DRIQ version history

DRIQ 1.6.6.2 - 20250206 0:0######

File/Routine altered: JLLib

Details of changes:

Added error check for infite pixel size to getPixelSize routines

DRIQ 1.6.6.1 - 20241219 0:0######

File/Routine altered: JLLib, mammoAECs

Details of changes:

Made getChestWall public, create new mammoAEC routine to get more robust detection of CNR test object

DRIQ 1.6.6.0 - 20241217 0:0######

File/Routine altered: JLLib

Details of changes:

Updated findAl routines to restrict to user Roi if specified

DRIQ 1.6.5.9 - 20241203 0:0######

File/Routine altered: DRIQCommons

Details of changes:

Updated copyFile routine (used by JLDICOMBrowser when user chooses to copy a file) as it was incredibly slow for windows network drives

DRIQ 1.6.5.8 - 20230822 0:0######

File/Routine altered: JLLib

Details of changes:

Updated find Al routines to subtract a 2d polynomial surface before thresholding

DRIQ 1.6.5.8 - 20230822 0:0######

File/Routine altered: DICOMDecoderJL

Details of changes:

Updated to use same version as SPICE-CT to handle more modern DICOM files

DRIQ 1.6.5.7 - 20231121 0:0#####

File/Routine altered: MTFPluginEdge

Details of changes:

Added option to apply Hanning window for MTF calculation

DRIQ 1.6.5.7 - 20231121 0:0#####

File/Routine altered: **DRIQSettings**

Details of changes:

Added option to apply Hanning window for MTF calculation

DRIQ 1.6.5.6 - 20230521 0:0######

File/Routine altered: DQE

Details of changes:

Added rebinExact output to the displayed results table

DRIQ 1.6.5.6 - 20230521 0:0######

File/Routine altered: NEQ

Details of changes:

Corrected to store the rebinned frequency data again so that the DQE routine can run

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: NEQ

Details of changes:

Updated to rebin the NEQ after full freq calculation instead of before in order to avoid interpolation errors (particularly at low frequencies)

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: JLLib

Details of changes:

Added bubbleSort(double[][])

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: JLLib

Details of changes:

Added rebinExact which rebins and then interpolates to estimate binned values at exactly the bin centre

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: NEQ

Details of changes:

Added rebinExact output to the displayed results table

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: MTFPluginEdge

Details of changes:

Added rebinExact output to the displayed results table

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: MTFPluginEdge

Details of changes:

Used rebinExact to calculate MTF50 and MTF10 and added MTF20 to the output

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: DR_IQ

Details of changes:

Corrected bug that left 'SDNR', 'average dicom stack', 'CIRS', and 'find focal plane' buttons enabled when in settings

DRIQ 1.6.5.5 - 20230815 0:0######

File/Routine altered: DR_IQ

Details of changes:

Updated path to help file

DRIQ 1.6.5.4 - 20221021 0:0######

File/Routine altered: mammoAECs

Details of changes:

Removed erroneous minus one for stdev calcs

DRIQ 1.6.5.3 - 20221020 0:0######

File/Routine altered: mammoAECs

Details of changes:

Ensured correct ImageProcessor used for each slice.

DRIQ 1.6.5.2 - 06/09/2022 0:0######

File/Routine altered: JLLib

Details of changes:

Added getAl20220906 as an improved version of finding the CNR target

DRIQ 1.6.5.1 - 20220831 14:0#####

File/Routine altered: JLLib

Details of changes:

Added median filter to full image before binarising in getAl routine.

DRIQ 1.6.5 - 19000100 0:0#####

File/Routine altered: JLLib

Details of changes:

Added routines mmToPixels and pixelsToMm as very common tasks. Made getPixelSizeXQuiet and getPixelSizeYQuiet check for mammo and use the mammo version if needed

DRIQ 1.6.4.9 - 20220818 2:24######

File/Routine altered: mammoAECs

Details of changes:

Added average background stdev to output of SDNR (CNR) routine

DRIQ 1.6.4.8 - 20220815 15:0######

File/Routine altered: DRIQ

Details of changes:

Added find focal plane button

DRIQ 1.6.4.7 - Beta 0:0#####

File/Routine altered: JLLib, mammoAECs, DRIQCommons

Details of changes:

Added getChestWall method to JLLib, moved getAl and related routines from MammoAECs to JLLib and getX,getY,getWidth,getHeight from DRIQCommons to JLLib

DRIQ 1.6.4.6 - Beta 0:0######

File/Routine altered: JLLib

Details of changes:

Edited findFocus to use user roi or make an roi by the chest wall edge if no roi provided.

