

# Fly Brain Anatomical Orientation Analysis Report

Generated on: February 13, 2026

This report contains analysis of fly brain microscopy images, including template characteristics, sample orientation detection, and correction results.

## Template Analysis Results

**Template:** *JRC2018U\_template*

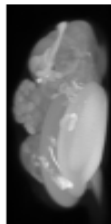
**Physical Dimensions:**  $627.9 \times 293.7 \times 174.0 \mu\text{m}$

**Voxel Resolution:**  $0.519 \times 0.519 \times 1.000 \mu\text{m}$

**Data Range:** 0-255

**Maximum Intensity Projections:**

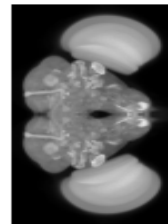
JRC2018U\_template  
X-Y (Dorsal)



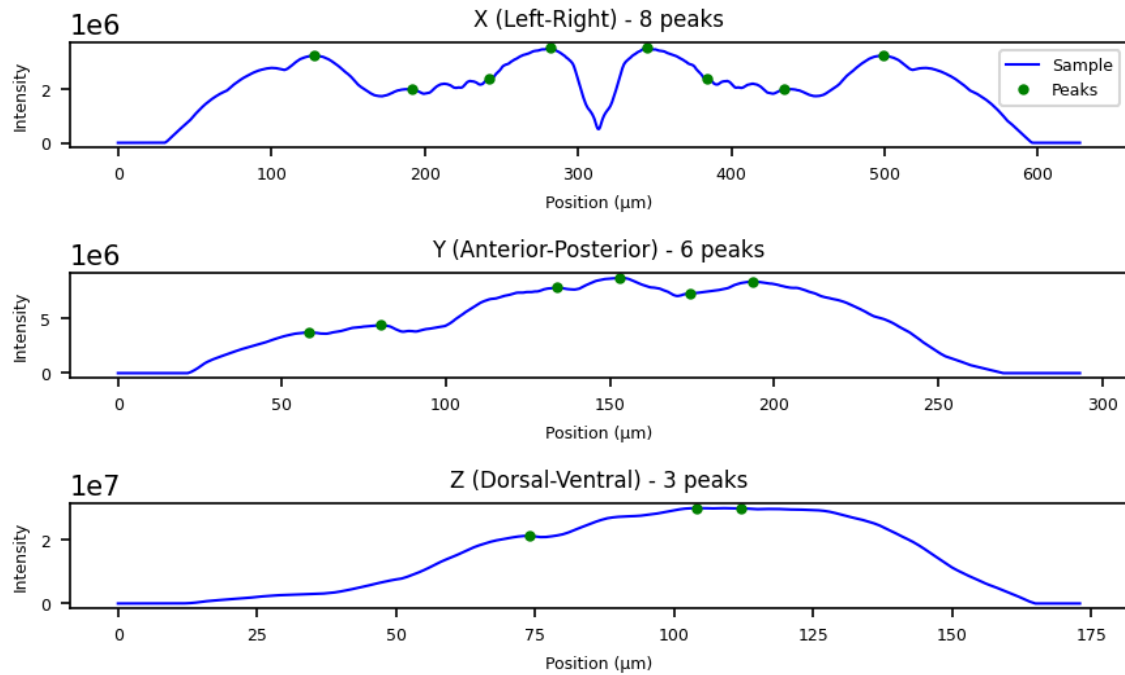
JRC2018U\_template  
X-Z (Lateral)



JRC2018U\_template  
Y-Z (Anterior)



## JRC2018U\_template Projection Analysis



**Template:** *JRC2018U\_template\_ips*

**Physical Dimensions:**  $627.9 \times 293.7 \times 174.0 \mu\text{m}$

**Voxel Resolution:**  $0.519 \times 0.519 \times 1.000 \mu\text{m}$

**Data Range:** 0-255

**Maximum Intensity Projections:**

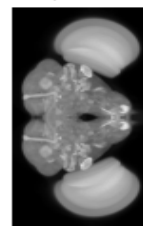
JRC2018U\_template\_ips  
X-Y (Dorsal)



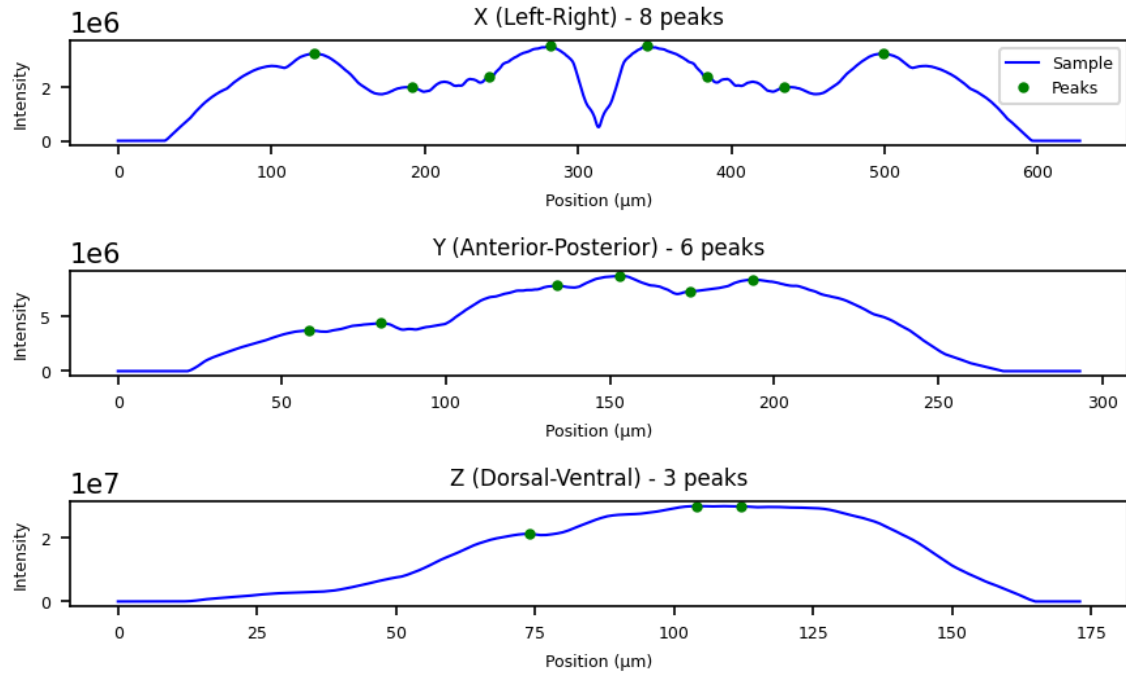
JRC2018U\_template\_ips  
X-Z (Lateral)



JRC2018U\_template\_ips  
Y-Z (Anterior)



