

AI Based Segmentation

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30/06/2025

AI - based Segmentation in 3D Slicer

Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : Bienvenue dans Slicer



3D Slicer

Bienvenue

DATA Charger des Données

DICOM Charger des données DICOM

MODULES Installer des extensions

EXPLORER Télécharger des exemples de données

PERSONNALISER Personnaliser Slicer

DATA Explorer les données ajoutées

Commentaires



Partagez vos histoires avec nous sur le [forum Slicer](#) et faites-nous savoir comment 3D Slicer a activé vos recherches.

Nous sommes toujours intéressés à améliorer 3D Slicer, pour nous faire part de votre problème ou soumettre un rapport de bug, ouvrez [Aide > Signaler un bug](#).

› A propos

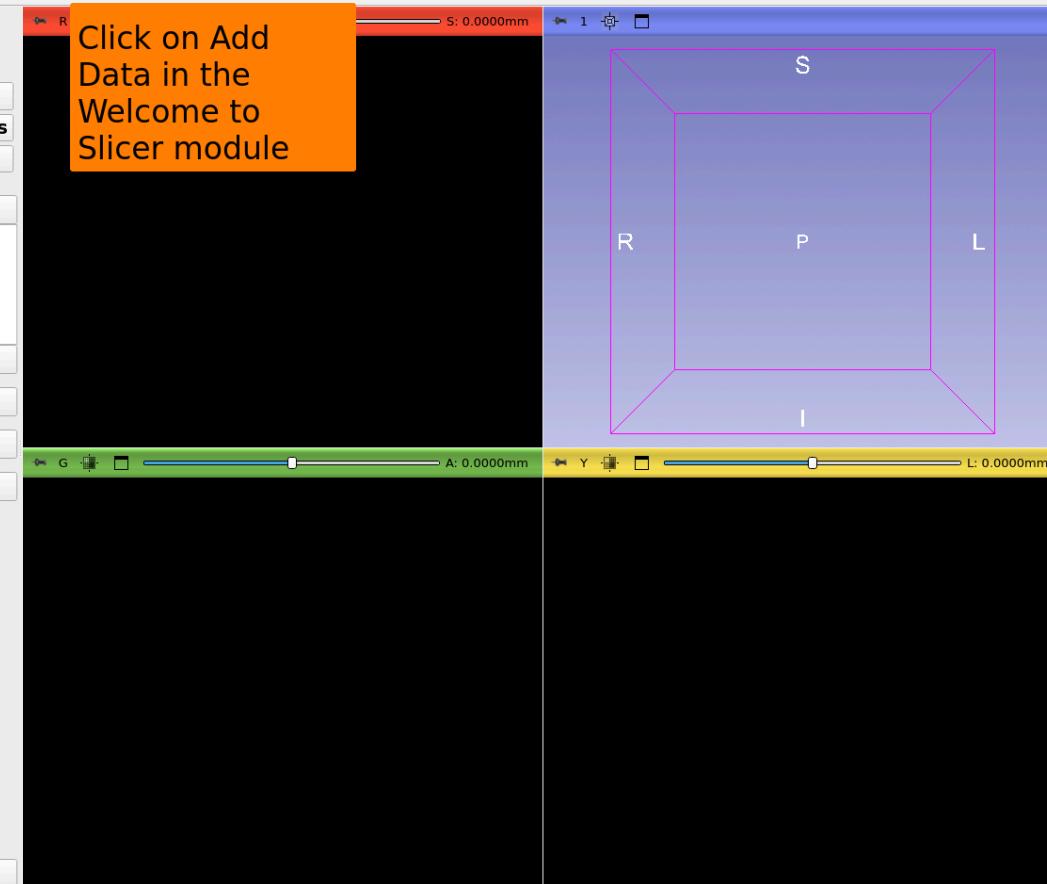
› Documentation et Tutoriels

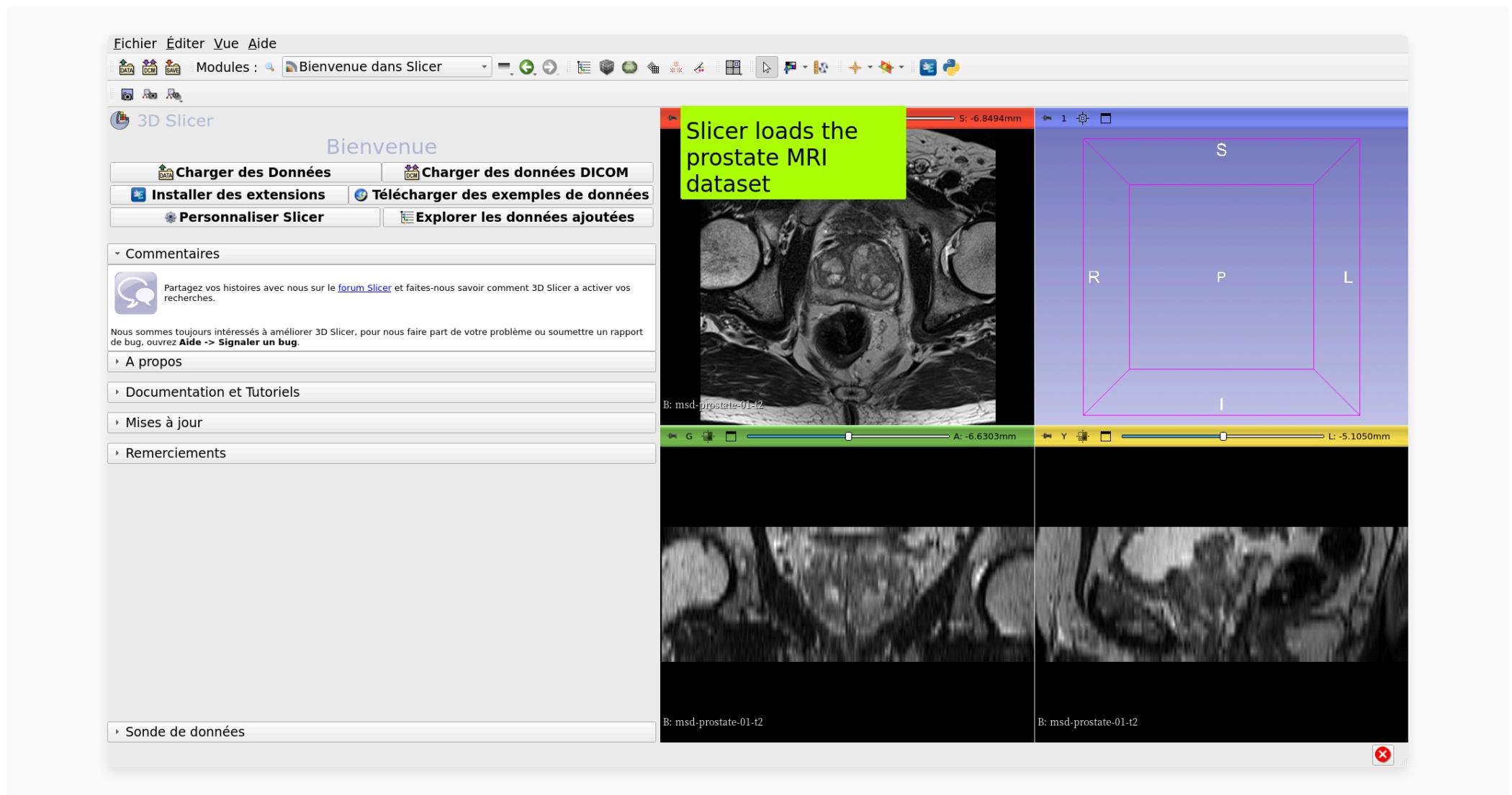
› Mises à jour

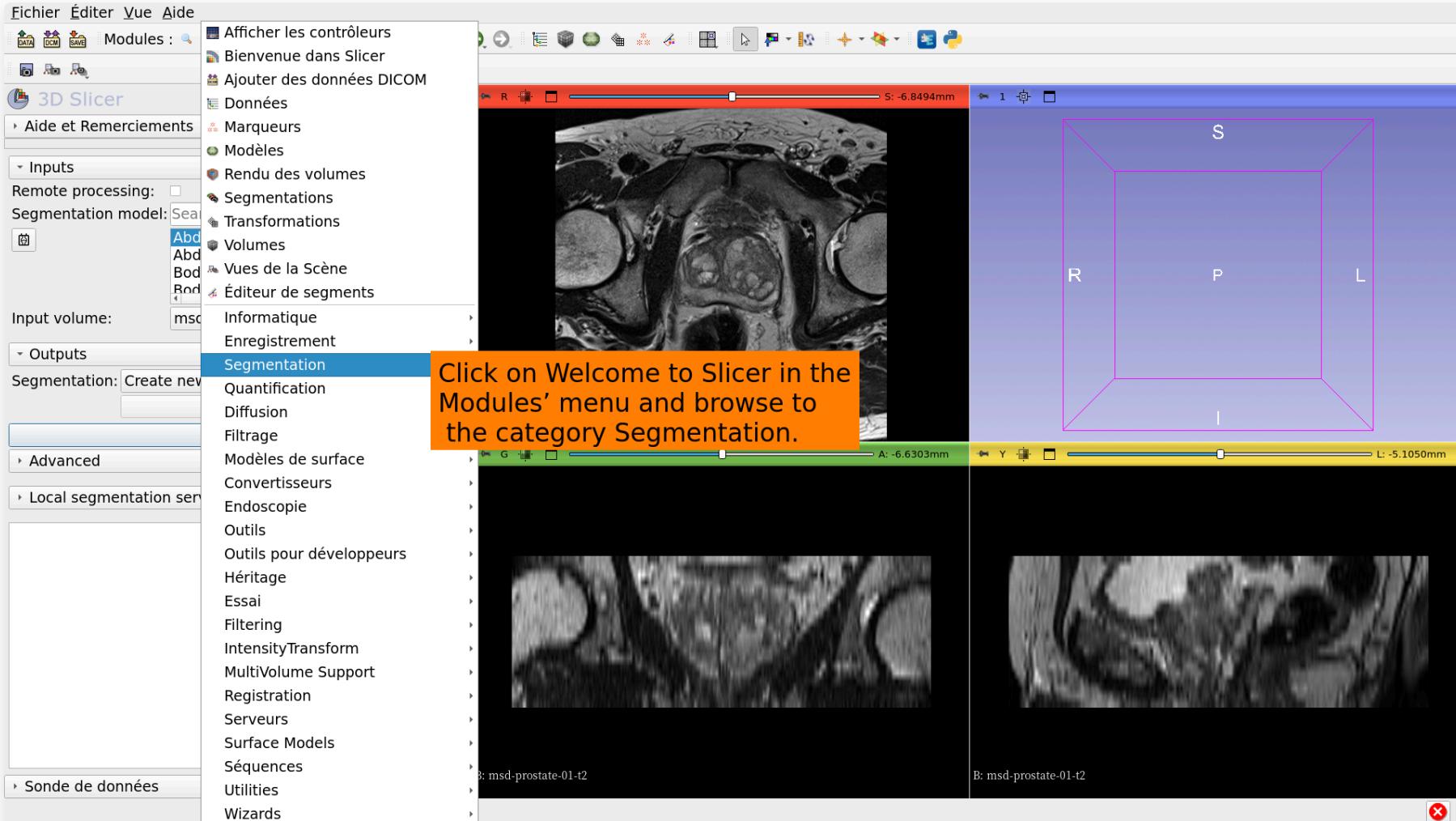
› Remerciements

› Sonde de données

Click on Add Data in the Welcome to Slicer module







Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : MONAI Auto3DSeg



3D Slicer

Aide et Remerciements

- Inputs

Remote processing:

Segmentation model: Prostate Multisequence Full text



Prostate - Multisequence

Input T2 volume: msd-prostate-01-adc

Input ADC volume: Select a Volume

- Outputs

Segmentation: Create new segmentation on Apply

Affichage 3D

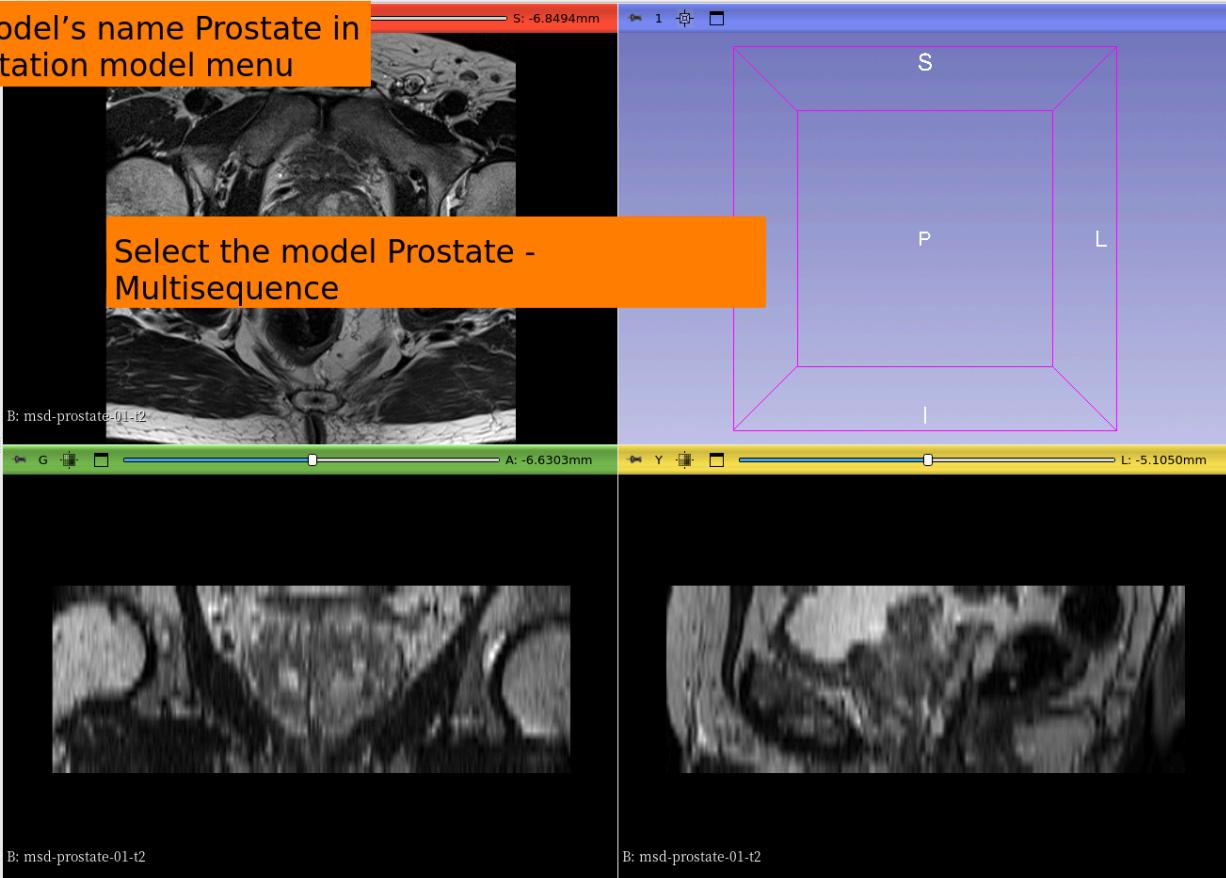
Apply

Advanced

Local segmentation server

Sonde de données

Enter the model's name Prostate in the Segmentation model menu



Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : MONAI Auto3DSeg



3D Slicer

› Aide et Remerciements

‐ Inputs

Remote processing:

Segmentation model: Prostate Multiseque

Prostate - Multisequ

Input T2 volume:

msd-prostate-01-adc

Input ADC volume:

Select a Volume

‐ Outputs

Segmentation: Create new segmentation on Apply

Affichage 3D

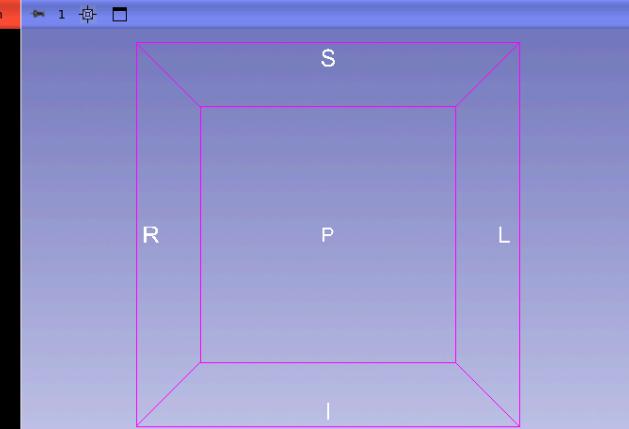
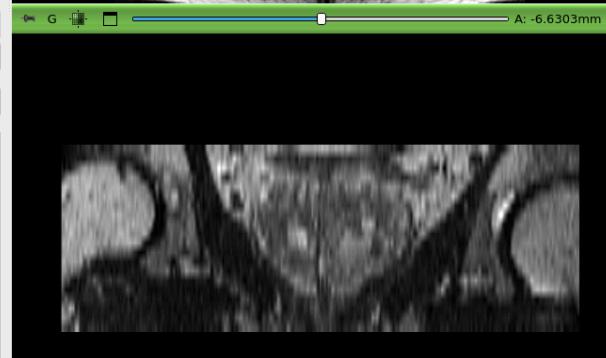
Apply

