

Cell Centered Database

University of California, San Diego

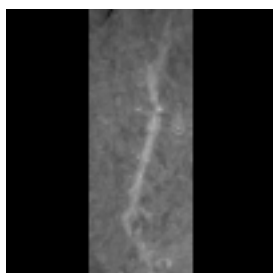
Maryann Martone

Microscopy Product #:14 ACC1_2ma

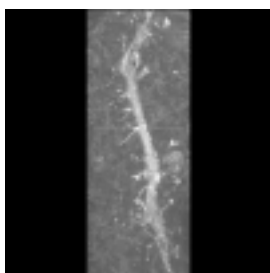
For the most updated information, please visit

<http://ccdb.ucsd.edu/CCDBWebSite/main?event=displaySum&mpid=14>

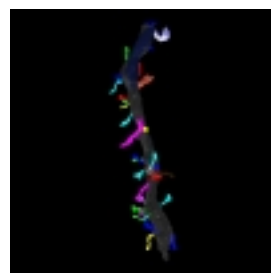
Image2D



Reconstruction



Segmentation



Project Information:

PROJECT_ID	P0000
PROJECT_NAME	Mouse BIRN test data
PROJECT_DESCRIPTION	NCMIR test data for Mouse BIRN
LEADER	Maryann Martone
FUNDING_AGENCY	NIH
PROJECT_START_DATE	2001-09-01 00:00:00.0
PROJECT_END_DATE	
COLLABORATORS	Eric Bushong
PUBLICATION1	
PUBLICATION2	
PUBLICATION3	

Experiment Information -	
PURPOSE	to obtain multi resolution data for Mouse BIRN
TITLE	Intracellular Injection of Nucleus Accumbens Neuron
EXPERIMENTER	Eric Bushong
EXPERIMENT_NAME	
EXPERIMENT_DATE	2001-12-13 00:00:00.0

Subject Information -	
GROUP_BY	
SUBJECT_NAME	
FIXATION_METHOD_ID	
SCIENTIFIC_NAME	mus musculus
SPECIES	mouse
STRAIN	C57BL/6
AGE	2 months
AGECLASS	adult
ANIMAL_NAME	
LITTER_ID	
SEX	male
VENDOR	
WEIGHT	

Tissue -	
ANATOMIC_LOCATION	nucleus accumbens
MICROTOME	ultramicrotome
ORIENTATION	coronal
THICKNESS	2 um
TISSUE_PROD_STORAGE	
EXTERNAL_FILE_NAME	
TISSUE_GROUP_TYPE	

Microscopy Product Information -	
MICROSCOPY_PRODUCT_ID	14
IMAGE_BASENAME	ACC1_2ma
CREATE_DATE	2002-04-19 00:00:00.0
INSTRUMENT	JEOL4000 IVEM
MICROSCOPE_TYPE	IVEM
PLANE_COUNT	
PRODUCT_TYPE	single tilt
PURL	NA
SESSION_NAME	ACC1_2ma/acc1_2ma_seg.jpg
TELESCIENCE_SRB	P0000/Experiment_1/Subject_1/Tissue_13/Microscopy_14
X_RESOLUTION	
Y_RESOLUTION	
XSIZE	1024
YSIZE	1024

Protocol:

N/A

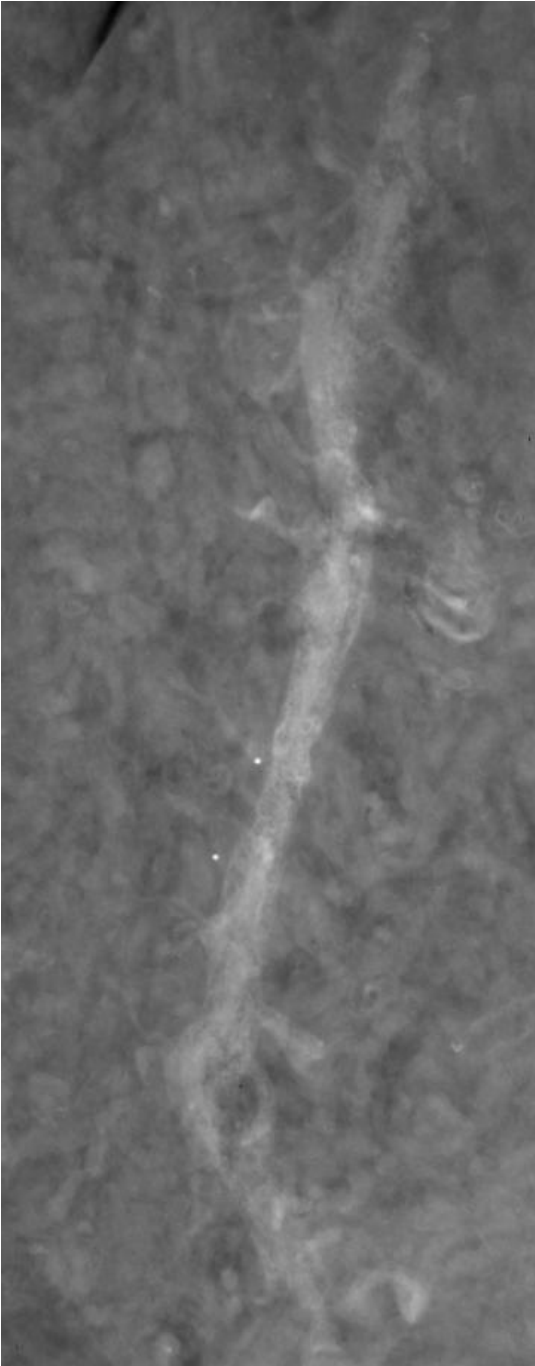
Image Type -	
SINGLE_TILT_IMAGE_SEQ_ID	3
TILT_INCREMENT	2 degrees
STEREO_PAIRS_ID	6001
STEREO_ANGLES	0
SINGLE_TILT_IMAGE_SEQ_ID	3
TILT_INCREMENT	2 degrees
RANGE_MAX	60 degrees
RANGE_MIN	-60 degrees

Specimen Description -	
ANATOMICAL_DETAIL	14
ATLAS_COORD	, ,
CELL_TYPE	medium spiny neuron
ORGAN	brain
REGION	nucleus accumbens
STRUCTURE	spiny dendrite
SYSTEM	central nervous system

Electron Microscopy Product -	
EM_PRODUCT_ID	3
ACCELERATING_VOLTAGE	400 KeV
MAGNIFICATION	3000
RECORDING_MEDIUM	film