## JRC2018U\_template\_lps Projection Analysis



**Template:** *JRCVNC2018U\_template*

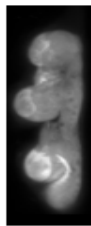
**Physical Dimensions:**  $264.0 \times 516.0 \times 152.8 \mu\text{m}$

**Voxel Resolution:**  $0.400 \times 0.400 \times 0.400 \mu\text{m}$

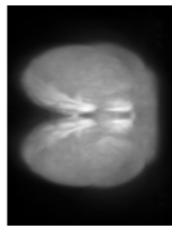
**Data Range:** 0-255

**Maximum Intensity Projections:**

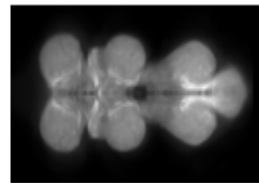
JRCVNC2018U\_template  
X-Y (Dorsal)



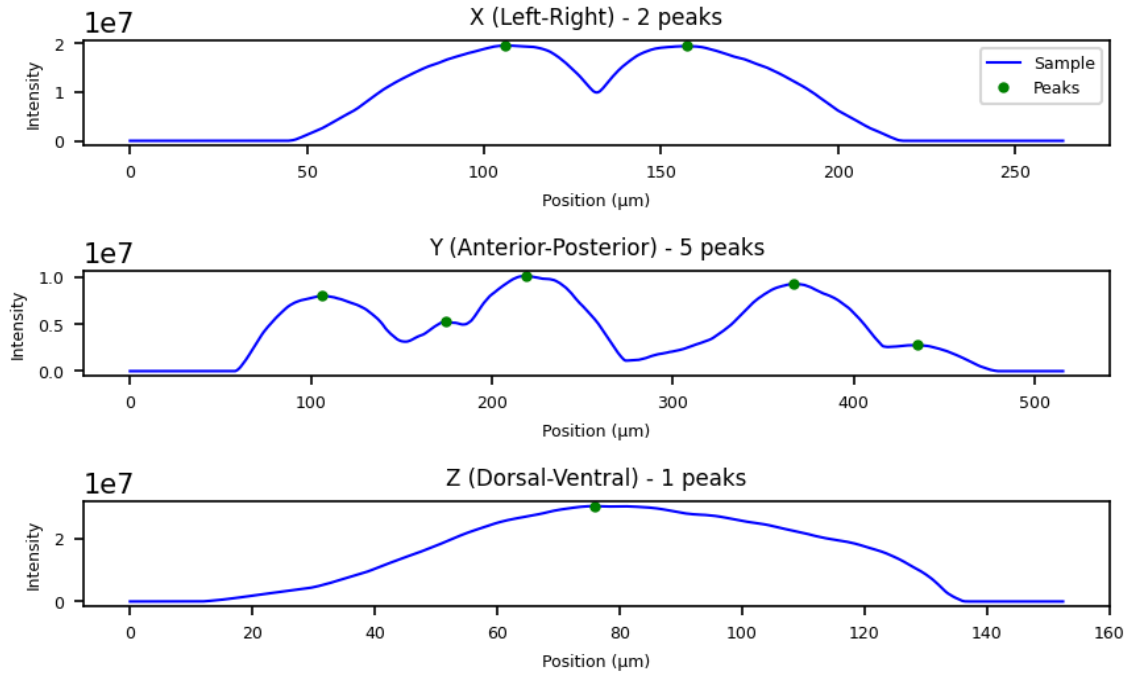
JRCVNC2018U\_template  
X-Z (Lateral)



JRCVNC2018U\_template  
Y-Z (Anterior)



## JRCVNC2018U\_template Projection Analysis



### Template: JRCVNC2018U\_template\_ips

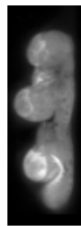
**Physical Dimensions:**  $264.0 \times 516.0 \times 152.8 \mu\text{m}$

**Voxel Resolution:**  $0.400 \times 0.400 \times 0.400 \mu\text{m}$

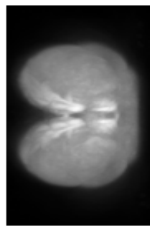
**Data Range:** 0-255

### Maximum Intensity Projections:

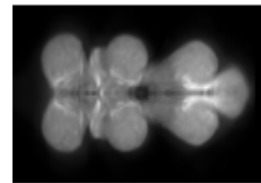
JRCVNC2018U\_template\_ips  
X-Y (Dorsal)



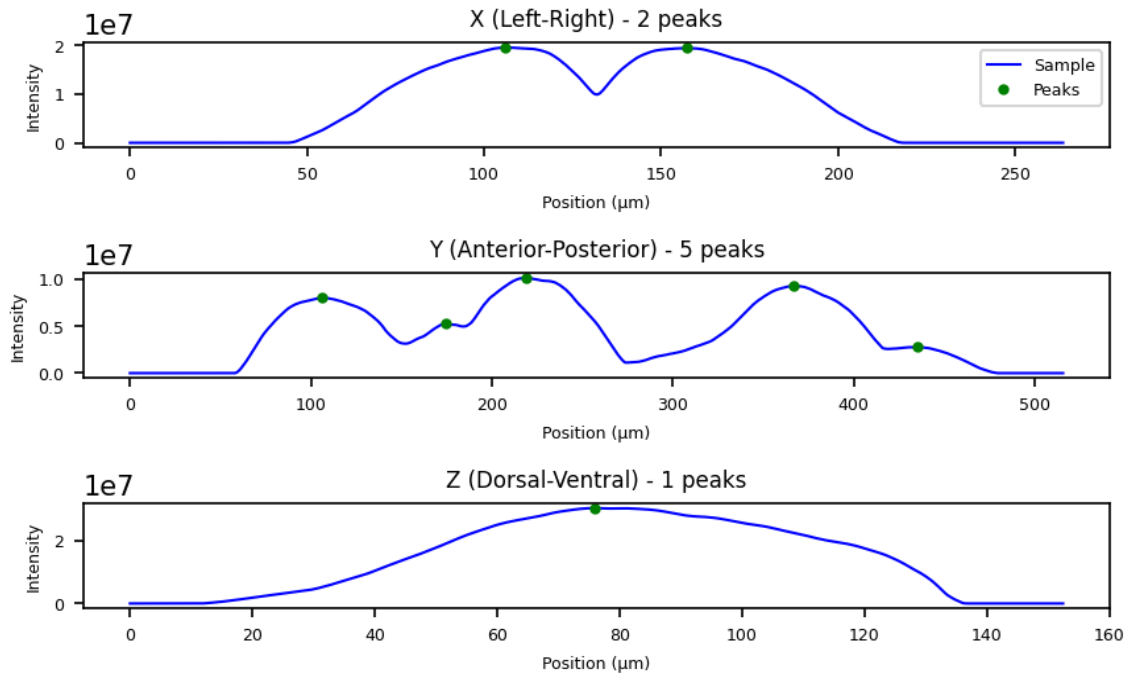
JRCVNC2018U\_template\_ips  
X-Z (Lateral)



