Features

Local Image Features Extraction
— LIFEx —

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Part I
Feature Definition

Chapter 1
Feature Definition

1.1 Definition

A feature is defined by the following structure:

CategoryName_FeatureName(ReferenceId)[Unit]

This structure is composed of the following elements:

1. CategoryName is the name of the category: this represents groups of features ; for example the different matrices for texture features;
2. _FeatureName is the name of the feature;
3. (ReferenceId)if the feature is defined by Image Biomarker Standardisation Initiative (IBSI);

4. [Unit] is unit of the value of the feature.

1.2 Example

SUMMARY
_BulkCentroidCoor(IBSI:no)[vx]

1. CategoryName is SUMMARY
2. FeatureName is BulkCentroidCoor
3. ReferenceId of IBSI does not exist
4. Unit is in voxel space

Part II

Features involving several ROIs

Chapter 1
All ROIs (SUMMARY)

This section describes the features that can be calculated based on the existing relationships between several ROIs. So you need more than one ROI before you can calculate them. For example, the Euclidean distance between 2 ROIs. These features use the whole image to obtain overall results (rather than ROI-by-ROI texture results). These "whole body" features are grouped together under the SUMMARY category.

1.1 Bulk Distances

SUMMARY
_BulkVolume(IBSI:YEKZ)[mL]
Volume of the largest ROI in milliliter

SUMMARY
_BulkCentroidCoor(IBSI:no)[vx]
Centroid coordinates of the largest ROI

All ROIs (SUMMARY)

SUMMARY
_BulkCentroidCoor-RoiCentroidCoor-DistSum(IBSI:no)[cm]
Sum of distances between the largest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_BulkCentroidCoor-RoiCentroidCoor-DistMean(IBSI:no)[cm]
Mean distance between the largest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_BulkCentroidCoor-RoiCentroidCoor-DistStd(IBSI:no)[cm]
Standard deviation distance between the largest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_BulkCentroidCoor-RoiCentroidCoor-DistMin(IBSI:no)[cm]
Minimal distance between the largest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_BulkCentroidCoor-RoiCentroidCoor-DistMax(IBSI:no)[cm]
Maximal distance between the largest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_BulkWCentroidCoor(IBSI:no)[vx]
Weighted centroid coordinates of the largest ROI

SUMMARY
_BulkWCentroidCoor-RoiWCentroidCoor-DistSum(IBSI:no)[cm]
Sum of distances between the largest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_BulkWCentroidCoor-RoiWCentroidCoor-DistMean(IBSI:no)[cm]
Mean distance between the largest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_BulkWCentroidCoor-RoiWCentroidCoor-DistStd(IBSI:no)[cm]
Standard deviation distance between the largest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_BulkWCentroidCoor-RoiWCentroidCoor-DistMin(IBSI:no)[cm]
Minimal distance between the largest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_BulkWCentroidCoor-RoiWCentroidCoor-DistMax(IBSI:no)[cm]
Maximal distance between the largest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

1.2 Smallest Distances

All ROIs (SUMMARY)

SUMMARY
_SmallestVolume(IBSI:YEKZ)[mL]
Volume of the smallest ROI in milliliter

SUMMARY
_SmallestCentroidCoor(IBSI:no)[vx]
Centroid coordinates of the smallest ROI

SUMMARY
_SmallestCentroidCoor-RoiCentroidCoor-DistSum(IBSI:no)[cm]
Sum of distances between the smallest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_SmallestCentroidCoor-RoiCentroidCoor-DistMean(IBSI:no)[cm]
Mean distance between the smallest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_SmallestCentroidCoor-RoiCentroidCoor-DistStd(IBSI:no)[cm]
Standard deviation distance between the smallest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_SmallestCentroidCoor-RoiCentroidCoor-DistMin(IBSI:no)[cm]
Minimal distance between the smallest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_SmallestCentroidCoor-RoiCentroidCoor-DistMax(IBSI:no)[cm]
Maximal distance between the smallest ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_SmallestWCentroidCoor(IBSI:no)[vx]
Weighted centroid coordinates of the smallest ROI

SUMMARY
_SmallestWCentroidCoor-RoiWCentroidCoor-DistSum(IBSI:no)[cm]
Sum of distances between the smallest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_SmallestWCentroidCoor-RoiWCentroidCoor-DistMean(IBSI:no)[cm]
Mean distance between the smallest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

All ROIs (SUMMARY)

SUMMARY
_SmallestWCentroidCoor-RoiWCentroidCoor-DistStd(IBSI:no)[cm]
Standard deviation distance between the smallest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_SmallestWCentroidCoor-RoiWCentroidCoor-DistMin(IBSI:no)[cm]
Minimal distance between the smallest ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_SmallestWCentroidCoor-RoiWCentroidCoor-DistMax(IBSI:no)[cm]
Maximal distance between the smallest ROI and all other ROIs
from weighted centroid coordinates of ROIs)

1.3 Other Distances

SUMMARY
_Dmax(IBSI:no)[cm]
Distance between the two ROIs that are the furthest apart
(with centroid coordinates)

SUMMARY
_DmaxVox(IBSI:no)[cm]
Distance between the two ROIs that are the furthest apart
(with the outermost voxel)

SUMMARY
_BulkDmax(IBSI:no)[cm]
Maximal distance between the largest ROI (bulk) and all others
(with centroid coordinates)

SUMMARY
_Volume-DiffSum(IBSI:no)[mL]
Sum of the differences in volume between all pairs of ROIs

SUMMARY
_Bulk-Volume-DiffSum(IBSI:no)[mL]
Sum of the differences in volume between the largest ROI and all other ROIs

