR, [2] File Extension (.xxx), [1] Message, [0] error out	Loads White Light Image.			
AlliGator Open Single Image		Opens a single Mask or White Light image.			
AlliGator Save Mask Image	 [3] AlliGator IV DVR out, [1] Message, [0] error out	Save Mask Image to file.			
AlliGator Decode PI Imaging Metadata Field		Extract metadata from a Pi Imaging gate image field.			
AlliGator Decode PI Imaging Metadata		Decodes metadata from a Pi Imaging Gate Image.			
AlliGator Read PI Imaging File Metadata		Extracts & decodes all metadata from a Pi Imaging gate image file.			
AlliGator Convert to Piccolo .bin Information		Complements Piccolo dataset information with derived and pre-stored quantities.			
AlliGator Load Piccolo hist .bin Data		Loads Piccolo binned data.			
AlliGator Load Piccolo hist .bin FLI Dataset Prelude		Preliminary loading steps for Piccolo .bin files.			
AlliGator Load Single Gate Image from Piccolo hist .bin File		Single gate image loading step for Piccolo .bin files.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Load Single Gate Image from .bin File		Single gate image loading step for PicoQuant .bin files.			
AlliGator Get Frame Number in .ptu File		Hack to figure out the number of "frames" in a .ptu files generated by the Leica FLIM confocal microscope (basically reading the entire file).			
AlliGator Load Extended PTU File Information		Extracts metadata used to load FLI dataset from .ptu file.			
AlliGator Load Single Gate Image from PTU File		Loads single gate image from a .ptu file.			
AlliGator Build Saved Image Path		Builds path for a saved image.			
AlliGator Convert Gate Image for Export		Converts a Gate Image (Float) to a U8 or U16 image based on user-selected options.			
AlliGator Export Dataset to TIFF or HDF5		Saves gate images and dataset information to either a HDF5 file or an image series. Destination File Type: 'TIFF Series' (Default) or 'HDF5' Note: TIFF Series does not support dual-gate datasets.			
AlliGator Gate Image File Name Format Dialog		Dialog to specify naming convention for gate image files (or other image files).			
AlliGator Get Complementary Channel Names		Obtains information on channel names from the Selected Channel Name .			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get DAQ & Metadata	[AlliGator Files.lvlib:AlliGator Get DAQ & Metadata.vi]	Gets DAQ Parameters and Metadata string from internal data storage.			
AlliGator Get Single Saved Dataset Path		Builds path for saved HFD5 FLI Dataset file.			
AlliGator Ordered Available Channel Names		Reorders channel names to put that corresponding to G2 first.			
AlliGator Save FLI Dataset Metadata		No description found (add content in vi description)			
AlliGator Save FLI Dataset		Saves current FLI dataset to HDF5 or TIFF image series.			
AlliGator Save Gate Image Series		Saves image series (gate images of a FLI Dataset) to a series of TIFF files. Because the gate images are floating point data (SGL = float32), a conversion to 8 or 16 bit images is applied, according to user-set options in the Settings window.			
AlliGator Save Hot Pixel Mask Image		Saves image as 8-bit binary Mask Image.			
AlliGator Save Image Data to File		Saves Original Image to an image file using user-selected options.			
AlliGator Load Single Gate Image from SS1 Dataset		Loads single gate image from SS1 dataset.			
AlliGator Load SS1 FLI Dataset Information		Loads data information from SS1 dataset.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Load SS1 FLI Dataset Prelude		Preliminary steps (optional dialog) in loading a SS1 dataset.			
AlliGator Load Single Gate Image from SS2 Dataset		Loads single gate image from SS2 HDF5 dataset.			
AlliGator Load SS2 FLI Dataset Information		Loads SS2 dataset information.			
AlliGator Load SS2 FLI Dataset Prelude		Preliminary steps to loading a SS2 dataset.			
AlliGator Check mat File Type		Tries reading the HDF5 file's information for the 3 different supported dataset type, until success, and returns the identified dataset type.			
AlliGator Load mat FLI Dataset Information		Loads HDF5 FLI dataset information.			
AlliGator Load mat SS2 FLI Dataset Prelude		Preliminary steps to loading a SS2 dataset.			
AlliGator Load Single Gate Image from SS2 mat File		Loads single gate image (or dual-channel images) from HDF5 FLI dataset file (v0.6b).			
AlliGator SS2 mat #Datasets Dialog with Skip Option		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator Load Single Gate Image		<p>VI template to use for any new type of FLI dataset file.</p> <p>The resulting VI will be dynamically called in the Core Loading VI.</p>			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.14.2. Library Constant VIs

NOTE No Constant VIs Found

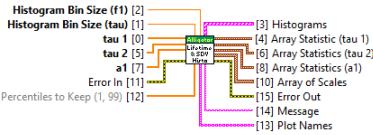
2.15. AlliGator Fit Method Benchmark.lvlib

Responsibility: VIs for the Fit Method Benchmark Tool.

Version: 1.0.0.0

2.15.1. Functions

Table 15. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator 2-Exp Decay Model		Computes a 2-#xp decay with the provided parameters.			
AlliGator Baseline Simulation Check		Computes an optimized baseline.			
AlliGator Compute Lifetime Simulation Histograms		Computes fitted parameter histograms and statistics.			
AlliGator Decay Sum		Computes the number of simulated photons in each decay (the other two plots are the fit and the residuals).			

Name	Connector pane	Description	S.	R.	I.
AlliGator Fit Linear Combinations of Exponentials		Simulate a 1-Exp or 2-Exp decay and fits it with the selected model.			
AlliGator Fit Method Benchmark		Fit Method Benchmark GUI.			
AlliGator Get tau1, tau2 & a1	[AlliGator Fit Method Benchmark.lvlib:AlliGator Get tau1]	Outputs tau1, tau2 and a1.			
AlliGator Load Experimental IRF		Load experimental IRF from ASCII file.			
AlliGator Pad or Truncate Decay		Adds or removes decay points for it to match the laser period.			
AlliGator Pseudo Dirac IRF		Computes a decay with a single non-zero bin.			
AlliGator Rescale 2-Exp Fraction		Normalizes decay amplitudes for random timestamp generation.			
AlliGator Save Simulation Outputs to ASCII		Saves simulation results.			
AlliGator Too Many Histogram Bins Message		Too many bins error dialog.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.15.2. Library Constant VIs

NOTE No Constant VIs Found

2.16. AlliGator Globals, Variables & Constants.lvlib

Responsibility: Globals, refnums, constants, etc.

Version: 1.0.0.0

2.16.1. Functions

Table 16. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Clear Variables	[AlliGator Globals]	Reset all internal variables to their default.			
AlliGator Exported Internal Variable Names	[AlliGator Globals]	Array of internal variable names exposed to Python plugin users. These names are internally preceded by "X_" in the enum item list.			
AlliGator Refnums Storage	[AlliGator Globals]	LV2-type global storing refnums to VIs, Tabs and Indicators.			
Alligator Variables Storage	[AlliGator Globals]	LV2-type global storage of internal AlliGator data and parameters.			
AlliGator Visible Tab Label	[AlliGator Globals]	Returns the label of visible tab on AlliGator's main window.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.16.2. Library Constant VIs

NOTE No Constant VIs Found

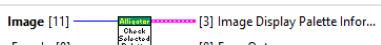
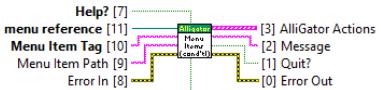
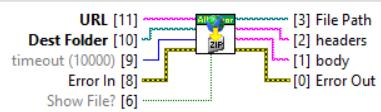
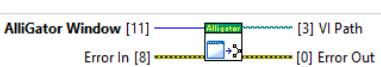
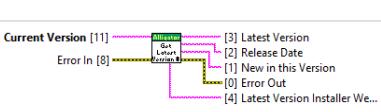
2.17. AlliGator GUI.lvlib

Responsibility: User Interface-related VIs.

Version: 1.0.0.0

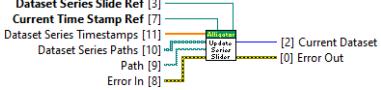
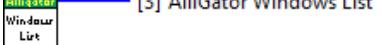
2.17.1. Functions

Table 17. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Launcher		Runs transparently. Launches AlliGator in transparent mode until initialization is complete.			
About Alligator		Modal "About" window for AlliGator.			
AlliGator Check Selected Palette		Gets the color palette information (Name, Type, Color Array and Interpolation) for one of the 3 images (Source Image, Phasor Plot or Decay Fit Parameter Map).			
AlliGator Check Version		Compares the current AlliGator version to the latest released one on Github. If a newer version is available, offers to download and install it.			
AlliGator Check whether Source Image needs update		Checks whether some user-selected settings requires reloading the dataset. If so, turns on the corresponding status LED on the main window.			
AlliGator Conditional Menu Items		Handles AlliGator menu items that are only responsive when AlliGator is idle.			
AlliGator Download Installer		Downloads AlliGator installer from the provided URL.			
AlliGator Get All Ancillary Window Paths		Returns the paths of all AlliGator windows (except those not close when quitting). This is used when quitting AlliGator.			
AlliGator Get Ancillary Window Path		Returns the path of the selected AlliGator window.			
AlliGator Get Latest Version Number (Github)		Fetches the last released version number from the ReadTheDocs website and compares it to the current version. If the installed version is older, offers to download and install the newest version.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get XY Graph Refnum		Returns a reference to one of the Graph objects in AlliGator based on the provided XY Graph Name..			
AlliGator Get-Set Control References		Storage of AlliGator controls and indicators refnums.			
AlliGator Get-Set Skippable Dialog		Stores state of dialog windows with a "Skip this dialog in the future" checkbox.			
AlliGator Get-Set State Indicators		Gets-sets the requested status LED.			
AlliGator Grayed out Menu Items		Grays out menu items that are not yet supported.			
AlliGator GUI Initialization		Launches sequence of initialization steps			
Alligator Initialization		Initializes controls and internal variables.			
AlliGator Install New Version		Installs the latest AlliGator version listed on the ReadTheDocs website.			
AlliGator Local Decay Plots Status		Boolean flag used to avoid constant update of the Local Decay Graph (when the corresponding window is opened).			
AlliGator Menu Items		Handles AlliGator menu items that are always responsive, including when AlliGator is busy.			
AlliGator Parse Version History reStructured Text File Content		Gets the version history page from the ReadTheDocs manual page and extracts the "New in this version" text for the last version.			
AlliGator Paths		Stores folder paths used throughout AlliGator.			
AlliGator Quit Dialog		Handles AlliGator quit menu command by checking whether the Notebook is closed and modified and has not been saved.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Register Control Events		Registers user events for controls on the main AlliGator window.			
AlliGator Set File Update LED		Sets the status of the "Dataset update needed" LED.			
AlliGator Set Phasor Plot Update LED		Sets the status of the "Phasor Plot update needed" LED.			
AlliGator Set Playback & Loop Menu Checkmarks	[AlliGator GUI.lvlib:AlliGator Set Playback & Loop Menu Checkmarks.vi]	Sets the checkmark(s) for the "Playback" and "Loop" menu items in the Analysis:FLI Dataset Series submenu.			
AlliGator Set Used Calibration Menu Checkmarks		Sets the checkmark(s) in the Calibration menu.			
AlliGator skippable_Delete Existing ROIs Dialog Window		Asks the user whether the existing ROIs should be kept or deleted before loading the new ones. This dialog is skippable by clicking on a checkbox, but can be re-activated by going to Settings?Miscellaneous.			
AlliGator Source Image Display Mouse Down-Up Event Monitoring		Updates registered events associated with the Source Image upon mouse click.			
AlliGator Source Image Display Mouse Move Flag		Stores the Source Image mouse move state.			
AlliGator Special Graph Menu Actions		Additional graph menu items developed for AlliGator.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Update Dataset Series Slide		Updates the Series Slide and associated indicators.			
AlliGator Update Gate Image Slide	 	Checks and updates the gate image slide control depending on the selected displayed image type and dataset characteristics.			
AlliGator Update Menu		Updates AlliGator menu upon activation, in order to set checkmarks and include dynamic menu items such as Python plugins.			
AlliGator Windows List		Returns an array of enum containing the list of AlliGator windows			
AlliGator		AlliGator main window. Spawns by AlliGator Launcher.vi. Spawns AlliGator Action Loop.vi, which handles UI requests from AlliGator.vi			
AlliGator_Graphs Metadata Types		No description found (add content in vi description)			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.17.2. Library Constant VIs

NOTE No Constant VIs Found

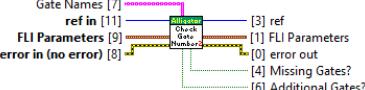
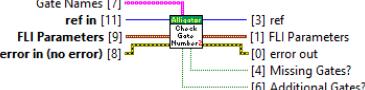
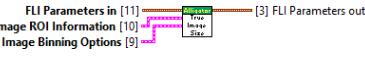
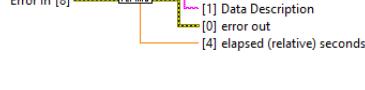
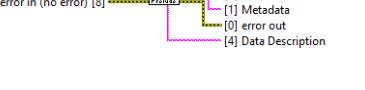
2.18. AlliGator HDF5.lvlib

Responsibility: VIs handling HDF5 dataset files.