JRCVNC2018U\_template\_ips  
Y-Z (Anterior)



## JRCVNC2018U\_template\_lps Projection Analysis



## Sample Analysis Results

**Sample:** *Brain\_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3\_background*

**Template Used:** JRC2018U\_template\_lps

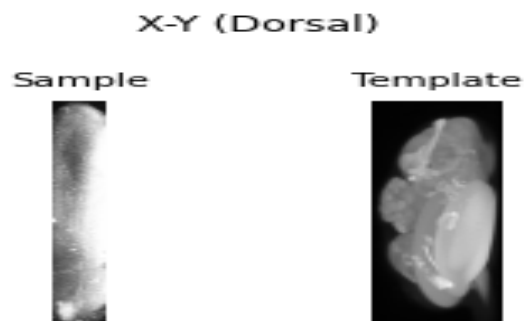
**Physical Dimensions:** 387.9 × 387.9 × 112.6 μm

**Voxel Resolution:** 0.379 × 0.379 × 0.901 μm

**Orientation Correct:** No

**Changes Needed:** 90° rotation (X-Y swap)

**Maximum Intensity Projections Comparison (Sample vs Template):**



### X-Z (Lateral)

Sample

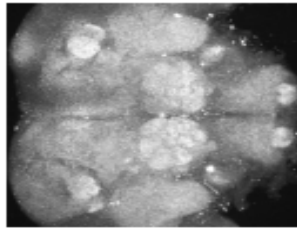


Template

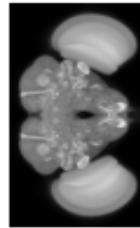


### Y-Z (Anterior)

Sample



Template



### Signal Channel Projections:

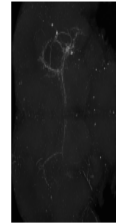
Brain\_SPR8AD.dsxD8D.FB1.1.Nc82.Brain.40x.3\_background Signal  
X-Y (Dorsal)



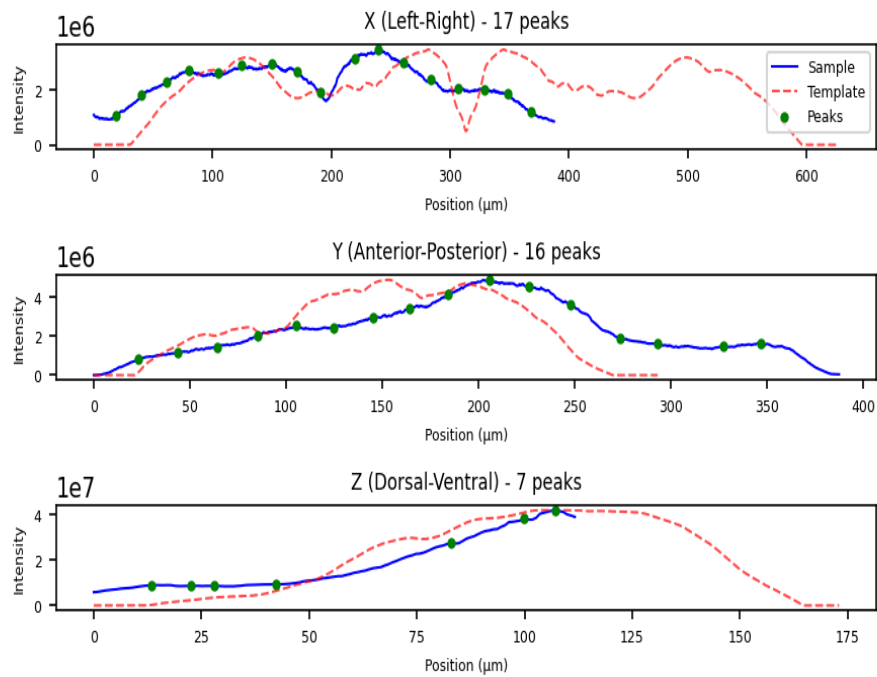
Brain\_SPR8AD.dsxD8D.FB1.1.Nc82.Brain.40x.3\_background Signal  
X-Z (Lateral)



Brain\_SPR8AD.dsxD8D.FB1.1.Nc82.Brain.40x.3\_background Signal  
Y-Z (Anterior)



# Brain\_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3\_background vs JRC2018U\_template\_Ips Projection Analysis



**Sample:** *VNC\_SPR8AD.FD6DBD\_FB1.1\_nc82647\_S1\_background*

**Template Used:** JRCVNC2018U\_template

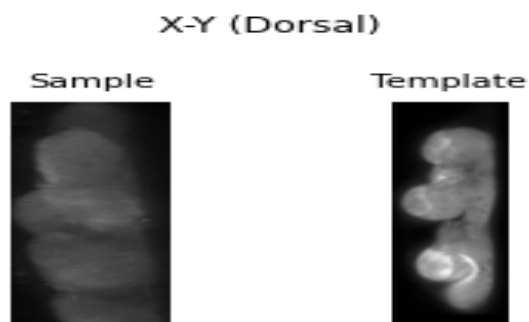
**Physical Dimensions:**  $387.9 \times 387.9 \times 126.3 \mu\text{m}$

**Voxel Resolution:**  $0.379 \times 0.379 \times 0.300 \mu\text{m}$

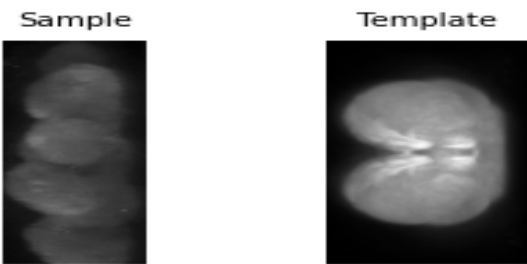
**Orientation Correct:** Yes

**Changes Needed:** None

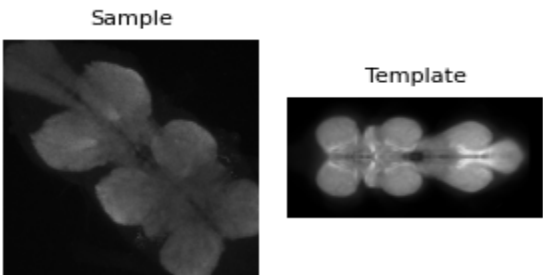
**Maximum Intensity Projections Comparison (Sample vs Template):**



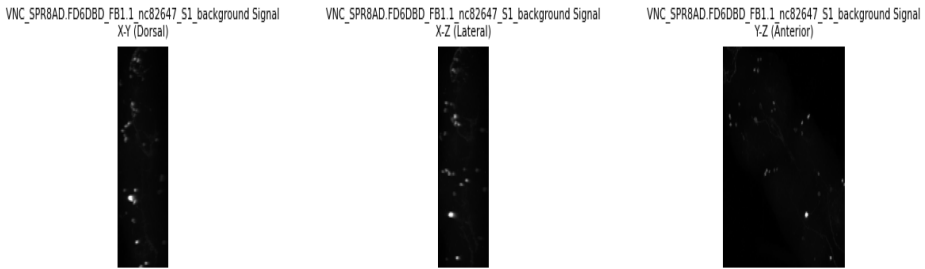
X-Z (Lateral)