SUMMARY
_BulkSmallest-Volume-Diff(IBSI:no)[mL]
Volume difference in milliliter between the largest and the smallest ROIs

1.4 Intensity Differences

SUMMARY
_HighestLowest-MaxIntensity-Diff(IBSI:no)[Intensity]
Difference in max intensity between the ROI with the highest max intensity and the ROI with the lowest max intensity

SUMMARY
_MaxIntensity-DiffSum(IBSI:no)[Intensity]
Sum of the differences in max intensity of all pairs of ROIs

SUMMARY
_BulkLowest-MaxIntensity-Diff(IBSI:no)[Intensity]
Difference in max intensity between the largest ROI and the minimum of all max intensity of other ROIs

SUMMARY
_Bulk-MaxIntensity-DiffSum(IBSI:no)[Intensity]
Sum of the differences in max intensity between the largest ROI and all other ROIs

SUMMARY
_Highest-MaxIntensity-DiffSum(IBSI:no)[Intensity]
Sum of the differences in max intensity between the ROI with the highest max intensity and all max intensities of other ROIs

SUMMARY
_HighestLowest-PeakIntensity-Diff(IBSI:no)[Intensity]
Difference in peak intensity between the ROI with the highest peakIntensity and the ROI with the lowest peak intensity

SUMMARY
_PeakIntensity-DiffSum(IBSI:no)[Intensity]
Sum of the differences in peak intensity of all pairs of ROIs

1.4 Intensity Differences

All ROIs (SUMMARY)

SUMMARY
_BulkLowest-PeakIntensity-Diff(IBSI:no)[Intensity]
Differences of peak intensity between the largest and the minimum of all peak intensity of other ROIs

SUMMARY
_Bulk-PeakIntensity-DiffSum(IBSI:no)[Intensity]
Sum of the differences in peak intensity between the largest ROI and all other ROIs

SUMMARY
_Highest-PeakIntensity-DiffSum(IBSI:no)[Intensity]
Sum of the differences in peak intensity between the ROI with the highest peak intensity and all peak intensities of other ROIs

SUMMARY
_MeanIntensity-Sum(IBSI:no)[Intensity]
Sum of the mean intensity of all ROIs

SUMMARY
_MinIntensity-Min(IBSI:no)[Intensity]
Minimum of the minimum intensity of all ROIs

SUMMARY
_MeanIntensity-Min(IBSI:no)[Intensity]
Minimum of the mean intensity of all ROIs

SUMMARY
_StdvIntensity-Min(IBSI:no)[Intensity]
Minimum of the standard deviation intensity of all ROIs

SUMMARY
_MaxIntensity-Min(IBSI:no)[Intensity]
Minimum of the maximum intensity of all ROIs

SUMMARY
_MinIntensity-Max(IBSI:no)[Intensity]
Maximum of the minimum intensity of all ROIs

SUMMARY
_MeanIntensity-Max(IBSI:no)[Intensity]
Maximum of the mean intensity of all ROIs

SUMMARY
_StdIntensity-Max(IBSI:no)[Intensity]
Maximum of the standard deviation intensity of all ROIs

SUMMARY
_MaxIntensity-Max(IBSI:no)[Intensity]
Maximum of the maximum intensity of all ROIs

SUMMARY
_PeakIntensity-Max(IBSI:no)[Intensity]
Maximum of the peak intensity of all ROIs

1.5 Volume Differences

SUMMARY
_Volume-Sum(IBSI:no)[mL]
Sum of the volumes of all ROIs (in milliliter unit) (MetabolicTotalVolume(MTV) for MN)

SUMMARY
_WeightNorm-Volume-Sum(IBSI:no)[mL/Kg]
Sum of the volumes of all ROIs divided by patient weight

SUMMARY
_VolumeIntensity-Sum(IBSI:no)[Intensity*mL]
Sum of the volumes of voxels multiplied by the intensities of voxels of all ROIs

SUMMARY
_WeightNorm-VolumeIntensity-Sum(IBSI:no)[Intensity*mL/Kg]
Sum of the volumes of voxels multiplied by the intensities of voxels of all ROIs and divided by patient weight

SUMMARY
_Intensity-Sum(IBSI:no)[Intensity]
Sum of the mean intensities of voxels of ROIs

1.6 CentroidCoor Distances

SUMMARY
_RoiCentroidCoor-DistSum(IBSI:no)[cm]
Sum of distances (from centroid coordinates) between all possible pairs of ROIs

SUMMARY
_RoiCentroidCoor-DistSumMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the sum of distances between the reference ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_RoiCentroidCoor-DistMeanMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the mean of distances between the reference ROI and all other ROIs
(from centroid coordinates of ROIs)

All ROIs (SUMMARY)

SUMMARY
_RoiCentroidCoor-DistStdMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the standard deviation of distances between the reference ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_RoiCentroidCoor-DistMinMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the minimum of distances between the reference ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_RoiCentroidCoor-DistMinMin(IBSI:no)[cm]
Minimum over all possible reference ROI of the minimum of distances between the reference ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_RoiCentroidCoor-DistMaxMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the maximum of distances between the reference ROI and all other ROIs
(from centroid coordinates of ROIs)

SUMMARY
_AllRoiCentroidCoor-DistMeanMax(IBSI:no)[cm]
Maximum of mean of distance between all ROIs = Max (Sum (all dist of CentroidCoor / (n * (n-1) / 2)))

SUMMARY
_AllRoiCentroidCoor-DistMeanMin(IBSI:no)[cm]
Minimum of mean of distance between all ROIs = Min (Sum (all dist of CentroidCoor / (n * (n-1) / 2)))