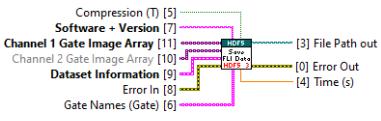
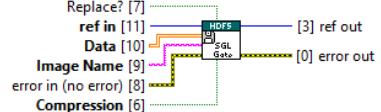
Version: 1.0.0.0

2.18.1. Functions

Table 18. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Check Gate Number in HDF5 File v2		Checks that the gate images stored in the HDF5 file correspond to the description provided by the FLI Parameters . If so updates # Gates in that structure and sets the corresponding output flags.			
AlliGator Check Gate Number in HDF5 File v3		Checks that the gate images stored in the HDF5 file correspond to the description provided by the FLI Parameters . If so updates # Gates in that structure and sets the corresponding output flags.			
AlliGator Check HDF5 File Type		Tries reading the HDF5 file's information for the 3 different supported dataset type, until success, and returns the identified dataset type.			
AlliGator Check HDF5 Image Size v2		Determines the gate image dimension (X, Y) from the provided file information.			
AlliGator Check HDF5 Image Size		Determines the gate image dimension (X, Y) from the provided file information.			
AlliGator Convert FLI Dataset Info to String		Builds HDF5 Dataset Information string			
AlliGator Get HDF5 File Type		No description found (add content in vi description)			
AlliGator Is SS2 Dataset HDF5 File		Checks whether a HDF5 file is a SS2 dataset file (early version).			
AlliGator Load HDF5 FLI Dataset Information		Loads HDF5 FLI dataset information.			
AlliGator Load HDF5 FLI Dataset Prelude		Initial steps of loading a HDF5 FLI dataset file.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Load HDF5 FLI Header File Information v0.6		Loads HDF5 FLI dataset file information (v0.6).			
AlliGator Load Single Gate Image from HDF5 v 0.6b		Loads single gate image (or dual-channel images) from HDF5 FLI dataset file (v0.6b).			
AlliGator Load Single HDF5 Gate Image v 0.2b		Loads single gate image from HDF5 FLI dataset file (v0.2).			
AlliGator Load Single HDF5 Gate Image v 0.3b		Loads single gate image (or dual-channel images) from HDF5 FLI dataset file (v0.3b).			
AlliGator Read HDF5 FLI Dataset Series Timestamps		Loads HDF5 FLI dataset gate images timestamps			
AlliGator Read HDF5 FLI Image Information		Reads HDF5 FLI dataset image information.			
AlliGator Read HDF5 SSX Detector Information		Reads HDF5 FLI dataset SSx detector information.			
AlliGator Save FLI Dataset Gates to HDF5 (VDM)		Saves gate images (single- or dual-channel) to HDF5 file.			
AlliGator Save FLI Dataset Metadata to HDF5		Saves the FLI Dataset metadata in the AlliGator HDF5 file format.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Save FLI Dataset to HDF5 File v3 (VDM)		Save gate images (single- or dual-channel) and dataset information to HDF5 file.			
AlliGator Save SGL Gate Image to HDF5		Saves single gate image data array to HDF5 FLI Dataset file.			
AlliGator Single SS3 Gate Slip Correction		Removes one of two sets of columns of a SS3 dataset to account for common FPGA data transfer issues.			
AlliGator SS3 Gates Slip Correction		Performs the column truncation for SS3 datasets needed to fix a common FPGA data transfer issue.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.18.2. Library Constant VIs

NOTE No Constant VIs Found

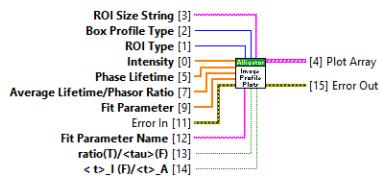
2.19. AlliGator Image Profile Window.lvlib

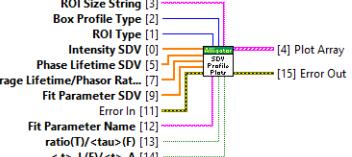
Responsibility: VIs used with the Image Profile Window.

Version: 1.0.0.0

2.19.1. Functions

Table 19. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Build Image Profile Plots		Builds the array of displayed profiles according to the user-selected options and ROI type.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Build Image SDV Profile Plots		Builds the array of displayed SDV profiles according to the user-selected options and ROI type.			
AlliGator Get Phase Lifetime & Phasor Ratio at Pixel	[AlliGator Image Profile Window.lvlib:AlliGator Get Phase Lifetime & Phasor Ratio at Pixel.vi]	Computes Phase Lifetime and Phasor Ratio.			
AlliGator Get Profile Plot Name		Builds plot suffix depending on user-selected options.			
AlliGator Image Profile Menu Check Marks		Handles checked items in Profile Window menu.			
AlliGator Image Profile Set Average Intensity Type		Updates type of intensity displayed in the Profile Window and corresponding menu item checkmark.			
AlliGator Image Profile Set Displayed vs Raw Data		Sets type of data displayed in the Profile Window and updates corresponding menu item checkmarks.			
AlliGator Image Profile Set Intensity-weighted vs Classic SDV		Sets type of SDV displayed in the Profile Window and updates corresponding menu item checkmarks			
AlliGator Image Profile Update Graph		Updates Profile Window plots.			
AlliGator Init Image Profile Window Menu		Initialize Profile Window menu.			
AlliGator Send Plots to Image Profile Window		Computes plots and send them to the Profile Window.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Source Image Profile Window		AlliGator Profile Window.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.19.2. Library Constant VIs

NOTE No Constant VIs Found

2.20. AlliGator Intensity Corrections.lvlib

Responsibility: VIs handling intensity correction to the Sum of All Gates image.

Version: 1.0.0.0

2.20.1. Functions

Table 20. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Define & Save Intensity Corrections File	[AlliGator Intensity Corrections.lvlib:AlliGator Define & Save Intensity Corrections File.vi]	UI to enter intensity correction specifications.			
AlliGator Get Dataset Series Timestamp & Intensity Correction	[AlliGator Intensity Corrections.lvlib:AlliGator Get Dataset Series Timestamp & Intensity Correction.vi]	Get dataset timestamp and intensity corrections (if available and requested) or use defaults instead.			
AlliGator Load Intensity Corrections		Loads saved dataset series intensity corrections.			

Name	Connector pane	Description	S.	R.	I.
AlliGator MCP Voltage to Gain		<p>Heuristic fit of the relationship between effective ICCD gain G and MCP voltage V_MCP.</p> <p>The function used is a stretched exponential with vertical and horizontal offsets.</p> <p>Parameters need to be fitted independently with a G(V_MCP) series.</p>			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.20.2. Library Constant VIs

NOTE No Constant VIs Found

2.21. AlliGator Internal Variables.lvlib

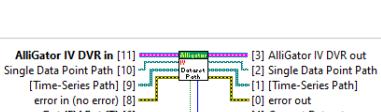
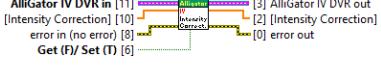
Responsibility: VIs to access individual (or group of) internal data or variables using a data by value reference (DVR).

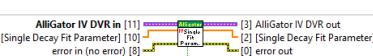
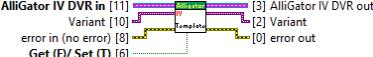
Version: 1.0.0.0

2.21.1. Functions

Table 21. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator IV [Raw Phasor Plot] .vi		No description found (add content in vi description)			
AlliGator IV Average Lifetime Map		No description found (add content in vi description)			
AlliGator IV Calibration Phasor Map		No description found (add content in vi description)			
AlliGator IV Calibration Phasor Series		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator IV Calibration Phasor		No description found (add content in vi description)			
AlliGator IV Clear Phasor Data		No description found (add content in vi description)			
AlliGator IV Current Dataset		No description found (add content in vi description)			
AlliGator IV Current Folder		No description found (add content in vi description)			
AlliGator IV Dataset Path		No description found (add content in vi description)			
AlliGator IV Dataset Series Folder & Type	[AlliGator Internal Variables.lvlib:AlliGator IV Dataset Series Folder & Type.vi]	No description found (add content in vi description)			
AlliGator IV Decay Shift Plot		No description found (add content in vi description)			
AlliGator IV Decays Max & Min	[AlliGator Internal Variables.lvlib:AlliGator IV Decays Max & Min.vi]	No description found (add content in vi description)			
AlliGator IV Gate Image Slide		No description found (add content in vi description)			
AlliGator IV Intensity Corrections		No description found (add content in vi description)			
AlliGator IV Last Calibrated Phasor SDV		No description found (add content in vi description)			
AlliGator IV Last Calibrated Phasor		No description found (add content in vi description)			
AlliGator IV Mask Image		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator IV Phasor Map		No description found (add content in vi description)			
AlliGator IV Phasor Plot		No description found (add content in vi description)			
AlliGator IV Phasor Plots Locked to Reference n		No description found (add content in vi description)			
AlliGator IV Phasor Ratio Map		No description found (add content in vi description)			
AlliGator IV Reference Decay		No description found (add content in vi description)			
AlliGator IV ROI Decay		No description found (add content in vi description)			
AlliGator IV ROI Mask		No description found (add content in vi description)			
AlliGator IV Selected Gate Images		No description found (add content in vi description)			
AlliGator IV Selected Max or Sum Image		No description found (add content in vi description)			
AlliGator IV Single Fit Parameters		No description found (add content in vi description)			
AlliGator IV Start Time		No description found (add content in vi description)			
AlliGator IV Template		No description found (add content in vi description)			
AlliGator IV Time Series Timestamps & Current Dataset	[AlliGator Internal Variables.lvlib:AlliGator IV Time Series Timestamps & Current Dataset.vi]	No description found (add content in vi description)			
AlliGator IV Type of Displayed Image		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator IV Valid Decay	AlliGator IV DVR in [11] Valid Decay [10] error in (no error) [8] Get (F)/ Set (T) [6]	[3] AlliGator IV DVR out [2] Valid Decay [0] error out			
AlliGator IV White Light Image	AlliGator IV DVR in [11] White Light Image [10] error in (no error) [8] Get (F)/ Set (T) [6]	[3] AlliGator IV DVR out [2] White Light Image [0] error out			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.21.2. Library Constant VIs

NOTE No Constant VIs Found

2.22. AlliGator Lifetime & Other Parameters.lvlib

Responsibility: No description found (add content in lvlib description)

Version: 1.0.0.0

2.22.1. Functions

Table 22. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute CV Mean & SDV	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Compute CV Mean & SDV.vi]	No description found (add content in vi description)			
AlliGator Compute Sliced Mean, SDV & CV Plots	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Compute Sliced Mean]	Computes sliced data statistics.			
AlliGator Format Slice Analysis Plots	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Format Slice Analysis Plots.vi]	Gets a cluster of calculated plots and outputs them as an array, skipping empty plots (which haven't been calculated). The associated names are also output, as well as a format string used to output a message listing these plots.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Histogram Bin Size Definition Dialog	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Histogram Bin Size Definition Dialog.vi]	<p>Displays a standard dialog box that prompts users to enter information, such as a user name and password.</p> <p>-----</p> <p>This Express VI is configured as follows:</p> <p>Message to Display to the User:Histogram bin to use: The inputs are: Number: Bin</p>			
AlliGator Plot Histogram Event	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Plot Histogram Event.vi]	No description found (add content in vi description)			
AlliGator Sliced Analysis Initialization	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Sliced Analysis Initialization.vi]	No description found (add content in vi description)			
AlliGator Sliced Mean, SDV & CV Enter Data Dialog	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Sliced Mean]	No description found (add content in vi description)			
AlliGator Sliced Mean, SDV & CV Plots Event	[AlliGator Lifetime & Other Parameters.lvlib:AlliGator Sliced Mean]	No description found (add content in vi description)			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.22.2. Library Constant VIs

NOTE No Constant VIs Found

2.23. AlliGator Local Decay Window.lvlib

Responsibility: VIs used with the Local Decay Window.