‐ Advanced

‐ Local segmentation server

› Sonde de données

Enter the Input T2 volume msdprostate-01-adc



Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : MONAI Auto3DSeg



3D Slicer

Aide et Remerciements

- Inputs

Remote processing:

Segmentation model: Prostate Multisequence Full text



Prostate - Multisequence

And the Input ADC volume msd-prostate-01-adc

Input T2 volume: msd-prostate-01-t2

Input ADC volume: msd-prostate-01-adc

- Outputs

Segmentation: Create new segmentation on Apply

Affichage 3D

Apply

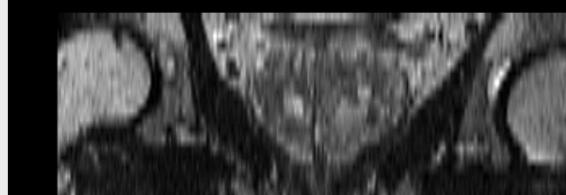
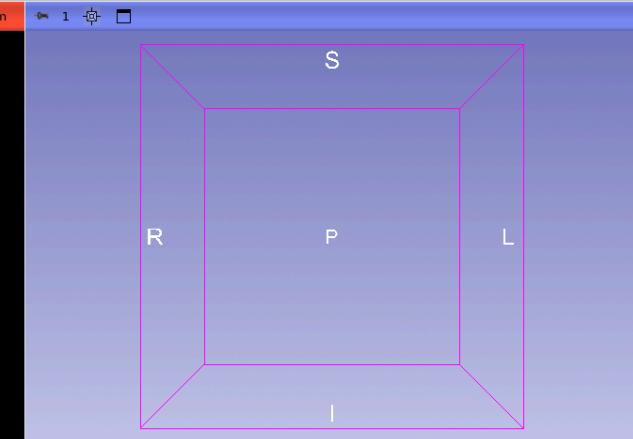
Advanced

Local segmentation server

Sonde de données



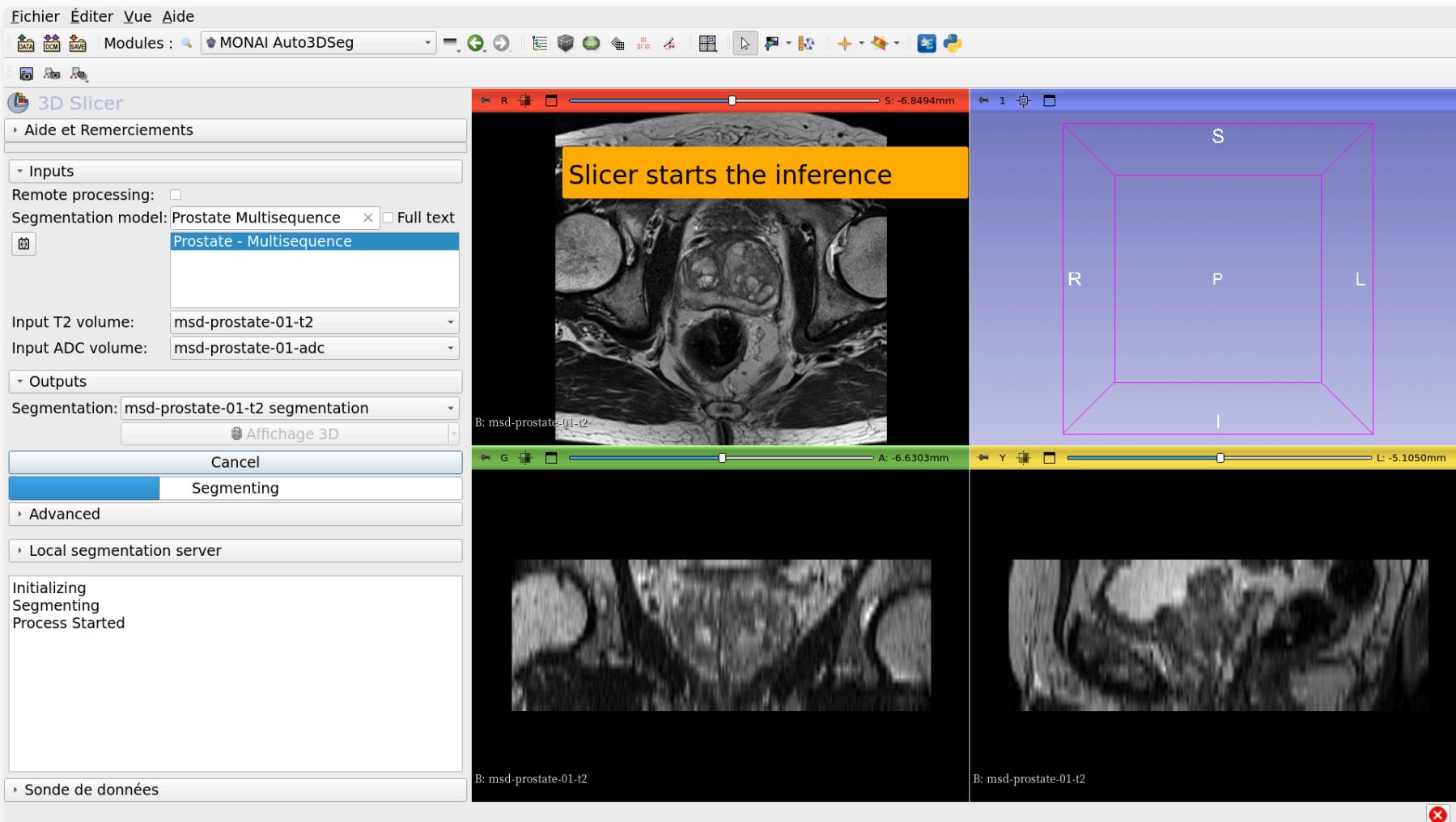
Click on Create new
segmentation on
Apply