1.7 WCentroidCoor Distances

SUMMARY
_RoiWCentroidCoor-DistSum(IBSI:no)[cm]
Sum of distances (from weighted centroid coordinates) between all possible pairs of ROIs

SUMMARY
_RoiWCentroidCoor-DistSumMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the sum of distances between the reference ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_RoiWCentroidCoor-DistMeanMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the mean of distances between the reference ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_RoiWCentroidCoor-DistStdMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the standard deviation of distances between the reference ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_RoiWCentroidCoor-DistMinMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the minimum of distances between the reference ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_RoiWCentroidCoor-DistMinMin(IBSI:no)[cm]
Minimum over all possible reference ROI of the minimum of distances between the reference ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_RoiWCentroidCoor-DistMaxMax(IBSI:no)[cm]
Maximum over all possible reference ROI of the maximum of distances between the reference ROI and all other ROIs
(from weighted centroid coordinates of ROIs)

SUMMARY
_AllRoiWCentroidCoor-DistMeanMax(IBSI:no)[cm]
Maximum of mean of distance between all ROIs = Max (Sum (all dist of weighted centroid coordinates / (n * (n-1) / 2)))

SUMMARY
_AllRoiWCentroidCoor-DistMeanMin(IBSI:no)[cm]
Minimum of mean of distance between all ROIs = Min (sum (all dist of weighted centroid coordinates / (n * (n-1) / 2)))

1.8 Quarter Distances

SUMMARY
_TLVolume-Sum(IBSI:no)[mL]
Sum in milliliters of volume of all ROIs in the Top Left quarter (if quarter segmentation is classified)

SUMMARY
_TRVolume-Sum(IBSI:no)[mL]
Sum in milliliters of volume of all ROIs in the Top Right quarter (if quarter segmentation is classified)

SUMMARY
_BLVolume-Sum(IBSI:no)[mL]
Sum in milliliters of volume of all ROIs in the Bottom Left quarter (if quarter segmentation is classified)

SUMMARY
_BRVolume-Sum(IBSI:no)[mL]
Sum in milliliters of volume of all ROIs in the Bottom right quarter (if quarter segmentation is classified)

SUMMARY
_NAVolume-Sum(IBSI:no)[mL]
Sum in milliliters of volume of all ROIs not classified in a quarter

SUMMARY
_WeightNorm-TLVolume-Sum(IBSI:no)[mL/Kg]
Weight-normalized sum in voxels of volume of all ROIs in the Top Left quarter (if quarter segmentation is classified)

SUMMARY
_WeightNorm-TRVolume-Sum(IBSI:no)[mL/Kg]
Weight-normalized sum in voxels of volume of all ROIs in the Top Right quarter (if quarter segmentation is classified)

SUMMARY
_WeightNorm-BLVolume-Sum(IBSI:no)[mL/Kg]
Weight-normalized sum in voxels of volume of all ROIs in the Bottom Left quarter (if quarter segmentation is classified)

SUMMARY
_WeightNorm-BRVolume-Sum(IBSI:no)[mL/Kg]
Weight-normalized sum in voxels of volume of all ROIs in the Bottom Right quarter (if quarter segmentation is classified)

SUMMARY
_WeightNorm-NAVolume-Sum(IBSI:no)[mL/Kg]
Weight-normalized sum in voxels of volume of all ROIs not classified in a quarter

SUMMARY
_TLVolumeIntensity-Sum(IBSI:no)[Intensity*mL]
Sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Top Left quarter (if quarter segmentation is classified)

SUMMARY
_TRVolumeIntensity-Sum(IBSI:no)[Intensity*mL]
Sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Top Right quarter (if quarter segmentation is classified)

SUMMARY
_BLVolumeIntensity-Sum(IBSI:no)[Intensity*mL]
Sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Bottom Left quarter (if quarter segmentation is classified)

SUMMARY
_BRVolumeIntensity-Sum(IBSI:no)[Intensity*mL]
Sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Bottom Right quarter (if quarter segmentation is classified)

SUMMARY
_NAVolumeIntensity-Sum(IBSI:no)[Intensity*mL]
Sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs not classified in a quarter

SUMMARY
_WeightNorm-TLVolumeIntensity-Sum(IBSI:no)[Intensity*mL/Kg]
Weight-normalized sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Top Left quarter (if quarter segmentation is classified)

SUMMARY
_WeightNorm-TRVolumeIntensity-Sum(IBSI:no)[Intensity*mL/Kg]
Weight-normalized sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Top Right quarter (if quarter segmentation is classified)

SUMMARY
_WeightNorm-BLVolumeIntensity-Sum(IBSI:no)[Intensity*mL/Kg]
Weight-normalized sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Bottom Left quarter (if quarter segmentation is classified)

SUMMARY
_WeightNorm-BRVolumeIntensity-Sum(IBSI:no)[Intensity*mL/Kg]
Weight-normalized sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs in the Bottom Right quarter (if quarter segmentation is classified)

1.8 Quarter Distances

SUMMARY
_WeightNorm-NAVolumeIntensity-Sum(IBSI:no)[Intensity*mL/Kg]
Weight-normalized sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs not classified in a quarter

All ROIs (SUMMARY)

Chapter 2
Features involving two ROIs

2.1 Intersection

SUMMARY
_Roi1IntersectionWithRoi0(IBSI:no)[vx]
Number of voxels common to roi0 and roi1 (roi1 intersection roi0)

SUMMARY
_Roi1IntersectionNotRoi0(IBSI:no)[vx]
Number of voxels of roi1 that are not in roi0