Y-Z (Anterior)

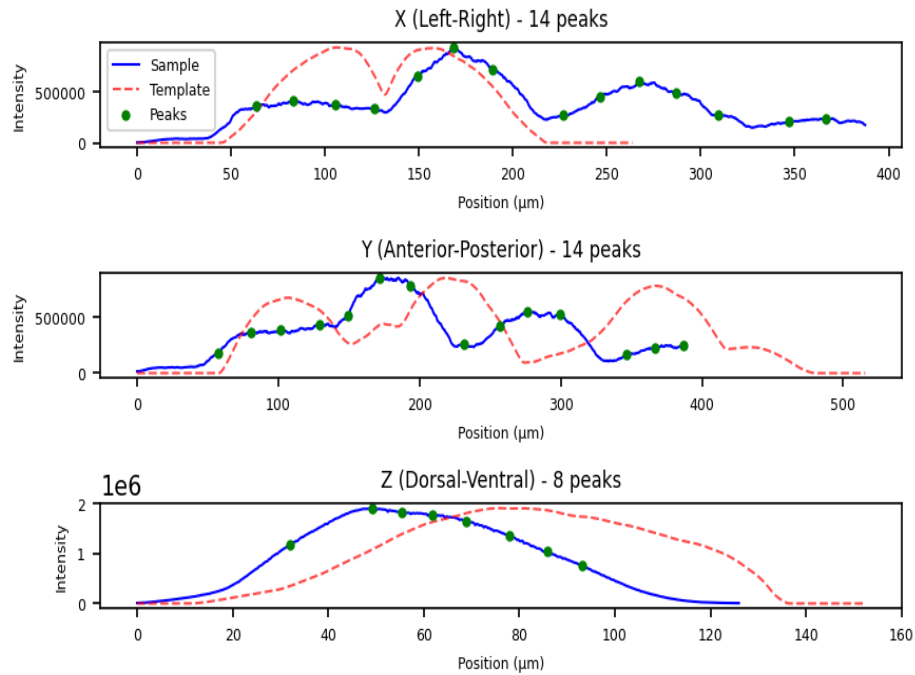


Signal Channel Projections:





# VNC\_SPR8AD.FD6DBD\_FB1.1\_nc82647\_S1\_background vs JRCVNC2018U\_template Projection Analysis



## Sample:

**VNC\_Fru11.12AD.dsxDBD.FB1.1.Brain.40x.8.composite\_background**

**Template Used:** JRCVNC2018U\_template

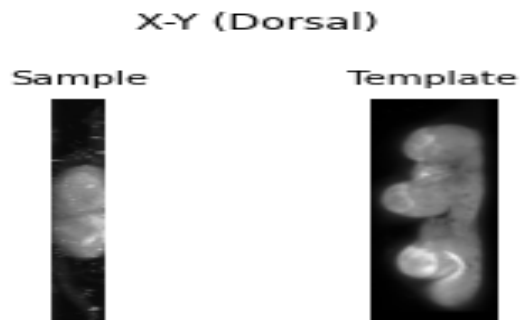
**Physical Dimensions:** 612.4 × 612.4 × 117.1 μm

**Voxel Resolution:** 0.598 × 0.598 × 0.901 μm

**Orientation Correct:** Yes

**Changes Needed:** None

## Maximum Intensity Projections Comparison (Sample vs Template):

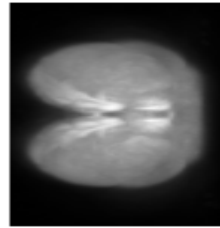


### X-Z (Lateral)

Sample

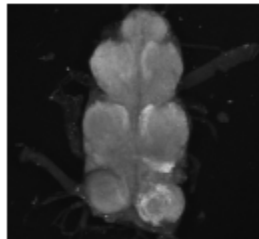


Template

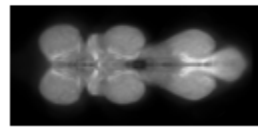


### Y-Z (Anterior)

Sample



Template



### Signal Channel Projections:

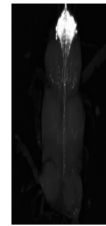
VNC\_Fru11.12AD.dsxD8D.F81.1.Brain.40x.8.composite\_background.Signal  
X-Y (Dorsal)



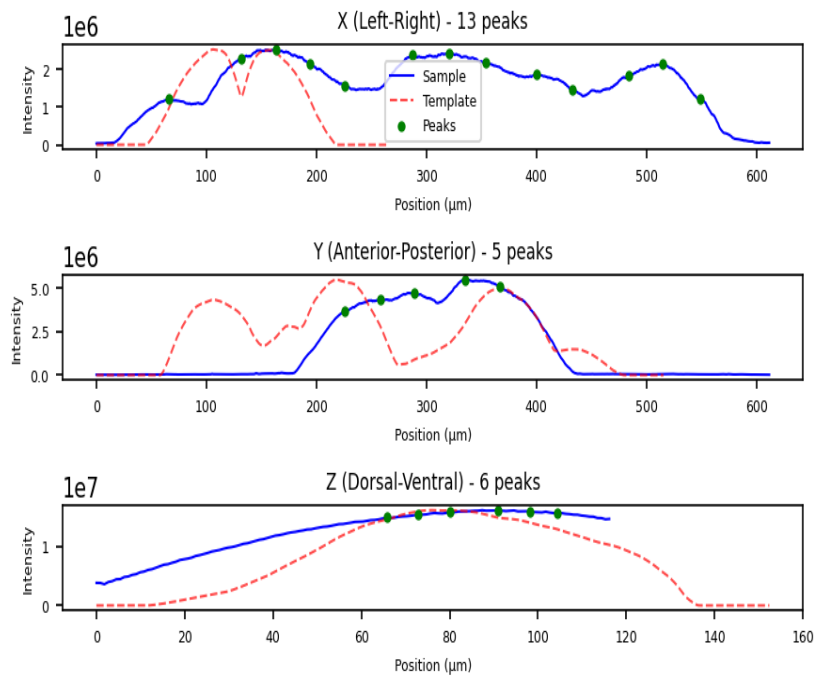
VNC\_Fru11.12AD.dsxD8D.F81.1.Brain.40x.8.composite\_background.Signal  
X-Z (Lateral)



VNC\_Fru11.12AD.dsxD8D.F81.1.Brain.40x.8.composite\_background.Signal  
Y-Z (Anterior)