Version: 1.0.0.0

2.23.1. Functions

Table 23. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Local Fit & Residuals	[AlliGator Local Decay Window.lvlib:AlliGator Get Local Fit & Residuals.vi]	Gets the fit and residuals for the selected ROI.			
AlliGator Local Decay Window		Local Decay Window UI. This window displays the decay (and when available, IRF, fit and residuals) at the selected ROI.			
AlliGator Send Local Decay Plots (Parameter Map)		Gets the data (decay, fit, IRF, residuals and fit parameters) at the selected ROI and sends it to the Local Decay Window for update.			
AlliGator Send Local Decay Plots		Gets the data (decay, fit, IRF, residuals and fit parameters) at the selected ROI and sends it to the Local Decay Window for update.			
AlliGator Update Local Decay Graph		Updates the Local Decay Window graph.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.23.2. Library Constant VIs

NOTE No Constant VIs Found

2.24. AlliGator Notebook.lvlib

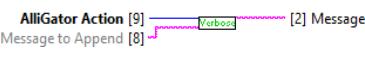
Responsibility: VIs communicating with the Notebook.

Version: 1.0.0.0

2.24.1. Functions

Table 24. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Format ROI Description for Notebook		Sends a formatted (and sometimes truncated) ROI description to the Notebook.			

Name	Connector pane	Description	S.	R.	I.
AlliGator New Object Name		Message informing of a name change (typically a ROI).			
AlliGator Remove Keywords from Action String		Removes frequent internal events from list of printed events in verbose mode.			
AlliGator Send Verbose Message to Notebook		Sends verbose action message to Notebook.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.24.2. Library Constant VIs

NOTE No Constant VIs Found

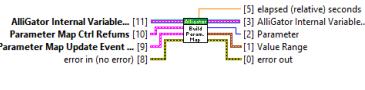
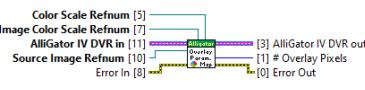
2.25. AlliGator Parameter Map.lvlib

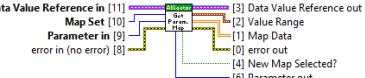
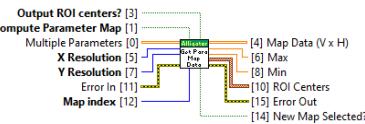
Responsibility: VIs handling generic Parameter Maps.

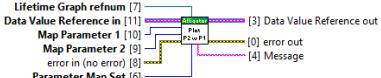
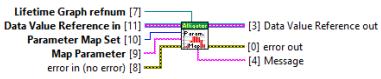
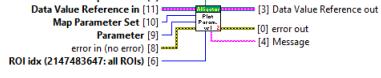
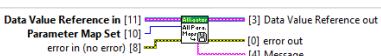
Version: 1.0.0.0

2.25.1. Functions

Table 25. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Build Parameter Map		Builds the selected fit parameter map image.			
AlliGator Color Parameter Map in Original Image		Overlays the Decay Fit Parameter Map on the Source Image.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Decay Fit Parameter Map Size Dialog		<p>Displays a standard dialog box that prompts users to enter information, such as a user name and password.</p> <p>-----</p> <p>This Express VI is configured as follows:</p> <p>Message to Display to the User: No dataset is currently loaded. Either load the dataset corresponding to the Decay Fit Parameter Map first, or provide the original dataset's X and Y resolution. The inputs are:</p> <p>Number: X Resolution Number: Y Resolution</p>			
AlliGator Delete Parameter Map Set		No description found (add content in vi description)			
AlliGator Export ROI(s) Parameter Set as ASCII File		Exports Decay Fit Parameter Map data to an ASCII file.			
AlliGator Get Parameter Map Data Wrapper		Returns selected fit parameter's map.			
AlliGator Get Parameter Map Data		Fills in matrix with fit parameter wherever it has been computed, NaN otherwise.			
AlliGator Parameter Map Context Menu Handler		Decay Fit Parameter Map contextual menu handler.			
AlliGator Parameter Map Range Mouse Move Event		Handles mouse move event in the Decay Fit Parameter Map display range control.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Parameters Map Mouse Up Event		Handles Mouse Up event in the Parameter Map image.			
AlliGator Plot Parameter 2 vs Parameter 1		Creates scatter plot of selected parameter vs intensity for all ROIs and sends it to the Lifetime & Other Parameters Graph .			
AlliGator Plot Parameter Scatterplot		Send the selected Decay Fit Parameter Map data to a single plot in Lifetime & Other Parameters Graph .			
AlliGator Plot Parameter vs Intensity Scatterplot v2		Creates scatter plot of selected parameter vs intensity for all ROIs and sends it to the Lifetime & Other Parameters Graph .			
AlliGator Save All Parameter Maps to ASCII		Saves the Decay Fit Parameter Map 2D array to an ASCII file.			
AlliGator Save Parameter Map to ASCII		Saves single Decay Fit Parameter Map data into an ASCII file.			
AlliGator Select Parameter Scatter Plot Type		Dialog to select parameter 1 and parameter 2 to be computed for a Phasor Plot of the Phasor Graph.			
AlliGator Update Parameter Map Palette		Updates the color palette of the Decay Fit Parameter Map image.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.25.2. Library Constant VIs

NOTE No Constant VIs Found

2.26. AlliGator Phasor Calibration.lvlib

Responsibility: VIs handling phasor calibration.

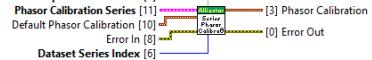
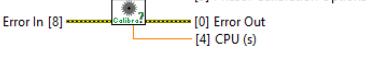
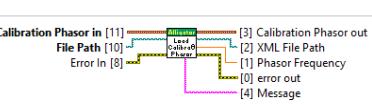
Version: 1.0.0.0

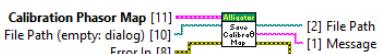
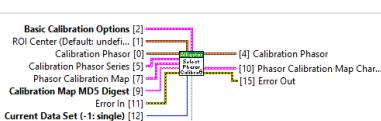
2.26.1. Functions

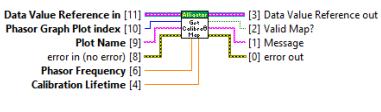
Table 26. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator [Z] to Z Plot	[AlliGator Phasor Calibration.lvlib:AlliGator [Z] to Z Plot.vi]	Returns full plot of the series of phasors, or only one if Single Point Display = True. The Phasor Graph Slide specifies which point to display.			
AlliGator Apply Calibration Phasor(s) v2		Calibrates single, selected or all plots. Updates the Phasor Graph and internal variables.			
AlliGator Build Phasor Calibration Map		Packages the provided Uncalibrated Phasors as a Phasor Calibration Map .			
AlliGator Build Phasor Calibration Series		Packages the provided Uncalibrated Phasor Series as a Phasor Reference Series .			
AlliGator Calibrate Single Phasor Plot		Applies phasor calibration to a single phasor plot. Takes into account whether a single phasor calibration, a phasor map or a phasor calibration series is used. For a calibration map, takes into account the location of each individual phasor in the phasor plot.			
AlliGator Calibration Frequency Dialog		Dialog opened when the phasor frequency stored in a calibration file is different from the current one. Offers to ignore the file, or load it and replace the current phasor frequency with that stored in the file.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Calibration Lifetime		Stored phasor calibration lifetime.			
AlliGator Calibration Phasor String		Builds calibration phasor string.			
AlliGator Check Calibration Menu Items		Checks the appropriate menu item telling what type of calibration is used (single phasor, map or series).			
AlliGator Check Deleted Locked Phasor Plot		When a plot is deleted from the Phasor Graph, updates the index of the plot linked to phasor reference 1.			
AlliGator Convert Calibration Map v1 to v2		Phasor calibration map version conversion.			
AlliGator Convert Calibration Map v2 to v1		Converts phasor calibration map from v2 to v1.			
AlliGator Find Closest Valid Calibration Phasor		Going backwards and forwards in the calibration series, starting from the Dataset Series Index , finds the first valid calibration phasor and returns it. If none is found (bogus series), setd the Found? flag to false.			
AlliGator Find Optimal Phasor Calibration (no Starting Calibration)		Find optimal <B.Calibration Phasor** for the two existing phasor references.			
AlliGator Get Basic Calibration Options		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Dataset Series Phasor Calibration v2		<p>Gets the phasor calibration corresponding to the Dataset Series Index.</p> <p>If the calibration series doesn't have enough elements, returns the Default Phasor Calibration instead.</p> <p>If the calibration series element is not valid (m or phi = NaN), searches for the nearest valid calibration in the series and returns it. If none can be found (bogus calibration series), returns the Dataset Series Index.</p>			
AlliGator Get Phasor Calibration in Calibration Map		<p>Finds the Phasor Calibration corresponding to the ROI Center location.</p> <p>If the location corresponds to a "dummy" ROI (typically a phasor created by manual conversion of a decay into a phasor by user interaction), the Phasor Calibration in is used.</p>			
AlliGator Get Phasor Calibration Options		Returns Phasor Plot Calibration Options defined in Settings .			
AlliGator Is Full-Frame Single-Pixel Calibration		Checks whether the store Phasor Calibration Map has the same number of elements as the dataset's number of pixels. This is useful to speed the search for the correct calibration phasor.			
AlliGator Load Calibration Phasor Map		Loads a Phasor Calibration Map .			
AlliGator Load Calibration Phasor Series		Loads Phasor Calibration Series .			
AlliGator Load Calibration Phasor		Loads a Calibration Phasor .			

Name	Connector pane	Description	S.	R.	I.
AlliGator Phasor Calibration Map Information	AlliGator IVDR [11]  [3] AlliGator IVDR error in [8] [2] Message [0] error out	Gets Phasor Calibration Map information and formats it into a string sent to the Notebook.			
AlliGator Phasor Calibration Series Information	AlliGator IVDR [11]  [3] AlliGator IVDR error in [8] [2] Message [0] error out	Gets Phasor Calibration Series information and formats it into a string sent to the Notebook.			
AlliGator Save Calibration Phasor Map	Calibration Phasor Map [11]  [2] File Path [10] [1] Message Error In [8] [0] error out	Saves the Phasor Calibration Map .			
AlliGator Save Calibration Phasor Series	Calibration Phasor Series [11]  [3] XML File Path [1] Message Error In [8] [0] error out	Saves the Phasor Calibration Series .			
AlliGator Save Calibration Phasor	Calibration Phasor [11]  [3] XML File Path [1] Message Error In [8] [0] error out	Saves the Phasor Calibration .			
AlliGator Select Phasor Calibration v3	Basic Calibration Options [2]  [1] ROI Center [Default: under...] [0] [4] Calibration Phasor [5] Calibration Phasor Series [7] Phasor Calibration Map [9] Calibration Map MD5 Digest [12] Current Data Set (-1; single) [13] Full-Frame Single-Pixel Cal... [15] Error Out	Picks the appropriate Phasor Calibration, depending on the ROI Center and Current Data Set and phasor calibration options (single calibration, series or map).			
AlliGator Set Calibration Type Status LEDs	State Indicators [11]  [1] Message error in (no error) [8] [0] error out	Sets phasor Calibration Type status LEDs.			
AlliGator Show Phasor Calibration Map ROI Centers Overlay	AlliGator IV DVR in [11]  [3] AlliGator IV DVR out [10] [0] Error Out	Displays a dot at the center of each Phasor Calibration Map locations.			
AlliGator Single Phasor Calibration Information	AlliGator IVDR [11]  [3] AlliGator IVDR error in [8] [2] Message [0] error out	Gets Single-Phasor Calibration information and formats it into a string sent to the Notebook.			

Name	Connector pane	Description	S.	R.	I.
AlliGator ucno_objective function phasor calibration		Minimization function used to search for the optimal calibration based on two references.			
AlliGator Update IV Calibration Phasor		No description found (add content in vi description)			
AlliGator Update Phasor Calibration & References	[AlliGator Phasor Calibration.lvlib:AlliGator Update Phasor Calibration & References.vi]	Updates Phasor Calibration and the corresponding phasor references (as well as the line connecting them in the Phasor Graph).			
AlliGator Update Phasor Graph References		Updates Phasor Graph references.			
AlliGator Use Phasor Plot as Phasor Calibration Map		Use the selected phasor graph plot (Phasor Graph Plot index) as the new Phasor Calibration Map .			
AlliGator Use Phasor Plot as Phasor Calibration Series		Uses the selected Phasor Graph Plot as Phasor Calibration Series.			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.26.2. Library Constant VIs

NOTE No Constant VIs Found

2.27. AlliGator Phasor Graph.lvlib

Responsibility: VIs handling Phasor Graph actions.