2.2 Union

SUMMARY
_Roi1UnionWithRoi0(IBSI:no)[vx]
Number of voxels in roi1 union roi0

2.3 Volume Ratio

SUMMARY
_VolumeRatio(IBSI:no)[ratio]
Number of voxels in roi1 / number of voxel in roi0

SUMMARY
_CommonDelineatedVolume(IBSI:no)[ratio]
Number of voxels common to roi0 and roi1 / number of voxel in roi0

SUMMARY
_AdditionalDelineatedVolume(IBSI:no)[ratio]
Number of voxels in roi1 that are not in roi0 / number of voxel in roi0

Two ROIs (SUMMARY)

SUMMARY
_DiceSimilarityCoefficient(IBSI:no)[ratio]
Dice similarity coefficient

SUMMARY
_OverlapIndex_JaccardCoefficient(IBSI:no)[ratio]
Jaccard similarity coefficient

2.4 Distance Differences

SUMMARY
_Max3DDiameterOfUnion(IBSI:no)[mm]
Maximal diameter of the roi1 union roi0

SUMMARY
_HausdorffDistance(IBSI:no)[mm]
Hausdorff distance between roi1 and roi0

Part III

Features involving one ROI

Chapter 1
Morphological

1.1 Morphological

MORPHOLOGICAL
_Volume(IBSI:RNU0)[mL]
see IBSI definition

MORPHOLOGICAL
_ApproximateVolume(IBSI:YEKZ)[vx]
see IBSI definition

MORPHOLOGICAL
_VoxelsCounting(IBSI:No)[vx]

Number of voxels in the ROI

MORPHOLOGICAL
_SurfaceArea(IBSI:C0JK)[cm2]
see IBSI definition

MORPHOLOGICAL
_SurfaceToVolumeRatio(IBSI:2PR5)[cm-1]
see IBSI definition

MORPHOLOGICAL
_Compacity(IBSI:No)[]
Surface at power 3/2 divided by the volume

MORPHOLOGICAL
_Compactness1(IBSI:SKGS)[]
see IBSI definition

MORPHOLOGICAL
_Compactness2(IBSI:BQWJ)[]
see IBSI definition

MORPHOLOGICAL
_SphericalDisproportion(IBSI:KRCK)[]
see IBSI definition

MORPHOLOGICAL
_Sphericity(IBSI:QCFX)[]
see IBSI definition

MORPHOLOGICAL
_Asphericity(IBSI:25C7)[]
see IBSI definition

MORPHOLOGICAL
_MaxIntensityCoor(IBSI:No)[vx]
Maximal intensity coordinates

MORPHOLOGICAL
_CentroidCoor(IBSI:No)[vx]
Centroid coordinates

MORPHOLOGICAL
_WCentroidCoor(IBSI:No)[vx]
Weighted intensity centroid coordinates

MORPHOLOGICAL
_RoiCentroidCoor-DistSum(IBSI:No)[cm]
Sum of distances of the selected ROI and all other ROIs (from CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiCentroidCoor-DistMean(IBSI:No)[cm]
Mean of distances of the selected ROI and all other ROIs (from CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiCentroidCoor-DistStd(IBSI:No)[cm]
Standard deviation of distances of the selected ROI and all other ROIs (from Centroid-Coor of ROIs)

MORPHOLOGICAL
_RoiCentroidCoor-DistMin(IBSI:No)[cm]
Minimum of distances of the selected ROI and all other ROIs (from CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiCentroidCoor-DistMax(IBSI:No)[cm]
Maximum of distances of the selected ROI and all other ROIs (from CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiWCentroidCoor-DistSum(IBSI:No)[cm]
Sum of distances of the selected ROI and all other ROIs (from weighted intensity of CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiWCentroidCoor-DistMean(IBSI:No)[cm]
Mean of distances of the selected ROI and all other ROIs (from weighted intensity of CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiWCentroidCoor-DistStd(IBSI:No)[cm]
Standard deviation of distances of the selected ROI and all other ROIs (from weighted intensity of CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiWCentroidCoor-DistMin(IBSI:No)[cm]
Minimum of distances of the selected ROI and all other ROIs (from weighted intensity of CentroidCoor of ROIs)

MORPHOLOGICAL
_RoiWCentroidCoor-DistMax(IBSI:No)[cm]
Maximum of distances of the selected ROI and all other ROIs (from weighted intensity of CentroidCoor of ROIs)

MORPHOLOGICAL
_MaxIntensityCoor-RoiCentroidCoor-Dist(IBSI:No)[cm]
Distance between the MaxIntensity coordinates and the centroid coordinates

MORPHOLOGICAL
_RadiusSphereNorm-MaxIntensityCoor-RoiCentroidCoor-Dist(IBSI:No)[]
"Distance between the MaxIntensity coordinates and the centroid coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-MaxIntensityCoor-RoiCentroidCoor-Dist(IBSI:No)[]
"Distance between the MaxIntensity coordinates and the centroid coordinates" normalized with the maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_PeakIntensityCoor-RoiCentroidCoor-Dist(IBSI:No)[cm]
Distance between the PeakIntensity coordinates and the centroid coordinates

MORPHOLOGICAL
_RadiusSphereNorm-PeakIntensityCoor-RoiCentroidCoor-Dist(IBSI:No)[]
"Distance between the PeakIntensity coordinates and the centroid coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-PeakIntensityCoor-RoiCentroidCoor-Dist(IBSI:No)[]
"Distance between the PeakIntensity coordinates and the centroid coordinates" normalized with the maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_CentreOfMassShift(IBSI:KLMA)[mm]
Distance between the centroid coordinates and the centre of Intensity * Volume centroid coordinates