DRIQ 1.6.4.5 - Beta 0:0######

File/Routine altered: mammoAECs

Details of changes:

mammoAECs created new more robust method to find the aluminium (even for stereo and mag) plus changed to use NCCPM rois. Renamed button to "SDNR (CNR)"

DRIQ 1.6.4.4 - Beta 0:0######

File/Routine altered: JLLib

Details of changes:

Editted VirtualStackJL and getWindowAndLevelFromDICOMtags to correct the auto window and level functions and to apply the inverting lookup tables correctly

DRIQ 1.6.4.3 - Beta 0:0#####

File/Routine altered: JLLib

Details of changes:

Editted VirtualStackJL to improve opening of single slice from multiple volumes in a single stack

DRIQ 1.6.4.2 - Beta 0:0######

File/Routine altered: JLLib

Details of changes:

Added a get focal plane method to find the most focussed slice in a tomo stack

DRIQ 1.6.4.1 - Beta 0:0######

File/Routine altered: JLLib

Details of changes:

Edited VirtualStackJL to allow opening a single slice from each of multiple DICOM volumes

DRIQ 1.6.4 - Beta 0:0#####

File/Routine altered: DRIQCommons, JLLib

Details of changes:

Added function to set the window and level based on the DICOM header

DRIQ 1.6.3.9 - 20211004 20:55######

File/Routine altered: DRIQCommons, DRIQsettings, JLDICOMBrowser

Details of changes:

Added option to specify the distance from the chest wall roi for mammography systems

DRIQ 1.6.3.8 - 20211004 17:11#####

File/Routine altered: DRIQCommons

Added display of the number of visible rows, total rows and selected rows

DRIQ 1.6.3.7 - 20210920 19:23######

File/Routine altered: JLLib, DRIQCommons, DR_IQ

Details of changes:

Changed auto window and level, DR_IQ linearise and VirtualStackJL so that the calibration applied per slice in VirtualStackJL's works with linearised images too.

DRIQ 1.6.3.6 - 20210917 16:13#####

File/Routine altered: JLLib

Details of changes:

Corrected JLOpener so that it correctly applies the calibration to VirtualStacksJL with signed short data and updates the calibration each time the slice is changed.

DRIQ 1.6.3.5 - 20210624 15:28######

File/Routine altered: JLLib

Details of changes:

Corrected VirtualStackJL in JLLib (added newline after "JL VIRTUAL STACK FILE NAME" tag)

DRIQ 1.6.3.4 - 20210226 14:0######

File/Routine altered: DRIQ

Details of changes:

Updated link to manual under help button

DRIQ 1.6.3.4 - 20210226 14:0######

File/Routine altered: JLDICOMBrowser

Used equalizeJL to ensure that the window and level were set automatically when opening images from a DICOMBrowser object.

DRIQ 1.6.3.4 - 20210226 14:0######

File/Routine altered: DRIQCommons

Details of changes:

Used equalizeJL to ensure that the window and level were set automatically when opening images from a DICOMBrowser object.

DRIQ 1.6.3.4 - 20210226 14:0######

File/Routine altered: JLLib

Details of changes:

Created custom automatic adjustment of window and level getAutoWindowMinMax(ImageProcessor), equalizeJL(ImageProcessor,ImagePlus). Added function setID to VirtualStackJL. Used setID to assign the ImagePlus ID to the VirtualStackJL on creation in JLopener. Edited VirtualStackJL to call equalizeJL when user changes the

DRIQ 1.6.3.3 - 20210222 16:10######

File/Routine altered: JLLib

Details of changes:

Undid automatic adjustment of window and level in VirtualStackJL (introduced in 1.6.3.1) to avoid inadvertently changing pixel values in some images

DRIQ 1.6.3.2 - 20210221 8:10######

File/Routine altered: DRIQ

Details of changes:

ResultsTable method was changed in ImageJ version 1.53. Added check that user is running ImageJ 1.53 or higher.