Version: 1.0.0.0

2.27.1. Functions

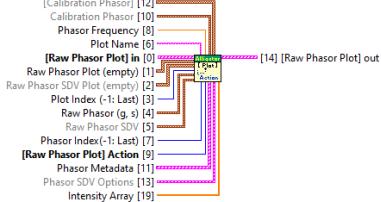
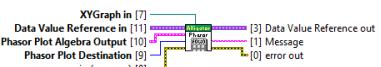
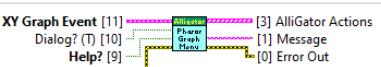
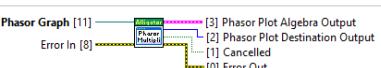
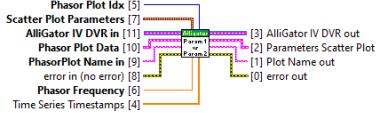
Table 27. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Phasor Value to Plot v2		<p>Core VI handling the creation of a phasor plot in the Phasor Graph.</p> <p>From the Decay plot and Calibration Phasor, computes the phasor (and if selected, the phasor standard deviation due to shot noise) and adds it to the current Phasor Plot in the Phasor Graph.</p>			
AlliGator All ROIs Phasor Analysis Script		Interactive phasor analysis of all ROIs.			
AlliGator All ROIs Phasor Analysis		Non-interactive phasor analysis of all ROIs.			
AlliGator Check Phasor Plot Destination		<p>Checks whether a Phasor Plot Destination is valid (i.e. a valid plot was provided: non empty name) as a destination.</p> <p>If not a valid destination, the new plot will be appended to the graph.</p>			
AlliGator Check Valid Scatter Plot Parameters		Checks whether the parameters selected in the "Parameter 2 vs Parameter 1" function are valid.			
AlliGator Choose Harmonic Order Dialog		Dialog to let the user enter the phasor frequency definition.			
AlliGator Clear Cursor Connecting Line		Clears the image drawing a line connecting the two references in the Phasor Graph.			
AlliGator Clear Phasor Graph Associated Indicators		Clears Phasor Graph-associated indicators.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Clear Phasor Ratio Reference		Removes Phasor Graph annotation representing one of the references.			
AlliGator Clear Plot(s) Calibration(s)		Removes calibration from single, selected or all phasor plots in the Phasor Graph.			
AlliGator Compute Multiple Average Phasors (Selected Plots)		Computes one average phasor (and derived quantities) per phasor plot in the Phasor Graph and plots each quantity as a series (where the abscissa is the plot index).			
AlliGator Compute P2 vs P1 Plots		Compute a (P1, P2) scatter plot for all selected phasor plots in the Phasor Graph and send them to the Lifetime & Other Parameters Graph. P1 & P2 are parameters associated with each phasor plot or derived from the phasor and/or phasor ratio references.			
AlliGator Compute Parameters SDV		Computes average and SDV of phasor-related quantities.			
AlliGator Compute Phasor Plot Parameter Array		Computes selected parameter for the phasors in a Phasor Plot of the Phasor Graph.			
AlliGator Compute SEPL Plot		Computes SEPL Plot as well as Ticks Label Data .			
AlliGator Compute Weighted Phasor Plot Statistics (Core)		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute Weighted Phasor Plot Statistics		Computes the (intensity-weighted) average phasor, SDV and related quantities for a phasor array.			
AlliGator Convert Raw Phasor Plot Data v2 to v3		Convert Raw Phasor Plot Data v2 to v3.			
AlliGator Convert Raw Phasor Plot Data v3 to v4		Convert Raw Phasor Plot Data v3 to v4.			
AlliGator Convert Raw Phasor Plot Data v4 to v5		Convert Raw Phasor Plot Data v4 to v5.			
AlliGator Create New Empty Phasor Plot		Creates empty plot in the Phasor Graph.			
AlliGator Create Phasor Plot Additional Data String		Creates a string with all the user-requested phasor plot additional data.			
AlliGator Current Phasor (g, s) Custom Menu Actions		Sends selected action to the main queue.			
AlliGator Draw Cursor Connecting Line		If Reference 1 or Reference 2 are provided, they are used to draw the line, otherwise the first or second cursor locations are used.			
AlliGator Enter Reference Lifetime Dialog		Reference Lifetime dialog.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Enter User-defined Phasor Dialog		User-entered phasor dialog.			
AlliGator Export Single Phasor Plot Phase Lifetimes		Saves phase lifetime for the selected phasor plot to an ASCII file.			
AlliGator Find Cursor Connecting Line Intersection(s) with Universal Circle		Computes intersections of a segment connecting the first two cursors of the Phasor Graph with the universal circle.			
AlliGator Get non UC Selected Plots	Selected Plots [2] -> [7] Selected Plots - UC	Removes UC index (0) from the list of selected phasor plots,			
AlliGator Get Phasor Plot Data		Returns the phasors in the selected phasor plot.			
AlliGator Get Phasor Value from Decay		Computes phasor for the last stored decay.			
AlliGator Get Time Stamps Array	Dataset Series Timestamps in [9] -> [3] Dataset Series Timestamps out	Returns stored dataset series timestamps.			
AlliGator Load Phasor Plot(s)		Loads Phasor Plot(s) and stores the corresponding data in the internal variable structure.			
AlliGator Load Phasor Plots v3		Loads Phasor Plot(s) and associated data and metadata from a phplot file. If no file paths are provided, a dialog window is shown.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Manage Phasor Plots Array		Handles addition to/deletion from the internal data structure used to store phasor plots and their associated data and metadata.			
AlliGator Move Cursor n to Reference n		Moves cursor to the specified reference (if it exists).			
AlliGator New Phasor Plot		Creates a new phasor plot and adds it to the internal data structure storing phasor plots and their data and metadata.			
AlliGator Phasor Algebra Calculator		Implements user-requested calculations on phasor plots.			
AlliGator Phasor Graph Context Menu Handler		Interprets Phasor Graph right-click menu items and sends corresponding actions to the action queue.			
AlliGator Phasor Plot Multiplication Window		UI to let the user define algebraic operations to apply to Phasor Plots in the Phasor Graph.			
AlliGator Phasor Plot Parameters Scatter Plot		Computes (P1, P2) scatterplot for the selected Phasor Graph.			
AlliGator Remove Phasor Plot		Removes Phasor Plot from Phasor Graph. Note that other actions need to be performed to remove the associated data and metadata.			
AlliGator Remove Selected Phasor Plots		Removes selected Phasor Plots from Phasor Graph. Note that other actions need to be performed to remove the associated data and metadata.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Save Multiple Phasor Plots Additional Data		Save phasor plot additional data to an ASCII file.			
AlliGator Save Phasor Plot Additional Data		Save the user-selected Phasor Plot additional data.			
AlliGator Save Raw Phasor v2		Saves raw phasor plot data and associated data and metadata to .phplot file.			
AlliGator Select Parameter Scatter Plot Type		Dialog to select parameter 1 and parameter 2 to be computed for a Phasor Plot of the Phasor Graph.			
AlliGator Select Phasor Plot Data to Export Dialog		Dialog to select which phasor-related parameters to export as ASCII file.			
AlliGator Set Phasor Harmonic		Computes phasor frequency following the user-selected options.			
AlliGator skippable_New Phasor Plot Dialog Window		Dialog to define whether a new phasor should be added to the last phasor plot or to a new phasor plot.			
AlliGator Toggle Phasor Plot(s) Locking to Reference n		Locks Phasor Plot(s) to a reference.			
AlliGator Update Phasor Graph Information at Cursor		Computes phasor-related quantities and displays them in the Phasor Graph panel.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Update Phasor Ratio Reference		Sets Phasor References status LEDs.			
AlliGator Update Phasor References v2		Updates phasor references using the internally stored information. Generally, this happens after the phasor harmonic has been changed.			
AlliGator Use Phasor Graph Selected Phasor Plots Principal Axis - UC Intersections as References		Defines references as the intersection of the major or minor axis of inertia of the phasor plot with the UC.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.27.2. Library Constant VIs

NOTE No Constant VIs Found

2.28. AlliGator Phasor Harmonics.lvlib

Responsibility: VIs handling multiple phasor harmonics operations.

Version: 1.0.0.0

2.28.1. Functions

Table 28. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Phasor Harmonic Components		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator Get Phasor Harmonic Manager Event Refnum	 [0] Phasor Harmonic Manager Eve...	No description found (add content in vi description)			
AlliGator Get Phasor Harmonics, Names & Current Description	[AlliGator Phasor Harmonics.lvlib:AlliGator Get Phasor Harmonics]	No description found (add content in vi description)			
AlliGator Harmonic Decomposition_Reorder Lifetimes & Fractions	[AlliGator Phasor Harmonics.lvlib:AlliGator Harmonic Decomposition_Reorder Lifetimes & Fractions.vi]	No description found (add content in vi description)			
AlliGator Phasor Harmonic Manager	 AlliGator Phasor Harmonic Manager	No description found (add content in vi description)			
AlliGator Phasor Harmonic Storage [SGL]	 .vi]	No description found (add content in vi description)			
AlliGator Update Phasor Harmonic Orders	 Stored Phasor Harmonics in [11] Update [0] Error In [8] Stored Phasor Harmonics out [3] Error Out [0]	No description found (add content in vi description)			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.28.2. Library Constant VIs

NOTE No Constant VIs Found

2.29. AlliGator Phasor Plot Color Map.lvlib

Responsibility: VIs handling the phasor plot color map tool.

Version: 1.0.0.0

2.29.1. Functions

Table 29. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute Interpolated Color Map (Multipoints)		Computes a color map based on user-provided parameters.			
AlliGator Draw Color Map Vertices		Displays color map vertices on the Phasor Plot.			
AlliGator Get-Set Phasor Color Map Vertices		Stores color map vertices and their colors.			
AlliGator Overlay Color Map Phasor in Original Image v3		Overlays a color-coded map on the Source Image based on the location of each pixel's phasor with respect to the user-defined Color Map , a polygon in the Phasor Plot, with one color associated with each vertex.			
AlliGator Phasor Color Map Picker		UI to define the vertices of a color map (using cursors) as well as their colors.			
AlliGator Phasor Color Map User Event Refnum		Stores the event refnum for the color map picker UI.			
AlliGator Save-Load Phasor Color Map		Saves/Loads a Phasor Plot Color Map from a XML file.			
AlliGator Set Phasor Map Color & Cursor Arrays	[AlliGator Phasor Plot Color Map.lvlib:AlliGator Set Phasor Map Color & Cursor Arrays.vi]	Updates color map based on stored vertices and colors.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Update Phasor Color Map Vertices Wrapper		Overlays color map on phasor plot.			
AlliGator Update Phasor Color Picker Color		Finds out whether the change in the cursor lists a color change only. In that case, the calling VI will update the color array accordingly.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.29.2. Library Constant VIs

NOTE No Constant VIs Found

2.30. AlliGator Phasor Plot.lvlib

Responsibility: Handles Phasor Plot-related actions.

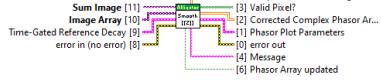
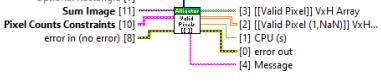
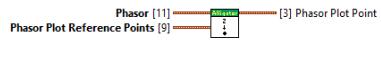
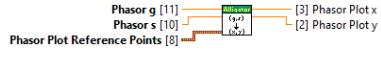
Version: 1.0.0.0

2.30.1. Functions

Table 30. Functions (non private scope only)

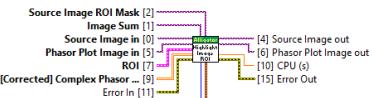
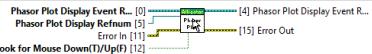
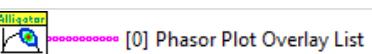
Name	Connector pane	Description	S.	R.	I.
AlliGator Adjust Phasor Plot Display Range Wrapper		Updates Phasor Plot colors according to the user-selected Display Range.			
AlliGator Build Phasor Plot Image		Builds Phasor Plot image based on phasor values and user-selected settings.			
AlliGator Check Decay Pre-Processing Steps Needed		Checks whether any decay pre-processing is needed.			