B: msd-prostate-01-t2

B: msd-prostate-01-t2





Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : MONAI Auto3DSeg



3D Slicer

› Aide et Remerciements

‐ Inputs

Remote processing:

Segmentation model: Prostate Multisequence Full text



Prostate - Multisequence

Input T2 volume:

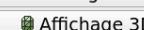
msd-prostate-01-t2

Input ADC volume:

msd-prostate-01-adc

‐ Outputs

Segmentation: msd-prostate-01-t2 segmentation



Affichage 3D

Apply

› Advanced

› Local segmentation server

Loading volumes: 0.00 seconds

Preprocessing: 0.07 seconds

Inference: 13.84 seconds

Logits: 0.18 seconds

Preds: 0.01 seconds

Convert to array: 0.00 seconds

Save: 0.01 seconds

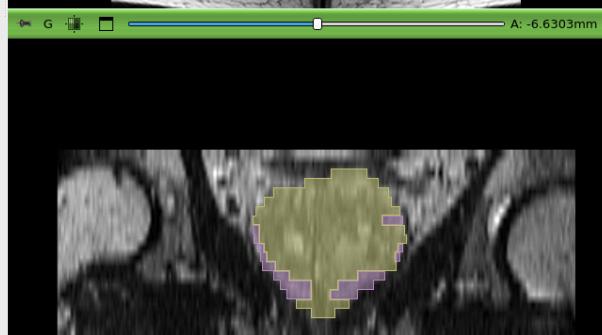
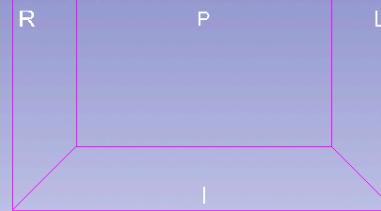
ALL DONE, result saved in /tmp/Slicer/_SlicerTemp_2026-02-18_18+30+32.429/output-segmentation.nrrd
Importing Results
Processing finished.

› Sonde de données

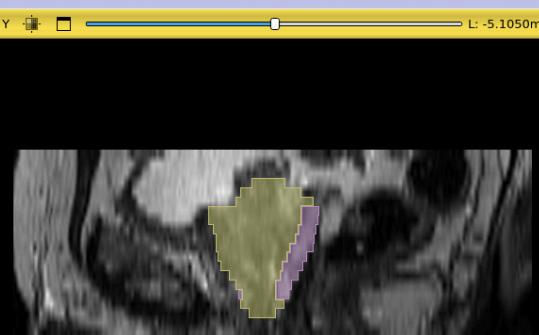


B: msd-prostate-01-t2

Slicer shows the result of the Albased prostate segmentation



B: msd-prostate-01-t2



B: msd-prostate-01-t2



Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : MONAI Auto3DSeg



3D Slicer

› Aide et Remerciements

Inputs

Remote processing:

Segmentation model: Prostate Multisequence Full text



Prostate - Multisequence

Input T2 volume:

msd-prostate-01-t2

Input ADC volume:

msd-prostate-01-adc

Outputs

Segmentation: Create new segmentation on Apply

Affichage 3D

Apply

Advanced

Local segmentation server

Loading volumes: 0.00 seconds

Preprocessing: 0.07 seconds

Inference: 13.84 seconds

Logits: 0.18 seconds

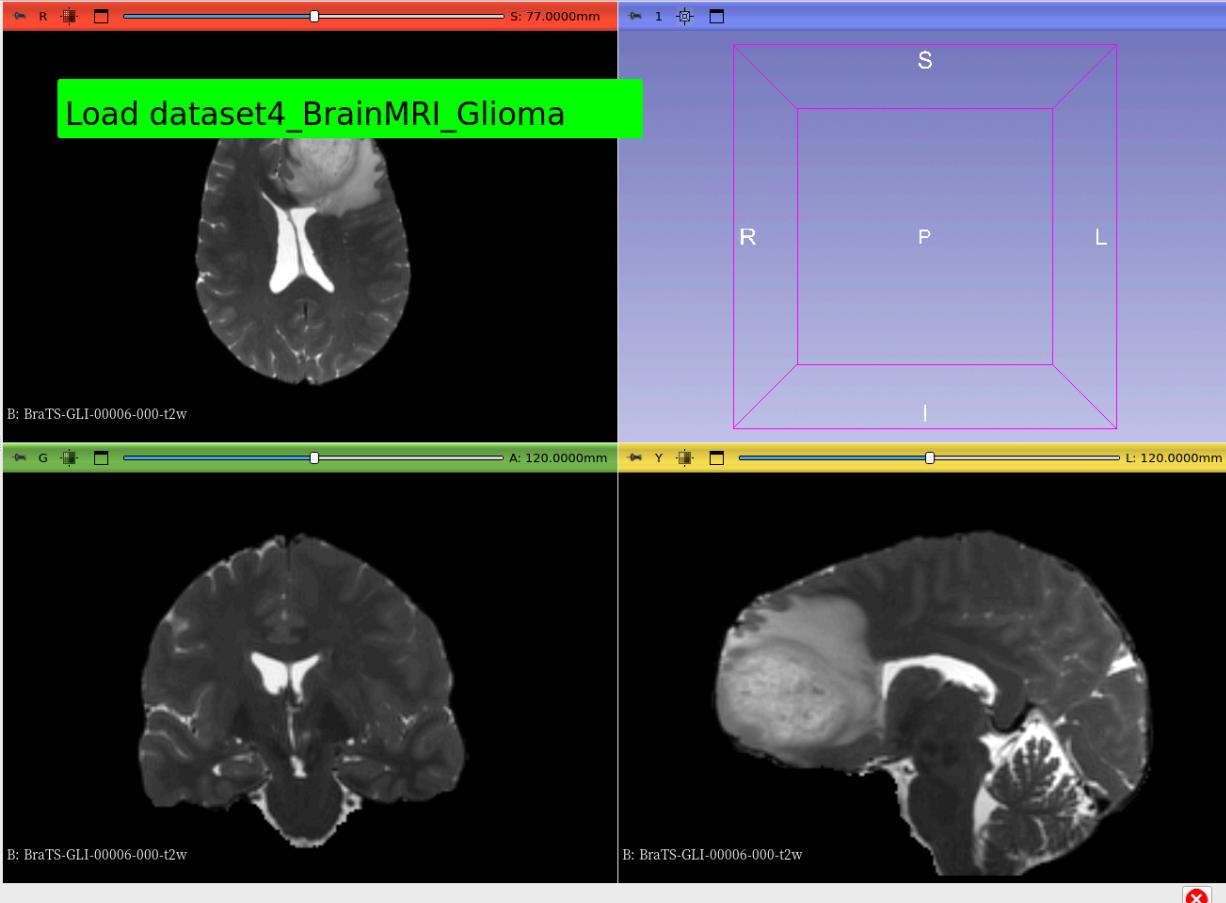
Preds: 0.01 seconds

Convert to array: 0.00 seconds

Save: 0.01 seconds

ALL DONE, result saved in /tmp/Slicer/_SlicerTemp_2026-02-18_18+30+32.429/output-segmentation.nrrd
Importing Results
Processing finished.

Sonde de données



Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : MONAI Auto3DSeg



Aide et Remerciements

- Inputs

Remote processing:

Segmentation model: Brain Tumor Full text



Select the module MONAIAuto3DSeg and enter the model's name Brain Tumor Segmentation in the Segmentation model menu



Input T2F volume: msd-prostate-01-t2

Input T1C volume: msd-prostate-01-adc

Input T1N volume: msd-prostate-01-adc

Input T2W volume: msd-prostate-01-adc

- Outputs

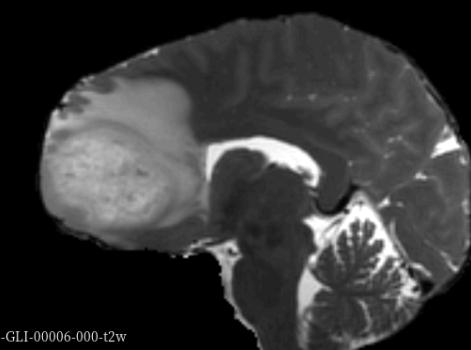
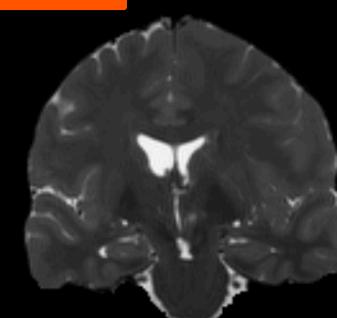
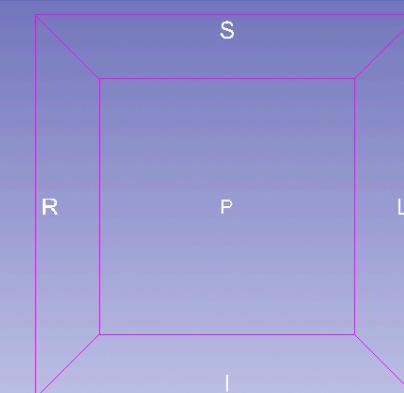
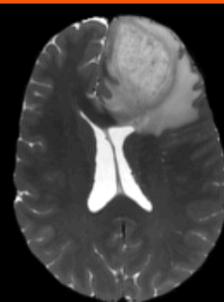
Segmentation: Select the model Brain Tumor Segmentation (BRATS) GLI

Advanced

Local segmentation server

```
preds inverted torch.Size([320, 320, 20])
Computation time log:
Loading volumes: 0.60 seconds
Preprocessing: 0.07 seconds
Inference: 13.84 seconds
Logits: 0.18 seconds
Preds: 0.01 seconds
Convert to array: 0.00 seconds
Save: 0.01 seconds
All DONE! result saved in /tmp/Slicer/
```

Sonde de données



B: BraTS-GLI-00006-000-t2w

B: BraTS-GLI-00006-000-t2w



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DATA DICOM SAVE Modules : MONAI Auto3DSeg



3D Slicer

Aide et Remerciements

- Inputs

Remote processing:

Segmentation model: Brain Tumor Full text



Brain Tumor Segmentation (BRATS) GI

Brain Tumor Segmentation (BRATS) MI

Brain Tumor Segmentation (BRATS) MI

Brain Tumor Segmentation (BRATS) PF

Input T2F volume: BraTS-GLI-00006-000-t2f

Input T1C volume: BraTS-GLI-00006-000-t1c

Input T1N volume: BraTS-GLI-00006-000-t1n

Input T2W volume: BraTS-GLI-00006-000-t2w

- Outputs

Segmentation: Create new segmentation on Apply

Affichage 3D

Apply

Advanced

Local segmentation server

preds inverted torch.Size([320, 320, 20])

Computation time log:

Loading volumes: 0.60 seconds

Preprocessing: 0.07 seconds

Inference: 13.84 seconds

Logits: 0.18 seconds

Preds: 0.01 seconds

Convert to array: 0.00 seconds

Save: 0.01 seconds

All DONE! result saved in /tmp/Slicer/-

Sonde de données

Enter the input volumes as follows:

Input T2F volume:

BraTS-GLI_00005-000-t12f

Input T1C volume:

BraTS-GLI_00005-000-t1c

Input T1N volume:

BraTS-GLI_00005-000-t1n

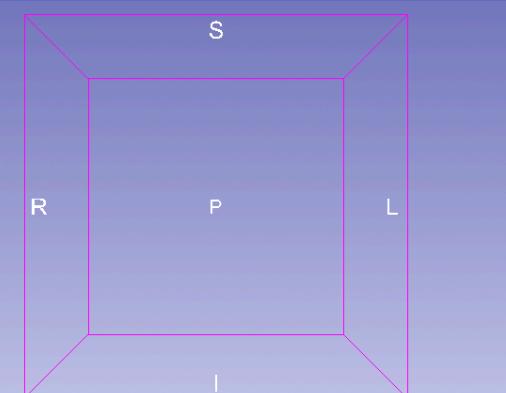
Input T2W volume:

BraTS-GLI_00005-000-t2w

Click on Create new Segmentation on Apply
Click on Apply to start the segmentation

B: BraTS-GLI-00006-000-t2w

B: BraTS-GLI-00006-000-t2w



Fichier Éditer Vue Aide

DATA DICOM SAVE Modules : MONAI Auto3DSeg



3D Slicer

› Aide et Remerciements

‐ Inputs

Remote processing:

Segmentation model: Brain Tumor Full text



Brain Tumor Segmentation (BRATS) GI
Brain Tumor Segmentation (BRATS) MI
Brain Tumor Segmentation (BRATS) MI
Brain Tumor Segmentation (BRATS) PF

Input T2F volume: BraTS-GLI-00006-000-t2f

Input T1C volume: BraTS-GLI-00006-000-t1c

Input T1N volume: BraTS-GLI-00006-000-t1n

Input T2W volume: BraTS-GLI-00006-000-t2w

‐ Outputs

Segmentation: BraTS-GLI-00006-000-t2f segmentation

Affichage 3D

Cancel

Segmenting

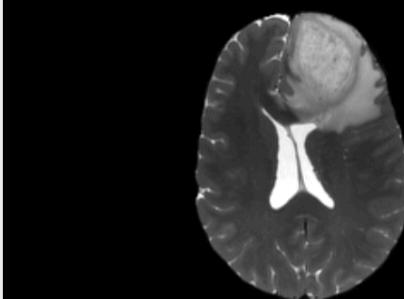
› Advanced

› Local segmentation server

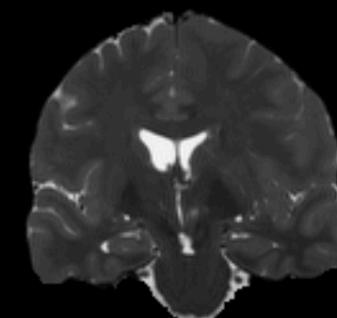
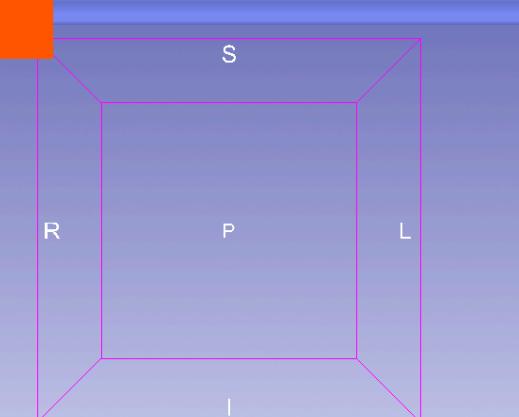
Initializing
Segmenting
Process Started

› Sonde de données

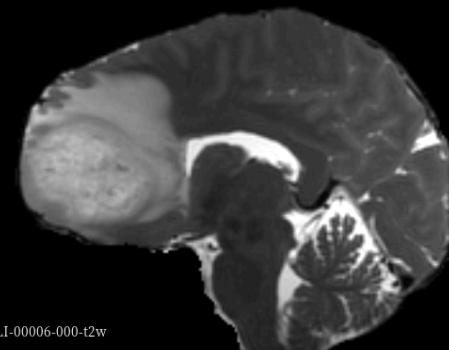
Slicer starts running the inference task