# VNC\_Fru11.12AD.dsxDBD.FB1.1.Brain.40x.8.composite\_background vs JRCVNC2018U\_template Projection Analysis



**Sample:** VNC\_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3\_background

**Template Used:** JRCVNC2018U\_template

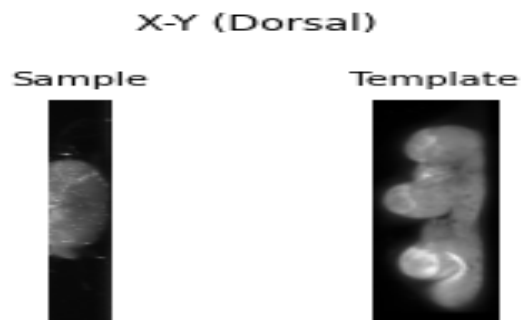
**Physical Dimensions:** 612.4 × 612.4 × 137.8 μm

**Voxel Resolution:** 0.598 × 0.598 × 0.901 μm

**Orientation Correct:** Yes

**Changes Needed:** None

**Maximum Intensity Projections Comparison (Sample vs Template):**

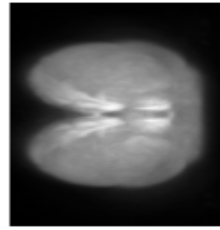


### X-Z (Lateral)

Sample

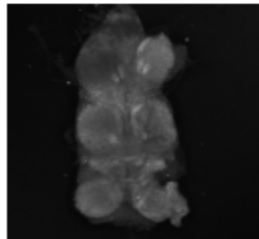


Template

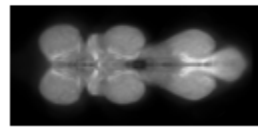


### Y-Z (Anterior)

Sample



Template



### Signal Channel Projections:

VNC\_SPR8AD.dsxD8D.FB1.1.Nc82.Brain.40x.3\_background Signal  
X-Y (Dorsal)



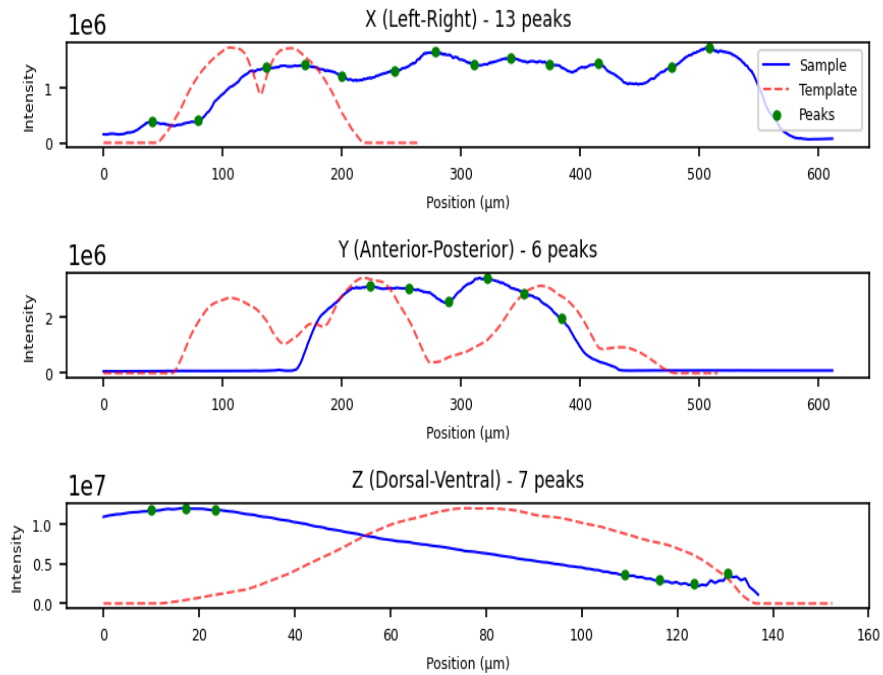
VNC\_SPR8AD.dsxD8D.FB1.1.Nc82.Brain.40x.3\_background Signal  
X-Z (Lateral)



VNC\_SPR8AD.dsxD8D.FB1.1.Nc82.Brain.40x.3\_background Signal  
Y-Z (Anterior)



# VNC\_SPR8AD.dsxDBD.FB1.1.Nc82.Brain.40x.3\_background vs JRCVNC2018U\_template Projection Analysis



**Sample:** VNC\_Fru11.12AD\_FD6DBD\_FB1.1\_NC82\_S1\_background

**Template Used:** JRCVNC2018U\_template

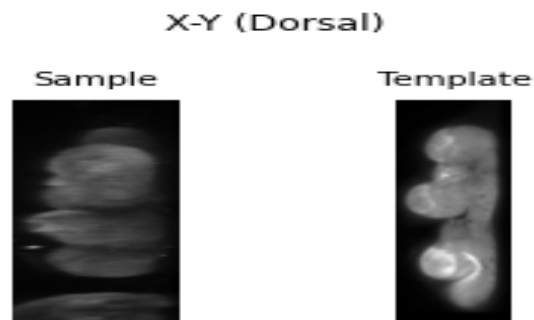
**Physical Dimensions:** 596.3 × 596.3 × 133.5 μm

**Voxel Resolution:** 0.582 × 0.582 × 0.300 μm

**Orientation Correct:** Yes

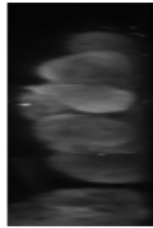
**Changes Needed:** None

**Maximum Intensity Projections Comparison (Sample vs Template):**

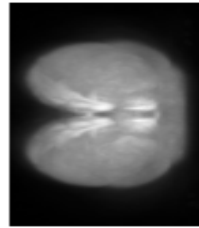


### X-Z (Lateral)

Sample

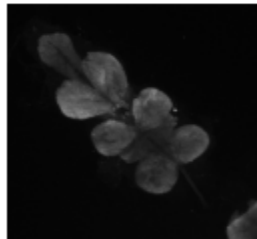


Template

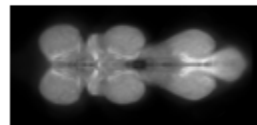


### Y-Z (Anterior)

Sample

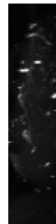


Template



### Signal Channel Projections:

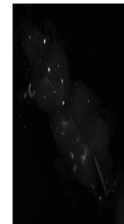
VNC\_Fru11.12AD\_FD60BD\_FB1.1\_NC82\_S1\_background Signal  
X-Y (Dorsal)