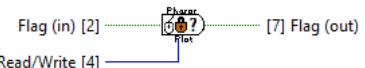
Name	Connector pane	Description	S.	R.	I.
AlliGator Check whether Phasor Plot needs update	Error In [9] ——————> Phasor [2] ——————> [1] Error Out	Checks whether any setting that could influence the Phasor Plot has been modified.			
AlliGator Clear Phasor Image Overlay	Phasor Plot Display Refnum [7] ——————> AlliGator IV DVR in [11] ——————> [3] AlliGator IV DVR out Error In [8] ——————> [0] Error Out	Clears whatever phasor plot overlay the user wants to clear.			
AlliGator Compute Phase Lifetime vs Intensity Scatter Plot	Lifetime Graph refnum [7] ——————> AlliGator IV DVR [11] ——————> [3] AlliGator IV DVR error in (no error) [8] ——————> [1] Message [0] error out	Computes a scatter plot of all valid pixels' Phase Lifetime vs Sum of All Gates intensity			
AlliGator Compute Phasor Plot for I-m-phi Dataset	[[CSG]] Phasor Array in [11] ——————> Valid Pixel? [3] ——————> [1] [[CSG]] Phasor Array out Sum Image [10] ——————> Image Array [9] ——————> Harmonic index [6] error in (no error) [8] ——————> [0] error out	Computes the Phasor Plot for a FLIMBox dataset.			
AlliGator Compute Phasor Plot Phase Lifetime Histogram	Lifetime Graph refnum [7] ——————> AlliGator IV DVR [11] ——————> [3] AlliGator IV DVR error in (no error) [8] ——————> [1] Message [0] error out	Computes Phase Lifetime histogram for valid pixels (uses a Dialog window to define histogram parameters).			
AlliGator Compute Phasor Plot Weber 2-Component Decomposition	Lifetime Graph refnum [5] ——————> AlliGator IV DVR [11] ——————> [3] AlliGator IV DVR error in (no error) [8] ——————> [1] Message [0] error out	Computes the 2-component linear decomposition of each phasor using Weber's approach. Returns two scatter plots (tau 2 vs tau 1 and f1 vs tau 1) sent to the Lifetime Graph.			
AlliGator Compute Phasor Plot	Pixel Phasors Array [11] ——————> Phasor Plot [3] ——————> [2] Phasor Plot Reference Points Pre-processed Sum Image (V x H) [10] ——————> Compute Phasor Plot (F) [9] ——————> [1] elapsed (relative seconds) error in (no error) [8] ——————> [0] error out	No description found (add content in vi description)			
AlliGator Compute Pixel Phasor Array v3	Time-Gated Reference Decay [7] ——————> Sum Image (V x H) [11] ——————> Gate Images Stack (NxNxH) [10] ——————> t Array [9] ——————> e^j w t,i Vector [6] Error In [8] ——————> [3] Pre-processed Sum Image (V x H) ——————> [2] Pixel Phasors Array (V x H) [1] # Invalid Phasors [0] Error Out [4] Message	Computes the phasor of all pixels using any user-selected decay pre-processing options.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute Smoothed Complex Phasor Array		Computes the (smoothed) array of single-pixel phasors.			
AlliGator Compute Valid Pixels Array		Computes a boolean array specifying whether each pixel is valid (verifies all user-defined constraints).			
AlliGator Computer User-defined Quantity		Computes a user-defined quantity based on the basic quantities: f_!, f_2, a_1, a_2 tau_phi, tau_m, <tau>_i, <tau>_a, tau_1, tau_@, T_laser, T_sync, N_gates, dt (gate separation) Ch_INT (intensity of the INT channel) Ch_G2 (intensity of the INT channel)			
AlliGator Convert Image Points to Phasors		Converts Phasor Plot image coordinates to phasor values.			
AlliGator Convert Phasor Plot Point to Phasor		Converts Phasor Plot image coordinates to actual phasor value.			
AlliGator Convert Phasor to Phasor Plot Point		Converts phasor value to Phasor Plot image coordinates.			
AlliGator Convert Phasor Value to Phasor Image Coordinates (1)		Converts single phasor value to the corresponding Phasor Plot image coordinates.			

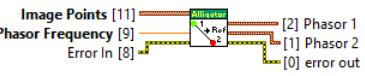
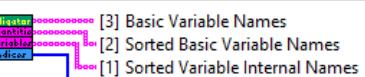
Name	Connector pane	Description	S.	R.	I.
AlliGator Convert Phasor Value to Phasor Image Coordinates (N)		Converts array of phasor values to the corresponding array of Phasor Plot image coordinates.			
AlliGator Display True Phasor Plot Value		No description found (add content in vi description)			
AlliGator Draw Phasor Plot SEPL v2		Draws the selected SEPL on the Phasor Plot image.			
AlliGator Draw Phasor Plot UC		Draws the UC in the Phasor Plot image.			
AlliGator Draw Phasor Ratio Reference Overlay Wrapper		Wrapper VI to the Draw Phasor Ratio Reference Overlay.vi.			
AlliGator Draw Phasor Ratio Reference Overlay		Updates Phasor Plot image phasor references overlay.			
AlliGator Draw Phasor Ratio References on Phasor Plot		Does the actual drawing of Phasor Ratio References (and associated segment and boundary region) on the Phasor Plot image.			
AlliGator Draw Phasor ROIs Overlay		Draws Phasor Plot image ROIs.			
AlliGator Draw SEPL Overlay v2		Draws SEPL in Phasor Plot image.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Draw Tick Labels		Draws UC or SEPL tick labels in the Phasor Plot image.			
AlliGator Draw UC Overlay		Draws the UC in the Phasor Plot image.			
AlliGator Filter Phasors in ROI(s)		Returns an array of phasor values located within the selected Phasor Plot ROI (or All ROIs).			
AlliGator Formula Interpreter		Replaces user quantities by definitions in the provided formula.			
AlliGator Get (Smoothed) Gate Images Sum & Stack	[AlliGator Plot.lvlib:AlliGator (Smoothed) Gate Images Sum & Stack.vi]	Phasor Get Computed the smoothed array of gate image data for subsequent phasor plot calculation.			
AlliGator Get Phasor at Source Image Cursor Location		Returns the phasor value corresponding to the pixel of the Source Image over which the mouse is located.			
AlliGator Get Phasor Plot Calibration Message String		Builds string specifying which phasor calibration is used.			
AlliGator Get Phasor Plot Display Options		Returns list of Phasor Plot image overlays to update.			
AlliGator Get Phasor Plot Parameters		Returns a structure with all the options needed to build the Phasor Plot image.			
AlliGator Get Phasor Plot Style		Gets information on how to draw the Phasor Plot image.			
AlliGator Get-Set Phasor Plot Reference is Updated		Stores status of Phasor Plot references changes.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Highlight Image ROI in Phasor Plot Wrapper		Wrapper for AlliGator Highlight Image ROI in Phasor Plot.vi			
AlliGator Highlight Image ROI in Phasor Plot		Highlights the phasors in the Phasor Plot image that correspond to pixels in the Source Image ROI.			
AlliGator Overlay Phasor Ratio or Derived Quantity on Source Image v3		Computes and overlays the phasor ratio map (or map of a derived quantity) on the Source Image.			
AlliGator Phasor Plot Context Menu Handler		Phasor Plot image context menu handler.			
AlliGator Phasor Plot Display Mouse Down-Up Event Monitoring		Handles event registration for mouse moves in the Phasor Plot image.			
AlliGator Phasor Plot Display Range Mouse Move Event		Sends action list following mouse Phasor Plot Display Range change.			
AlliGator Phasor Plot Display Range User Event Refnum		Stores Phasor Plot display range user event refnum.			
AlliGator Phasor Plot Elements List		Stores list of Phasor Plot image overlays.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Phasor Plot Image Cursor Location to Phasor v2		Converts Phasor Plot Image cursor location to Phasor value.			
AlliGator Phasor Plot Mouse Move Event	<pre>graph LR; A[Source Image Display Refnum [7]] --> B[Alligator Queue Elements In [11]]; C[Image User Event Data [10]] --> B; D[Current Phasor Plot Informa... [6]] --> B; B --> E[3 Alligator Queue Elements out]; B --> F[0 Error Out]; B --> G[Error In [8]]</pre>	Handles mouse move events in the Phasor Plot image.			
AlliGator Phasor Plot Mouse Move Flag		Raise the flag when calling the action. Lower it when done.			
AlliGator Phasor Plot Mouse Up Event	<pre>graph LR; A[Alligator Actions in [11]] --> B[Phasor Plot Mouse Up Event ... [9]]; C[error in (no error) [8]] --> B; B --> D[3 Alligator Actions out]; B --> E[0 error out]; B --> F[Current Phasor Plot Informa... [6]]</pre>	Handles Mouse Up events in the Phasor Plot image.			
AlliGator Phasor Plot Overlay List		Stores list of Phasor Plot image overlays.			
AlliGator Phasor ROI to Source Image ROI		Buils a Source Image ROI comprising all pixels whose phasors are included in the Phasor Plot ROI.			
AlliGator Reset Cumulative Phasor Plot Image		Resets array of phasors when starting accumulation across several datasets.			
AlliGator Set Checkmarks in Phasor Overlay to Erase Button Menu		Checks appropriate context menu items for the "Phasor Overlay to Erase" button.			
AlliGator Set Checks in Phasor Update Button		Checks appropriate context menu items for the "Phasor Update" button.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Show Local Phasor Info in Phasor Plot		Displays phasor information at the mouse location in the Phasor Plot image.			
AlliGator Show-Hide Phasor Plot Menu Items		Sets the Phasor Plot image menu items.			
AlliGator Update Checkmarks in Phasor Overlay to Erase Button Menu		Builds the list of items to display with a checkmark in front of them in the contextual menu.			
AlliGator Update Phasor Image Elements to Update		Modifies the list of Phasor Plot image elements to update based on user selection.			
AlliGator Update Phasor Plot Image Overlay		Updates user-selected Phasor Plot image overlays.			
AlliGator Update Phasor Plot Image v2		Updates the Phasor Plot image including its overlays.			
AlliGator Update Phasor Plot Image		Updates the Phasor Plot image.			
AlliGator Update Phasor Plot Information at Mouse Location		Updates the phasor information at the mouse location in the Phasor Plot image.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Use Phasor Plot Segment Extremities as References		Defines the references as the extremities of the user-drawn segment in the Phasor Plot image.			
AlliGator Use Phasor Plot UC-Linear Fit Intersections as References		Defines the references as the intersections of the user-drawn segment and the UC in the Phasor Plot image.			
AlliGator Use Phasor Plot UC-Principal Axis Intersections as References		Defines the references as the intersection of the minor or major axis of the phasor plot with the UC in the Phasor Plot image.			
AlliGator Use Phasor Plot UC-Segment Intersections as References		Defines the references as the intersection of the user-drawn segment and the UC in the Phasor Plot image.			
AlliGator Variable Names		Stores basic variable names and their internal counterparts (used in formula).			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.30.2. Library Constant VIs

NOTE No Constant VIs Found

2.31. AlliGator Phasor Ratio.lvlib

Responsibility: VIs handling phasor ratio analysis.

