

# 3dBAR reconstruction examples

Under construction - more examples soon.

1. Based on Paxinos and Watson *The Rat Brain in Stereotaxic Coordinates*
2. Based on ScalableBrainAtlas templates
3. Based on Waxholm Space Atlas

## Based on Paxinos and Watson *The Rat Brain in Stereotaxic Coordinates*

Examples of reconstructions based on Paxinos and Watson *The Rat Brain in Stereotaxic Coordinates* created with 3D Brain Atlas Reconstructor. Meshes are presented without any additional processing such as smoothing or complexity reduction in order to fully represent source data.

Reconstruction of the whole brain

Segmented reconstruction of the cortex  
(both archi and neocortex):  
M1,M2 primary and secondary motor cortex  
RSD - retrosplenial dysgranular cortex  
V1 - primary visual cortex  
OlfCx - olfactory cortex  
S2 - secondary somatosensory cortex  
S1ULp - primary somatosensory cortex,  
upper lip region.

Thalamus

Segmented reconstruction of thalamus:  
LD - laterodorsal thalamic nucleus,  
PO - posterior thalamic nuclear group,  
LP - lateral posterior thalamic nucleus,  
DLG - dorsal lateral geniculate nucleus,  
MG - medial geniculate nucleus,  
Rt - reticular thalamic nucleus,  
PVA - paraventricular thalamic nucleus.

Pyramidal tract

Segmented reconstruction  
of pyramidal tract:  
ic - internal capsule,  
lfp - longitudinal fasciculus of the pons,  
cp - cerebral peduncles,  
py - pyramids.

## Based on ScalableBrainAtlas templates

Rhesus Monkey, Paxinos et al. 2000

NeuroMaps Macaque Atlas

Segmented reconstruction of the cortex:  
6, 47 - areas 6 and 47 of cortex,  
PE - parietal area PE,  
STreg - superior temporal sulcus  
V1,V4 - visual area 1 and 4.

Reconstructions of cerebral cortex  
and chosen subcortical structures:  
Amg - amygdala,  
Str - striatum,  
CgG - cingulate gyrus,  
FL,OL,PL - frontal, occipital and  
parietal lobe,  
Olf - olfactory bulb.

## Based on Waxholm Space Atlas

Reconstruction of whole brain

Segmented reconstructions  
of chosen brain structures:  
SC - superior colliculus,  
VS - ventricular system,  
cb - cerebellum.