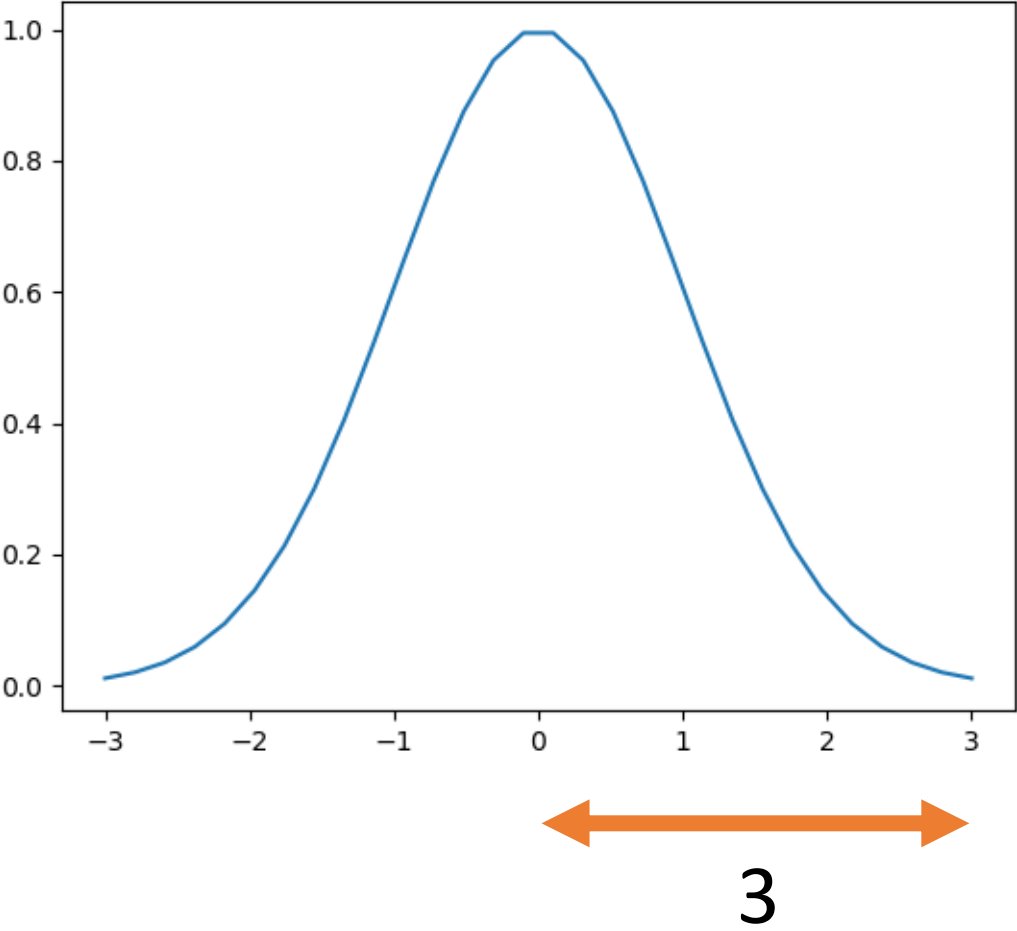


Parameter space

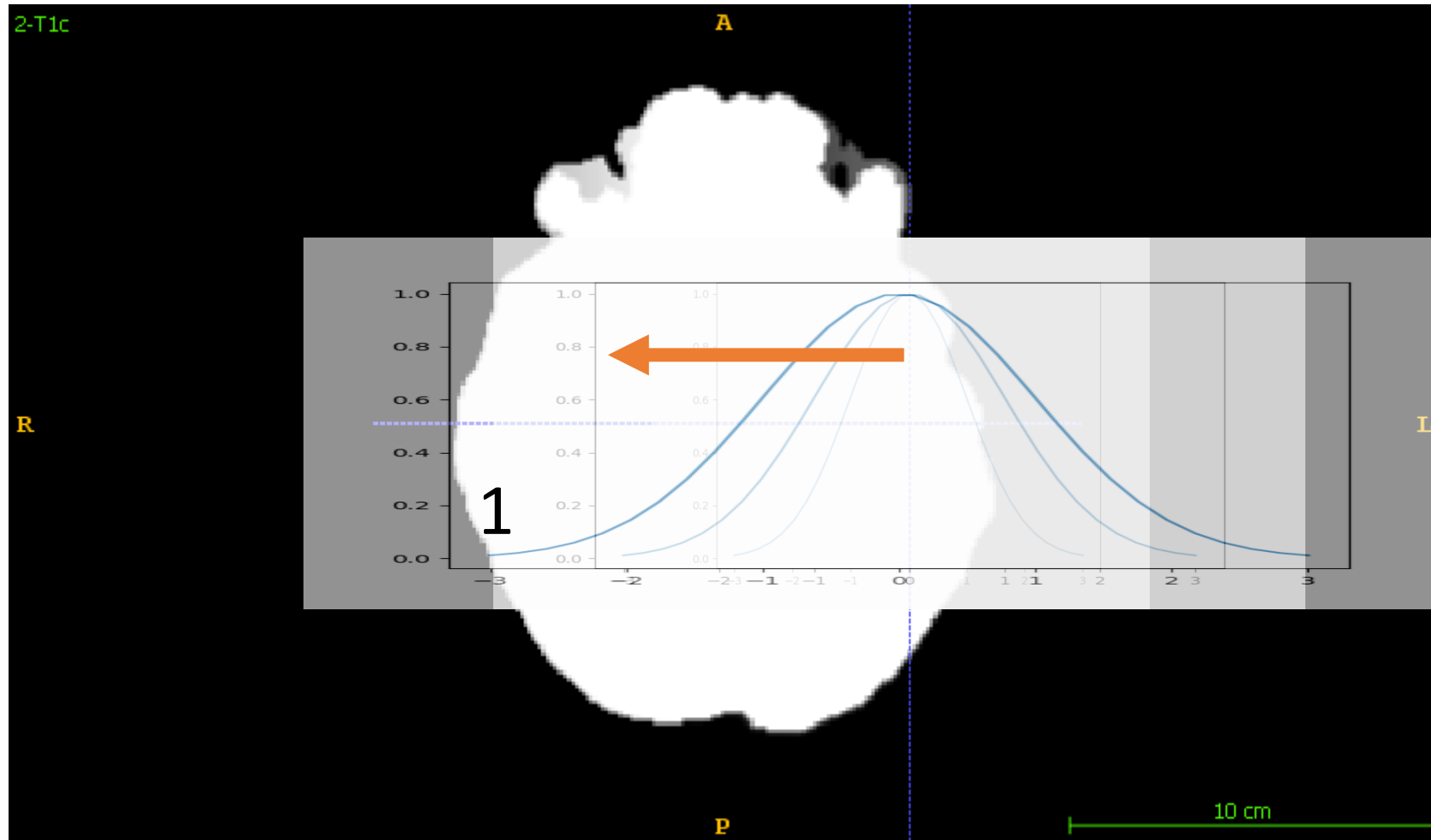
```
displacement=4 8
gaussian_range_one_sided=5
brain_coverage_fraction=0.5 1
intensity_decay_fraction=0 0.75
num_vecs=64
angle_thr=7
num_splits=4
spline_order=1
smoothing_std=4
perlin_noise_res=0.05 0.2 0.5
perlin_noise_abs_max=0 0.3 0.9
```

gaussian_range_one_sided



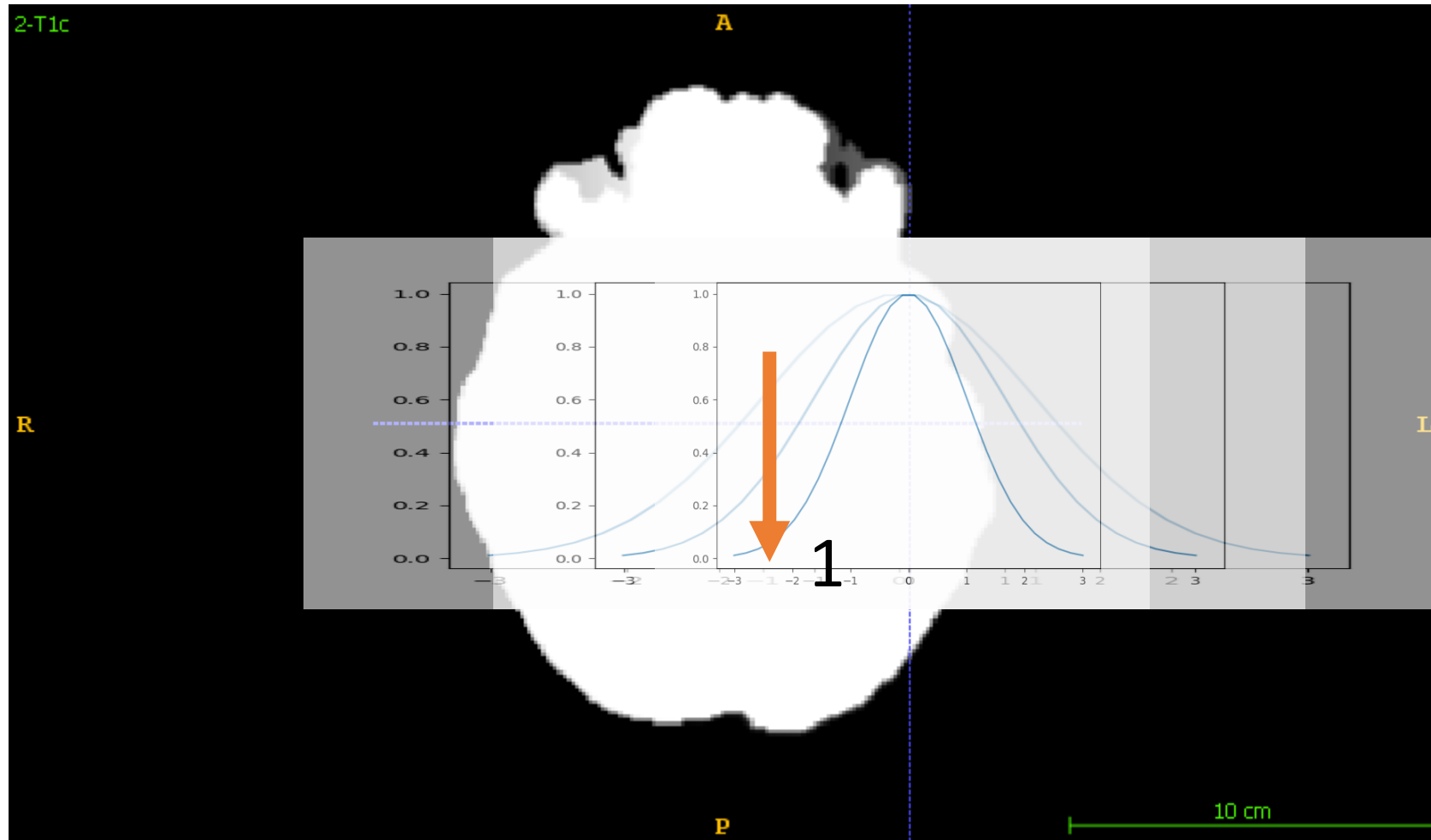
brain_coverage_fraction

+ = More pushing



intensity_decay_fraction

+ = Less pushing (More local. Infiltrative?)