MORPHOLOGICAL
_RadiusSphereNorm-CentroidCoor-WCentroidCoor-Dist(IBSI:No)[]
"Distance between the centroid coordinates and the centre of Intensity * Volume centroid coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-CentroidCoor-WCentroidCoor-Dist(IBSI:No)[]
"Distance between the centroid coordinates and the centre of Intensity*Volume centroid coordinates" normalized with the maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_MaxIntensityCoor-PerimeterCoor-3DSmallestDist(IBSI:No)[mm]
Smallest distance of the maximal intensity coordinates and the perimeter coordinates

MORPHOLOGICAL
_RadiusSphereNorm-MaxIntensityCoor-PerimeterCoor-3DSmallestDist(IBSI:No)[]
"Smallest distance of the maximal intensity coordinates and the perimeter coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-MaxIntensityCoor-PerimeterCoor-3DSmallestDist(IBSI:No)[]
"Smallest distance of the maximal intensity coordinates and the perimeter coordinates" normalized with the maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_MaxIntensityCoor-PerimeterCoor-2DAxialSmallestDist(IBSI:No)[mm]
Smallest distance of the maximal intensity coordinates and the perimeter coordinates of axial slice setting at maximal intensity coordinates

MORPHOLOGICAL
_RadiusSphereNorm-MaxIntensityCoor-PerimeterCoor-2DAxialSmallestDist(IBSI:No)[]

"Smallest distance of the maximal intensity coordinates and the perimeter coordinates of axial slice setting at maximal intensity coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-MaxIntensityCoor-PerimeterCoor-2DAxialSmallestDist(IBSI:No)[]

"Smallest distance of the maximal intensity coordinates and the perimeter coordinates of axial slice setting at maximal intensity coordinates" normalized with maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_MaxIntensityCoor-PerimeterCoor-2DCoronalSmallestDist(IBSI:No)[mm]
Smallest distance of the maximal intensity coordinates and the perimeter coordinates of coronal slice setting at maximal intensity coordinates

MORPHOLOGICAL
_RadiusSphereNorm-MaxIntensityCoor-PerimeterCoor-2DCoronalSmallestDist(IBSI:No)[]

"Smallest distance of the maximal intensity coordinates and the perimeter coordinates of coronal slice setting at maximal intensity coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-MaxIntensityCoor-PerimeterCoor-2DCoronalSmallestDist(IBSI:No)[]

"Smallest distance of the maximal intensity coordinates and the perimeter coordinates of coronal slice setting at maximal intensity coordinates" normalized with maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_MaxIntensityCoor-PerimeterCoor-2DSagittalSmallestDist(IBSI:No)[mm]
Smallest distance of the maximal intensity coordinates and the perimeter coordinates of sagittal slice setting at maximal intensity coordinates

MORPHOLOGICAL
_RadiusSphereNorm-MaxIntensityCoor-PerimeterCoor-2DSagittalSmallestDist(IBSI:No)[]

"Smallest distance of the maximal intensity coordinates and the perimeter coordinates of sagittal slice setting at maximal intensity coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-MaxIntensityCoor-PerimeterCoor-2DSagittalSmallestDist(IBSI:No)[]

"Smallest distance of the maximal intensity coordinates and the perimeter coordinates of sagittal slice setting at maximal intensity coordinates" normalized with maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_PeakIntensityCoor-PerimeterCoor-3DSmallestDist(IBSI:No)[mm]
Smallest distance of the peak intensity coordinates and the perimeter coordinates

MORPHOLOGICAL
_RadiusSphereNorm-PeakIntensityCoor-PerimeterCoor-3DSmallestDist(IBSI:No)[]
"Smallest distance of the peak intensity coordinates and the perimeter coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-PeakIntensityCoor-PerimeterCoor-3DSmallestDist(IBSI:No)[]
"Smallest distance of the peak intensity coordinates and the perimeter coordinates" normalized with maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_PeakIntensityCoor-PerimeterCoor-2DAxialSmallestDist(IBSI:No)[mm]
Smallest distance of the peak intensity coordinates and the perimeter coordinates of axial slice setting at peak intensity coordinates

MORPHOLOGICAL
_RadiusSphereNorm-PeakIntensityCoor-PerimeterCoor-2DAxialSmallestDist(IBSI:No)[]

"Smallest distance of the peak intensity coordinates and the perimeter coordinates of axial slice setting at peak intensity coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-PeakIntensityCoor-PerimeterCoor-2DAxialSmallestDist(IBSI:No)[]

"Smallest distance of the peak intensity coordinates and the perimeter coordinates of axial slice setting at peak intensity coordinates" normalized with maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_PeakIntensityCoor-PerimeterCoor-2DCoronalSmallestDist(IBSI:No)[mm]
Smallest distance of the peak intensity coordinates and the perimeter coordinates of coronal slice setting at peak intensity coordinates

MORPHOLOGICAL
_RadiusSphereNorm-PeakIntensityCoor-PerimeterCoor-2DCoronalSmallestDist(IBSI:No)[]

"Smallest distance of the peak intensity coordinates and the perimeter coordinates of coronal slice setting at peak intensity coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-PeakIntensityCoor-PerimeterCoor-2DCoronalSmallestDist(IBSI:No)[]

"Smallest distance of the peak intensity coordinates and the perimeter coordinates of coronal slice setting at peak intensity coordinates" normalized with maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_PeakIntensityCoor-PerimeterCoor-2DSagittalSmallestDist(IBSI:No)[mm]
Smallest distance of the peak intensity coordinates and the perimeter coordinates of sagittal slice setting at peak intensity coordinates

MORPHOLOGICAL
_RadiusSphereNorm-PeakIntensityCoor-PerimeterCoor-2DSagittalSmallestDist(IBSI:No)[]

