

MIM Extensions™ Locations



Overview

A comprehensive list of MIM-provided extensions and where to find them within the extensionDevelopment folder that can be downloaded [here](#).

Installation and Use

Refer to the MIM Software Java® and MATLAB® Extensions Quick Start guides for technical information and installation help.

| Extension Name | Folder Name | Description |
|--------------------------------|------------------------|---|
| MATLAB Max Dose Finder | contourDoseStats.zip | Locates the maximum dose value within a specified contour and places a marker contour at that location. A dose volume must also be specified. Both the marker contour and the max dose value are returned as outputs. |
| Contour Inverter | contourInverter.zip | Plots the axial slices of the selected contour using an external mathematics suite. |
| Dose Scaler | doseScaler.zip | Scales the values in the dose volume by the specified scale factor then sends the resulting dose back to MIM. |
| 4D Mean | fourDeeMean.zip | Generates a 3D series that is the mean of all of the 3D frames from a 4D series. |
| Hybrid DefReg | hybridDefReg.zip | Launch a MATLAB extension passing a deformable registration matrix. Modify the matrix in MATLAB and then output a new deformed secondary series. |
| 4D Diff Revealer | java4dSamples.zip | Highlights differences between adjacent 4D frames. |
| Chrontour "AND" | java4dSamples.zip | Performs an "AND" operation across all frames of a 4D contour. |
| AUC-CSH Heterogeneity Analysis | javaAUCCSH.zip | Creates a histogram for heterogeneity analysis using the AUC-CSH method. |
| 4D Maximum Centroid Motion | javaContourSamples.zip | Computes the maximum centroid motion of a 4D contour. |
| Average Counts Per Region | javaContourSamples.zip | Adds an Average Counts Per Region statistic to all contours. |

| Algorithm | Applications | Method |
|---|------------------------|---|
| Contour - Maximum Orthogonal Dimensions | javaContourSamples.zip | Finds the maximum dimensions of the currently active contour. |
| Contour & Dose to CSV | javaContourSamples.zip | Outputs a CSV file that contains a list of all of the scaled values of the multiplied voxels contained within the selected contour and the associated dose. |
| Contour Min Max Finder | javaContourSamples.zip | Finds the minimum and maximum voxels from an image, constrained by a contour. |
| Contour Splitter | javaContourSamples.zip | Splits a contour by slice. |
| Contour to CSV | javaContourSamples.zip | Outputs a CSV file that contains a list of all of the scaled values of the multiplied voxels contained within the selected contour. |
| Draw Sphere | javaContourSamples.zip | Draws a roughly spherical contour in the center of the series with a radius of 25 mm. |
| Ejection Fraction | javaContourSamples.zip | Adds the Ejection Fraction statistic to the 4D contour provided. |
| Longitudinal Dimension | javaContourSamples.zip | Adds a statistic that is the total length of the contour in the longitudinal direction. |
| A-P Dimension | javaContourSamples.zip | Adds a statistic that is the total length of the contour in the AP direction. |
| Max Finder | javaContourSamples.zip | Finds the max voxel in the provided contour and creates a marker contour for it on the provided series. |
| Deformation Swirler | javaDeformation.zip | Applies a swirl transform to a deformation field and recreates the deformed image based on the modified transform. |
| Convert DICOM to CSV | javaDicomToCsv.zip | Reads some of the DICOM tags for a series and appends the data to a specified CSV file. |
| Dose Processing Sample | javaDoseSample.zip | Scales each value in the dose volume by $(\text{rawVolumeValue}/\text{meanBodyValue})$. |

| Algorithm | Applications | Method |
|---|------------------------|---|
| CustomConstraintStatistic | javaDVHSample.zip | Computes the total dose received by the coolest part of a contour. |
| DVHToCsv | javaDVHSample.zip | Writes a DVH out to a CSV file. |
| ContourDrawer | javaMaxVoxelSUV | Draws a one 1x1x1 voxel contour around the input point. |
| Max SUV Voxel | javaMaxVoxelSUV | Draws a spherical contour around the crosshair point, then draws a contour around the max value voxel center inside the sphere. |
| SphereMaxFinder | javaMaxVoxelSUV | Find the minimum and maximum voxels from a series, constrained by a spherical contour. |
| Beam Reader | javaMisc.zip | Logs the beam names and descriptions from any RTPLAN that has been loaded into the current session. |
| Contour Boolean Return | javaMisc.zip | Asks the user "yes" or "no" and returns an empty contour to mean "no" and a non-empty contour to mean "yes." |
| Deep Image Copy | javaMisc.zip | Outputs a deep copy of the series passed in. |
| Dose Point Contour Extractor | javaMisc.zip | Exports the dose value at the point contours of a given series to a CSV file. |
| Normalizer | javaMisc.zip | Creates a normalized copy of the selected series. |
| Conformity Index (N ROI DICE coefficient) | javaNROIDICE.zip | Calculates a conformity index (N ROI DICE coefficient) as defined by Erik Kouwenhoven et al. |
| Quartile Statistics | javaQuartile.zip | Adds quartiles to contour statistics. |
| Skeletalectomy | javaSkeletalectomy.zip | Derives a new 3D series which consists of only bones (used with Java). |

| Algorithm | Applications | Method |
|---------------------------------------|-----------------------|---|
| Slabbing | javaSlabbing.zip | Derives a new 3D series which may have fewer slices. |
| Voxelwise Math w/ Formula as Input | javaVoxelwiseMath.zip | Derives a new 3D series where the voxels are calculated based on a user-defined voxelwise formula. |
| MATLAB Image Deformation | matlabDeformation.zip | Image deformation example. |
| DVH Grapher | matlabDVH.zip | Uses the MATLAB plotting framework to plot the DVH associated with a contour. |
| MATLAB Skelectomy | matlabSkelectomy.zip | Derives a new 3D series which consists of only bones (used with MATLAB). |
| MATLAB Sphere Maker | matlabSphereMaker.zip | Creates a new spherical contour (located at the center of the provided series) with the specified radius (in mm). |