DRIQ 1.6.3.1 - 20210220 23:5######

File/Routine altered: All

Moved into package to avoid conflicts

DRIQ 1.6.3.1 - 20210220 23:5######

File/Routine altered: JLLib

Details of changes:

Made automatically adjust window and level in VirtualStackJL for each slice

DRIQ 1.6.3 - 20210219 17:10#####

File/Routine altered: JLLib

Details of changes:

Corrected getInterpolationIndex in JLlib - was potentially failing if x values intially increased but then decreased or vice versa. Now returns first cross-over point regardless of functional form of x

DRIQ 1.6.3 - 20210219 17:10#####

File/Routine altered: DRIQSettings

Details of changes:

Added new setting to give option of older version of output for fiveRoiAnalysis, added check to upgrade settings file to include the new setting

DRIQ 1.6.3 - 20210219 17:10######

File/Routine altered: DRIQCommons

Details of changes:

edited default settings to include the new setting for quadrant analysis

DRIQ 1.6.3 - 20210219 17:10######

File/Routine altered: MTFPluginEdgeJLIEC

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10#####

File/Routine altered: MTFPluginEdge

Details of changes:

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10#####

File/Routine altered: NEQ

Details of changes:

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10#####

File/Routine altered: mammoAECs

Details of changes:

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10######

File/Routine altered: hotelling

Details of changes:

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10######

File/Routine altered: DQE

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10######

File/Routine altered: CIRSAnalysis

Details of changes:

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10#####

File/Routine altered: NNPSJLIEC

Details of changes:

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10######

File/Routine altered: NNPSJL

Details of changes:

Used JLShowResultsTable to show a results table without overwriting an existing table

DRIQ 1.6.3 - 20210219 17:10######

File/Routine altered: Uniformity

Details of changes:

Added option to run on stack (plots are not interactive if this is chosen. Used JLShowResultsTable to show a results table without overwriting an existing table, used addDICOMTagsToResultsTable which adds the images dicom tags to the current line in the specified ResultsTable

DRIQ 1.6.2.8 - 20210216 21:56######

File/Routine altered: fiveRoiAnalysis

Changed output format to make it more suitable for stacks and created prompt for user ask if want to run on stack or current slice

DRIQ 1.6.2.8 - 20210216 21:56######

File/Routine altered: DRIQCommons

Details of changes:

Added routine JLShowResultsTable to show a results table without overwriting an existing table. Added method addDICOMTagsToResultsTable which adds the image's dicom tags to the current line in the specified ResultsTable

DRIQ 1.6.2.7 - 20210105 22:5######

File/Routine altered: DRIQCommons

Details of changes:

Added DICOM tag for tomo projection angle for systems other than GE

DRIQ 1.6.2.7 - 20210105 22:5######

File/Routine altered: DRIQCommons

Details of changes:

Made copy file option (added in 1.6.2.6) launch in new thread to allow display of progress

DRIQ 1.6.2.6 - 20210105 11:48#####

File/Routine altered: DRIQCommons

Allowed DICOMBrowser to handle .csv format, added option to copy selected files in browser.

DRIQ 1.6.2.5 - 20200326 20:52######

File/Routine altered: JLLib

Details of changes:

 $Corrected\ getInterpolationIndex\ in\ JLlib\ -\ was\ potential\ to\ incorrectly\ think\ x\ values\ were\ in\ descending\ order$

DRIQ 1.6.2.4 - 20200304 14:16#####

File/Routine altered: DRIQCommons

Details of changes:

Corrected public double getCalibratedStdDev(ImageProcessor ipIn,Roi roiIn,double calibratedMeanIn,Calibration cIn) to stop using call to jl lib

DRIQ 1.6.2.3 - 20200304 13:56#####

File/Routine altered: DRIQ

Details of changes:

Added button for CIRS CESM phantom Analysis

DRIQ 1.6.2.3 - 20200304 13:56######

File/Routine altered: CIRSAnalysis

Details of changes:

New file

DRIQ 1.6.2.2 - 20181117 21:21#####

File/Routine altered: JLDICOMBrowser

Added correction to handle imagej munged signed 16-bit data files

DRIQ 1.6.2.2 - 20181117 21:21#####

File/Routine altered: DRIQCommons

Details of changes:

Added correction to handle imagej munged signed 16-bit data files

DRIQ 1.6.2.1 - 20171106 9:50######

File/Routine altered: DRIQ

Details of changes:

forced user to have ImageJ 1.51p or later as otherwise ImageJ bug in roi drawing causes problem $\,$

DRIQ 1.6.2 - 20171030 17:3#####

File/Routine altered: DRIQCommons

Details of changes:

corrected method getBasicCalibrationFromHeader routine to cope with pixelrepresentation==1 (previously where this was the case the pixel intercept was not being applied (therefore did not work with GE scanners)

DRIQ 1.6.1 - 20171005 17:14#####

File/Routine altered: JLDICOMBrowser

Details of changes:

Fixed DICOM browser to be able to handle CT dose reports.