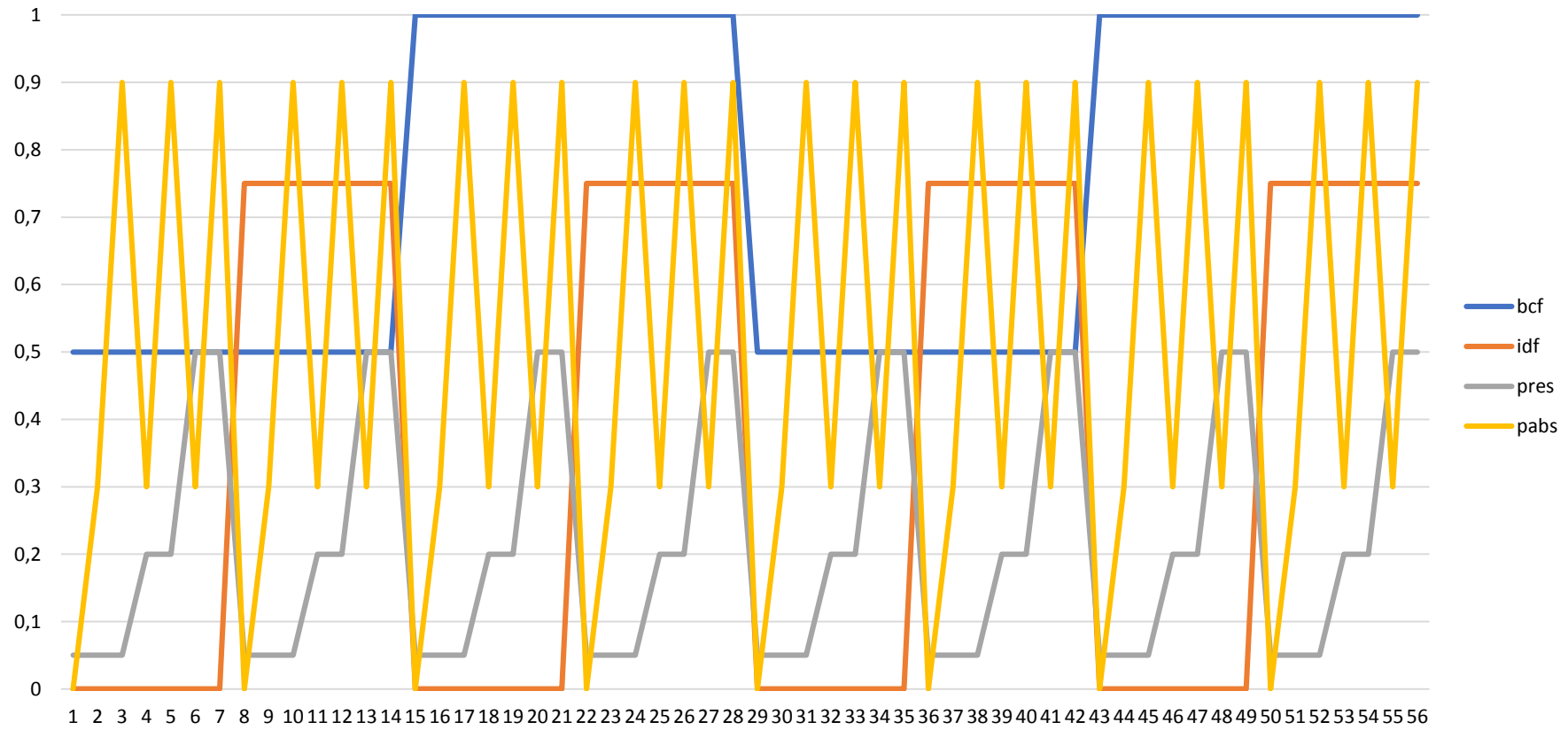
idx	disp	grange	bcf	idf	vecs	angle	splits	splo	sm	pres	pabs
1	4	5	0.5	0	64	7	4	1	4	0.05	0
2	4	5	0.5	0	64	7	4	1	4	0.05	0.3
3	4	5	0.5	0	64	7	4	1	4	0.05	0.9
4	4	5	0.5	0	64	7	4	1	4	0.2	0.3
5	4	5	0.5	0	64	7	4	1	4	0.2	0.9
6	4	5	0.5	0	64	7	4	1	4	0.5	0.3
7	4	5	0.5	0	64	7	4	1	4	0.5	0.9
8	4	5	0.5	0.75	64	7	4	1	4	0.05	0
9	4	5	0.5	0.75	64	7	4	1	4	0.05	0.3
10	4	5	0.5	0.75	64	7	4	1	4	0.05	0.9
11	4	5	0.5	0.75	64	7	4	1	4	0.2	0.3
12	4	5	0.5	0.75	64	7	4	1	4	0.2	0.9
13	4	5	0.5	0.75	64	7	4	1	4	0.5	0.3
14	4	5	0.5	0.75	64	7	4	1	4	0.5	0.9
15	4	5	1	0	64	7	4	1	4	0.05	0
16	4	5	1	0	64	7	4	1	4	0.05	0.3
17	4	5	1	0	64	7	4	1	4	0.05	0.9
18	4	5	1	0	64	7	4	1	4	0.2	0.3
19	4	5	1	0	64	7	4	1	4	0.2	0.9
20	4	5	1	0	64	7	4	1	4	0.5	0.3
21	4	5	1	0	64	7	4	1	4	0.5	0.9
22	4	5	1	0.75	64	7	4	1	4	0.05	0
23	4	5	1	0.75	64	7	4	1	4	0.05	0.3
24	4	5	1	0.75	64	7	4	1	4	0.05	0.9
25	4	5	1	0.75	64	7	4	1	4	0.2	0.3
26	4	5	1	0.75	64	7	4	1	4	0.2	0.9
27	4	5	1	0.75	64	7	4	1	4	0.5	0.3
28	4	5	1	0.75	64	7	4	1	4	0.5	0.9
29	8	5	0.5	0	64	7	4	1	4	0.05	0
30	8	5	0.5	0	64	7	4	1	4	0.05	0.3
31	8	5	0.5	0	64	7	4	1	4	0.05	0.9
32	8	5	0.5	0	64	7	4	1	4	0.2	0.3
33	8	5	0.5	0	64	7	4	1	4	0.2	0.9
34	8	5	0.5	0	64	7	4	1	4	0.5	0.3
35	8	5	0.5	0	64	7	4	1	4	0.5	0.9
36	8	5	0.5	0.75	64	7	4	1	4	0.05	0
37	8	5	0.5	0.75	64	7	4	1	4	0.05	0.3
38	8	5	0.5	0.75	64	7	4	1	4	0.05	0.9
39	8	5	0.5	0.75	64	7	4	1	4	0.2	0.3
40	8	5	0.5	0.75	64	7	4	1	4	0.2	0.9
41	8	5	0.5	0.75	64	7	4	1	4	0.5	0.3
42	8	5	0.5	0.75	64	7	4	1	4	0.5	0.9
43	8	5	1	0	64	7	4	1	4	0.05	0
44	8	5	1	0	64	7	4	1	4	0.05	0.3
45	8	5	1	0	64	7	4	1	4	0.05	0.9
46	8	5	1	0	64	7	4	1	4	0.2	0.3
47	8	5	1	0	64	7	4	1	4	0.2	0.9
48	8	5	1	0	64	7	4	1	4	0.5	0.3
49	8	5	1	0	64	7	4	1	4	0.5	0.9
50	8	5	1	0.75	64	7	4	1	4	0.05	0
51	8	5	1	0.75	64	7	4	1	4	0.05	0.3
52	8	5	1	0.75	64	7	4	1	4	0.05	0.9
53	8	5	1	0.75	64	7	4	1	4	0.2	0.3
54	8	5	1	0.75	64	7	4	1	4	0.2	0.9
55	8	5	1	0.75	64	7	4	1	4	0.5	0.3
56	8	5	1	0.75	64	7	4	1	4	0.5	0.9