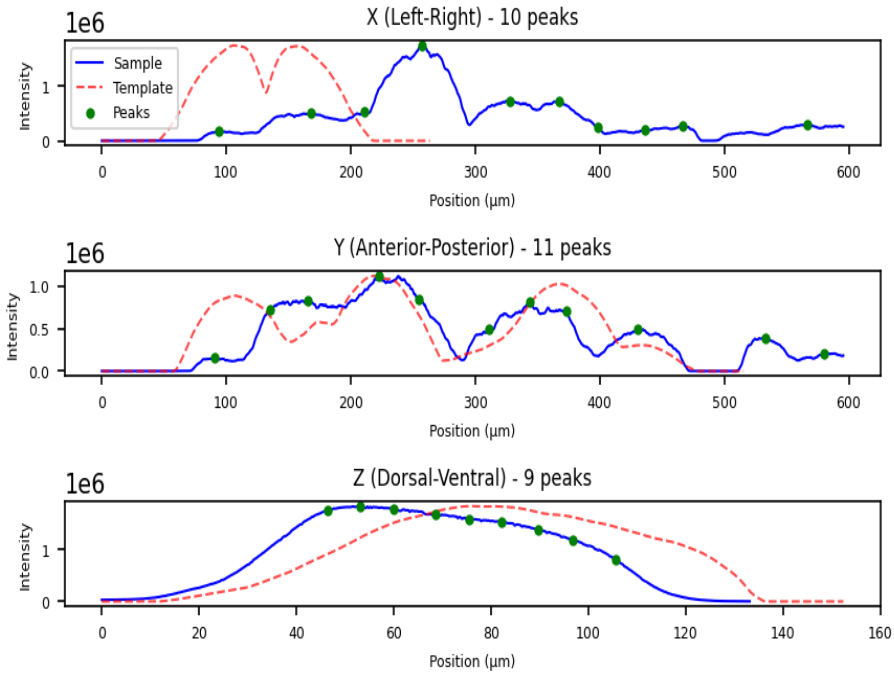
VNC\_Fru11.12AD\_FD60BD\_FB1.1\_NC82\_S1\_background Signal  
X-Z (Lateral)



VNC\_Fru11.12AD\_FD60BD\_FB1.1\_NC82\_S1\_background Signal  
Y-Z (Anterior)



# VNC\_Fru11.12AD\_FD6DBD\_FB1.1\_NC82\_S1\_background vs JRCVNC2018U\_template Projection Analysis



**Sample:** *Fru11.12AD.dsxDBD.FB1.1.Brain.40x.8.composite\_background*

**Template Used:** JRC2018U\_template\_lps

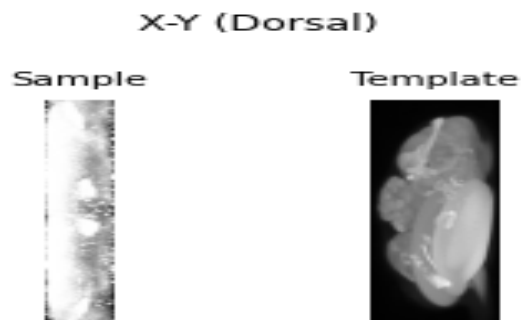
**Physical Dimensions:** 387.9 × 387.9 × 147.7 μm

**Voxel Resolution:** 0.379 × 0.379 × 0.901 μm

**Orientation Correct:** No

**Changes Needed:** 90° rotation (X-Y swap)

**Maximum Intensity Projections Comparison (Sample vs Template):**



### X-Z (Lateral)

Sample

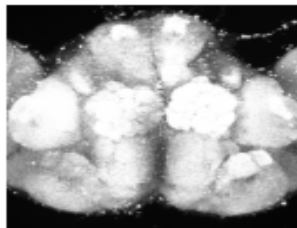


Template

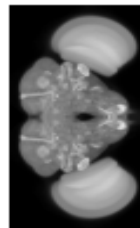


### Y-Z (Anterior)

Sample



Template



### Signal Channel Projections:

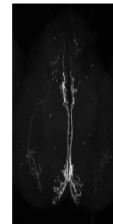
Fru11.12AD.dsxD8D.FB1.1.Brain.40x.8.composite\_background\_Signal  
X-Y (Dorsal)



Fru11.12AD.dsxD8D.FB1.1.Brain.40x.8.composite\_background\_Signal  
X-Z (Lateral)

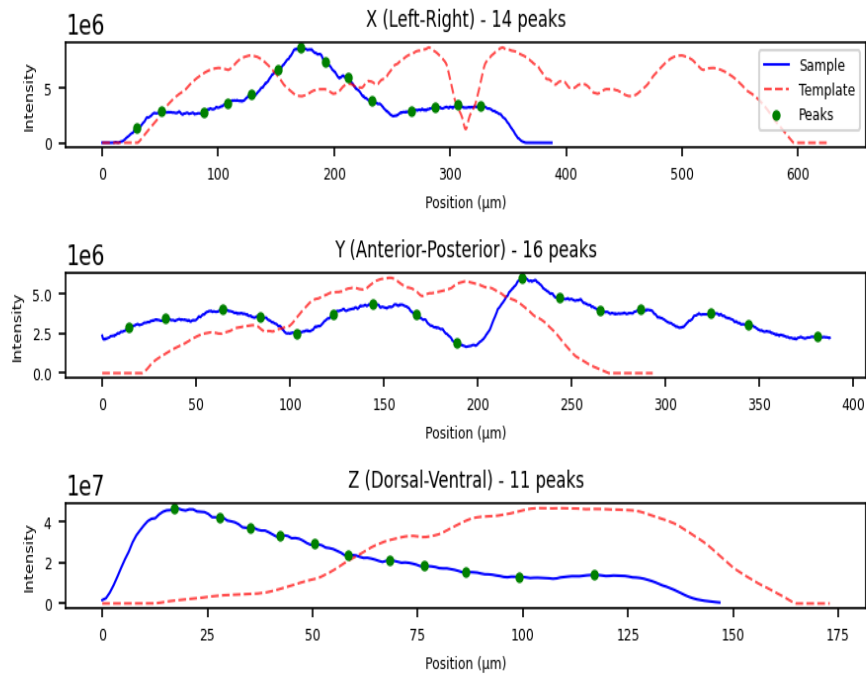


Fru11.12AD.dsxD8D.FB1.1.Brain.40x.8.composite\_background\_Signal  
Y-Z (Anterior)





Fru11.12AD.dsxDBD.FB1.1.Brain.40x.8.composite\_background vs JRC2018U\_template\_lps Projection Analysis



**Sample:** Brain\_SPR8AD.FD6DBD\_FB1.1\_nc82647\_S1\_background

**Template Used:** JRC2018U\_template\_lps

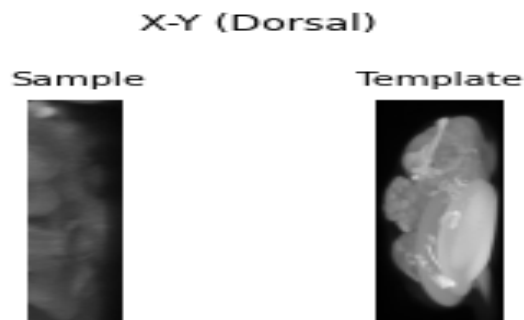
**Physical Dimensions:**  $368.2 \times 368.2 \times 70.8 \mu\text{m}$