Version: 1.0.0.0

2.31.1. Functions

Table 31. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Average Lifetime to Plot		Adds a single lifetime data point to a plot.			
AlliGator Add Phasor Ratio to Plot (with optional dialog)		Dialog to add individual Phasor Ratio value to a Phasor Ratio plot.			
AlliGator Add Phasor Ratio to Plot		Adds single phasor ratio to a phasor ratio plot.			
AlliGator Build Phasor Ratio Plot Name Prefix		Strips " Phasor Plot" from the source phasor plot name.			
AlliGator Build Reference Lifetime String		Builds reference lifetime string.			
AlliGator Compute Basic Quantities		Computes phasor ratio-derived quantities.			
AlliGator Compute Phasor Plot Phasor Ratio Histogram		If two Phasor References are defined, computes an histogram of the phasor ratios of all valid pixels.			
AlliGator Compute Phasor Plot's Phasor Ratio	[AlliGator Ratio.lvlib:AlliGator Compute Phasor Plot's Phasor Ratio.vi]	Computes phasor ratio and derived quantities and outputs the corresponding plots.			
AlliGator Compute Phasor Ratio at Mouse Location		Computes phasor ratio and derived quantities at mouse location (interactively or using the last computed phasor) and updates a variety of indicators.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Define Phasor References		Reorders phasor references according to user preferences. Updates annotations in Phasor Graph.			
AlliGator Fit Phasor Ratio Plot v2		Fits phasor ratio plot to a line.			
AlliGator Get Phasor Ratio Interpolated Color v2		Computes phasor ratio equivalent color using the two references' colors.			
AlliGator Get Phasor Ratio Map Color v3		Computes phasor ratio equivalent color using the provided color scale.			
AlliGator Get Phasor Ratio Reference v2		Gets the phasor reference selected by the user.			
AlliGator Get Updated Phasor Ratio References		Updates references when the harmonic is changed.			
AlliGator Get-Set Phasor Ratio References		Stores the references and their associated data.			
AlliGator Load Phasor Ratio References		Dialog to select one or both references to load.			
AlliGator Phasor Ratio Reference String		Builds phasor reference output string.			
AlliGator Phasor Ratio Step		Computes phasor ratio and updates graphs.			
AlliGator Phasor References Defined		Checks whether all references parameters are defined.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Reorder Phasor Ratio References		Reorders phasor references as specified in Settings.			
AlliGator Save Phasor Ratio References		Saves phasor reference(s) - with Dialog.			
AlliGator Set Phasor Reference		Updates phasor reference annotation in the Phasor Graph and sets corresponding status flag to True.			
AlliGator Single Plot Average Phasor Ratio		Computes single phasor plot's average phasor ratio.			
AlliGator Update Phasor Ratio References		Builds series of actions to update phasor references.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.31.2. Library Constant VIs

NOTE No Constant VIs Found

2.32. AlliGator Python Plugins.lvlib

Responsibility: VIs handling python plugins.

Version: 1.0.0.0

2.32.1. Functions

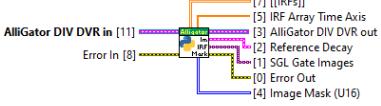
Table 32. Functions (non private scope only)

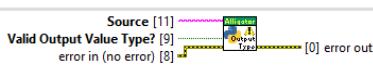
Name	Connector pane	Description	S.	R.	I.
AlliGator Add Python Functions to Menu		Adds python function found in script to corresponding menu in AlliGator.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Python Functions to Object Menu		Adds python function to object menu.			
AlliGator Export Plugin Parameters to Clipboard		Sends a string containing all parameters, internal variables and data accessible to python plugins.			
AlliGator Find Object Python Function Information		Gets object's python function's information			
AlliGator Find Python Function Information		Gets python function's information.			
AlliGator Format Path String for Python		Formats path for python function consumption.			
AlliGator Get Message & Parameters from JSON Output	[AlliGator Python Plugins.lvlib:AlliGator Get Message & Parameters from JSON Output.vi]	Interprets JSON string output and formats it to be sent to the Notebook.			
AlliGator Get Python Function Parameter Values Dialog		Dialog to allow user to enter python function parameters.			
AlliGator Get Python Session ID		Gets the current (or creates a new) python session ID.			
AlliGator JSON Output Warning		Formats error message with python function information.			
AlliGator JSON String to Settings Parameter		Decodes JSON python ouput string.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Parameter Type to Default Value String	Parameter Type [11] [3] Default Parameter String	Returns default value of input parameter type.			
AlliGator Plugin Target to Submenu	Function Target [11] [3] Menu Tag Function Target Type [9]	<p>Convert Plugin Target to Menu Tag for insertion of the menu item.</p> <p>For plugins associated with objects such as Source Image or Decay Graph, the insertion takes place at the bottom of contextual menu and thus an empty string is provided.</p> <p>For plugins associated with data not exposed to the user (such as the Gate Series), the plugin menu is added to the main menu, and thus the tag of the submenu in which it will be inserted needs to be provided.</p>			
AlliGator Python Plugin Function Doc String	String in [11] [3] String out Source [9] [1] Doc String Error In [8] [0] Error Out	Extracts doc string from python function.			
AlliGator Python Plugin is Function a Plugin	String in [11] [3] String out Error In [8] [1] Is AlliGator Python Plugin? [0] Error Out	Checks for the presence of the # IsAlliGatorPythonPlugin # tag in the python function.			
AlliGator Python Plugin Plot Data Type	Function Name [11] [3] Type of Plot Data error in (no error) [8] [0] error out	Looks at the python function name to figure out whether it acts on "All Plots" or "Selected Plots".			
AlliGator Python Plugin Valid Input Datatype	Input Datatype [2] [7] Valid Datatype?	Checks whether the input datatype is valid.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Python Plugin Valid Output Datatype		Checks whether the output datatype is valid.			
AlliGator Python Plugin Valid Output Destination		Checks whether the output destination is valid.			
AlliGator Send Python Function Doc String to Notebook		Sends python function doc string to Notebook.			
AlliGator Run XY Graph Python Function		Calls a XY Graph-associated python function.			
AlliGator XY Graph Python Function Handler		Calls XY Graph-associated python function.			
AlliGator Add Missing Parameter Map Parameters		Complements python function output parameter map by adding "NaN" instead of the missing parameters. The map needs to be complete to be displayable in AlliGator, even though the python function might only output a few parameters.			
AlliGator FLI Dataset Python Function Handler Core		Calls FLI Dataset python function.			
AlliGator Parameter Names to Parameters List		Converts parameter names to an array of enums.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Python Plugin Get FLI Dataset		Gets FLI Dataset and related information to pass to a python plugin.			
AlliGator Python Plugin Get FLI Dataset Data		Gets FLI Dataset Images and additional information for python plugin call. - IRFs: array of decays (IRFs) preceded by the (X, Y) coordinate of the corresponding pixel. Each decay is an array of DBL. - IRF Time Axis: common array of time points (DBL) corresponding to the IRF values - Reference Decay: in the case where the IRF is common to the whole dataset, it is provided as a single decay plot structure comprised of a Plot Name, X Array (DBL) and Y Array (DBL). - Image Mask is a U16 array defining the different ROIs by different pixel values.			
AlliGator Run FLI Dataset Python Function		Runs FLI Dataset python plugin function.			
AlliGator Add Plugins to Main Menu		Adds python functions to the corresponding AlliGator submenus. If a submenu is empty, deactivates it.			
AlliGator Check Invalid Python Plugin Input Parameter Types		Formats error with invalid input parameter message.			
AlliGator Check Invalid Python Plugin Output Destination		Outputs warning message with invalid destination.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Check Invalid Python Plugin Output Value Type		Outputs warning with invalid output value type			
AlliGator Check Missing Python Plugin API Version		Outputs warning with missing function name.			
AlliGator Check Missing Python Plugin Doc String		Outputs warning with missing doc string message.			
AlliGator Check Missing Python Plugin Function Name		Outputs warning with missing function name.			
AlliGator Check Missing Python Plugin Input Section		Outputs warning with missing input section.			
AlliGator Check Missing Python Plugin Output Section		Outputs warning with missing output section.			
AlliGator Check Valid Python Plugin Target		Outputs warning with missing python plugin target.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Clear Unknown Python Error		Clears unknown python function error (i.e. code != 1672).			
AlliGator Close Python Session		Closes python session with message.			
AlliGator Decode Python Plugin Output Section		<p>Looks for Python Plugin Header and Footer and returns:</p> <p>- String before Header - Output Type - Output Destination</p> <p>String before Header: if the section is not found (no header or no footer), the input string is passed unchanged.</p> <p>If the section is found, the part that preceded that section is returned,</p>			
AlliGator Get Python Functions List in Scripts		Gets python functions list in scripts array.			
AlliGator Get Python Plugin API Version		No description found (add content in vi description)			
AlliGator Get Python Plugin Function Parameters String		Gets requested parameter names from the python function description, opens up a dialog window to allow the user to enter the required parameters, and builds a JSON string to pass those parameters (names and values) to the python function.			
AlliGator Get Python Plugin Functions List		Extracts list of python plugin functions from the Python Plugin folder.			
AlliGator Get Python Script Function List		Extracts list of python plugin functions and their information from a python script.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Parse Python Function Input Parameters		Looks for Python Plugin Input Paramater Section Header and Footer and returns the parameter names, types and descriptions If the section is found, the part that follows that section is returned.			
AlliGator Python Plugin Function Offsets		Finds function definition section Offsets . Returns the script part preceding the first function as Script Header .			
AlliGator Python Plugin Get Function Name		Returns function name and whether the function should be preceded by a separator in the menu.			
AlliGator Python Plugin Target Information		Extracts information on the python plugin target(s).			
AlliGator Reset Python Session		Resets python session.			
AlliGator Unzip Python Plugins		Unzips python plugin archive provided with AlliGator installation.			
AlliGator Image Python Function Handler Core		Runs image-related python plugin function.			
AlliGator Run Source Image Python Function		Runs image-related python function.			
AlliGator Run XY Graph Python Function (API v1)		No description found (add content in vi description)			

Name	Connector pane	Description	S.	R.	I.
AlliGator Python Plugin Get Reference Decay (API v1)		If AlliGator Parameter Names in contains 'Reference Decay', returns the Reference Decay cluster and removes 'Reference Decay' from AlliGator Parameter Names out . Sets the Found? flag to TRUE. Otherwise, do nothing and returns the default cluster and set the Found? flag to FALSE			
AlliGator Run XY Graph Python Function (API v1.1)		No description found (add content in vi description)			
AlliGator Python Plugin Get Reference Decay (API v1.1)		If AlliGator Parameter Names in contains 'Reference Decay', returns the Reference Decay cluster and removes 'Reference Decay' from AlliGator Parameter Names out . Sets the Found? flag to TRUE. Otherwise, do nothing and returns the default cluster and set the Found? flag to FALSE			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.32.2. Library Constant VIs

NOTE No Constant VIs Found

2.33. AlliGator ROIs.lvlib

Responsibility: VIs handling ROI actions.

Version: 1.0.0.0

2.33.1. Functions

Table 33. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Create Complementary ROI		Computes complementary ROI and adds it to the ROI list.			
AlliGator Create Individual Pixel ROIs from ROI		Converts a closed ROI into a series of single-pixel ROIs.			
AlliGator Find ROI Name		Looks for the stored ROI having the same definition as the input ROI and returns its name if found.			
AlliGator Get Current ROI Name		Returns the current ROI name.			
AlliGator Get ROI Components		Separates stored ROIs information into arrays of: - ROI Descriptors - ROI Names - Overlay Colors			
AlliGator Get ROI Names		Returns list of ROI names.			
AlliGator Load ROI v3		When invoked from a context menu, used Dialog for file selection: the Dialog flag should be set to True (default) and the Destination Image string is ignored. When invoked from a drag & drop event, the Dialog flag should be set to False and the Destination Image (Source Image or Phasor Plot Image) should be provided.			
AlliGator Preview ROI File		Returns information on ROIs stored in the file.			
AlliGator ROI Analysis Script		Actions needed to extract the decay corresponding to the current ROI or input ROI and compute its phasor.			
AlliGator Save ROI(s)		Saves one or more ROIs.			
AlliGator Save Multiple ROIs v3		Save multiple ROIs.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Save ROI v3		Saves single ROI.			
AlliGator Set New ROI Name		Sets new ROI name (verifies that the input name is not already used).			
AlliGator Update ROI After Mouse Release		Builds list of actions handling ROI update following a mouse release event.			
AlliGator Get Phasor Plot ROI Event Refnum		Returns the Phasor Plot Image ROI Event refnum.			
AlliGator Get Phasor Plot ROIs, Names & Current ROI	[AlliGator ROIs.lvlib:AlliGator Phasor Plot ROIs]	Get Returns all ROIs and their names as well as the index of the current ROI.			
AlliGator Phasor Plot Image Edit ROI Name		Changes current Phasor Plot image ROI name.			
AlliGator Phasor Plot Image ROI Storage [MULT] v3	[AlliGator ROIs.lvlib:AlliGator Phasor Plot Image ROI Storage [MULT] v3.vi]	Handles multiple Phasor Plot image ROI storage.			
AlliGator Phasor Plot Image ROI Storage [SGL] v3	[AlliGator ROIs.lvlib:AlliGator Phasor Plot Image ROI Storage [SGL] v3.vi]	Handles single Phasor Plot image ROI storage.			
AlliGator Phasor Plot ROI Manager		Phasor Plot image ROI list display UI.			
AlliGator Quit Phasor Plot Image ROI Manager		Handles Phasor Plot image ROI Manager quit event.			
AlliGator Select Phasor Plot ROI		Handles Phasor Plot image ROI selection.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Check Current Phasor Image ROI		No description found (add content in vi description)			
AlliGator Compute & Plot All ROIs Characteristics	[AlliGator ROIs.lvlib:AlliGator Compute & Plot All ROIs Characteristics.vi]	Computes all Source Image ROI characteristics and sends them as plots to the Lifetime & Other Parameters Graph.			
AlliGator Create Source Image Contour ROI		Create new Source Image ROI consisting of the contour of the input ROI.			
AlliGator Create Source Image ROI Grid		Creates a series of Source Image ROIs layed out on a grid.			
AlliGator Add Multiple Source Image ROIs		Adds multiple Source Image ROIs to ROI storage.			
AlliGator Get All Image ROIs		Returns all Source Image ROI names.			
AlliGator Get Source Image ROI Event Refnum		Returns the Source Image ROI Event refnum.			
AlliGator Get Source Image ROIs, Names & Current ROI	[AlliGator ROIs.lvlib:AlliGator Source Image ROIs] Get	Returns list of store Source Image ROIs, their names and the index of the current ROI.			
AlliGator is Full-Frame ROI		Checks whether the Source Image ROI is a full-frame ROI.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Mask Image to ROIs		Define ROIs as sets of Mask Image pixels with identical integer values. If the Mask Image Name parameter is left unconnected (or is an empty string), the file name of the loaded Mask Image is used as a prefix to all ROI names.			
AlliGator Quit Source Image ROI Manager		Handles Source Image ROI manager quit event.			
AlliGator Reject Source Image ROIs based on Characteristics		Computes ROI characteristics and compare them to the conditions defined by the user in a dialog box. Keeps only the ROIs that meet those conditions.			
AlliGator ROIs to Mask Image		Uses existing ROIs to build a mask image summarizing their information. Define ROIs as sets of Mask Image pixels with identical integer values.			
AlliGator Select Source Image ROI		Selects Source Image ROI(s).			
AlliGator Set Source Image ROI ID		Change the selected Source Image ROI ID.			
AlliGator Source Image Edit ROI Name		Changes current Source Image ROI name.			
AlliGator Source Image ROI Manager		Source Image ROI list display UI.			
AlliGator Source Image ROI Storage [MULT] v3	[AlliGator ROIs.lvlib:AlliGator Source Image ROI Storage [MULT] v3.vi]	Handles multiple Source Image ROIs storage.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Source Image ROI Storage [SGL] v3	[AlliGator ROIs.lvlib:AlliGator Source Image ROI Storage [SGL] v3.vi]	Handles single Source Image ROI storage.			
AlliGator Check Current Source Image ROI		No description found (add content in vi description)			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.33.2. Library Constant VIs