DRIQ 1.6 - 20170927 12:32######

File/Routine altered: NNPS

modularised to reduce code duplication by using rebin function in DRIQCommons

DRIQ 1.6 - 20170927 12:32######

File/Routine altered: MTF

Details of changes:

modularised to reduce code duplication by using rebin function in DRIQCommons

DRIQ 1.5.8.3 - 20170719 17:2#####

File/Routine altered: DRIQCommons

Details of changes:

Added rebin function from SPICE-CT and corrected to cope with multiple empty bins

DRIQ 1.5.8.2 - 20170719 17:1#####

File/Routine altered: NNPS

Details of changes:

Forced desired display settings for 3D plot

DRIQ 1.5.8.2 - 20170719 17:1#####

File/Routine altered: Uniformity

Details of changes:

Forced desired display settings for 3D plot

DRIQ 1.5.8.1 - 20170719 16:0######

File/Routine altered: Uniformity

Changed uniformity to check for inverted LUT and if inverted then invert again to avoid problems

DRIQ 1.5.8 - 20170711 13:55#####

File/Routine altered: Illib

Details of changes:

Changed JLlib to make VirtualStackJL extend VirtualStack instead of ImageStack to allow correct functioning under ImageJ verion 1.5p

DRIQ 1.5.7 - 20170221 20:30######

File/Routine altered: DRIQCommons

Details of changes:

corrected typo in DRIQCommons version of interpolateFromBestLinearFitToWindow (typo introduced in 1.5.6.9)

DRIQ 1.5.6.9 - 20170215 19:51#####

File/Routine altered: All

Details of changes:

Seperated out IP to separate classes

DRIQ 1.5.6.8 - 20170215 19:50######

File/Routine altered: MTF

Details of changes:

switched to rotating edge by 180 degrees instead of inverting pixel values. This way the air kerma values are correctly preserved in the ESF

DRIQ 1.5.6.7 - 20161222 11:45#####

File/Routine altered: MTF

corrected getEdgePositions useage in MTF routine to avoid applying linearisation multiple time during the calculation

DRIQ 1.5.6.6 - 20161222 11:44#####

File/Routine altered: JLDICOMBrowser

Details of changes:

corrected JLDICOMBrowser to ensure measurement is performed centred at 6cm from chest wall for mammo rather than with edge of roi at 6cm from chest wall

DRIQ 1.5.6.5 - 20161221 16:7#####

File/Routine altered: Variance and artifact images

Details of changes:

changed variance routine to use create calibratedStats using imageprocessor instead of imageplus... reduces the number of calls to getProcessor() therefore masively increase speed

DRIQ 1.5.6.4 - 20161215 18:16#####

File/Routine altered: DRIQCommons

Details of changes:

slimlined DRIQcommons by removing duplication caused by overloading.

DRIQ 1.5.6.4 - 20161215 18:16#####

File/Routine altered: Mammo AECs

Details of changes:

Tweaked mammoAECS to make it handle processed images and to minimise errors introduced by dust/dead pixels

DRIQ 1.5.6.3 - 20161214 16:29######

File/Routine altered: DRIQ

made help button link to website

DRIQ 1.5.6.2 - 20161208 12:0#####

File/Routine altered: DRIQCommons, all

Details of changes:

added getY,getX,getWidth,getHeight functions to cope with positioning and size of smaller image within larger stack. Made all other routines usethese to ensure they work correctly with comboStacks

DRIQ 1.5.6.1 - 20161208 11:59#####

File/Routine altered: DRIQCommons

Details of changes:

updated saveAsString method to avoid empty line at end of file, reduced duplication within getProcessor method of VirtualStackJL

DRIQ 1.5.6 - 20161107 18:26#####

File/Routine altered: DRIQCommons

Details of changes: Streamlined code

DRIQ 1.5.5 - 20161102 22:0######

File/Routine altered: DRIQCommons

Details of changes:Streamlined code

DRIQ 1.5 - 20160303 11:35######

File/Routine altered: DRIQ

Added drag and drop functionality to DRIQ

DRIQ 1.5 - 20160303 11:35######

File/Routine altered: JLDICOMBrowser

Details of changes:

Added constructor taking a file list as input. Added initialisation to handle a file list instead of a starting directory.