Raw 2D Image

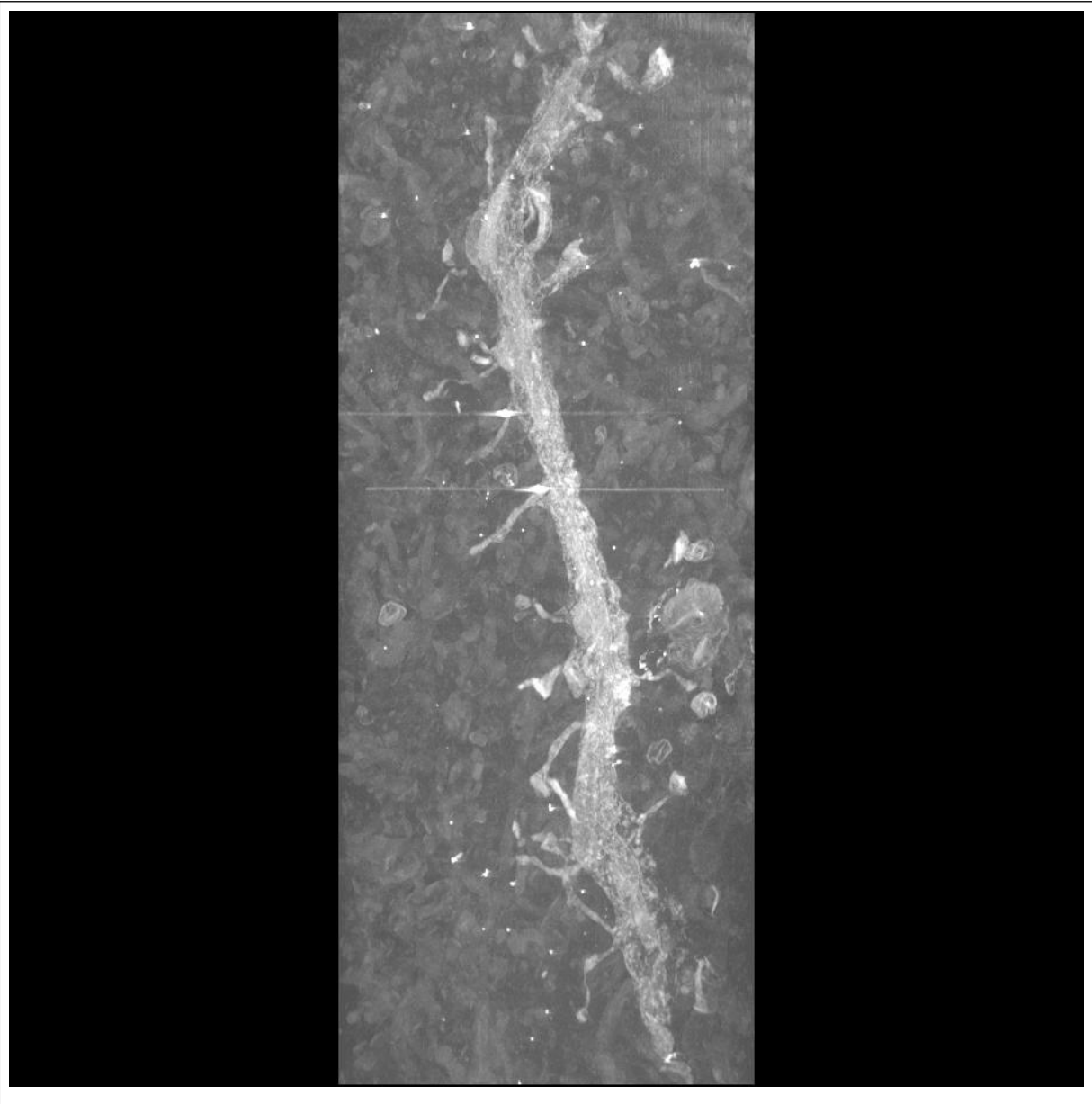
Raw Low Resolution 2D Image -



Raw 2D Image -	
IMAGE2D_ID	14
IMAGE_DESC	Tar file containing full sized unaligned tilt images in Suprim format (tomo1.*.f) along with the fiducial mark file used to align them (tomo1.fido) and the aligned, cropped images used for the reconstruction (tomo1.*.crop). An animation of the aligned, cropped images may be viewed by clicking on the animation link. Note the basename for the 2D data files (tomo1) is different than the basename for the volume (acc1_2ma).
IMAGE_FILE_NAME	ACC1_2ma/ACC1_2ma_img.jpg
MAGNIFICATION	3000
RAW_ANIMATION_DESC	Animation through the aligned tilt series
RAW_ANIMATION_FILE	ACC1_2ma/ACC1_2ma_img.qt
RAW_DATA_FILE	ACC1_2ma/ACC1_2ma_img.tar
THUMBNAIL_DESC	Zero tilt image from a single tilt series through a 2 ?m thick section of a medium spiny neuron that has been intracellularly injected and photooxidized
THUMBNAIL_FILE	P0000/ACC1_2ma_rt.jpg

