		attribute		
		AppFileVer BackgroundBalance	Microscope software version Background balance	
		BitDepth	The bit-depth of a camera sensor describes its ability to transform the analog signal coming from the pixel array into a digital signal	
		Brightness ChannelCount	Relative intensity affecting a person or sensor Number of RGB channels	
		ColorEnhancement	Whether enhanced image color display or not The difference in color and intensity of the depicted object from its background	
		Optional DeviceSN	Microscope device serial number	
		DistortionCorrection ExposureTime	Whether fixed distortion or not Exposure time in ms	
		FOVHeight FOVWidth	Height of an individual FOV in pixel Width of an individual FOV in pixel	
		Gain	Amplification applied to the signal by the image sensor The coefficient links between the human eye	
		Gamma	and the digital camera Whether adapt the digital image taken with the help of a linearly recording camera to the	
		GammaShift Illuminance	Intensity of light	
	ImageInfo	Manufacture Model Overlap	Microscope manufacture Microscope model Overlapping pixels between single tiles	
		Pitch PixelSizeX	Physical pitch (nm) between neighbor spots Size of pixel in x direction	
		PixelSizeY Optional	Size of pixel in y direction	
		QCResultFile ScanChannel	Prefix of imageQC result file, the unique identifier of the image Fluorescence channel	
		ScanCols	Number of columns scanned Magnification power of the scan objective	
		ScanObjective ScanRows ScanTime	Number of rows scanned Scan date and time	
		Sharpness StereoResepVersion	Degree of clarity of the edge(s) of the image Stereo-resep version	
		StitchedImage	Whether the corresponding image is a panorama image (true) or a set of tiled images (false)	
		STOmicsChipSN	Stereo-seq Chip T serial number An adjustment in electronic and film imaging	
		WhiteBalance	that corrects for the color balance of the lighting	
		ID array RGBScale	RGB color	
		attribute	Reference score for any in the	
		ClarityScore	Reference score for evaluating the clearness of cell boundaries Email of the experimenter who did QC for the image	
		GoodFOVCount	Number of FOVs that have identified more than 3 track cross points	
		ImageQCVersion QCPassFlag	Whether the corresponding image passed QC	
	QCInfo	RemarkInfo Optional StainType	Any remarks, notes, comments on the image The staining type	
	Group	TotalFOVCount	Total number of FOVs Reference score for evaluating whether the detected track lines can be used as	
			references for image stitching and registering with gene expression matrix. (This score only evaluate whether the program detected track lines on the image, it does not infer the clarity	
		TrackLineScore	of the lines or the images) 2D array	
		CrossPoints	x_y *n Dataset	(x, y) coordinates of track cross points in each FOV
		StitchingScore	Reference score for stitching	
		TemplateSource	The reference FOV for deriving the template that used for rotating and scaling the microscopic images	
			attribute	
			StitchedGlobalHeight	Height of stitched tiled images using BGI stitching algorithm
		BGIStitch	Tiled Image Only StitchedGlobalWidth	
		BGIStitch	Tiled Image Only StitchedGlobalWidth Tiled Image Only 2D array	stitching algorithm Width of stitched tiled images using BGI stitching algorithm
	Stitch		Tiled Image Only StitchedGlobalWidth Tiled Image Only	stitching algorithm Width of stitched tiled images using BGI
	Stitch		StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only	stitching algorithm Width of stitched tiled images using BGI stitching algorithm
			StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (
		Group	Tiled Image Only StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image
IPR		Group	Tiled Image Only StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope
IPR		Group	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched)
IPR		Group	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal
IPR		ScopeStitch Group StitchEval	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix
IPR		ScopeStitch Group StitchEval	Tiled Image Only StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal
IPR		ScopeStitch Group StitchEval	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalV Dataset Tiled Image Only Reference score for tissue segmentation	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
IPR	TissueSeg	ScopeStitch Group StitchEval Group TissueSegScore TissueSegShape	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalV Dataset Tiled Image Only	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
IPR	Group	ScopeStitch Group StitchEval Group attribute TissueSegScore	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalV Dataset Tiled Image Only Reference score for tissue segmentation Image shape for tissue segmentation mask	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