**Voxel Resolution:**  $0.360 \times 0.360 \times 0.300 \mu\text{m}$

**Orientation Correct:** No

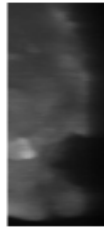
**Changes Needed:**  $90^\circ$  rotation (X-Y swap)

**Maximum Intensity Projections Comparison (Sample vs Template):**

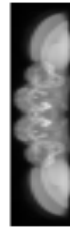


### X-Z (Lateral)

Sample

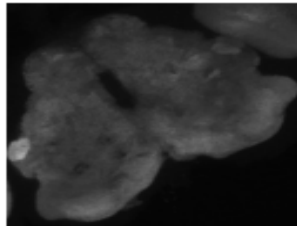


Template

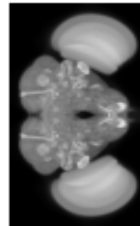


### Y-Z (Anterior)

Sample



Template



### Signal Channel Projections:

Brain\_SPR8AD.FD60BD.FB1.1.nc82647.S1\_background Signal  
X-Y (Dorsal)



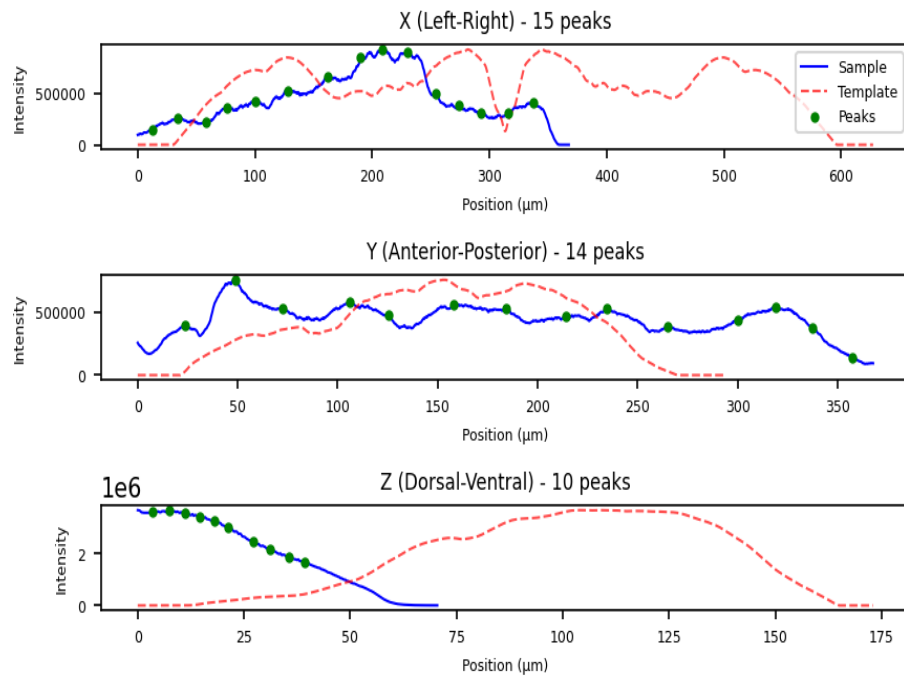
Brain\_SPR8AD.FD60BD.FB1.1.nc82647.S1\_background Signal  
X-Z (Lateral)



Brain\_SPR8AD.FD60BD.FB1.1.nc82647.S1\_background Signal  
Y-Z (Anterior)



# Brain\_SPR8AD.FD6DBD\_FB1.1\_nc82647\_S1\_background vs JRC2018U\_template\_ips Projection Analysis



## Sample:

**VNC\_SPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite\_background**

**Template Used:** JRCVNC2018U\_template

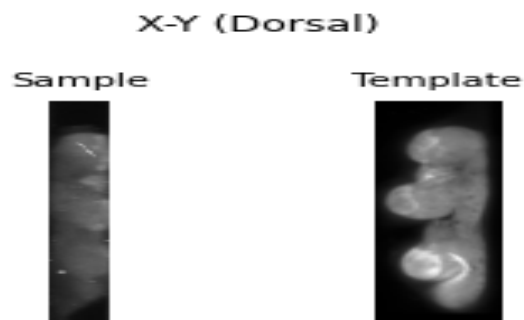
**Physical Dimensions:** 646.5 × 646.5 × 126.1 μm

**Voxel Resolution:** 0.631 × 0.631 × 0.901 μm

**Orientation Correct:** Yes

**Changes Needed:** None

## Maximum Intensity Projections Comparison (Sample vs Template):

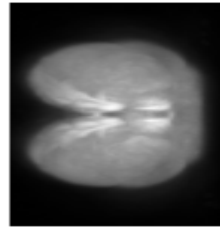


### X-Z (Lateral)

Sample

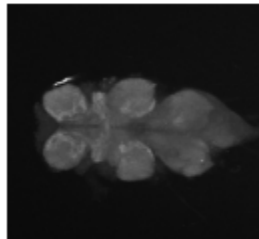


Template

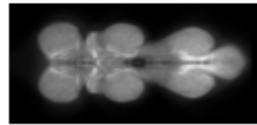


### Y-Z (Anterior)

Sample



Template



### Signal Channel Projections:

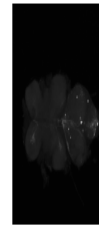
VNC\_SPR8AD Fru11 120BD FB1 1 NC82 Brain 40x.1 composite\_background Signal  
X-Y (Dorsal)



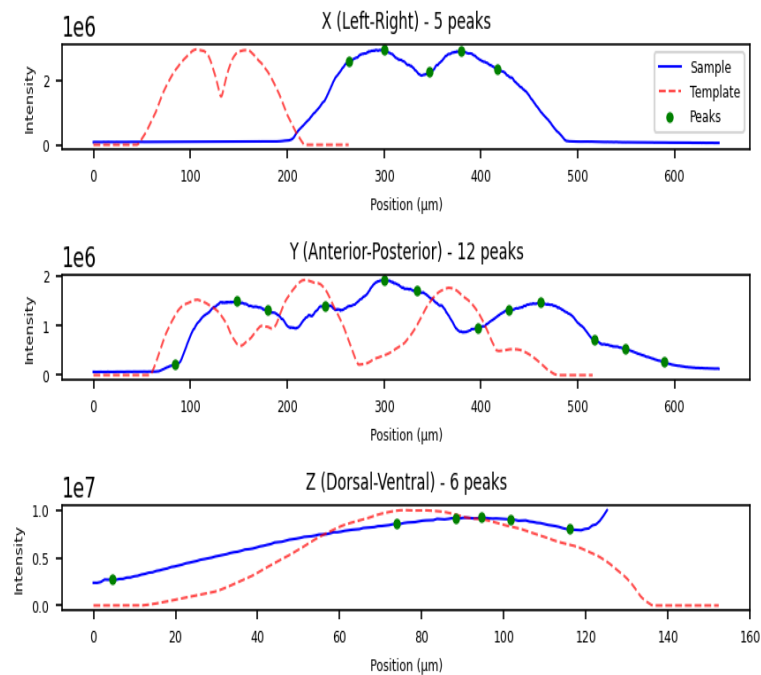
VNC\_SPR8AD Fru11 120BD FB1 1 NC82 Brain 40x.1 composite\_background Signal  
X-Z (Lateral)