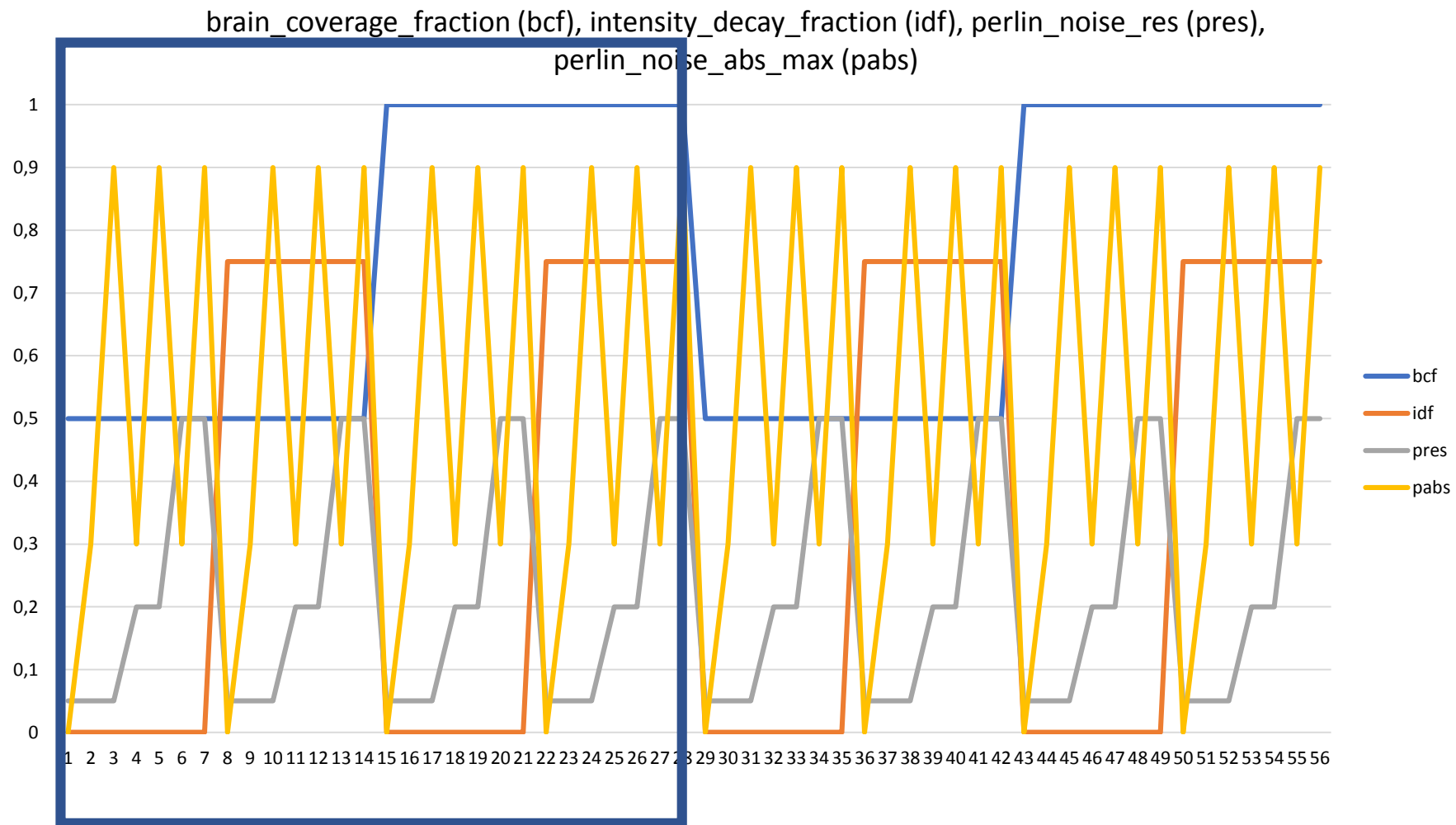
N=56

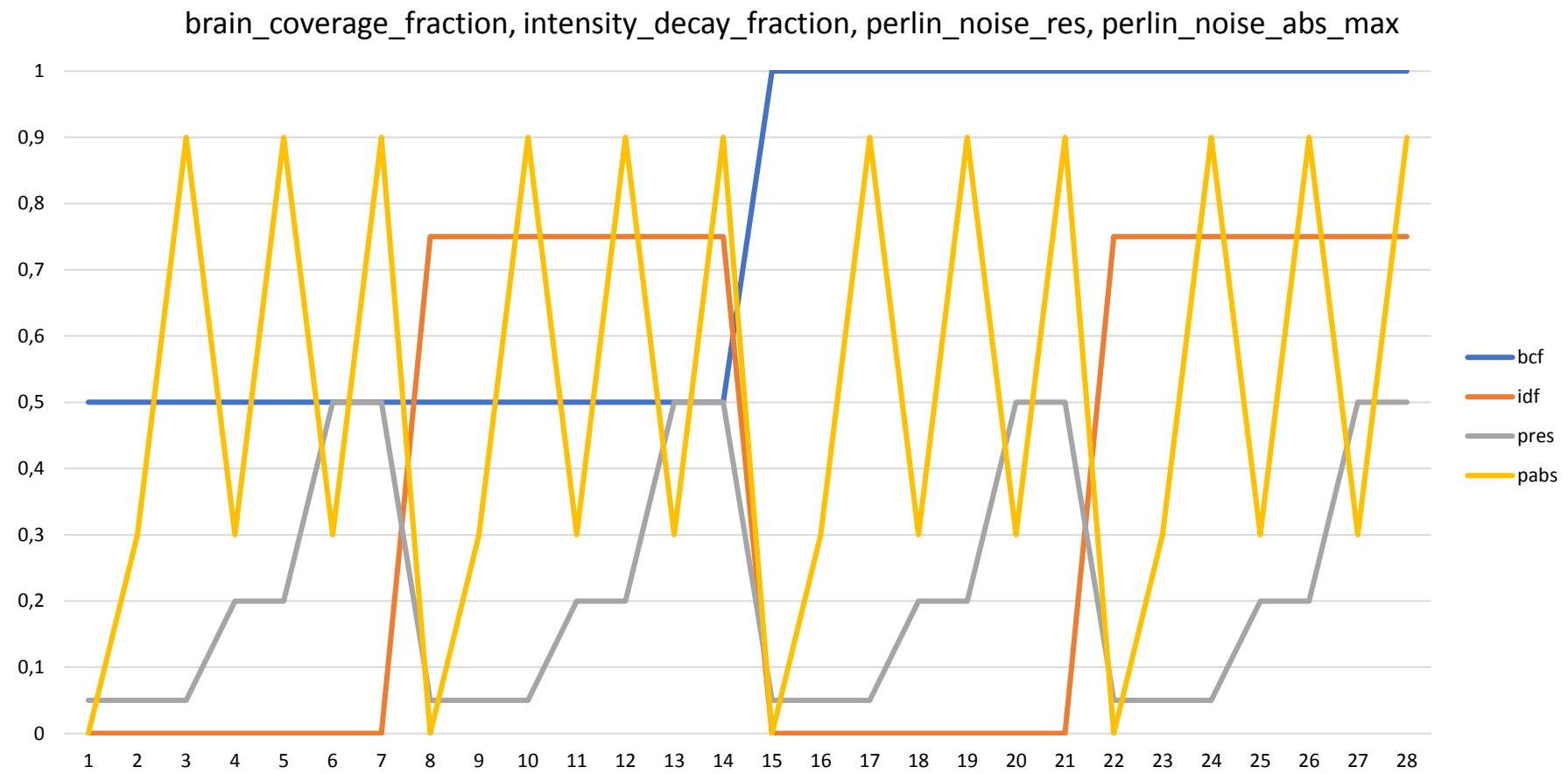
displacement



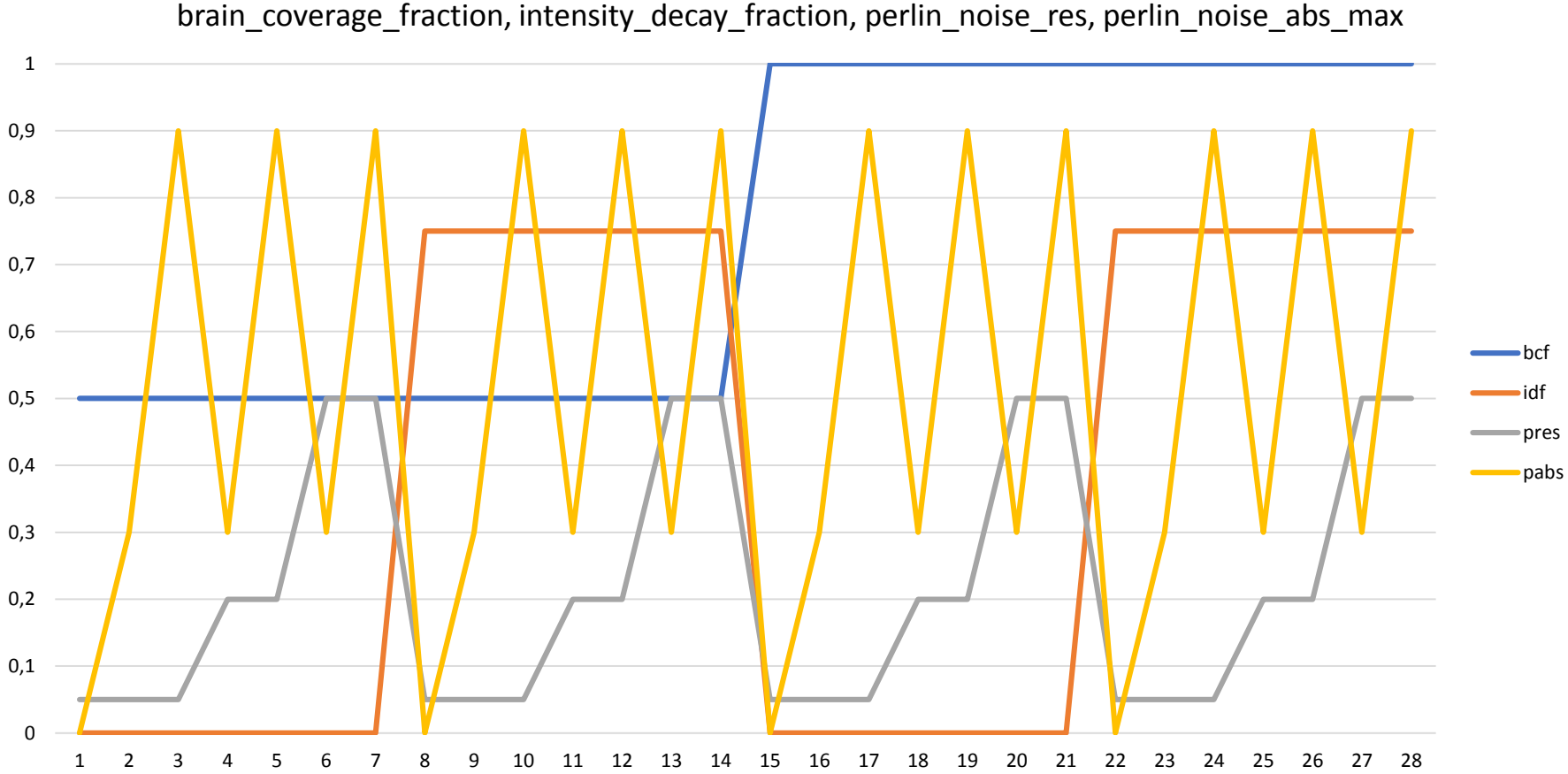
brain_coverage_fraction (bcf), intensity_decay_fraction (idf), perlin_noise_res (pres),
perlin_noise_abs_max (pabs)





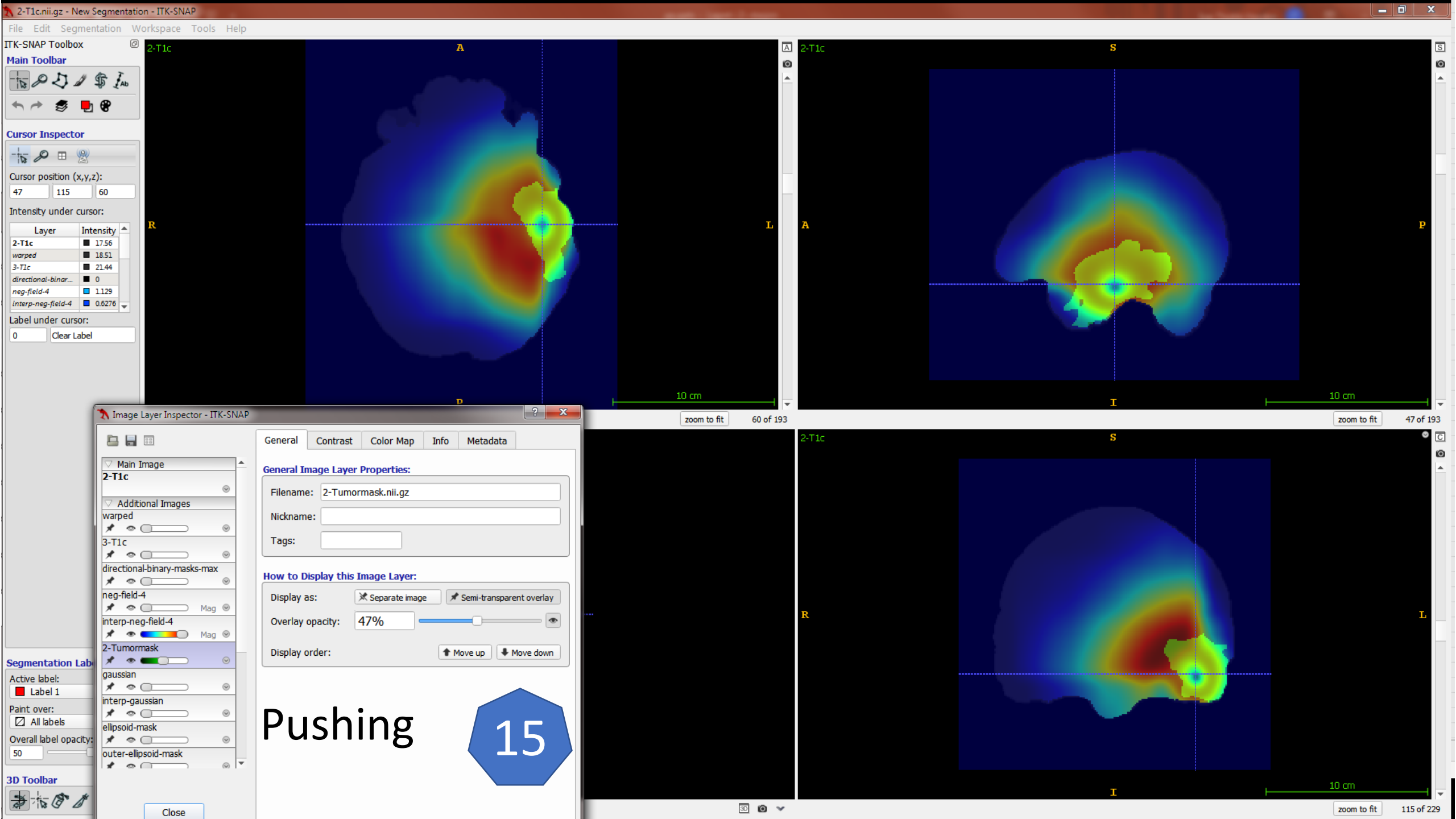


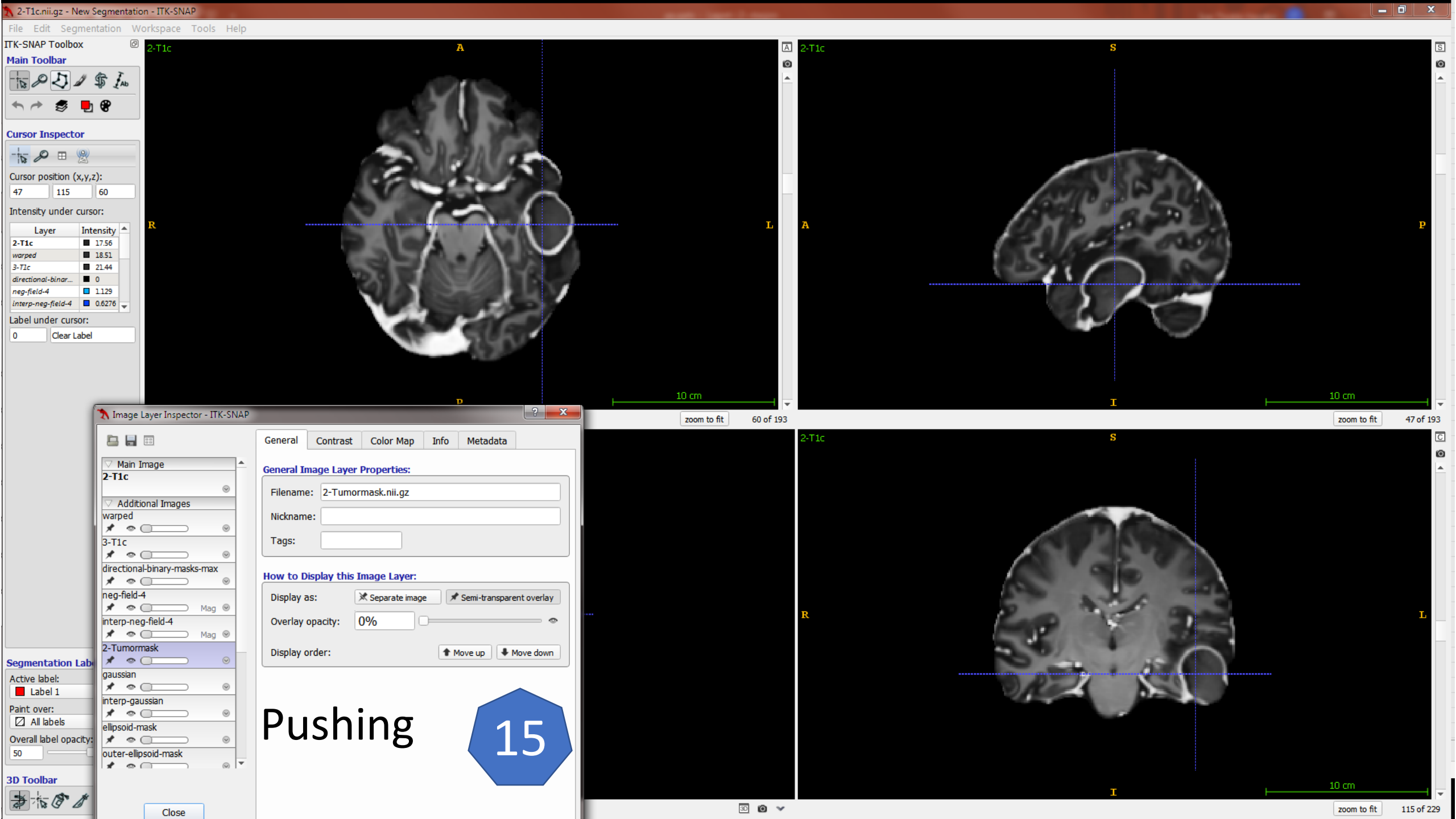
Pushing



Parameter combination

```
displacement=4  
gaussian_range_one_sided=5  
brain_coverage_fraction=1  
intensity_decay_fraction=0  
num_vecs=64  
angle_thr=7  
num_splits=4  
spline_order=1  
smoothing_std=4  
perlin_noise_res=0.05  
perlin_noise_abs_max=0
```





2-T1c.nii.gz - New Segmentation - ITK-SNAP

File Edit Segmentation Workspace Tools Help

ITK-SNAP Toolbox

Main Toolbar

Cursor Inspector

Cursor position (x,y,z):
47 115 60

Intensity under cursor:

Layer	Intensity
2-T1c	17.56
warped	18.51
3-T1c	21.44
directional-binary...	0
neg-field-4	1.129
interp-neg-field-4	0.6276

Label under cursor:
0 Clear Label

Image Layer Inspector - ITK-SNAP

General Contrast Color Map Info Metadata

General Image Layer Properties:

Filename: 2-Tumormask.nii.gz

Nickname:

Tags:

How to Display this Image Layer:

Display as: ☒ Separate image ☐ Semi-transparent overlay

Overlay opacity: 0%

Display order:

Segmentation Labels

Active label:
Label 1

Paint over:
☒ All labels

Overall label opacity:
50

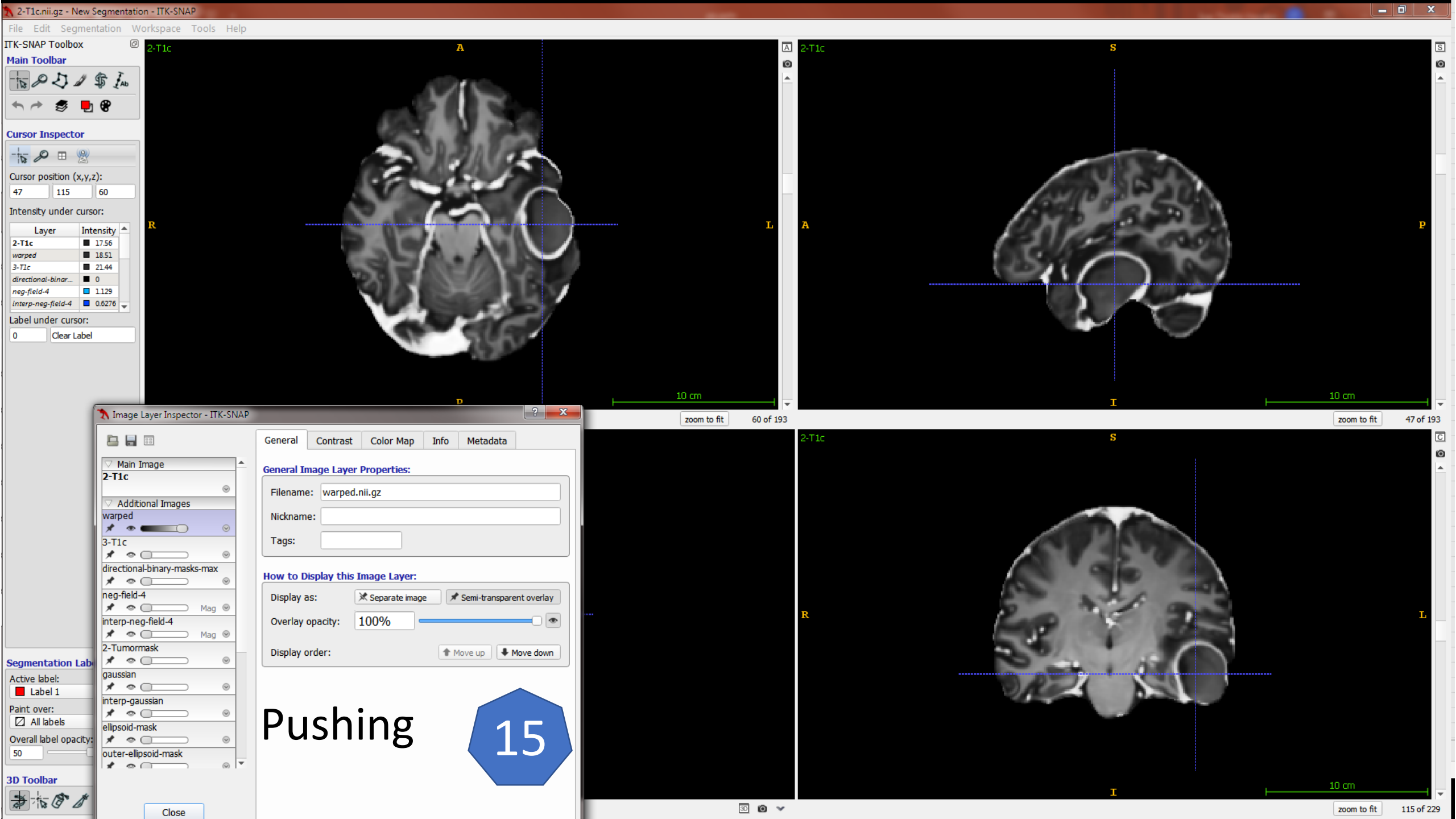
3D Toolbar

Close

Pushing

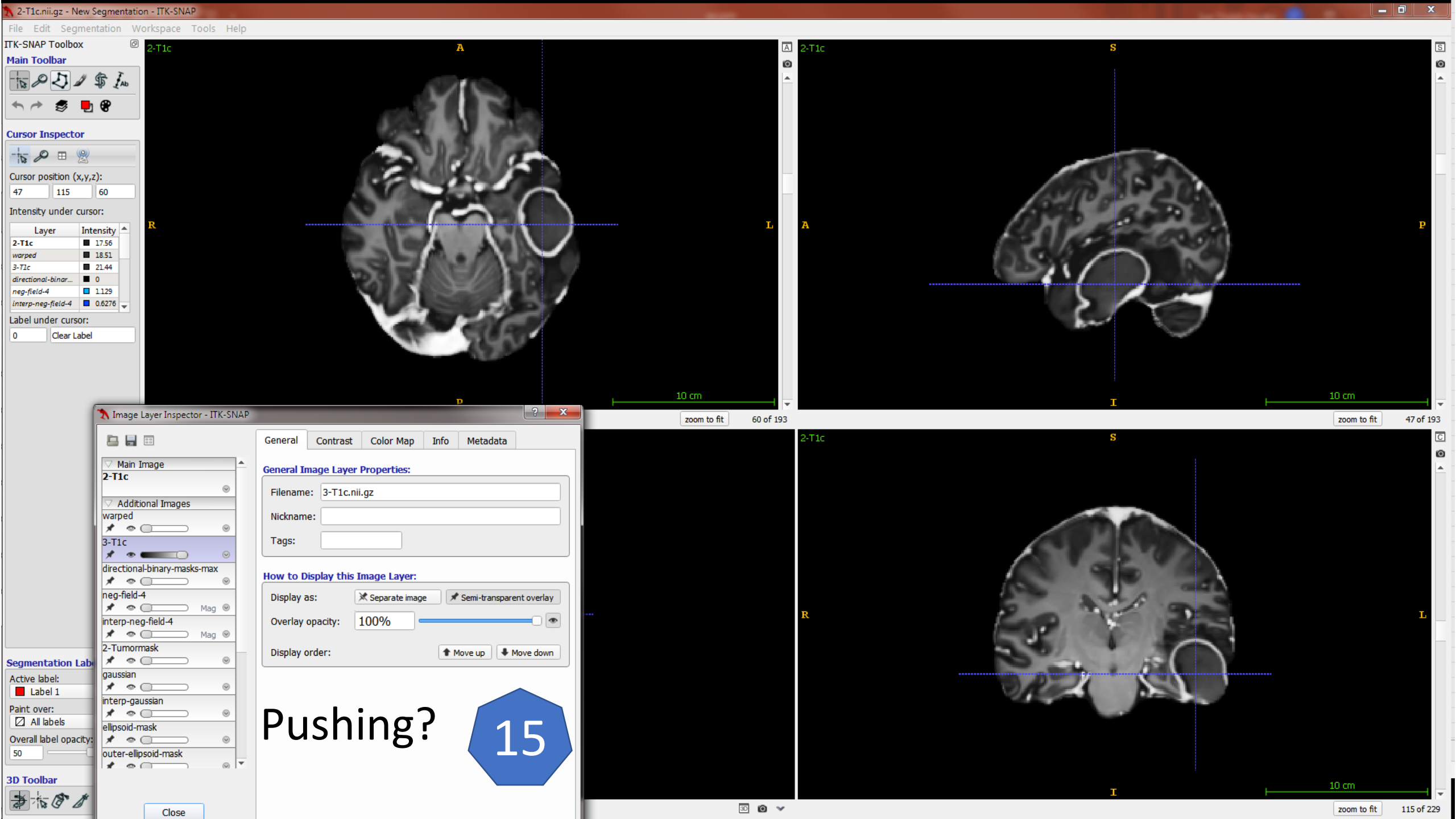
15

115 of 229

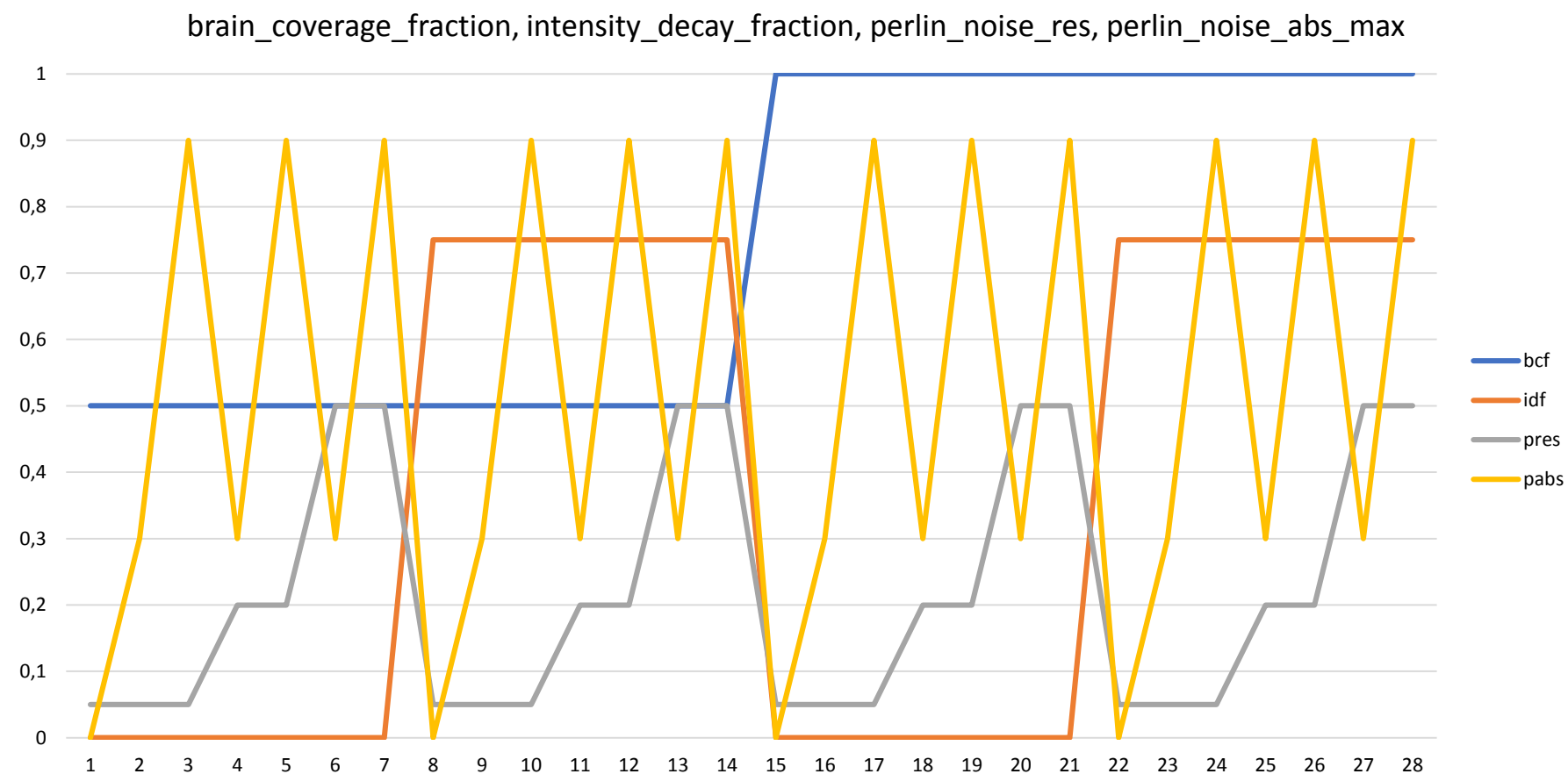


Pushing

15

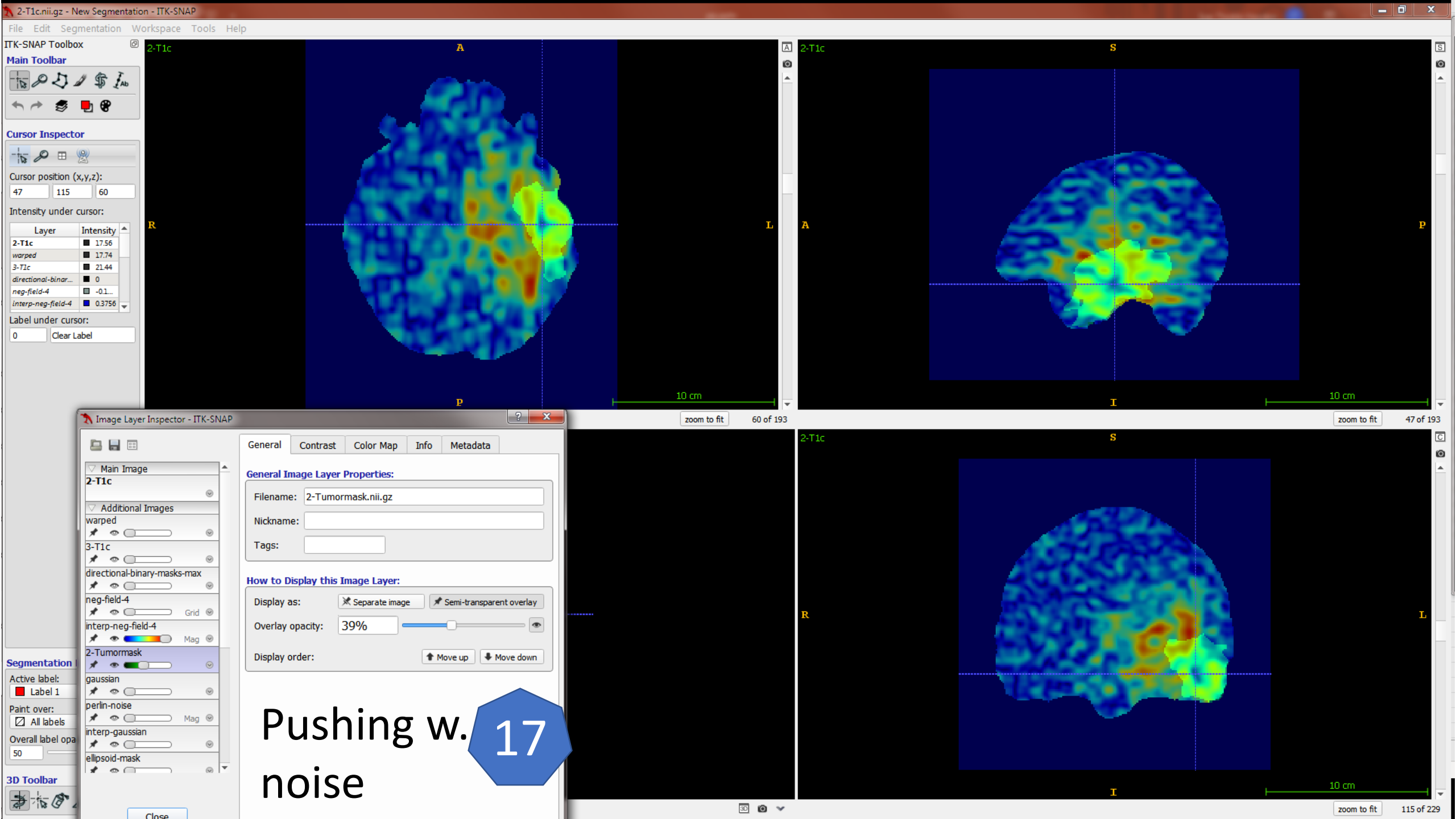


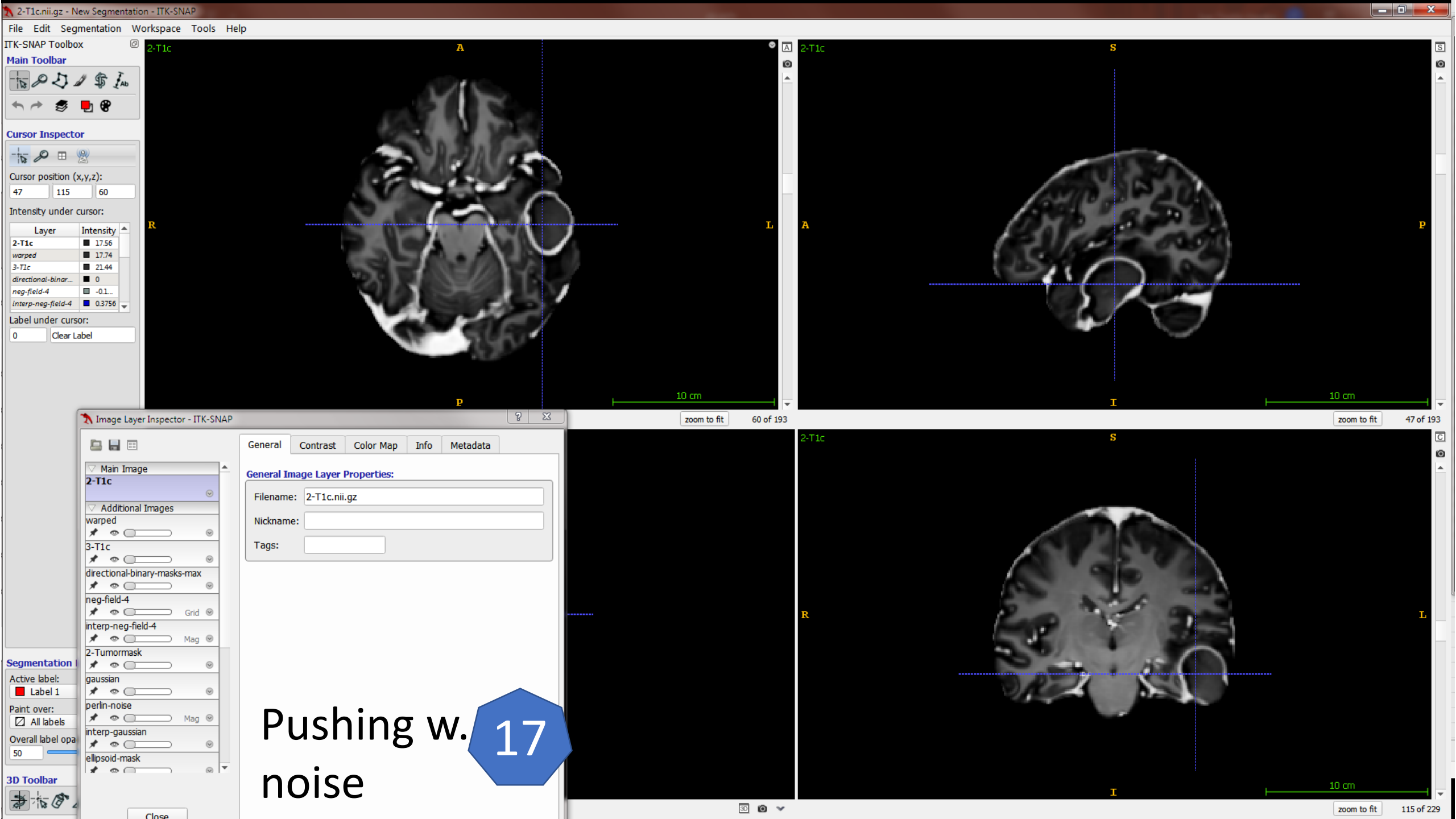
Pushing w. noise



Parameter combination

```
displacement=4  
gaussian_range_one_sided=5  
brain_coverage_fraction=1  
intensity_decay_fraction=0  
num_vecs=64  
angle_thr=7  
num_splits=4  
spline_order=1  
smoothing_std=4  
perlin_noise_res=0.05  
perlin_noise_abs_max=0.9
```