NOTE No Constant VIs Found

2.34. AlliGator Scripts.lvlib

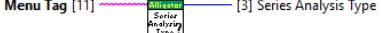
Responsibility: AlliGator actions performing a series of sequential tasks.

Version: 1.0.0.0

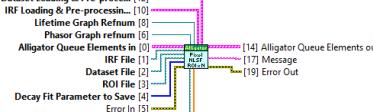
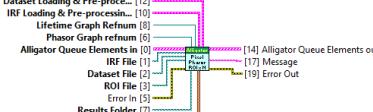
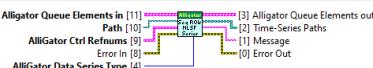
2.34.1. Functions

Table 34. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Calibrated Phasor Map Series Dialog		Dialog window to enter the information needed to run the Calibrated Phasor Map Series script.			
AlliGator Calibrated Phasor Maps Series Script		Loops through a series of FLI Dataset files, loads them with the specified gate step, and performs an All ROIs Phasor Analysis, using the resulting phasor plot as Phasor Calibration Map. This map is then save and optionally, the phasor plot as well.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Clear Internal Variables before Script		Clears internal data structure before a script.			
AlliGator Get Series Analysis Type		Decodes menu tag to determine whether an action is limited to the Current ROI or All ROIs .			
AlliGator Get Series Dataset Type		Converts Dataset Series type to FLI Dataset type enum.			
AlliGator Get Series Subfolders Information		Returns a breakdown of the folder's content for subsequent script actions.			
AlliGator Get-Set Data Information		Gets/Sets Dataset Information stored in the Settings Storage.vi			
AlliGator Get-Set Loading & Pre-Processing Options	[AlliGator Scripts.lvlib:AlliGator Get-Set Loading & Pre-Processing Options.vi]	Gets/Sets Data Information, Source Image Settings and Decay Preprocessing from/in the Settings Storage.vi.			
AlliGator Get-Set Source Image Settings		Gets/Sets Source Image options.			
AlliGator Load ROIs, Select one ROI (& Convert to Pixel ROIs) Script	[AlliGator Scripts.lvlib:AlliGator Load ROIs]	Script loading the selected ROI from a multi-ROIs file, This requires a number of subsequent steps that are queued by this script.			
AlliGator Load, Merge & to Pixel ROIs Script	[AlliGator Scripts.lvlib:AlliGator Load]	Loads a (multi-) ROI(s) file and merges all the ROIs (including the existing ones), before converting it to a list of single-pixel ROIs.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Logistic Square Gated IRF Characteristics Map		Computes the decays of all ROIs and fits them with a logistic square gate model. Saves the results in an ASCII file.			
AlliGator Logistic Square Gated IRF Fit Result File String		Builds string containing the output of a logistic square gate fit.			
AlliGator NLSF & Phasor Multi-ROI Analysis Dialog	[AlliGator Scripts.lvlib:AlliGator_NLSF & Phasor Multi-ROI Analysis Dialog.vi]	Dialog window to set up a multi-ROIs single-pixel NLSF analysis of a FLI dataset.			
AlliGator Phasor Calibration Map Series Dialog		Dialog to enter the parameters necessary for the calculation of a Series of Phasor Calibration Maps differing by the gate step used when loading the FLI dataset.			
AlliGator Phasor Calibration Maps (# Gates Series) Script	[AlliGator Scripts.lvlib:AlliGator_Phasor_Calibration_Maps (</mark> Gates Series) Script.vi];	Series of Phasor Calibration Map differing by the gate step used when loading the FLI dataset script.			
AlliGator Playback Time-Gated Data Series v2		Launches the playback of a FLI dataset series.			
AlliGator Save Single Phasor Plot Script		Script used to save the last Phasor Plot in the Phasor Graph with the specified name and folder.			
AlliGator Script Current ROI Time-Gated Data Series NLSF Analysis v1		Script performing NLSF analysis of the current ROI for the series of FLI dataset in the provided folder.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Script Current ROI Time-Gated Data Series Phasor Analysis v2		Script computing a phasor plot consisting of the current ROI's phasor in the FLI dataset series.			
AlliGator Script Destination File Path		Gets the Script Destination File Path internal variable.			
AlliGator Script Export ROI Fit Parameters as ASCII		Script saving the Decay Fit Parameter Map parameters selected by the user to individual ASCII files (one file per parameter per ROI). This script works for a single ROI or all ROIs.			
AlliGator Script Multi-ROI Single-Pixel NLSF Analysis		Scripts performing NLSF analysis of all pixels in all ROIs, using individual IRFs if provided.			
AlliGator Script Multi-ROI Single-Pixel Phasor Analysis		Scripts performing phasor analysis of all pixels in all ROIs, using individual IRFs if provided.			
AlliGator Script Open Mask Image		Script used to open a Mask Image and identify the corresponding ROIs.			
AlliGator Script Open White Light Image		Script used to open a White Light Image .			
AlliGator Script Sequential ROIs Time-Gated Data Series NLSF Analysis		Script performing NLSF analysis of a different ROI for each dataset in a series. This is used for instance if the ROI list is representing the successive locations of an object being tracked across the dataset series.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Script Sequential ROIs Time-Gated Data Series Phasor Analysis		Script performing phasor analysis of a different ROI for each dataset in a series. This is used for instance if the ROI list is representing the successive locations of an object being tracked across the dataset series.			
AlliGator Square Gated IRF Characteristics Map		Performs a crude square gate analysis of all ROI decays and saves the gate parameters in an ASCII file.			
AlliGator Tilted Square Gated IRF Characteristics Map		Performs a tilted logistic square gate NLSF analysis of all ROI decays and saves the gate parameters in an ASCII file.			
AlliGator Toggle (Loop) Playback		Toggles from normal playback (stops at the end of the series) to looped playback or vice versa.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.34.2. Library Constant VIs

NOTE No Constant VIs Found

2.35. AlliGator Settings.lvlib

Responsibility: VIs handling user-defined parameters.

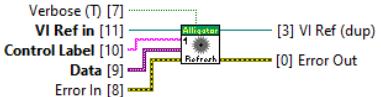
Version: 1.0.0.0

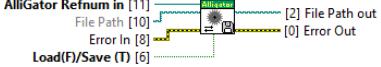
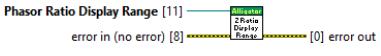
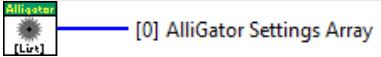
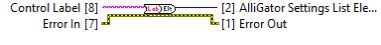
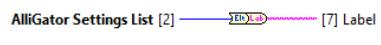
2.35.1. Functions

Table 35. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Check Fit Options		Handles user-initiated parameter changes in the Fit Options panel.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute Natural Frequency		Computes the "natural" phasor frequency as a functions of various settings parameters.			
AlliGator Export Settings Parameter JSON String to Clipboard		Reads the control's value and creates a JSON string describing it and copies it into the clipboard.			
AlliGator Gate Separation (ns)		Returns the Gate Separation settings parameter.			
AlliGator Get Available Fitting Parameters		Returns list of parameters not in the Parameter Names list.			
AlliGator Get Control Label & Settings Element	[AlliGator Settings.lvlib:AlliGator Get Control Label & Settings Element.vi]	Returns the label string of the Settings control whose CtlRef refnum is provided, as well as the corresponding AlliGator Settings List enumerated value.			
AlliGator Get Control Notebook String		Formats the input Value of the control whose Control Label is provided into a string. A special case is needed when units are involved, otherwise the default case should be able to handle all other cases.			
AlliGator Get Phasor Ratio Interpolated Color Scale		Builds a Interpolated Color Scale Definition based on the colors associated with both references.			
AlliGator Hot Pixel Removal Options String		Builds a string defining the hot pixel removal options.			
AlliGator Init Settings v2		Resets selected Settings parameters to their default values.			
AlliGator Laser Period		Settings Data Information:Laser Period value.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Nanotime Gate Separation	(g) [0] Nanotime Gate Separation	Settings Data Information:Nanotime Gate Separation value.			
AlliGator Number of Gates	(g) [0] # Gates	Settings Data Information:# Gates value.			
AlliGator Phasor Frequency	(f) [0] Phasor Frequency	Settings Data Information:Phasor Frequency value.			
AlliGator Refresh All Settings		Reads all Settings values and refresh the corresponding controls and indicators with those values.			
AlliGator Refresh Single Setting		Refresh the control with Control Label with the provided Data . Optionally sends this label and value to the Notebook.			
AlliGator Remove Duplicated Fit Parameter Constraints		Removes any potential duplicate entries in the array of fit parameter constraints.			
AlliGator Reorder Decay Pre-processing Operations		Dialog window allowing the user to reorder decay pre-processing steps.			
AlliGator Save-Load Parameter Map Color Palette List		Loads/Save the list of palettes used for the Decay Fit Parameter Map in the AlliGator Settings ini file.			
AlliGator Save-Load Phasor Plot Color Palette List		Loads/Save the list of palettes used for the Phasor Plot in the AlliGator Settings ini file.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Save-Load Settings		<p>Use this file to Save or Load AlliGator's settings to an ini file.</p> <p>If the File Path input is left unconnected, the default ini file is used (overriding the current ini file).</p> <p>To save settings in a user-specified location, either provide a valid path, or connect a "Not a Path" constant to the input. A File Dialog window will then open to allow the user to choose a path.</p>			
AlliGator Save-Load Source Image Color Palette List		Loads/Save the list of palettes used for the Source Image in the AlliGator Settings ini file.			
AlliGator Save-Load Source Image Overlay Color Palette List		Loads/Save the list of palettes used to overlay a phasor-based map on the Source Image in the AlliGator Settings ini file.			
AlliGator Set Phasor Ratio Display Range		Constrains the sliders of the Phasor Ratio (or other parameter) Range to the displayed slide's min and max values.			
AlliGator Settings Array		Returns the complete list of settings parameters (values of the enumerated constant).			
AlliGator Settings Control Label to Element		Convert Control label to Settings Parameter List enum.			
AlliGator Settings Element to Control Label		Returns the last string after the rightmost semicolon in the parameter's name., which corresponds to the control's label.			
AlliGator Settings Event Refnum		Sends user event to the Settings window.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Settings Names		Returns the list of settings parameter names stored internally.			
AlliGator Settings Storage		Get/Set Settings parameter values using variant attributes.			
AlliGator Settings to String v2		Returns a string listing all or only the selected settings.			
AlliGator Settings Window		GUI providing access to settings parameters for all aspect of AlliGator's functions.			
AlliGator Special Controls Update		Handles update of some Settings controls & indicators as a result of settings changes.			
AlliGator SYNC Period		Returns the SYNC Period stored in Settings.			
AlliGator Update Channel File Settings		Updates the values of the Channel Name and Channel Arithmetic controls, as well as of the hidden Available Channel Names indicator.			
AlliGator Update Settings & Control	[AlliGator Settings.lvlib:AlliGator Update Settings Control.vi]	Updates the Control whose reference or label is passed. The Settings window is updated as well (or if the Settings Window is the sender, AlliGator is).			
AlliGator Update Settings Available Channel Names		Updates the Channel Name control in the Settings window.			
AlliGator Update Settings Dataset Channel		Updates Source Image according to the Selected Channel .			