"Smallest distance of the peak intensity coordinates and the perimeter coordinates of sagittal slice setting at peak intensity coordinates" normalized with the radius of a sphere with same volume

MORPHOLOGICAL
_RadiusRoiNorm-PeakIntensityCoor-PerimeterCoor-2DSagittalSmallestDist(IBSI:No)[]

"Smallest distance of the peak intensity coordinates and the perimeter coordinates of sagittal slice setting at peak intensity coordinates" normalized with maximal radius, where the maximal radius is the largest distance between two voxels beloning to the ROI perimeter divided by 2

MORPHOLOGICAL
_Maximum3DDiameter(IBSI:L0JK)[mm]
Maximum 3D diameter

MORPHOLOGICAL
_SphereDiameter(IBSI:No)[mm]
Diameter of sphere with equal volume

MORPHOLOGICAL
_IntegratedIntensity(IBSI:99N0)[Intensity]
Sum of intensity of all voxels

Chapter 2
(Local) Intensity-based

2.1 Intensity-based

INTENSITY-BASED
_MeanIntensity(IBSI:Q4LE)[SUV]
see IBSI definition

INTENSITY-BASED
_IntensityVariance(IBSI:ECT3)[SUV*SUV]
see IBSI definition

INTENSITY-BASED
_IntensitySkewness(IBSI:KE2A)[]
see IBSI definition

INTENSITY-BASED
_IntensityKurtosis(IBSI:IPH6)[]
see IBSI definition

INTENSITY-BASED
_MedianIntensity(IBSI:Y12H)[SUV]
see IBSI definition

INTENSITY-BASED
_MinimumIntensity(IBSI:1GSF)[SUV]
see IBSI definition

INTENSITY-BASED
_10thIntensityPercentile(IBSI:QG58)[]
see IBSI definition

INTENSITY-BASED
_25thIntensityPercentile(IBSI:No)[]
see IBSI definition

INTENSITY-BASED
_50thIntensityPercentile(IBSI:Y12H)[]
see IBSI definition

INTENSITY-BASED
_75thIntensityPercentile(IBSI:No)[]
see IBSI definition

INTENSITY-BASED
_90thIntensityPercentile(IBSI:8DWT)[]
see IBSI definition

INTENSITY-BASED
_StandardDeviation(IBSI:No)[SUV]
see IBSI definition

INTENSITY-BASED
_MaximumIntensity(IBSI:84IY)[SUV]
see IBSI definition

INTENSITY-BASED
_IntensityInterquartileRange(IBSI:SALO)[SUV]
see IBSI definition

INTENSITY-BASED
_IntensityRange(IBSI:2OJQ)[SUV]
see IBSI definition

INTENSITY-BASED
_IntensityBasedMeanAbsoluteDeviation(IBSI:4FUA)[]
see IBSI definition

INTENSITY-BASED
_IntensityBasedRobustMeanAbsoluteDeviation(IBSI:1128)[]
see IBSI definition

INTENSITY-BASED
_IntensityBasedMedianAbsoluteDeviation(IBSI:N72L)[]
see IBSI definition

INTENSITY-BASED
_IntensityBasedCoefficientOfVariation(IBSI:7TET)[]
see IBSI definition

INTENSITY-BASED
_IntensityBasedQuartileCoefficientOfDispersion(IBSI:9S40)[]
see IBSI definition

INTENSITY-BASED
_AreaUnderCurveCIVH(IBSI:No)[SUV]
Area under the curve of cumulative intensity volume histogram

INTENSITY-BASED
_IntensityBasedEnergy(IBSI:N8CA)[]
see IBSI definition

INTENSITY-BASED
_RootMeanSquareIntensity(IBSI:5ZWQ)[]
see IBSI definition

INTENSITY-BASED
_IntensityVolumeSum(IBSI:No)[Intensity*mL]
Sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs

INTENSITY-BASED
_TotalLesionGlycolysis(IBSI:No)[Intensity*mL]
Sum of the VoxelVolume multiplied by the VoxelIntensity mean of all ROIs (is the TotalLesionGlycolysis (TLG) for FDG PET)

INTENSITY-BASED
_WeightNorm-IntensityVolumeSum(IBSI:No)[Intensity*mL/Kg]
Weight-normalized Sum of the VoxelVolume multiplied by the VoxelIntensity of all ROIs

INTENSITY-BASED
_TotalCalciumScore(OnlyOnCT, IBSI:No)[]
Total calcium score calculated only on CT is the weighted density score (1,2,3,4) given to the highest attenuation value (130-199HU, 200-299HU, 300-399HU, >400HU) multiply by thickness slice in mm

2.2 Local Intensity-based

LOCAL_INTENSITY_BASED
_IntensityPeakDiscretizedVolumeSought(IBSI:No)[mL]
Used discretized volume of the peak sphere (approximating 1 mL)

LOCAL_INTENSITY_BASED
_GlobalIntensityPeak(IBSI:0F91)[Intensity]
Mean intensity of the discretized peak sphere located in the ROI and maximizing mean intensity with maximum mean intensity in ROI
(from based-intensity)

LOCAL_INTENSITY_BASED
_LocalIntensityPeak(IBSI:VJGA)[Intensity]
Mean intensity of the discretized peak sphere centered on the voxel with maximum intensity in the ROI
(from based-intensity)

2.3 RIM Intensity-based

INTENSITY-BASED
_RIM-IntensityMin(IBSI:No)[Intensity]
Minimum voxel value from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from based-intensity)

INTENSITY-BASED
_RIM-IntensityMean(IBSI:No)[Intensity]
Mean voxel value from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from based-intensity)