VNC\_SPR8AD Fru11 120BD FB1 1 NC82 Brain 40x.1 composite\_background Signal  
Y-Z (Anterior)



# VNC\_SPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite\_background vs JRCVNC2018U\_template Projection Analysis



## Sample:

**BrainSPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite\_background**

**Template Used:** JRC2018U\_template\_lps

**Physical Dimensions:** 387.9 × 387.9 × 118.0 μm

**Voxel Resolution:** 0.379 × 0.379 × 0.901 μm

**Orientation Correct:** No

**Changes Needed:** 90° rotation (X-Y swap)

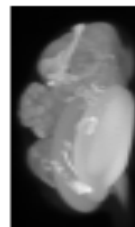
## Maximum Intensity Projections Comparison (Sample vs Template):

### X-Y (Dorsal)

Sample



Template



### X-Z (Lateral)

Sample

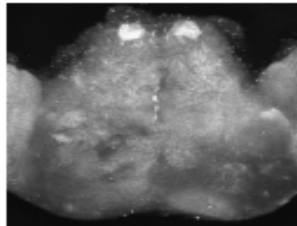


Template

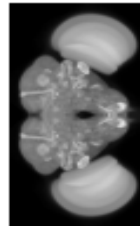


### Y-Z (Anterior)

Sample



Template



### Signal Channel Projections:

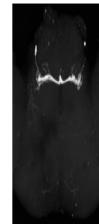
BrainSPR8AD Fru11.120BD FB1.1 NC82 Brain 40x.1 composite\_background Signal  
X-Y (Dorsal)



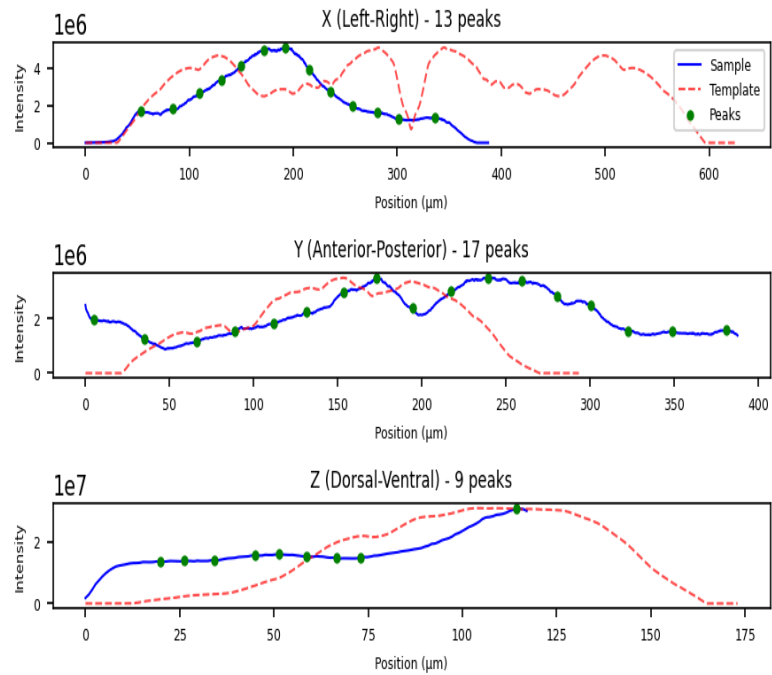
BrainSPR8AD Fru11.120BD FB1.1 NC82 Brain 40x.1 composite\_background Signal  
X-Z (Lateral)



BrainSPR8AD Fru11.120BD FB1.1 NC82 Brain 40x.1 composite\_background Signal  
Y-Z (Anterior)



BrainSPR8AD.Fru11.12DBD.FB1.1.NC82.Brain.40x.1.composite\_background vs JRC2018U\_template\_ips Projection Analysis



**Sample:** Brain\_Fru11.12AD\_FD6DBD\_FB1.1\_NC82\_S1\_background

**Template Used:** JRC2018U\_template\_ips

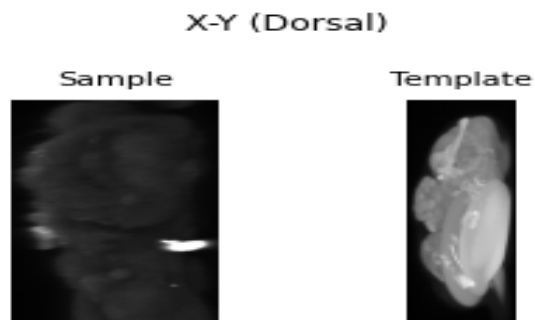
**Physical Dimensions:**  $313.4 \times 313.4 \times 179.4 \mu\text{m}$

**Voxel Resolution:**  $0.306 \times 0.306 \times 0.300 \mu\text{m}$

**Orientation Correct:** No

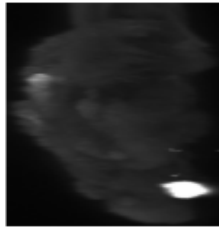
**Changes Needed:**  $90^\circ$  rotation (X-Y swap)

**Maximum Intensity Projections Comparison (Sample vs Template):**



### X-Z (Lateral)

Sample

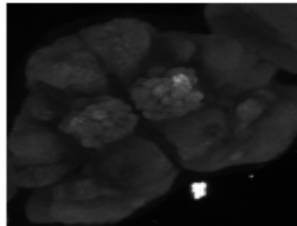


Template

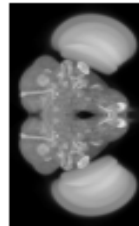


### Y-Z (Anterior)

Sample



Template

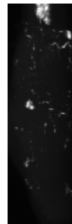


### Signal Channel Projections:

Brain\_Fru11.12AD\_FD6DBD\_FB1.1\_NC82\_S1\_background Signal  
X-Y (Dorsal)



Brain\_Fru11.12AD\_FD6DBD\_FB1.1\_NC82\_S1\_background Signal  
X-Z (Lateral)



Brain\_Fru11.12AD\_FD6DBD\_FB1.1\_NC82\_S1\_background Signal  
Y-Z (Anterior)





Brain\_Fru11.12AD\_FD6DBD\_FB1.1\_NC82\_S1\_background vs JRC2018U\_template\_Ips Projection Analysis