IPR	TissueSeg	ScopeStitch Group StitchEval Group attribute TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalCoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalv Dataset Tiled Image Only Encoded tissue segmentation mask image Encoded tissue segmentation mask file (before register with gene expression matrix)	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
IPR	TissueSeg Group CellSeg	ScopeStitch Group StitchEval Group StitchEval Group TissueSegScore TissueSegShape 2D array TissueMask Dataset	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalV Dataset Tiled Image Only Reference score for tissue segmentation Image shape for tissue segmentation mask image Encoded tissue segmentation mask file (Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
IPR	TissueSeg	ScopeStitch Group StitchEval Group StitchEval Group TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalCoc Dataset attribute MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalv Dataset Tiled Image Only Encoded tissue segmentation mask image Encoded tissue segmentation mask file (before register with gene expression matrix)	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
IPR	TissueSeg Group CellSeg	ScopeStitch Group StitchEval Group TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Attribute	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalHeight GlobalLoc Dataset MaxDeviation 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalV Dataset Tiled Image Only Pataset Tiled Image Only Dataset Tiled Image Only Reference score for tissue segmentation Image shape for tissue segmentation mask image Encoded tissue segmentation mask file (before register with gene expression matrix) Reference score for cell segmentation Encoded cell segmentation mask file (before register with gene expression matrix) Count of counter clockwise rotation of 90	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
IPR	TissueSeg Group CellSeg	ScopeStitch Group StitchEval Group attribute TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape (Optional) 2D array CellMask Dataset Optional)	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only StitchEvalV Dataset Tiled Image Only Encoded tissue segmentation mask image Encoded tissue segmentation mask image Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Count of counter clockwise rotation of 90 degree Whether horizontally flipped or not	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg	ScopeStitch Group StitchEval Group attribute TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Qptional 2D array attribute CounterRot90	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalHeight GlobalDeviation Dataset Panorama Image Only StitchEvalH Dataset Tiled Image Only StitchEvalV Dataset Tiled Image Only StitchEvalV Dataset Tiled Image Only Reference score for tissue segmentation mask image Encoded tissue segmentation mask file (before register with gene expression matrix) Reference score for cell segmentation Encoded cell segmentation mask file (before register with gene expression matrix) Count of counter clockwise rotation of 90 degree	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg	ScopeStitch Group StitchEval Group attribute TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional attribute CounterRot90 Flip MatrixShape OffsetX OffsetY	Titled image Only StitchedGlobalWidth Titled image Only StitchedGlobalLoc Dataset Titled image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset attribute MaxDeviation Dataset Panorama image Only 2D array StitchEvalH Dataset Titled image Only 2D array StitchEvalV Dataset Titled image Only Encoded tissue segmentation mask image Encoded tissue segmentation mask image Encoded tissue segmentation mask file (before register with gene expression matrix) Reference score for cell segmentation Encoded tissue segmentation mask file (before register with gene expression matrix) Count of counter clockwise rotation of 90 degree Whether horizontally flipped or not Height and width of the gene expression matrix Offset between microscope image and gene expression matrix in x-axis Offset between microscope image and gene expression matrix in y-axis	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group	ScopeStitch Group StitchEval Group attribute TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape (Optional) 2D array CellMask Dataset Optional attribute CounterRot90 Flip MatrixShape OffsetX	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalHoc Dataset Taled Image Only attribute GlobalLoc Dataset MaxDeviation Dataset Panorama Image Only StitchEvalH Dataset Tiled Image Only StitchEvalH Dataset Tiled Image Only StitchEvalW Dataset Tiled Image Only Encoded tissue segmentation mask image Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation of 90 degree Whether horizontally flipped or not Height and width of the gene