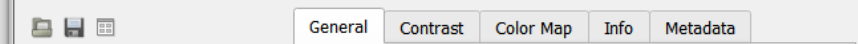




47 115 60

Layer	Intensity
2-T1c	17.56
warped	17.74
3-T1c	21.44
directional-binar...	0
neg-field-4	-0.1...
interp-neg-field-4	0.3756

0 Clear Label



- Main Image
 - 2-T1c
- Additional Images
 - warped
 - 3-T1c
 - directional-binary-masks-max
 - neg-field-4
 - interp-neg-field-4
 - 2-Tumormask
 - gaussian
 - perlin-noise
 - interp-gaussian
 - ellipsoid-mask

General Image Layer Properties:

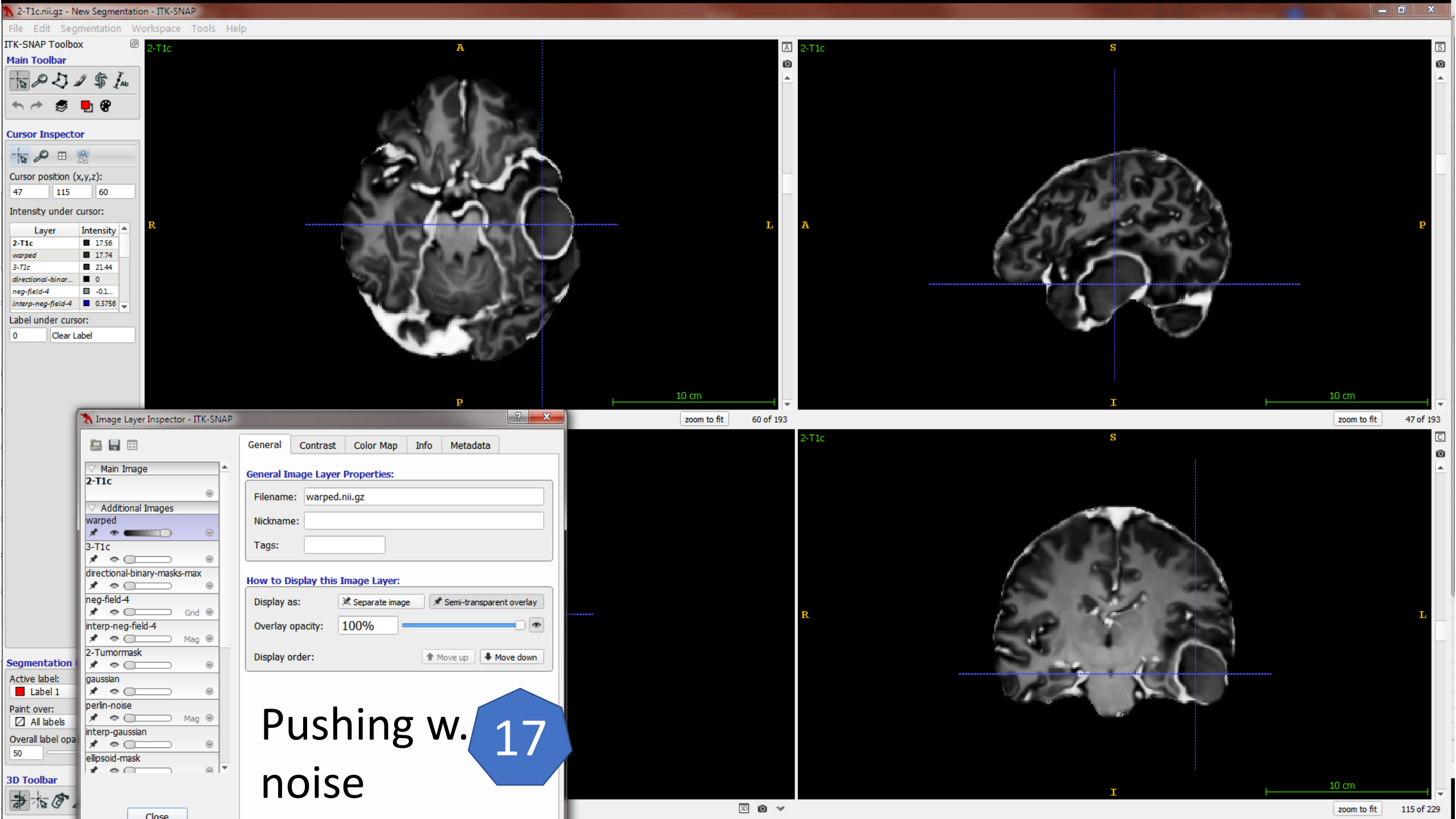
Filename: 2-T1c.nii.gz

Nickname:

Tags:

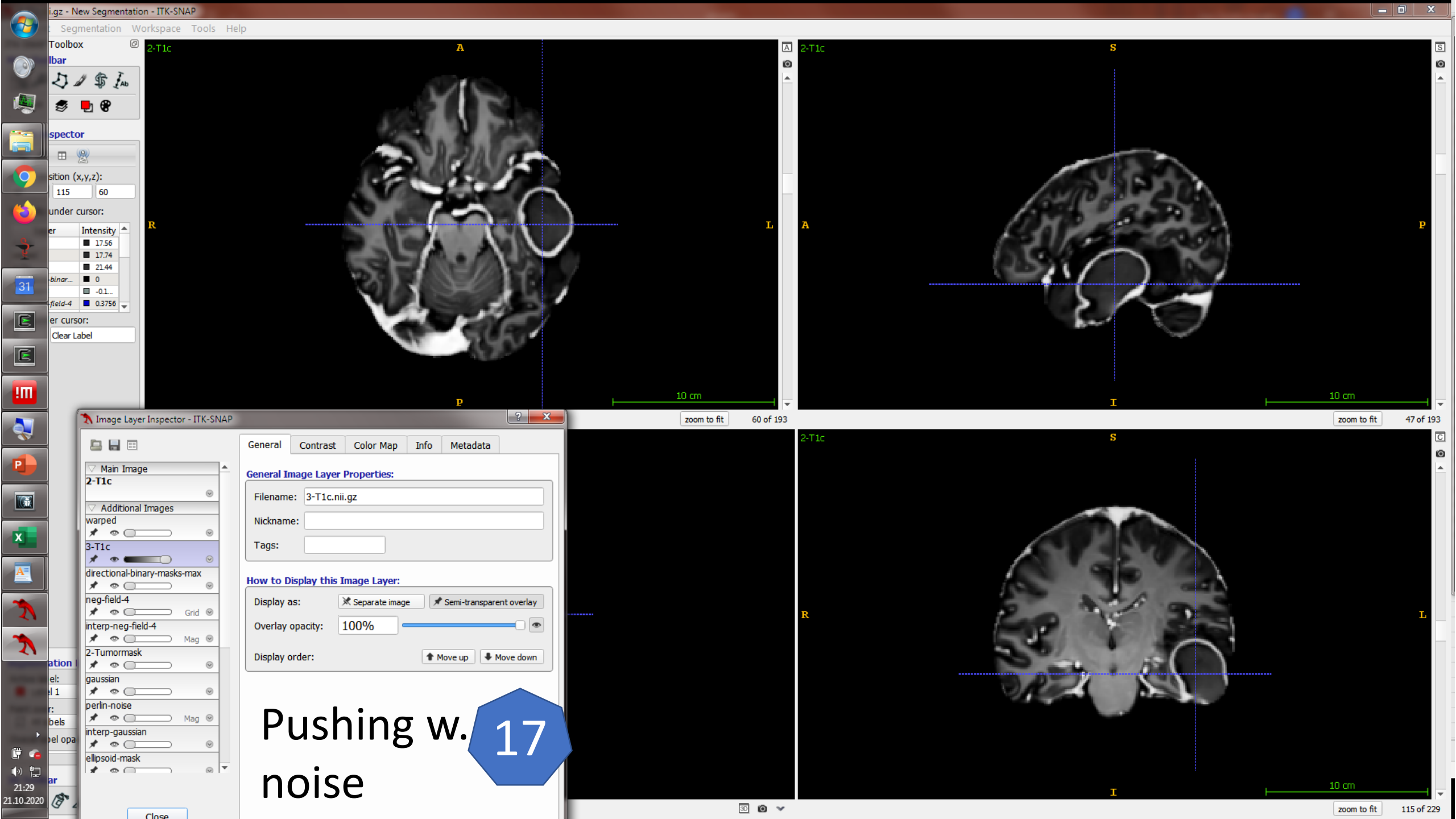
Pushing w.
noise

17



Pushing w. noise

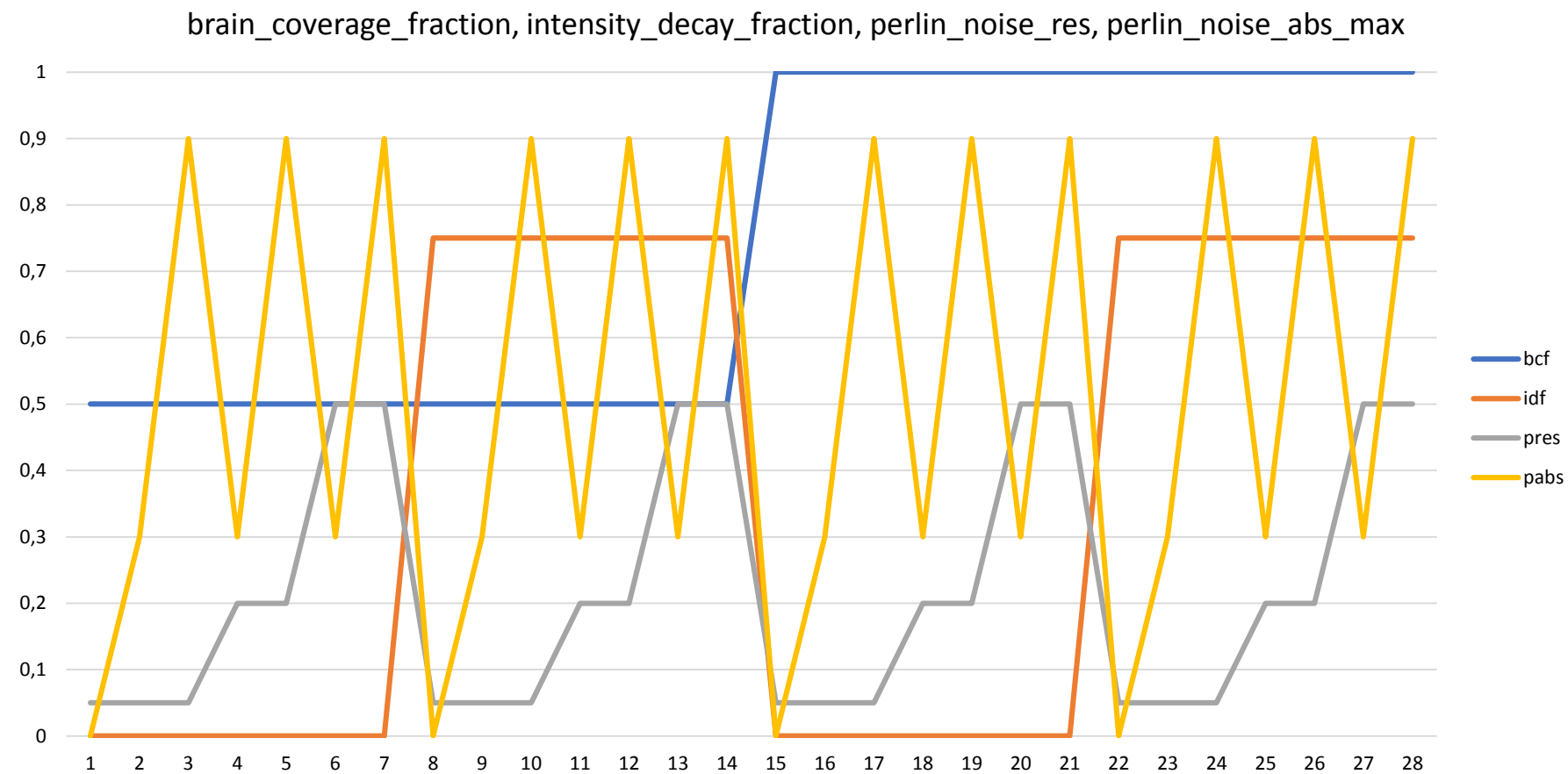
17



Pushing w. noise

17

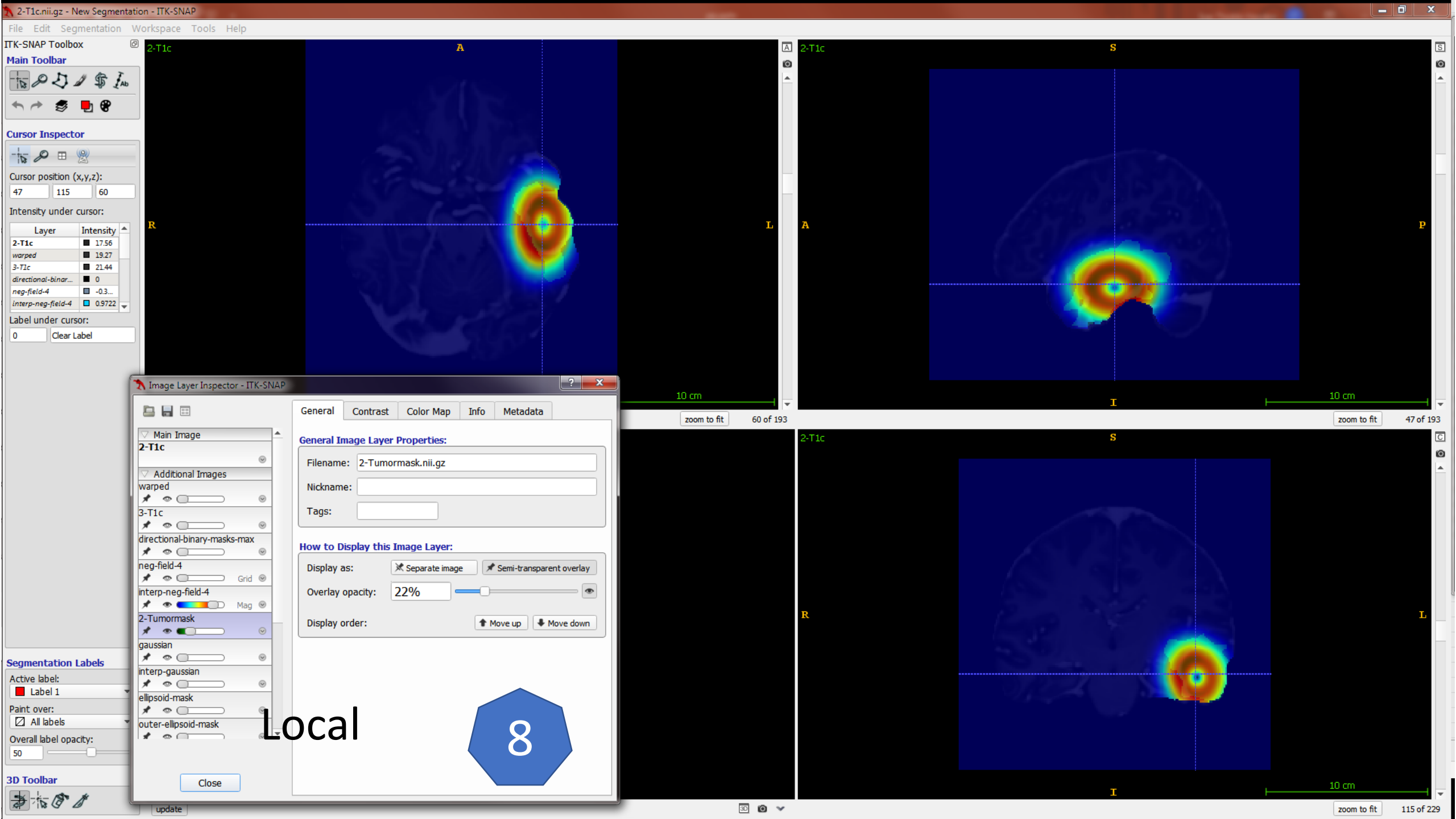
Local

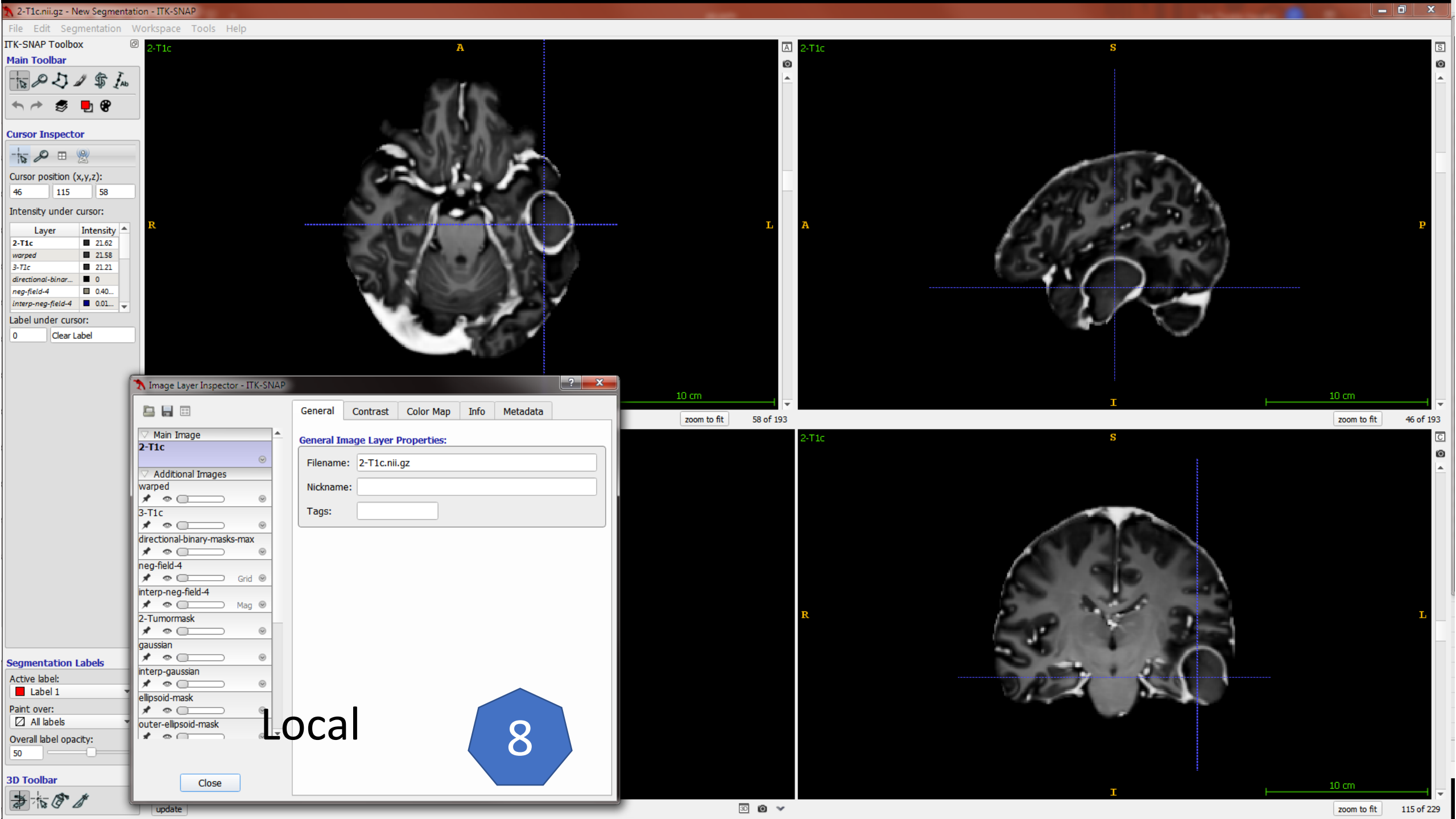


Parameter combination

```
displacement=4  
gaussian_range_one_sided=5  
brain_coverage_fraction=0.5  
intensity_decay_fraction=0.75  
num_vecs=64  
angle_thr=7  
num_splits=4  
spline_order=1  
smoothing_std=4  
perlin_noise_res=0.05  
perlin_noise_abs_max=0
```

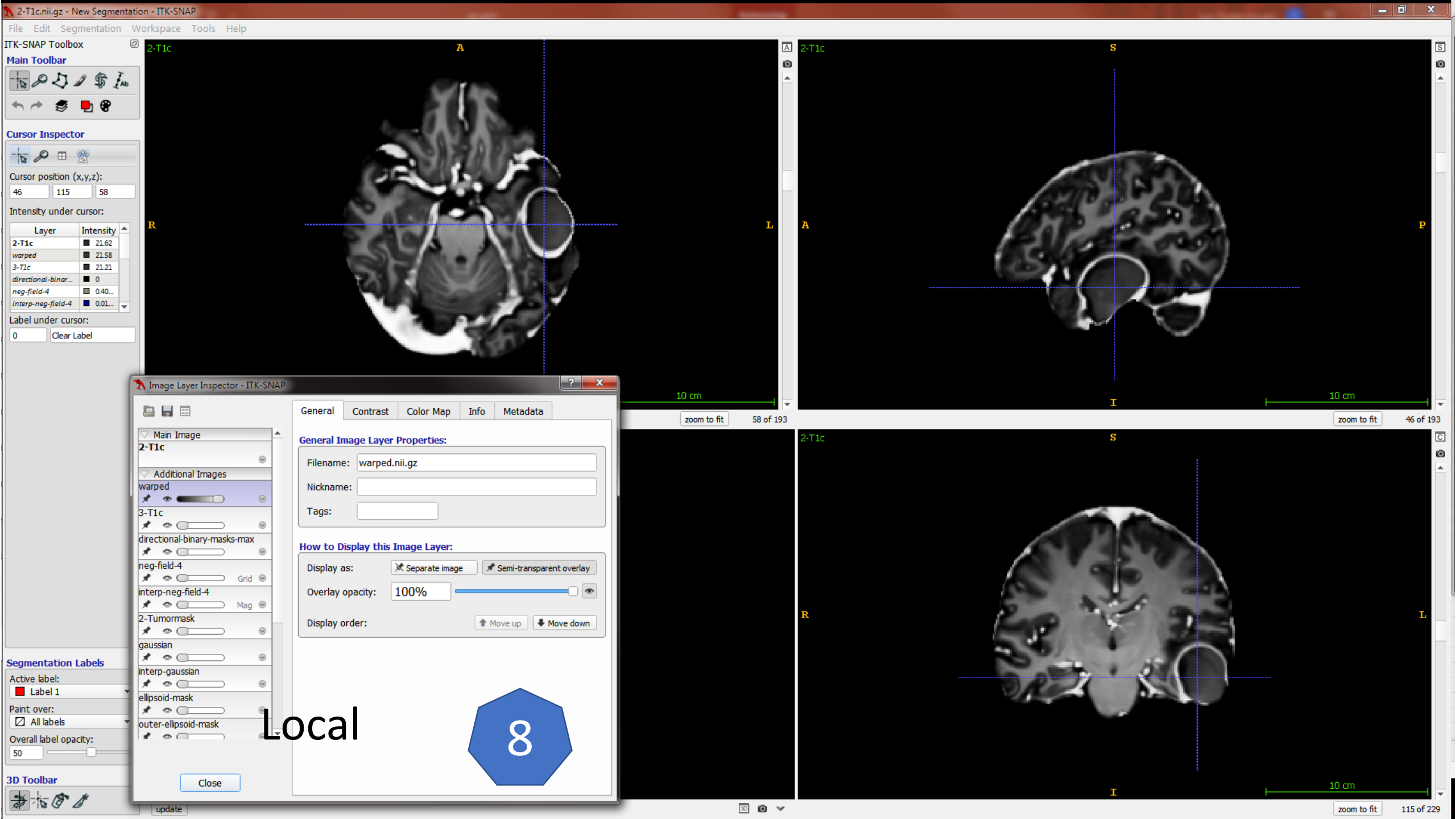
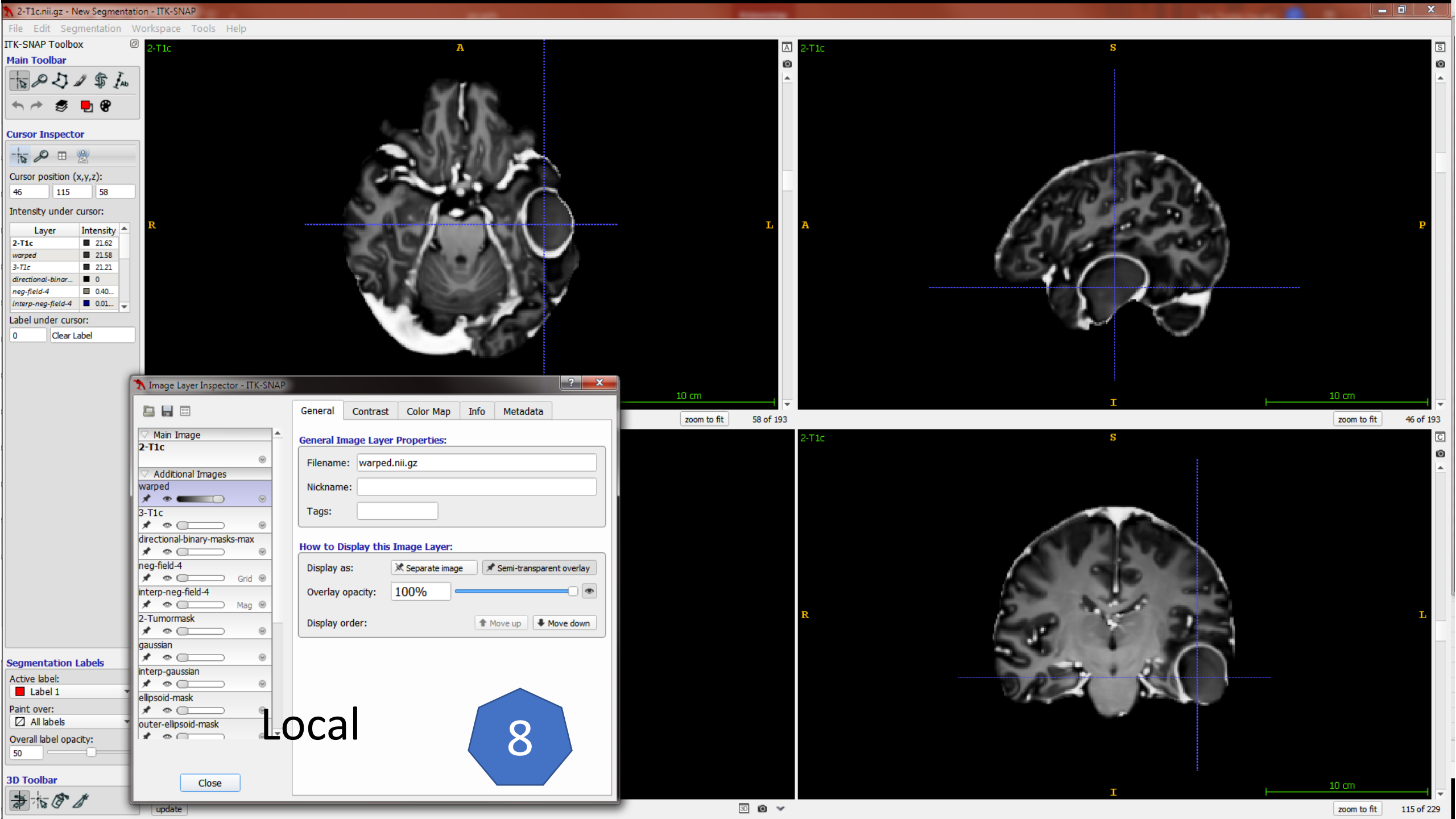