Reconstruction

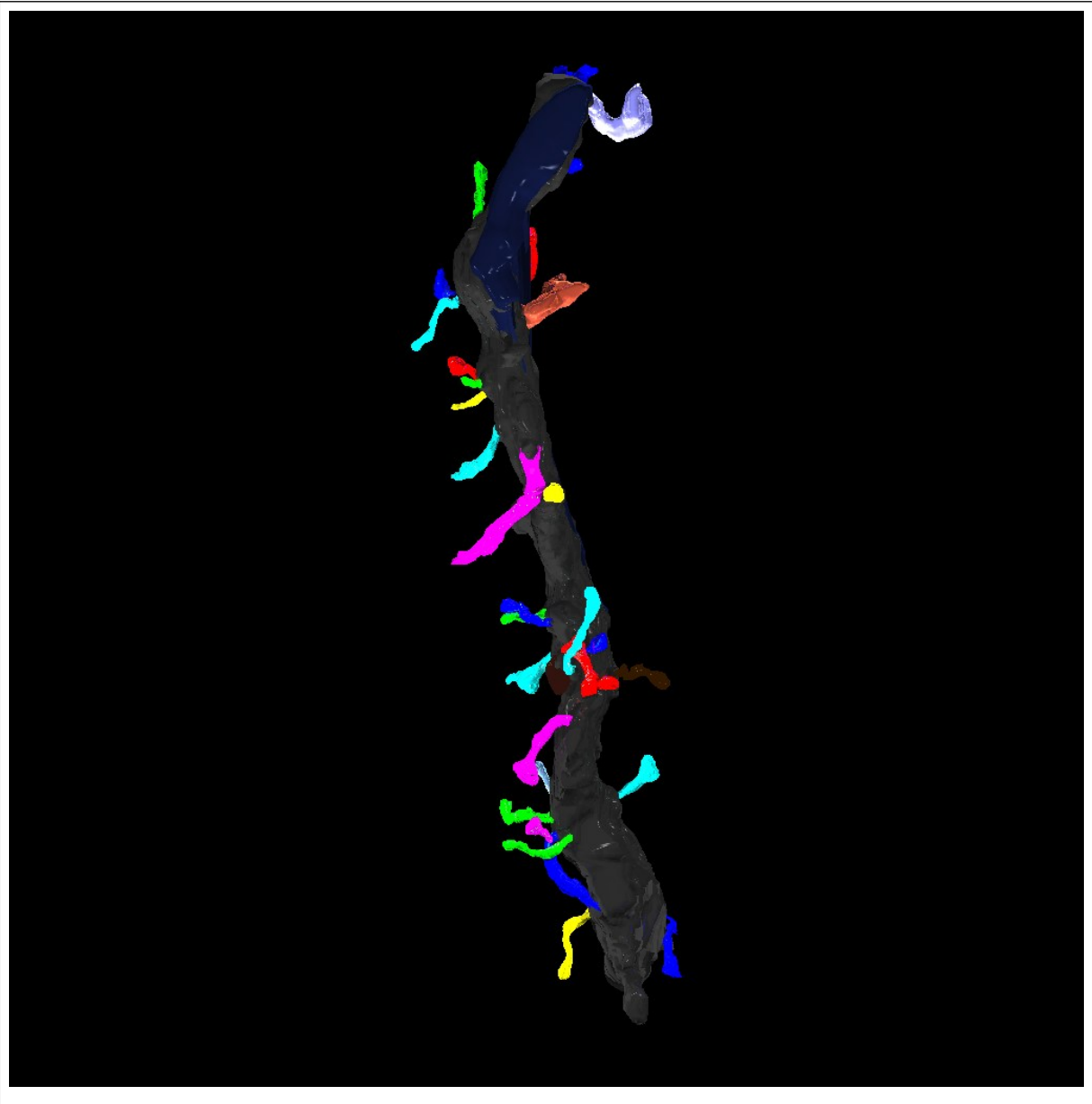
Reconstruction Image -



Reconstruction -	
RECONSTRUCTION3D_ID	14
ALIGNMENT_METHOD	manual
ALIGNMENT_PROGRAM	xfido
CORRELATED_VOLUME_NAME	ACC1/Proj_EricsMontage.tif
CROPPING_COORDINATE1	,
CROPPING_COORDINATE2	,
IMAGE_MAP_FILE	ACC1/acc1_cellmap.jpg
RECON_ALGORITHM	R-weighted back projection
RECON_DATE	2002-04-19 00:00:00.0
RECON_DESC	Tar file containing the tomographic volume in Analyze 7.5 format (acc1_2ma.img/hdr).
RECON_PROGRAM	Suprim
RECON_TYPE	single tilt electron tomography
THUMBNAIL	P0000/ACC1_2ma_vt.jpg
VOLUME_DIMENSION	360, 920, 191
VOLUME_NAME	ACC1_2ma/ACC1_2ma_vol.tar
VOXEL_SCALE	.02, .02, .02
RECONSTRUCTION_IMAGES_ID	14
RECON_IMAGE_DESC	Tomographic reconstruction of portion of spiny dendrite from a medium spiny neuron from mouse nucleus accumbens. Neuron was filled with Lucifer Yellow and then photooxidized. To view correlated light microscopic data, click View Correlated Data
RECON_RAW_FILENAME	ACC1_2ma/ACC1_2ma_vol.tar
RECON_FILE_NAME	ACC1_2ma/acc1_2ma.vol.jpg
VOLUME_THUMBNAIL	P0000/ACC1_2ma_vt.jpg
ANIMATION_FILE	ACC1_2ma/acc1_2ma.QT
ANIMATION_DESC	maximum intensity projection through spiny dendrite rotated in 5 degrees increments on the y axis. Contrast is reversed so that the stained dendrite appears bright against a dark background

Segmentation

Segmentation Image -



Segmentation -	
SEGMENTED_OBJECT_ID	76
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
OBJECT_DESC	part of the dendritic shaft
OBJECT_NAME	sheared_face
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	76
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
THUMBNAIL	P0000/ACC1_2ma_st.jpg
SEGMENTED_OBJECT_ID	96
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.2958 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp3
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	96
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the

Segmentation -	
	dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.4934788 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.065133816 um ³
SEGMENTED_OBJECT_ID	98
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.1176 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp5
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	98
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.6208918 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.046883144 um ³
SEGMENTED_OBJECT_ID	101
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.

Segmentation -	
IS_MANUAL	Y
LENGTH	1.6786 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp8
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	101
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	2.7741186 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.133163888 um ³
SEGMENTED_OBJECT_ID	103
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.6192 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp10
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	103
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.29018912 um ²

Segmentation -	
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.045562792 um3
SEGMENTED_OBJECT_ID	105
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.342 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp12
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	105
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.31484892 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.043007272 um3
SEGMENTED_OBJECT_ID	107
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	2.8226 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp14

Segmentation -	
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	107
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	3.87769668 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.122153856 um ³
SEGMENTED_OBJECT_ID	109
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.7952 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp16
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	109
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.39854704 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.048576176 um ³
SEGMENTED_OBJECT_ID	112
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements

Segmentation -	
	from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.584 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp19
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	112
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	2.70748632 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.127605632 um ³
SEGMENTED_OBJECT_ID	114
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.5136 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp22
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	114
SEGMENT_PERSON_NAME	Maryann Martone

Segmentation -

SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.7863064 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.023468192 um ³
SEGMENTED_OBJECT_ID	115
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	.946 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp23
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	115
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.82255316 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.029399128 um ³
SEGMENTED_OBJECT_ID	117
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the

Segmentation -	
	tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.1176 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp25
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	117
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.92224264 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.034914792 um ³
SEGMENTED_OBJECT_ID	119
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	.814 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp28
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	119
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image