DRIQ 1.4.10 - 20160223 11:35#####

File/Routine altered: DRIQ

Details of changes:

Added function to return a column ID (e.g. A,B,C,D etc.) given a column number (left most column=1)

DRIQ 1.4.9 - 20160108 16:35#####

File/Routine altered: DRIQCommons

Details of changes:

Added copyright text to DRIQ title. Increased default window height by 30 pixels.

DRIQ 1.4.8 - 20151211 17:35#####

File/Routine altered: JLDICOMBrowser

Details of changes:

Added code to remember the last used directory.

DRIQ 1.4.8 - 20151211 17:35#####

File/Routine altered: NNPS

Changed the default roi for multi-slice NNPS measurements. Now finds the smallest roi that encloses all sub rois on all images and centres this instead of just centering the first roi in the first slice. No change for single slice images or the IEC method. Added code to draw the sub rois on each image analysed in red. As the user cycles through the slices the sub roi

DRIQ 1.4.7 - 20151204 14:40######

File/Routine altered: DRIQCommons

Details of changes:

Added warning if user does not press enter when entering a custom SNR value in the DQE settings page. If return is not pressed before saving then the SNR defaults to 1.

DRIQ 1.4.6 - 20151102 17:35######

File/Routine altered: JLDICOMBrowser

Details of changes:

Changed such that if user selects a file that is not a valid JLDICOMBrowser file then it gives the user the option to search the parent directory instead. Increased width from 900 to 1000 to fit thumbnail in by default.

DRIQ 1.4.5 - 20151029 16:35######

File/Routine altered: DRIQCommons

Details of changes:

Added check to ensure average DICOM stack button works even if only one image selected. Changed getPixelSize routines to try 0018,7020 before 0028,0030. Stopped user from reordering columns in the DICOMsettings menu.

DRIQ 1.4.5 - 20151029 16:35######

File/Routine altered: MTF

Details of changes:

Uncommented the routine to centre the roi over the edge. Had been commented out in 1.4.4

DRIQ 1.4.5 - 20151029 16:35######

File/Routine altered: JLDICOMBrowser

Moved the filename column to the second column instead of the second last column. Added ability to load previously saved JLDICOMBrowser results files. Added ability to cope with Microsoft Windows symbolic links.

DRIQ 1.4.4 - 20151023 16:35######

File/Routine altered: MTF

Details of changes:

Added checking and warning to detect ESFs with empty bins. Interpolate the missing bins to allow calculation but display a warning.

DRIQ 1.4.3 - 20151019 16:35######

File/Routine altered: MTF

Details of changes:

Improved angle detection by adding additional tests to help discard dust, etc from edge fit. Also added error checking to abort and give error message if fewer than 10 points are found along the edge.

DRIQ 1.4.2 - 20151013 16:35######

File/Routine altered: DRIQCommons

Details of changes:

Corrected function gaussianRandom - was previously unused but unusable. Still unused but now useable

DRIQ 1.4.2 - 20151013 16:35######

File/Routine altered: MTF

Details of changes:

Improved accuracy of angle detection by interpolating to find subpixel locations of edge in each row.

DRIQ 1.4.1 - 20150922 11:0#####

File/Routine altered: DRIQCommons

Added method getNumericVersion().

DRIQ 1.4.1 - 20150922 11:0#####

File/Routine altered: DQE

Details of changes:

Added IEC beam qualities for mammography to default options in DQE routine.

DRIQ 1.4.0 - 20150902 15:48#####

File/Routine altered: DRIQCommons

Details of changes:

Corrected method getDICOMFileNameArray to avoid division by zero when a directory containing only one file is selected by the user.

DRIQ 1.3.9 - 20150805 13:20#####

File/Routine altered: NNPS

Details of changes:

Binned v section y index had an incorrect additional -1. (y2=N/2-1-y; should have been y2=N/2-y;)

DRIQ 1.3.8 - 20150803 23:20######

File/Routine altered: NNPS

Details of changes:

the 3D plot to work on MAC OSX.