expression matrix in x-axis Offset between microscope image and gene expression matrix in x-axis Offset between microscope image and gene expression matrix in x-axis	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg	ScopeStitch Group StitchEval Group attribute TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional TissueMask Dataset Optional Attribute CounterRot90 Flip MatrixShape OffsetX OffsetY RegistrationScore	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalHoc Dataset Attribute MaxDeviation Dataset Panorama Image Only StitchEvalH Dataset Tiled Image Only StitchEvalH Dataset Tiled Image Only StitchEvalH Dataset Tiled Image Only StitchEvalV Dataset Tiled Image Only Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix)	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group	ScopeStitch Group StitchEval Group attribute TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional attribute CounterRot90 Flip MatrixShape OffsetX OffsetY RegistrationScore	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset Tiled Image Only attribute MaxDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEval Dataset Tiled Image Only Pattern StitchEval Dataset Tiled Image Only Count of counter clockwise rotation mask image Encoded tissue segmentation mask file (before register with gene expression matrix) Reference score for cell segmentation Encoded cell segmentation mask file (before register with gene expression matrix) Count of counter clockwise rotation of 90 degree Whether horizontally flipped or not Height and width of the gene expression matrix in x-axis Offset between microscope image and gene expression matrix in y-axis Reference score for registration Rotation degree between raw image and deviation template Scale between raw image and deviation	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group	ScopeStitch Group StitchEval Group StitchEval Group TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional attribute CounterRoty0 Filip MatrixShape OffsetX OffsetX OffsetY RegistrationScore Rotation ScaleX ScaleY XStart	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalWidth 2D array GlobalWidth 2D array GlobalDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalV Dataset Tiled Image Only Encoded dissue segmentation mask file (before register with gene expression matrix) Encoded dissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix)	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group	ScopeStitch Group StitchEval Group StitchEval Group TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional Stribute CounterRot90 Filip MatrixShape OffsetX OffsetX OffsetY RegistrationScore Rotation ScaleX ScaleY XStart YStart Parray MatrixTemplate	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset Amaze A	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group	ScopeStitch Group StitchEval Group StitchEval Group TissueSegScore TissueSegShape 2D array TissueMask Dataset Stribute CellSegShape Optional 2D array CellMask Dataset Optional Attribute CounterRot90 Flip MatrixShape OffsetX OffsetY RegistrationScore Rotation ScaleX ScaleY XStart YStart Dataset Dataset Dataset Dataset Attribute Dataset	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset Astribute MaxDeviation Dataset Panorama Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalH Dataset Tiled Image Only 2D array StitchEvalV Dataset Tiled Image Only Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation file (before register with gene expression matrix) Encoded cell segmentation file (before register with gene expression matrix) Encoded cell segmentation file (before register with gene expression matrix) Encoded cell segmentation file (before register with gene expression matrix)	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
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	TissueSeg Group CellSeg Group Register Group	ScopeStitch Group StitchEval Group StitchEval Group TissueSegScore TissueSegScore TissueSegScore TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional Attribute CounterRot90 Filip MatrixShape OffsetX OffsetY RegistrationScore Rotation ScaleX ScaleY XStart YStart Lattribute Stitch	StitchedGlobalWidth Tited Image Only StitchedGlobalLoc Dataset Tited Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset Tited Image Only GlobalLoc Dataset Tited Image Only StitchevalH Dataset Panorama Image Only 2D array StitchEvalH Dataset Tited Image Only StitchEvalH Dataset Tited Image Only StitchEvalW Dataset Tited Image Only StitchEvalW Dataset Tited Image Only Encoded tited Image Only Encoded tited Image Only Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded the segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Count of counter clockwise rotation of 90 degree Expression matrix in x-axis Reference score for registration Rotation degree between