Segmentation -	
	shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.69188284 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.029058392 um ³
SEGMENTED_OBJECT_ID	121
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.4344 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp31
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	121
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.07416056 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.052196496 um ³
SEGMENTED_OBJECT_ID	123
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a

Segmentation -	
	list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.7028 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp33
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	123
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	2.7187248 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.136166624 um ³
SEGMENTED_OBJECT_ID	126
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	18.666 um
OBJECT_DESC	dendritic shaft
OBJECT_NAME	shaft
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	126
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar

Segmentation -

THUMBNAIL	P0000/ACC1_2ma_st.jpg
SEGMENTED_OBJECT_ID	128
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
OBJECT_DESC	dendritic spine/partial
OBJECT_NAME	sp26p
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	128
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
THUMBNAIL	P0000/ACC1_2ma_st.jpg
SEGMENTED_OBJECT_ID	129
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
OBJECT_DESC	dendritic spine/partial
OBJECT_NAME	sp30p
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	129
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from

Segmentation -	
	tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
THUMBNAIL	P0000/ACC1_2ma_st.jpg
SEGMENTED_OBJECT_ID	1088
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.936 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp1
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	1088
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.16937788 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.039472 um ³
SEGMENTED_OBJECT_ID	95
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a

Segmentation -	
	list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.3904 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp2
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	95
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.08641544 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.040366568 um ³
SEGMENTED_OBJECT_ID	97
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	.5962 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp4
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	97
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar

Segmentation -	
SURFACE_AREA	.44182908 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.013746568 um3
SEGMENTED_OBJECT_ID	99
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.6324 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp6
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	99
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.60645408 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.048320624 um3
SEGMENTED_OBJECT_ID	102
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.9096 um
OBJECT_DESC	dendritic spine

Segmentation -

OBJECT_NAME	sp9
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	102
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	2.49899364 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.108748024 um3
SEGMENTED_OBJECT_ID	104
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.0692 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp11
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	104
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.83556308 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.025001504 um3
SEGMENTED_OBJECT_ID	106

Segmentation -

ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.6082 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp13
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	106
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.141998 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.04456188 um ³
SEGMENTED_OBJECT_ID	108
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.8436 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp15
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	108

Segmentation -

SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	4.81095516 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.236886056 um3
SEGMENTED_OBJECT_ID	110
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.881 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp17
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	110
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	4.98029708 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.243807256 um3
SEGMENTED_OBJECT_ID	111
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend

Segmentation -

DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	.7414 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp18
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	111
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.6413 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.026045008 um ³
SEGMENTED_OBJECT_ID	113
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.7094 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp20
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	113
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object.

Segmentation -	
	Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.17360804 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.03135836 um ³
SEGMENTED_OBJECT_ID	116
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.4476 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp24
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	116
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.89270412 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.028611176 um ³
SEGMENTED_OBJECT_ID	118
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects.

Segmentation -	
	Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.8194 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp27
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	118
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.07642084 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.032976856 um ³
SEGMENTED_OBJECT_ID	120
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.012 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp29
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	120
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.

Segmentation -	
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.75308948 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.031369008 um3
SEGMENTED_OBJECT_ID	122
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.342 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp32
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	122
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	.9921758 um2
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.043326712 um3
SEGMENTED_OBJECT_ID	124
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.1484 um

Segmentation -

OBJECT_DESC	dendritic spine
OBJECT_NAME	sp34
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	124
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.03937064 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.025299648 um ³
SEGMENTED_OBJECT_ID	125
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	1.364 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp36
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	125
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	1.252229 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.060384808 um ³

Segmentation -	
SEGMENTED_OBJECT_ID	127
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
OBJECT_DESC	dendritic spine/partial
OBJECT_NAME	sp21p
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	127
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
THUMBNAIL	P0000/ACC1_2ma_st.jpg
SEGMENTED_OBJECT_ID	130
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
OBJECT_DESC	dendritic spine/partial
OBJECT_NAME	sp35p
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	130
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus

Segmentation -	
	accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
THUMBNAIL	P0000/ACC1_2ma_st.jpg
SEGMENTED_OBJECT_ID	100
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
ANALYZE_DESC	SA and Vol measurements from Analyze; length measurements from Xdend
DOWNLOADABLE_FILE_DESC	Tar file containing the segmented spines and dendritic shaft from the tomographic volume. Tarfile contains objects surfaced with Synu (*.synu), the associated Viewdata file required by Synu for viewing; and Xvoxtrace file (acc1_2ma.trace) used to contour the objects. Clicking on "All details" link in the segmentation window will return a list of segmented objects and their descriptions.
IS_MANUAL	Y
LENGTH	2.1428 um
OBJECT_DESC	dendritic spine
OBJECT_NAME	sp7
OBJECT_TYPE	surface
SEGMENTED_OBJ_2D_IMAGE	ACC1_2ma/acc1_2ma_seg.jpg
SEGMENTED_OBJECT_ID	100
SEGMENT_PERSON_NAME	Maryann Martone
SEG_DESC	Manual segmentation of dendritic spines using Xvoxtrace 2.11 from tomographic volume of spiny dendrite from mouse nucleus accumbens. Each spine was segmented as a separate object. Spines were surfaced and rendered using Synu. The display image shows a rendering of the dendritic spines (multiple colors) and the dendritic shaft (gray). The dark blue face on the dendritic shaft represents the shorn face of the dendrite at the volume surface.
SEG_FILE_NAME	ACC1_2ma/ACC1_2ma_seg.tar
SURFACE_AREA	2.42674696 um ²
THUMBNAIL	P0000/ACC1_2ma_st.jpg
VOLUME	.093212592 um ³

USER AGREEMENT

Data Sharing and Citation Policy: The mission of the CCDB is to promote data sharing among scientists interested in cellular and subcellular anatomy and in developing computer algorithms for 3D reconstruction and modeling of such data. Data sets may be viewed or shared at the discretion of the author of the data. In some cases, the data may be freely viewed and downloaded without contacting the original author while in other cases, permission of the author may have to be obtained prior to downloading the data. In either case, failure to cite or give proper credit to the original authors who collected these data in subsequent published articles or presentations is a material breach of this User Agreement. CCDB requires all researchers re-analyzing these published data via the CCDB access to reference the original published article and the CCDB. An example of an appropriate acknowledgement is provided on the CCDB web site. CCDB is not in a position to police every intended use of these data. The scientific community will self-police the compliance of this contractual obligation.

DISCLAIMER

THE DATA PROVIDED BY THE CCDB ARE FREELY DISTRIBUTED AND WITHOUT CHARGE. THESE DATA ARE PROVIDED BY THE CCDB "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT, TO ANY THIRD PARTY RIGHTS. IN NO EVENT SHALL THE CCDB BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THESE DATA, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

USER NOTIFICATION

For large size image data, it will take several minutes to download, please be patient. Thanks!

ACKNOWLEDGEMENT

Data used from the CCDB should be appropriately referenced, including both the author of the data and the CCDB. If the data were from a published study, the reference is included in the database record. The following reference should be cited for the CCDB:

Martone, M. E., Gupta, A., Wong, M., Qian, X., Sosinsky, G., Ludaescher, B., and Ellisman, M. H. A cell centered database for electron tomographic data. *J. Struct. Biology* 138: 145-155, 2002.

In addition, the support for the Cell Centered Database should be included in the acknowledgement section of any publication: The Cell Centered Database is supported by NIH grants from NCRR RR04050, RR RR08605 and the Human Brain Project DA016602 from the National Institute on Drug Abuse, the National Institute of Biomedical Imaging and Bioengineering and the National Institute of Mental Health, and NSF grants supporting the National Partnership for Advanced Computational Infrastructure NSF-ASC 97-5249 and MCB-9728338.

Maryann Martone