DRIQ 1.3.7 - 20150803 18:0#####

File/Routine altered: NNPS

Changed code sampling the NNPS - now sort out the quadrants before sampling rather than after.

DRIQ 1.3.6 - 20150803 17:10######

File/Routine altered: NNPS

Details of changes:

Corrected code so that running the IEC method no longer affects the original image or stack. Previously the routine subtracted the polynomial fit from the original stack or image.

DRIQ 1.3.5 - 20150803 13:30######

File/Routine altered: MTF

Details of changes:

changed method reOrientateEdge() by adding the minimum value of the ESF when inverting the pixel values. This ensures that the values in the ESF still correspond to Air Kerma values even after inversion. Used DRIQCommons method getVersion to include the DRIQ version number in the output.

DRIQ 1.3.5 - 20150803 13:30######

File/Routine altered: DRIQCommons

Details of changes:

added method getVersion to return the current version of DRIQ. Used DRIQCommons method getVersion instead of hard coding version

DRIQ 1.3.5 - 20150803 13:30######

File/Routine altered: NNPS

Details of changes:

used DRIQCommons method getVersion to include the DRIQ version number in the output

DRIQ 1.3.5 - 20150803 13:30######

File/Routine altered: NEQ

used DRIQCommons method getVersion to include the DRIQ version number in the output

DRIQ 1.3.5 - 20150803 13:30######

File/Routine altered: DQE

Details of changes:

used DRIQCommons method getVersion to include the DRIQ version number in the output

DRIQ 1.3.4 - 20150716 18:30######

File/Routine altered: NNPS

Details of changes:

Corrected code handling overlapping rois. Corrected check that IEC standard roi fits within image. Corrected polynomial subtraction in IEC method... was fitting to each sub roi but IEC standard says to fit to each complete image instead.

DRIQ 1.3.3 - 20150715 17:44#####

File/Routine altered: JLDICOMBrowser

Details of changes:

Altered JLTable class to allow right click options even when no rows present in filtered table. Added check to disable keep and lose filter options if visible table rows equals zero. Altered JLTable class to provide filter options correctly even after user has moved columns around.

DRIQ 1.3.2 - 20150714 14:34#####

File/Routine altered: DRIQCommons

Details of changes:

Added method getCalibratedStdDev(ImagePlus impIn,Roi roiIn,double calibratedMeanIn) to avoid repeating calculation of calibrated mean if it has already been established

DRIQ 1.3.2 - 20150714 14:34#####

File/Routine altered: JLDICOMBrowser

Allowed automatic re-sizing of the table to fit the allowable space. Kept buttons roughly constant size at bottom of display area by changing GridBagLayout weights. Corrected addRow method in dicomTagSetting class. When a new row was created was previously failing to add an entry for the third column leading to out of index errors.

DRIQ 1.3.1 - 20150702 16:44######

File/Routine altered: DRIQCommons

Details of changes:

Adjusted standard deviation calculation in calibratedStats class - was crashing for some images.

DRIQ 1.3 - 20150630 16:47######

File/Routine altered: JLDICOMBrowser

Details of changes:

Used new class calibratedStats to get measurements. Added ability to divide DICOM tags by a specified value automatically. Added details of any division occurring to the relevant column header.

DRIQ 1.3 - 20150630 16:47######

File/Routine altered: DRIQCommons

Details of changes:

Added methods getCalibratedMin, getCalibratedMax. Added class calibratedStats.

DRIQ 1.2 - 20150604 16:47######

File/Routine altered: MTF

Details of changes:

Added calculation of MTF50 and MTF10 to output using simple piecewise linear interpolation from full data and moving window (2 points either side) least squares linear interpolation from full data

DRIQ 1.2 - 20150604 16:47######

File/Routine altered: DRIQCommons

changed function getInterpolationIndex to cope with non monotonically increasing values of knownXs. Achieved by checking if knownXs[0] is greater than knownXs[knownXs.length] and if so multiplying all knownXs and newXs by -1.0. Also changed such that if the index to return is <=windowSize the return zero (rather than windowSize as in DRIQ 1.1).

DRIQ 1.1 - 20150524 22:49#####

File/Routine altered: NNPS

Details of changes:

Fixed bug in calculation of variance before linearisation for linear systems (a factor of B was missing)