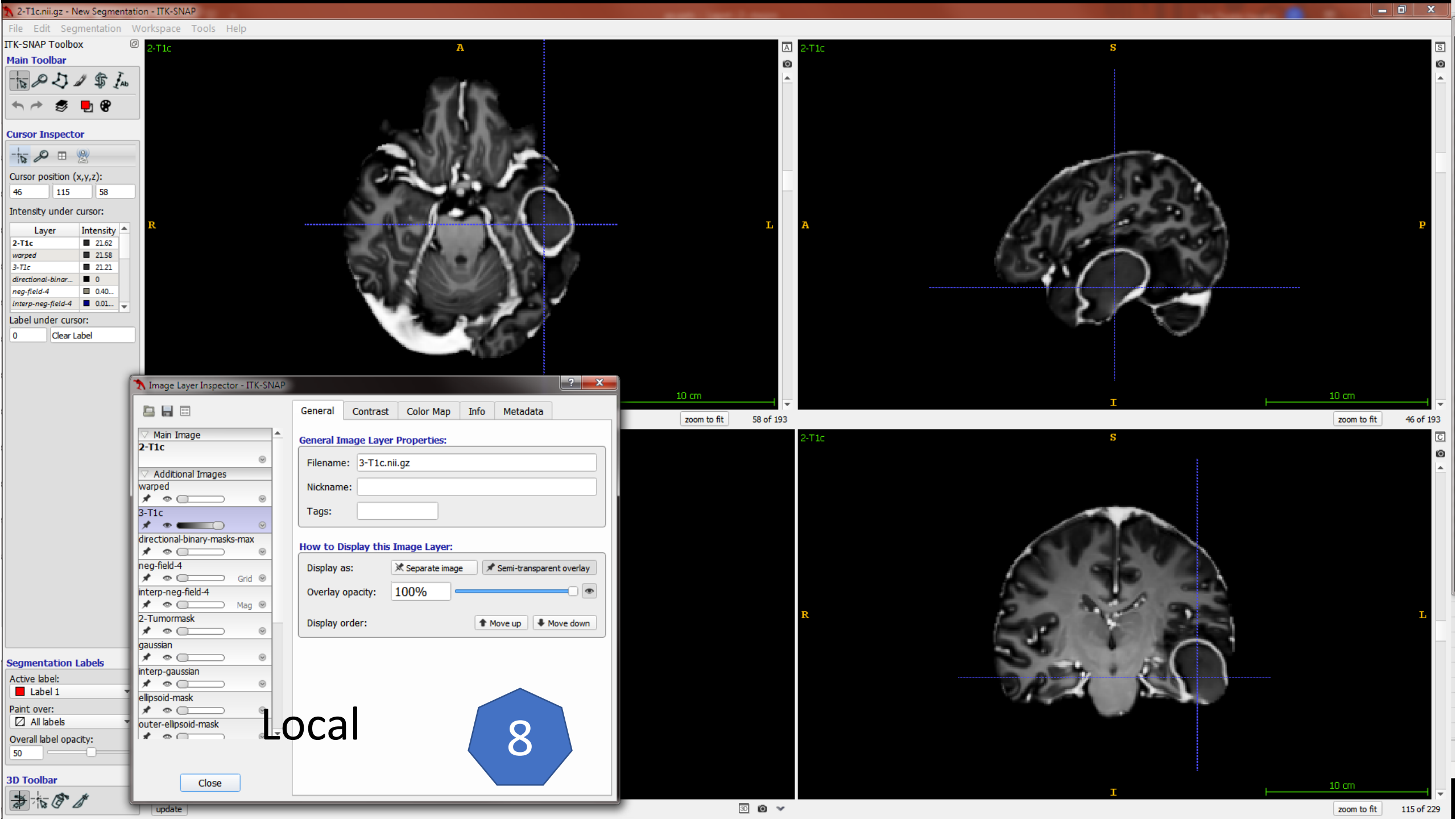
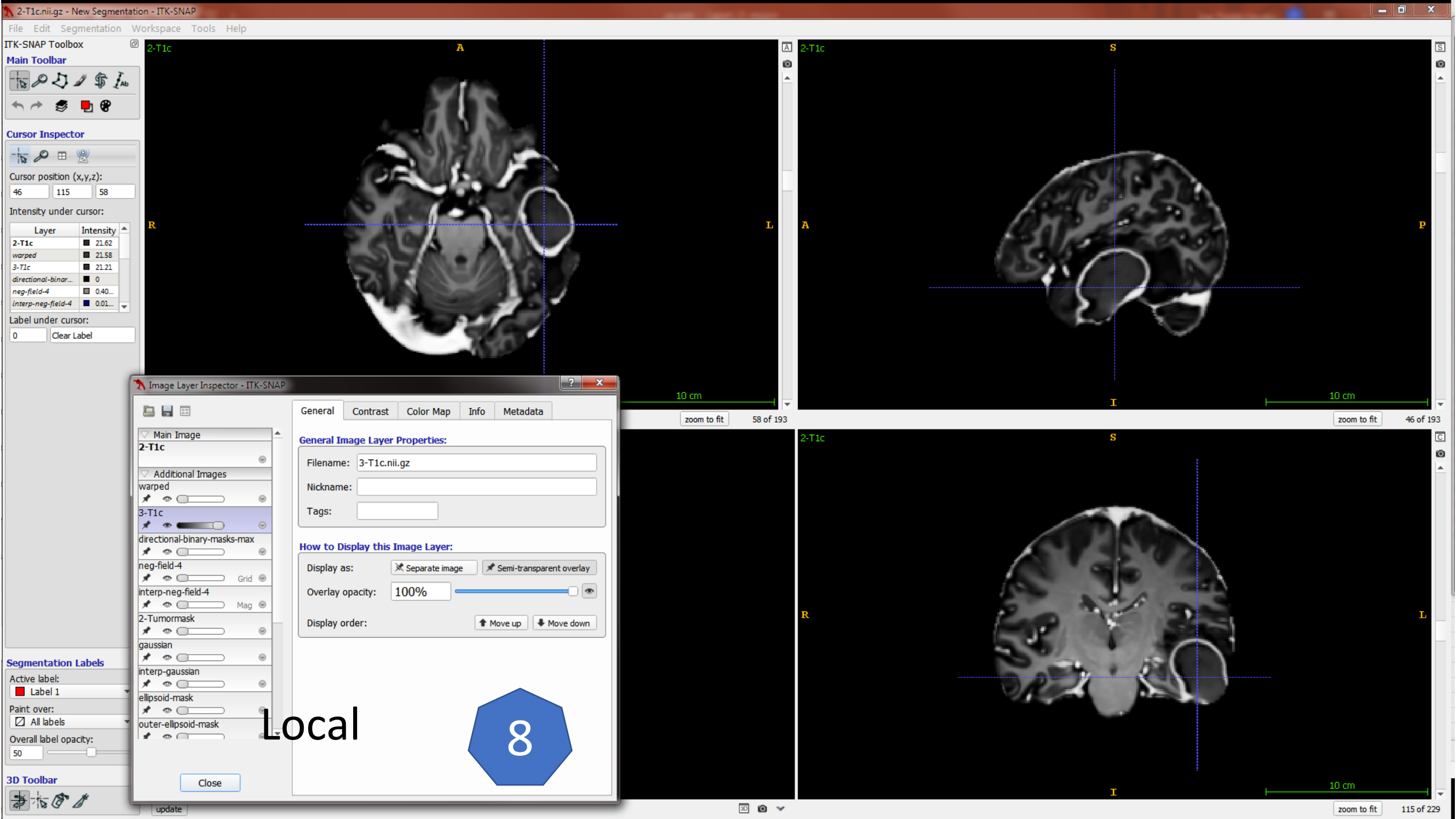




