Console

The console is an element of the main GUI. Data appears in the console when a sample or a curve is highlighted in the main GUI and when operations have completed such as dose estimation. The console displays information in real-time, while reports can be used to save information related to samples, calibration curves, or dose estimation results. The console also contains tabular output when a plot is generated, providing a method to view the numerical data which forms the plot.

Example console output

The console is updated in real-time upon completion of a variety of events. Some example console output is shown below.

A sample has completed processing

---------- May 23 15:43:13
Summary of Processing Sample: **Xray 0**
In the file folder of Xray 0: D:/BioDosimetry Curve Data/AECL/Xray 0
500 image file(s) are found in total. 500 file(s) are processed. 0 file(s) are damaged, corrupted or missing.

A sample is highlighted

---------- May 23 15:16:46
Sample: **CNL2GyAll**
Description:

Images in total: 996
Images path: D:\BioDosimetry Curve Data\AECL\CNL Xray 2Gy All Inv
DC analysis result in all 996 images
DCs in all images, FP flag 126

SVMs	Sigma 0.8	Sigma 0.9	Sigma 1.0	Sigma 1.1	Sigma 1.2	Sigma 1.3	Sigma 1.4	Sigma 1.5	Sigma 1.6	Sigma 1.7	Sigma 1.8
DC Count	6	37	65	132	193	247	289	349	409	447	489
DC Frequency	0.006	0.037	0.065	0.133	0.194	0.248	0.290	0.350	0.411	0.449	0.491

DC analysis result in 996 selected images, no image selection applied, using all images
DCs in selected images, FP flag 126

SVMs	Sigma 0.8	Sigma 0.9	Sigma 1.0	Sigma 1.1	Sigma 1.2	Sigma 1.3	Sigma 1.4	Sigma 1.5	Sigma 1.6	Sigma 1.7	Sigma 1.8
DC Count	6	37	65	132	193	247	289	349	409	447	489
DC Frequency	0.006	0.037	0.065	0.133	0.194	0.248	0.290	0.350	0.411	0.449	0.491

A curve is highlighted

---------- May 23 15:20:43
Curve: **TestCurve**
Description:
Combined Filter 4.0, 3.0, 4.0, 5.0, 2.0, 1.0, Top 250 images, No 0.5 Gy, Image filter [40, 65] applied before sorting images, All FP Filters enabled mask 1111110, sigma 1.5
SVM Sigma: **Sigma 1.5**; Applicable Range [0.0Gy - 4.0Gy]
Applied Image Selection Model File: None
Coefficients of Curve

Terms	Intercept	Dose^1	Dose^2
Coefficients	0.038172	0.076590	0.007157
S.D. +/-	0.006698	0.007934	0.001902

Fitting Stats: Chi-square 0.000101308; R^2 (Coefficient of Determination) 0.999899; Degrees of Freedom 2

Dose estimation is performed

---------- May 23 15:22:24
Dose Estimation using Curve: **TestCurve**
Dose Estimation Result

DC Frequency Name	DC Frequency	SVM	Estimated Dose	Dose 95% LCL	Dose 95% UCL	CL Uncertainty	Applied Image Selection Model
INTC003S04_All_Sigma 1.5_0.445	0.445141	Sigma 1.5	3.90Gy	Disabled	Disabled	CL is disabled	No image selection is applied
INTC003S05_All_Sigma 1.5_0.530	0.529797	Sigma 1.5	*4.00 Gy	Disabled	Disabled	CL is disabled	No image selection is applied
INTC003S07_All_Sigma 1.5_0.570	0.570068	Sigma 1.5	*4.00 Gy	Disabled	Disabled	CL is disabled	No image selection is applied

CL: confidence limit. LCL, UCL: lower, upper CL.
*(if present in table): the estimated dose or dose CL is out of bounds.
^(if present in table): the calibration curve is ill-formed at region of the estimated dose. The DC frequency matches multiple doses

A classified object / segmented object plot is generated

---------- May 23 15:34:18
Classified Ratio Distribution in sample **CNL3GyAll**
Distribution part 1

Classified Ratio Range	[0.00, 0.05)	[0.05, 0.10)	[0.10, 0.15)	[0.15, 0.20)	[0.20, 0.25)	[0.25, 0.30)	[0.30, 0.35)	[0.35, 0.40)
Percentage of Such Images	0.008	0.000	0.000	0.001	0.001	0.005	0.010	0.017

Distribution part 2

Classified Ratio Range	[0.50, 0.55)	[0.55, 0.60)	[0.60, 0.65)	[0.65, 0.70)	[0.70, 0.75)	[0.75, 0.80)	[0.80, 0.85)	[0.85, 0.90)
Percentage of Such Images	0.078	0.078	0.076	0.094	0.099	0.109	0.108	0.105