raw image and gene expression matrix in y-axis Reference score for registration Rotation degree between raw image and deviation template in vertical direction Scale between raw image and deviation template in vertical direction Gene expression matrix offset y (GEF geneExplybinNexpression attribute miny) Whether manually stitched the tiled i	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group Register Group	ScopeStitch Group StitchEval Group StitchEval Group attribute TissueSegScore TissueSegScore TissueSegShape 2D array TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional attribute CounterRot90 Flip MatrixShape OffsetX OffsetX OffsetX Flip MatrixShape OffsetX ScaleX ScaleX ScaleX ScaleY XStart YStart TyStart TySt	StitchedGlobalWidth Tiled Image Only StitchedGlobalLoc Dataset Tiled Image Only attribute GlobalHeight GlobalWidth 2D array GlobalLoc Dataset Attribute MaxDeviation Dataset Panorama Image Only StitchEvalH Dataset Tiled Image Only StitchEvalH Dataset Tiled Image Only StitchEvall Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix in y-cvit and gene expression matrix offset x (GEF gene ExpfsinNexpression attribute minx) Gene expression matrix offset x (GEF gene ExpfsinNexpression attribute minx) Whether manually stitched the dell tissue coverage regions	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group Register Group	ScopeStitch Group StitchEval Group StitchEval Group StitchEval Group TissueSegScore TissueSegScore TissueMask Dataset attribute CellSegShape Optional 2D array CellMask Dataset Optional attribute CounterRot90 Flip MatrixShape OffsetX OffsetX OffsetY RegistrationScore Rotation ScaleX ScaleY XStart YStart YStart Total Parisy MatrixTemplate Dataset attribute stitch tissueseg cellseg register attribute stitch tissueseg	StitchedGlobalWidth Tiled Image Only) StitchedGlobalLoc Dataset Tiled Image Only) StitchedGlobalLoc Dataset Tiled Image Only) StitchedGlobalLoc ClobalHeight GlobalWidth 2D array GlobalLoc Dataset Panorama Image Only StitchEvaltH Dataset Panorama Image Only StitchEvaltH Dataset Tiled Image Only StitchEvaltV Dataset Tiled Image Only StitchEvaltV Dataset Tiled Image Only StitchEvaltW Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation stitut (before register with gene expression matrix) Encoded tissue segmentation file (before register with gene expression matrix) Encoded tissue segmentation file (before register with gene expression matrix) Encoded tissue segmentation Encoded tissue segmentation Encoded tissue segmentation Whether horizontal direction Scale between raw image and deviation template in vertical direction Scale between raw image and deviation template in vertical direction Scale between raw image and deviation template in vertical direction Scale between raw image and deviation template in vertical direction Scale between raw image and deviation template in vertical direction Scale between raw image and deviation template in vertical direction Scale betwee	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes
	TissueSeg Group CellSeg Group Register Group Group	ScaleX ScaleY Attribute CounterRot90 Flip MatrixShape OffsetX OffsetX OffsetX Cataset ScaleX ScaleY XStart YStart Lattribute Cellseg attribute CounterRot90 Flip MatrixShape OffsetX Contain ScaleX ScaleY XStart YStart Lattribute Cellseg	StitchedGlobalWidth Tiled Image Only 2D array StitchedGlobalLoc Dutased Tiled Image Only attribute GlobalHeight GlobalWidth 2D array StitchedGlobalLoc Dataset Attribute MaxDeviation Dataset Panotama Image Only 2D array StitchEvalH Dutaset Tiled Image Only 2D array StitchEvalH Dutaset Tiled Image Only 2D array StitchEvalV Dutaset Tiled Image Only 2D array StitchEvalV Dutaset Tiled Image Only Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded cell segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Encoded tissue segmentation mask file (before register with gene expression matrix) Center promise and deviation template in vertical direction Scale between matrix of the gene expression matrix of the gene expression matrix offset y (GEF geneExpSphinNexpression attribute minX) Gene expression matrix offset y (GEF geneExpSphinNexpression attribute minX) Gene expression matrix offset y (GEF geneExpSphinNexpression attribute minX) Whether manually stitched the tited linages Whether manually delineated the cell	Width of stitched tiled images using BGI stitching algorithm Coordinates for the BGI stitched tiled image Height of panorama image Width of panorama image Coordinates for the stitched tiled image (either program stitched or microscope stitched) Maximum stitching deviation Global stitching deviation matrix Stitching deviation matrix for the horizontal axes

A 2D matrix merges stitched image, tissue segmentation boundary and cell segmentation boundary

IPR file format version

Preview

IPRVersion

Dataset