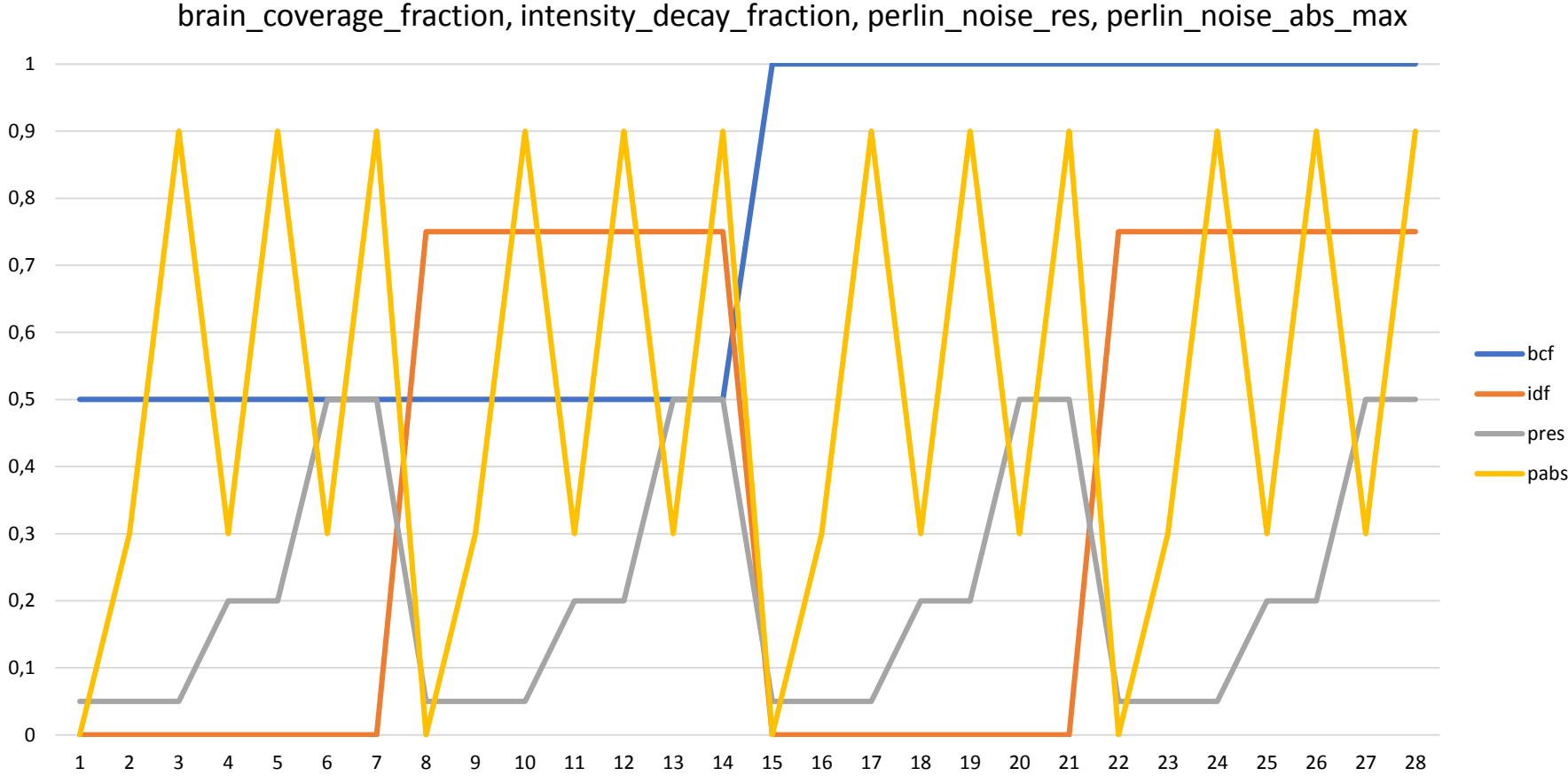
Local







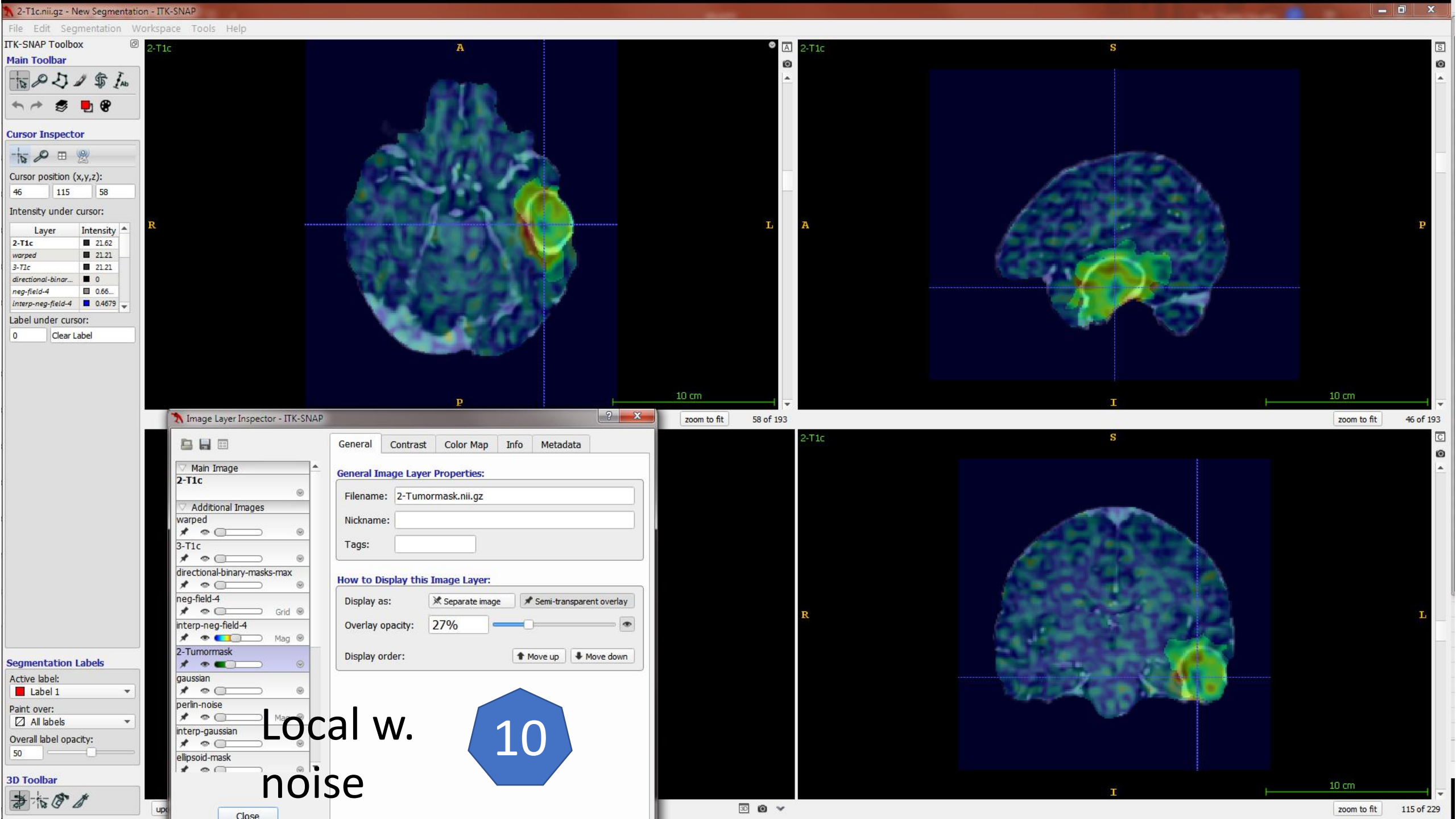
Local w. noise



Parameter combination

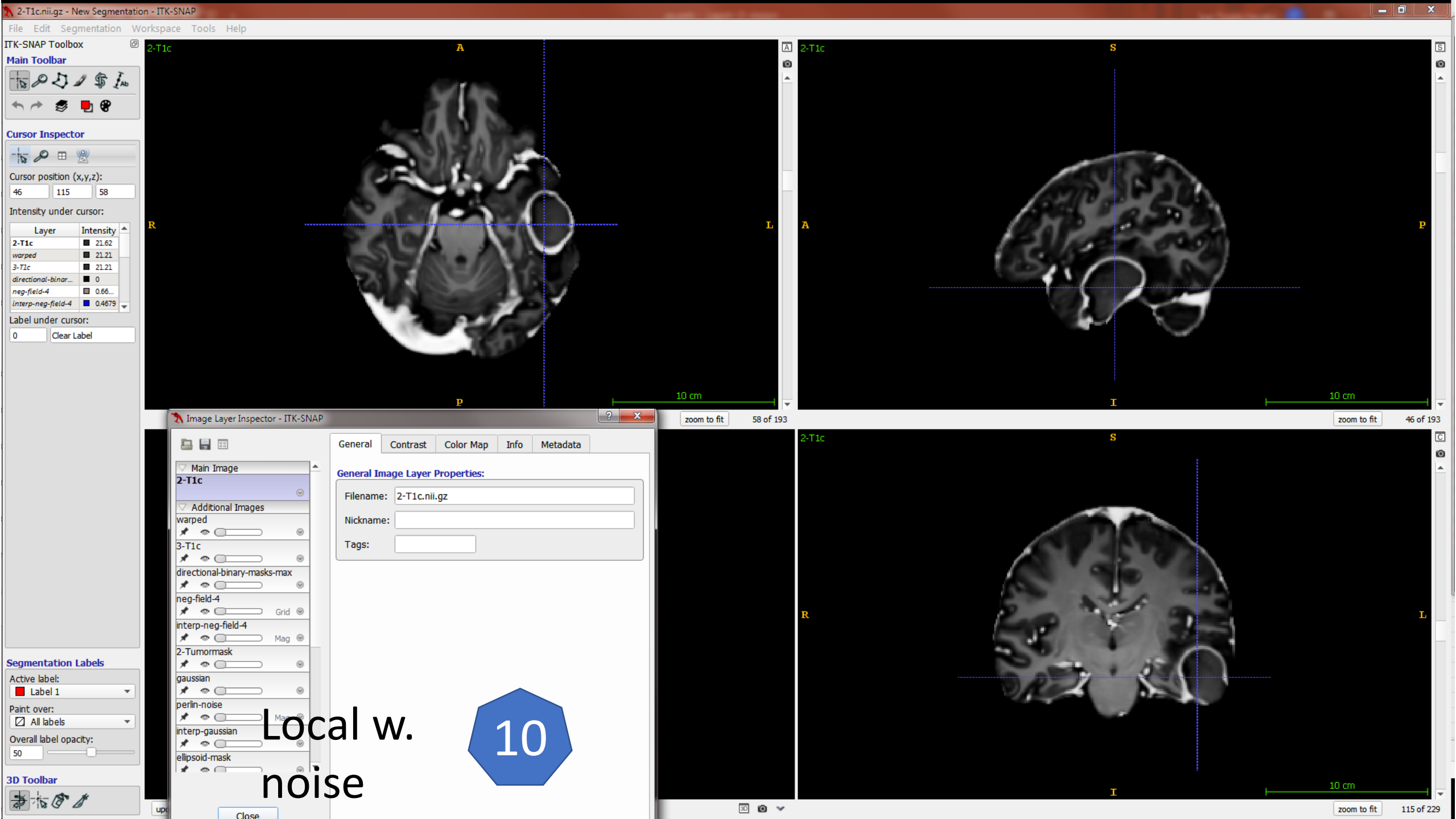
```
displacement=4  
gaussian_range_one_sided=5  
brain_coverage_fraction=0.5  
intensity_decay_fraction=0.75  
num_vecs=64  
angle_thr=7  
num_splits=4  
spline_order=1  
smoothing_std=4  
perlin_noise_res=0.05  
perlin_noise_abs_max=0.9
```





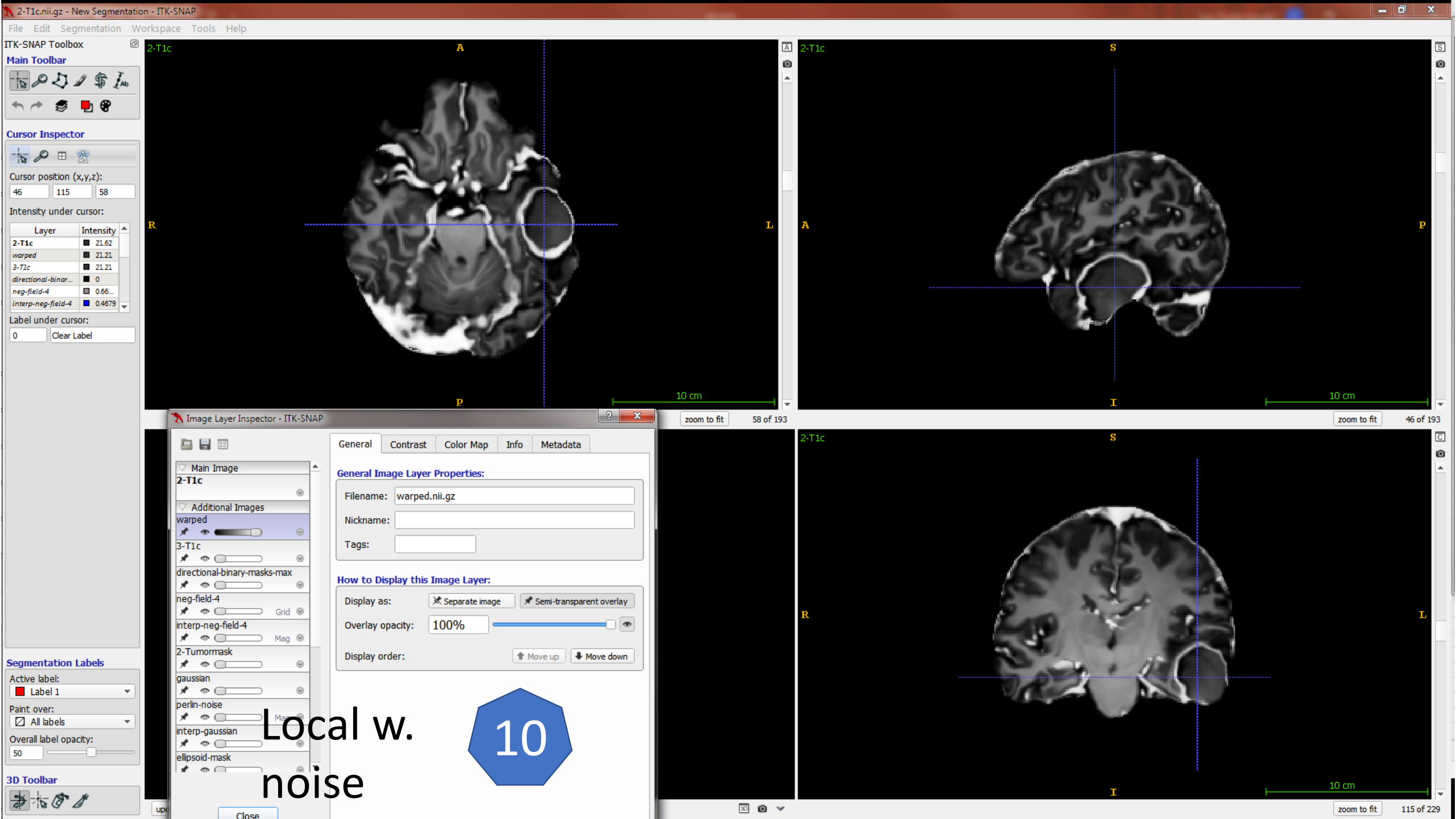
Local w.
noise

10



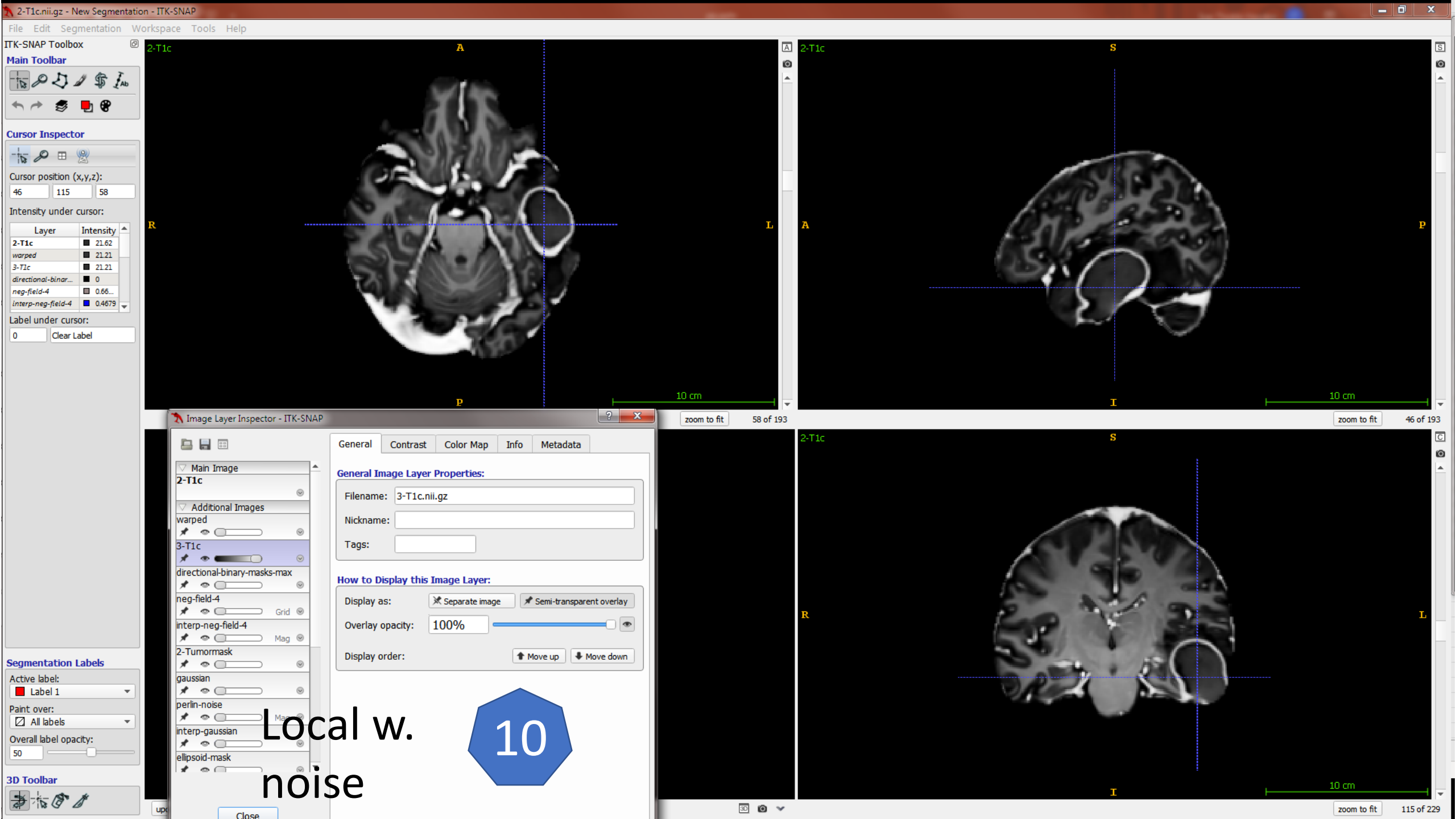
Local w.
noise





Local w.
noise





Local w.
noise