INTENSITY-BASED
_RIM-IntensityStd(IBSI:No)[Intensity]
Standard deviation of voxel values from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from based-intensity)

INTENSITY-BASED
_RIM-IntensityMax(IBSI:No)[Intensity]
Maximum voxel value from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from based-intensity)

INTENSITY-BASED
_RIM-CountingVoxels(IBSI:No)[vx]
Volume in voxel unit of all voxels from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from based-intensity)

INTENSITY-BASED
_RIM-ApproximateVolume(IBSI:No)[mL]
Volume in milliliter unit of all voxels from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from based-intensity)

INTENSITY-BASED
_RIM-IntensitySum(IBSI:No)[Intensity]
Sum of voxel values from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from based-intensity)

Chapter 3
(Local) Intensity Histogram

3.1 Intensity Histogram

INTENSITY-HISTOGRAM
_IntensityHistogramMean(IBSI:X6K6)[Intensity]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramVariance(IBSI:CH89)[Intensity]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramSkewness(IBSI:88K1)[Intensity]

see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramKurtosis(IBSI:C3I7)[Intensity]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramMedian(IBSI:WIFQ)[Intensity]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramMinimumGreyLevel(IBSI:1PR8)[Intensity]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogram10thPercentile(IBSI:GPMT)[]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogram25thPercentile(IBSI:No)[]
Lower quartile or the 25th empirical percentile
(from discretized-intensity)

INTENSITY-HISTOGRAM
_IntensityHistogram50thPercentile(IBSI:No)[]
Middle quartile or the 50th empirical percentile
(from discretized-intensity)

INTENSITY-HISTOGRAM
_IntensityHistogram75thPercentile(IBSI:No)[]
Upper quartile or the 75th empirical percentile
(from discretized-intensity)

INTENSITY-HISTOGRAM
_IntensityHistogram90thPercentile(IBSI:OZ0C)[]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramStd(IBSI:No)[Intensity]
Standard deviation of signal intensity in ROI
(from discretized-intensity)

INTENSITY-HISTOGRAM
_IntensityHistogramMaximumGreyLevel(IBSI:3NCY)[Intensity]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramMode(IBSI:AMMC)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramInterquartileRange(IBSI:WR0O)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramRange(IBSI:5Z3W)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramMeanAbsoluteDeviation(IBSI:D2ZX)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramRobustMeanAbsoluteDeviation(IBSI:WRZB)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramMedianAbsoluteDeviation(IBSI:4RNL)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramCoefficientOfVariation(IBSI:CWYJ)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramQuartileCoefficientOfDispersion(IBSI:SLWD)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_IntensityHistogramEntropyLog10(IBSI:No)[SUV]
Log10 value conversion of INTENSITY-HISTOGRAM_IntensityHistogramEntropyLog2 feature

INTENSITY-HISTOGRAM
_IntensityHistogramEntropyLog2(IBSI:TLU2)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_AreaUnderCurveCIVH(IBSI:No)[SUV]
Area under the curve of cumulative intensity volume histogram

INTENSITY-HISTOGRAM
_Uniformity(IBSI:BJ5W)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_RootMeanSquare(IBSI:No)[SUV]
Root mean square of histogram
(from discretized-intensity)

INTENSITY-HISTOGRAM
_MaximumHistogramGradient(IBSI:12CE)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_MaximumHistogramGradientGreyLevel(IBSI:8E6O)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_MinimumHistogramGradient(IBSI:VQB3)[SUV]
see IBSI definition

INTENSITY-HISTOGRAM
_MinimumHistogramGradientGreyLevel(IBSI:RHQZ)[SUV]
see IBSI definition

3.2 Local Intensity Histogram

LOCAL-INTENSITY-HISTOGRAM
_IntensityPeakDiscretizedVolumeSought(IBSI:No)[mL]
Used discretized volume of the peak sphere (approximating 1 mL)

LOCAL-INTENSITY-HISTOGRAM
_GlobalIntensityPeak(IBSI:No)[Intensity]
Mean intensity of the discretized peak sphere located in the ROI and maximizing mean intensity with maximum mean intensity in ROI
(from discretized-intensity)

LOCAL-INTENSITY-HISTOGRAM
_LocalIntensityPeak(IBSI:No)[Intensity]
Mean intensity of the discretized peak sphere centered on the voxel with maximum intensity in the ROI
(from discretized-intensity)

(Local) Intensity Histogram

INTENSITY-HISTOGRAM
_RIM-IntensityMin(IBSI:No)[Intensity]
Minimum voxel value from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from discretized-intensity)

INTENSITY-HISTOGRAM
_RIM-IntensityMean(IBSI:No)[Intensity]
Mean voxel value from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from discretized-intensity)

INTENSITY-HISTOGRAM
_RIM-IntensityStd(IBSI:No)[Intensity]
Standard deviation of voxel values from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from discretized-intensity)

INTENSITY-HISTOGRAM
_RIM-IntensityMax(IBSI:No)[Intensity]
Maximum voxel value from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from discretized-intensity)

INTENSITY-HISTOGRAM
_RIM-CountingVoxels(IBSI:No)[vx]
Volume in voxel unit of all voxels from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from discretized-intensity)

INTENSITY-HISTOGRAM
_RIM-ApproximateVolume(IBSI:No)[mL]
Volume in milliliter of all voxels from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from discretized-intensity)

INTENSITY-HISTOGRAM
_RIM-IntensitySum(IBSI:No)[Intensity]
Sum of voxel values from the envelopes (envelope is the radial intensity mean of successive layers of voxels from the outside of the region to the inside)
(from discretized-intensity)