Name	Connector pane	Description	S.	R.	I.
AlliGator Update Settings Decay Shift Parameters Visibility		Updates the visibility of controls related to shift pre-processing operations.			
AlliGator Update Settings Fit Options Laser Period		Updates the Fit Options cluster's Laser Period obtained from the Data Information tab of the Settings if the User Data Information Period option is selected.			
AlliGator Update Settings Fit Options		If the Laser Period parameter of the Fit Options is modified, and it is different from the value associated with the dataset, toggles the Use Data Information Laser Period checkbox off.			
AlliGator Update Settings Guess Parameter Arrays		Handles user modifications of the Guess Parameter Names and/or Guess Parameter Values in the Settings window. Ensures that both arrays have the same size.			
AlliGator Update Settings IRF Analysis Method Control		Update decay shifting parameters in the Settings window.			
AlliGator Update Settings Python Options & Valid Flag	[AlliGator Settings.lvlib:AlliGator Update Settings Python Options & Valid Flag.vi]	Updates Python Plugins options and Valid Session flag in the Settings window.			
AlliGator Update Settings Python Options		Updates Python Plugins options in the Settings window.			
AlliGator Update Settings SEPL Parameters		Updates SEPL parameters in the Settings window.			

Scope: ⚡ → Protected | ⚡ → Community

Reentrancy: 🗃 → Preallocated reentrancy | 🗃 → Shared reentrancy

Inlining: 📁 → Inlined

2.35.2. Library Constant VIs

NOTE No Constant VIs Found

2.36. AlliGator Shot Noise Influence on Average Lifetime.lvlib

Responsibility: VIs used for the Shot Noise Influence on Average Lifetime Analysis Tool.

Version: 1.0.0.0

2.36.1. Functions

Table 36. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Compute Shot Noise Average Lifetime Simulation Histograms		Computes histograms and summary statistics for the computed lifetimes.			
AlliGator Shot Noise Influence on Average Lifetime		Main window of the Shot Noise Influence on Average Lifetime tool.			
AlliGator Simulate Average Lifetime of Linear Combination		Performs the simulations used in the Shot Noise Influence on Average Lifetime tool.			

Scope: ⚡ → Protected | ⚡ → Community

Reentrancy: 🗃 → Preallocated reentrancy | 🗃 → Shared reentrancy

Inlining: 📁 → Inlined

2.36.2. Library Constant VIs

NOTE No Constant VIs Found

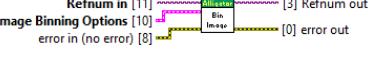
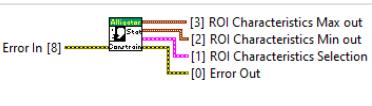
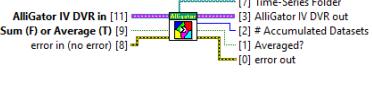
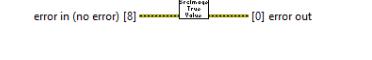
2.37. AlliGator Source Image.lvlib

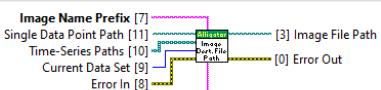
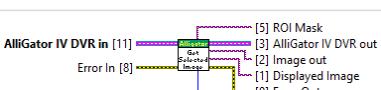
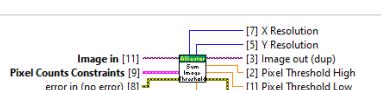
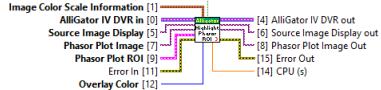
Responsibility: VIs handling Source Image actions.

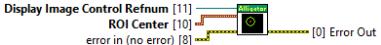
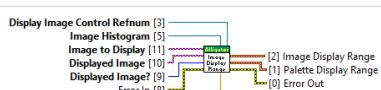
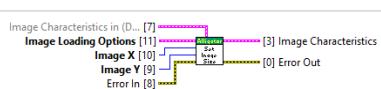
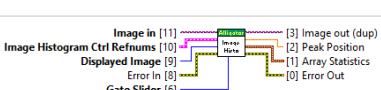
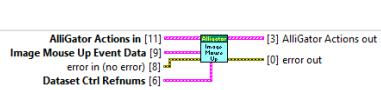
Version: 1.0.0.0

2.37.1. Functions

Table 37. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Scale Bar Overlay		Draws a scale bar overlay on the Source Image.			
AlliGator Bin Simple Image		Bins an image according to the Settings:Source Image:Image Binning Options.			
AlliGator Clear Source Image Overlay		Erase selected overlays in the Source Image.			
AlliGator Define ROI Selection Criteria		Dialog to define selection/rejection criteria for ROIs based on computed characteristics.			
AlliGator Display Accumulated Dataset		Displays the Sum of all accumulated images or their mean, depending on the user-selected menu option.			
AlliGator Display True Pixel Value		No description found (add content in vi description)			
AlliGator Export Average Lifetime Map as ASCII		Saves the average lifetime map (computed after overlay on the Source Image, to a ASCII matrix file.			
AlliGator Export Phasor Ratio Map as ASCII		Saves the phasor ratio map (computed after overlay on the Source Image, to a ASCII matrix file.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Export User-Defined Quantity Map as ASCII		Exports the User-defined quantity matrix as an ASCII file.			
AlliGator Find Optimal ROI		Find the ROI center in either one of the following two ways: - use the barycenter - use the pixel with maximum intensity			
AlliGator Get Hot Pixel Removal String		Builds string describing hot pixel removal options.			
AlliGator Get Image Destination File Path		Builds path to save a front panel object's image based on its source and the current dataset.			
AlliGator Get Image Smoothing String		Builds image smoothing options string.			
AlliGator Get Selected Image to Display		Gets the selected Image structure.			
AlliGator Get Sum Image Threshold		Computes intensity threshold based on the multi-parameter Pixel Rejection criteria.			
AlliGator Highlight Phasor ROI in Original Image v3		Compute and overlays the selected Phasor Plot ROI's pixels in the Source Image.			
AlliGator Image Contrast Status		Raises the flag when calling the action. Lowers it when done.			
AlliGator Is Search ROI Modified		If the "Use Search ROI" option is checked and the user modified the ROI, uncheck this option.			

Name	Connector pane	Description	S.	R.	I.
AlliGator Overlay ROI Center		Overlays the provided ROI center on the Source Image.			
AlliGator Overlay ROI Median		No description found (add content in vi description)			
AlliGator Set Check Marks in Source Image Overlay to Erase Button Menu		Sets checkmarks in front of menu items for the "Erase Overlay" button of the Source Image.			
AlliGator Set Image Display Range		Handles Source Image display range using the Histogram.			
AlliGator Set Loaded Image Resolution		Sets the loaded image's resolution from the provided information.			
AlliGator Single Image Histogram		Computes image histogram and associated parameters.			
AlliGator Source Image Context Menu Handler		Converts menu items into Source Image actions.			
AlliGator Source Image Mouse Move Event		Handles mouse move event in the Source Image: if the Phasor Plot panel is visible and the SHIFT key is pressed, request phasor information update.			
AlliGator Source Image Mouse Up Event		Handles mouse up event (signifying the end of an action).			
AlliGator Source Image Overlay List		List of overlay groups on the Source Image (constant).			

Name	Connector pane	Description	S.	R.	I.
AlliGator Source Image Scale Bar		Computes scale bar parameters based on user-defined options.			
AlliGator Source Image Selection		Builds sequence of actions following a Source Image ROI selection.			
AlliGator Store Search ROI		Stores Search ROI definition.			
AlliGator Test Flat Field Correction		Test VI to correct for flatfield distortions.			
AlliGator Update Checkmarks in Source Image Overlay to Erase Button Menu		Builds the list of items to display with a checkmark in front of them in the Source Image's Erase Overlay button's context menu.			
AlliGator Update Displayed Image		Updates displayed image if background correction is not expected to follow immediately after.			
AlliGator Update Local Decay Window Event		Sends an update event to the Local Decay Window.			

Scope: → Protected | → Community

Reentrancy: → Preallocated reentrancy | → Shared reentrancy

Inlining: → Inlined

2.37.2. Library Constant VIs

NOTE No Constant VIs Found

2.38. AlliGator Files Tests.lvlib

Responsibility: Tests different files loading

2.38.1. Functions

Table 38. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Test FLI Dataset [All] Loading	[AlliGator Files Tests.lvlib:AlliGator Test FLI Dataset [All] Loading.vi]	No description found (add content in vi description)			
AlliGator Test FLI Dataset [B&H-SDT] Loading	[AlliGator Files Tests.lvlib:AlliGator Test FLI Dataset [B&H-SDT] Loading.vi]	No description found (add content in vi description)			
AlliGator Test FLI Dataset [Gate Images-LaVision ICCD] Loading	[AlliGator Files Tests.lvlib:AlliGator Test FLI Dataset [Gate Images-LaVision ICCD] Loading.vi]	No description found (add content in vi description)			
AlliGator Test FLI Dataset [Gate Images-SPAD512S] Loading	[AlliGator Files Tests.lvlib:AlliGator Test FLI Dataset [Gate Images-SPAD512S] Loading.vi]	No description found (add content in vi description)			
AlliGator Test FLI Dataset [HDF5] Loading	[AlliGator Files Tests.lvlib:AlliGator Test FLI Dataset [HDF5] Loading.vi]	No description found (add content in vi description)			
AlliGator Test FLI Dataset [PicoQuant-BIN] Loading	[AlliGator Files Tests.lvlib:AlliGator Test FLI Dataset [PicoQuant-BIN] Loading.vi]	No description found (add content in vi description)			
AlliGator Test FLI Dataset [PicoQuant-PTU] Loading	[AlliGator Files Tests.lvlib:AlliGator Test FLI Dataset [PicoQuant-PTU] Loading.vi]	No description found (add content in vi description)			

Scope:  → Protected |  → CommunityReentrancy:  → Preallocated reentrancy |  → Shared reentrancyInlining:  → Inlined

2.38.2. Library Constant VIs

NOTE No Constant VIs Found

2.39. AlliGator Test Suite.lvlib

Responsibility: No description found (add content in lvlib description)

Version: 1.0.0.0

2.39.1. Functions

Table 39. Functions (non private scope only)

Name	Connector pane	Description	S.	R.	I.
AlliGator Add Test Result		No description found (add content in vi description)			
AlliGator Test Internal Data		Updates tested VI's error code.			
AlliGator Test Suite		Runs a series of tests.			
AlliGator Wait for Test Result [no Error]		No description found (add content in vi description)			

Scope:  → Protected |  → Community

Reentrancy:  → Preallocated reentrancy |  → Shared reentrancy

Inlining:  → Inlined

2.39.2. Library Constant VIs

NOTE No Constant VIs Found

Chapter 3. Legal Information

3.1. Document creation

This document has been generated using the following tools.

3.1.1. Antidoc

Project website: [Antidoc](#)

Maintainer website: [Wovalab](#)

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3.1.2. Asciidoc for LabVIEW™

Project website: [Asciidoc toolkit](#)

Maintainer website: [Wovalab](#)

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3.2. Product used in the project

Antidoc hasn't been able to detect third party products in the project. This is the author's responsibility to list any of the missing product used.