Chapter 4
Texture

4.1 GLCM

GLCM
_JointMaximum(IBSI:GYBY)[]
see IBSI definition

GLCM
_JointAverage(IBSI:60VM)[]
see IBSI definition

GLCM
_JointVariance(IBSI:UR99)[]

see IBSI definition

GLCM
_JointEntropyLog2(IBSI:TU9B)[]
see IBSI definition

GLCM
_JointEntropyLog10(IBSI:No)[]
Log10 is value conversion of GLCM_JointEntropyLog2 feature

GLCM
_DifferenceAverage(IBSI:TF7R)[]
see IBSI definition

GLCM
_DifferenceVariance(IBSI:D3YU)[]
see IBSI definition

GLCM
_DifferenceEntropy(IBSI:NTRS)[]
see IBSI definition

GLCM
_SumAverage(IBSI:ZGXS)[]
see IBSI definition

GLCM
_SumVariance(IBSI:OEEB)[]
see IBSI definition

GLCM
_SumEntropy(IBSI:P6QZ)[]
see IBSI definition

GLCM
_AngularSecondMoment(IBSI:8ZQL)[]
see IBSI definition

GLCM
_Contrast(IBSI:ACUI)[]
see IBSI definition

GLCM
_Dissimilarity(IBSI:8S9J)[]
see IBSI definition

GLCM
_InverseDifference(IBSI:IB1Z)[]
see IBSI definition

GLCM
_NormalisedInverseDifference(IBSI:NDRX)[]
see IBSI definition

GLCM
_InverseDifferenceMoment(IBSI:WF0Z)[]
see IBSI definition

GLCM
_NormalisedInverseDifferenceMoment(IBSI:1QCO)[]
see IBSI definition

GLCM
_InverseVariance(IBSI:E8JP)[]
see IBSI definition

GLCM
_Correlation(IBSI:NI2N)[]
see IBSI definition

GLCM
_Autocorrelation(IBSI:QWB0)[]
see IBSI definition

GLCM
_ClusterTendency(IBSI:DG8W)[]
see IBSI definition

GLCM
_ClusterShade(IBSI:7NFM)[]
see IBSI definition

GLCM
_ClusterProminence(IBSI:AE86)[]
see IBSI definition

4.2 GLRLM

Texture

GLRLM
_ShortRunsEmphasis(IBSI:22OV)[]
see IBSI definition

GLRLM
_LongRunsEmphasis(IBSI:W4KF)[]
see IBSI definition

GLRLM
_LowGreyLevelRunEmphasis(IBSI:V3SW)[]
see IBSI definition

GLRLM
_HighGreyLevelRunEmphasis(IBSI:G3QZ)[]
see IBSI definition

GLRLM
_ShortRunLowGreyLevelEmphasis(IBSI:HTZT)[]
see IBSI definition

GLRLM
_ShortRunHighGreyLevelEmphasis(IBSI:GD3A)[]
see IBSI definition

GLRLM
_LongRunLowGreyLevelEmphasis(IBSI:IVPO)[]
see IBSI definition

GLRLM
_LongRunHighGreyLevelEmphasis(IBSI:3KUM)[]
see IBSI definition

GLRLM
_GreyLevelNonUniformity(IBSI:R5YN)[]
see IBSI definition

GLRLM
_RunLengthNonUniformity(IBSI:W92Y)[]
see IBSI definition

GLRLM
_RunPercentage(IBSI:9ZK5)[]
see IBSI definition

4.3 NGTDM

NGTDM
_Coarseness(IBSI:QCDE)[]
see IBSI definition

NGTDM
_Contrast(IBSI:65HE)[]
see IBSI definition

NGTDM
_Busyness(IBSI:NQ30)[]
see IBSI definition

NGTDM
_Complexity(IBSI:HDEZ)[]
see IBSI definition

NGTDM
_Strength(IBSI:1X9X)[]
see IBSI definition

4.4 GLSZM

GLSZM
_SmallZoneEmphasis(IBSI:5QRC)[]
see IBSI definition

GLSZM
_LargeZoneEmphasis(IBSI:48P8)[]
see IBSI definition

GLSZM
_LowGrayLevelZoneEmphasis(IBSI:XMSY)[]
see IBSI definition

GLSZM
_HighGrayLevelZoneEmphasis(IBSI:5GN9)[]
see IBSI definition

GLSZM
_SmallZoneLowGreyLevelEmphasis(IBSI:5RAI)[]
see IBSI definition

GLSZM
_SmallZoneHighGreyLevelEmphasis(IBSI:HW1V)[]
see IBSI definition

GLSZM
_LargeZoneLowGreyLevelEmphasis(IBSI:YH51)[]
see IBSI definition

GLSZM
_LargeZoneHighGreyLevelEmphasis(IBSI:J17V)[]
see IBSI definition

GLSZM
_GreyLevelNonUniformity(IBSI:JNSA)[]
see IBSI definition

GLSZM
_NormalisedGreyLevelNonUniformity(IBSI:Y1RO)[]
see IBSI definition

GLSZM
_ZoneSizeNonUniformity(IBSI:4JP3)[]
see IBSI definition

GLSZM
_NormalisedZoneSizeNonUniformity(IBSI:VB3A)[]
see IBSI definition

GLSZM
_ZonePercentage(IBSI:P30P)[]
see IBSI definition

GLSZM
_GreyLevelVariance(IBSI:BYLV)[]
see IBSI definition

GLSZM
_ZoneSizeVariance(IBSI:3NSA)[]
see IBSI definition

GLSZM
_ZoneSizeEntropy(IBSI:GU8N)[]
see IBSI definition