B: BraTS-GLI-00006-000-t2w

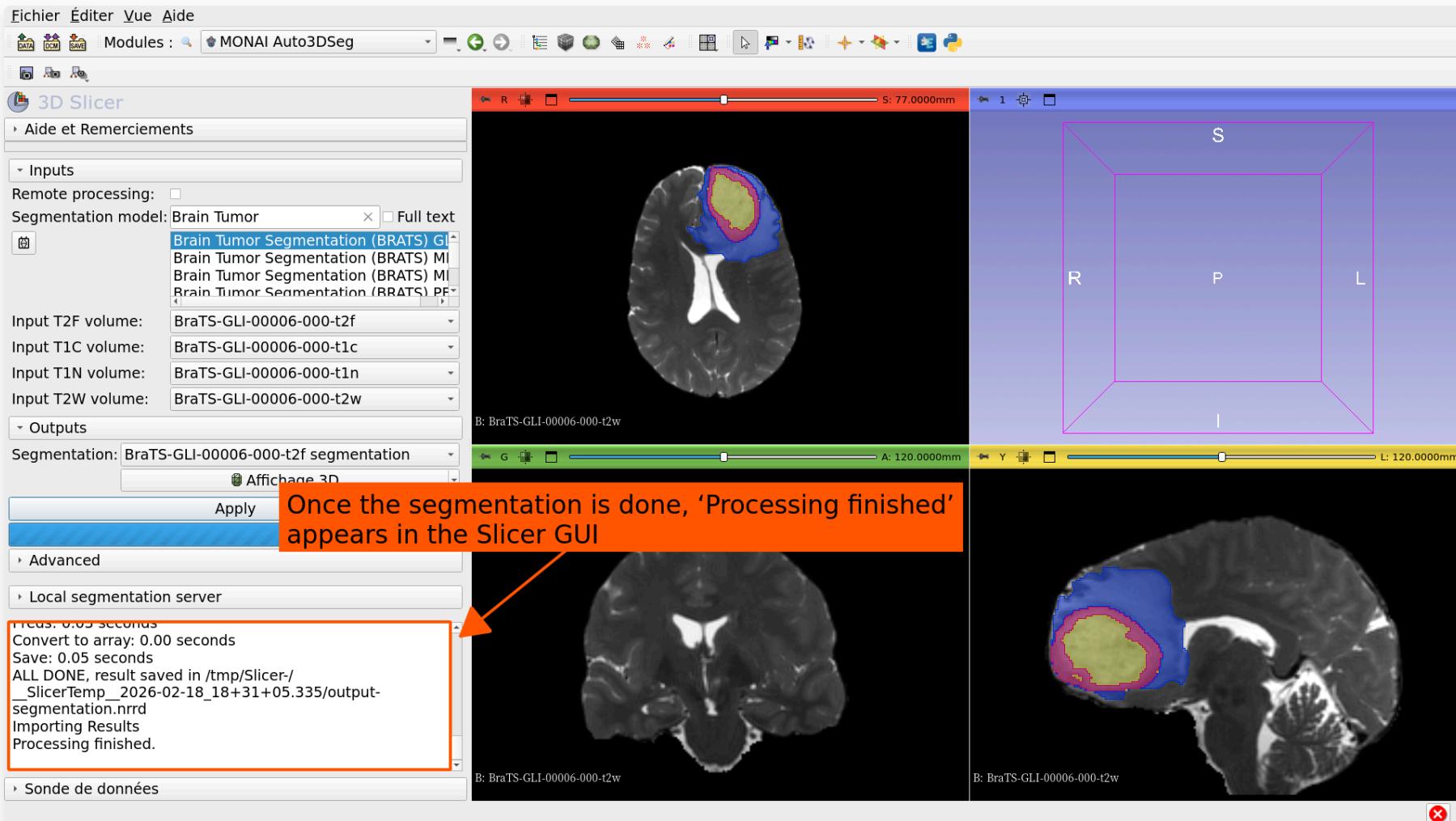


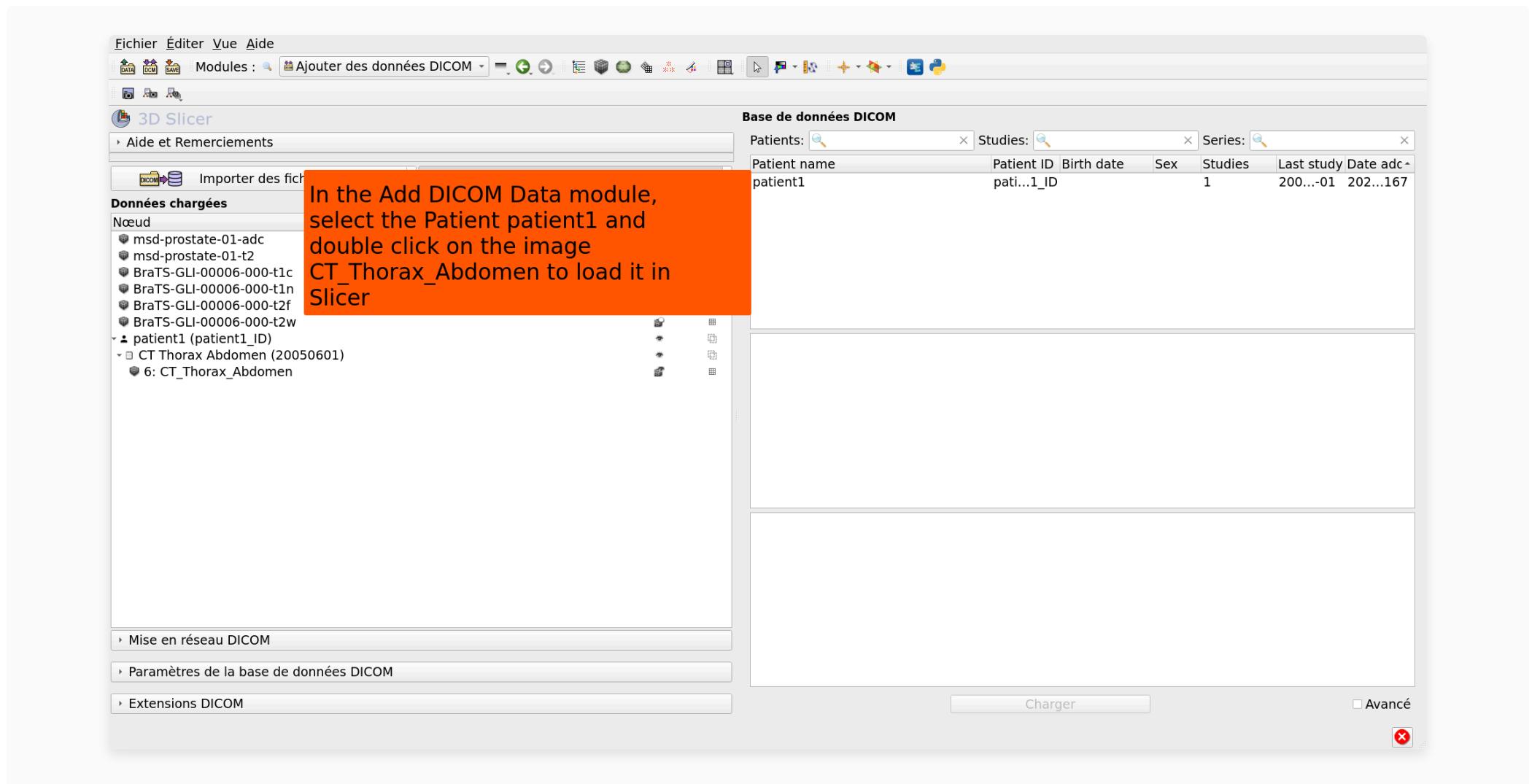
B: BraTS-GLI-00006-000-t2w

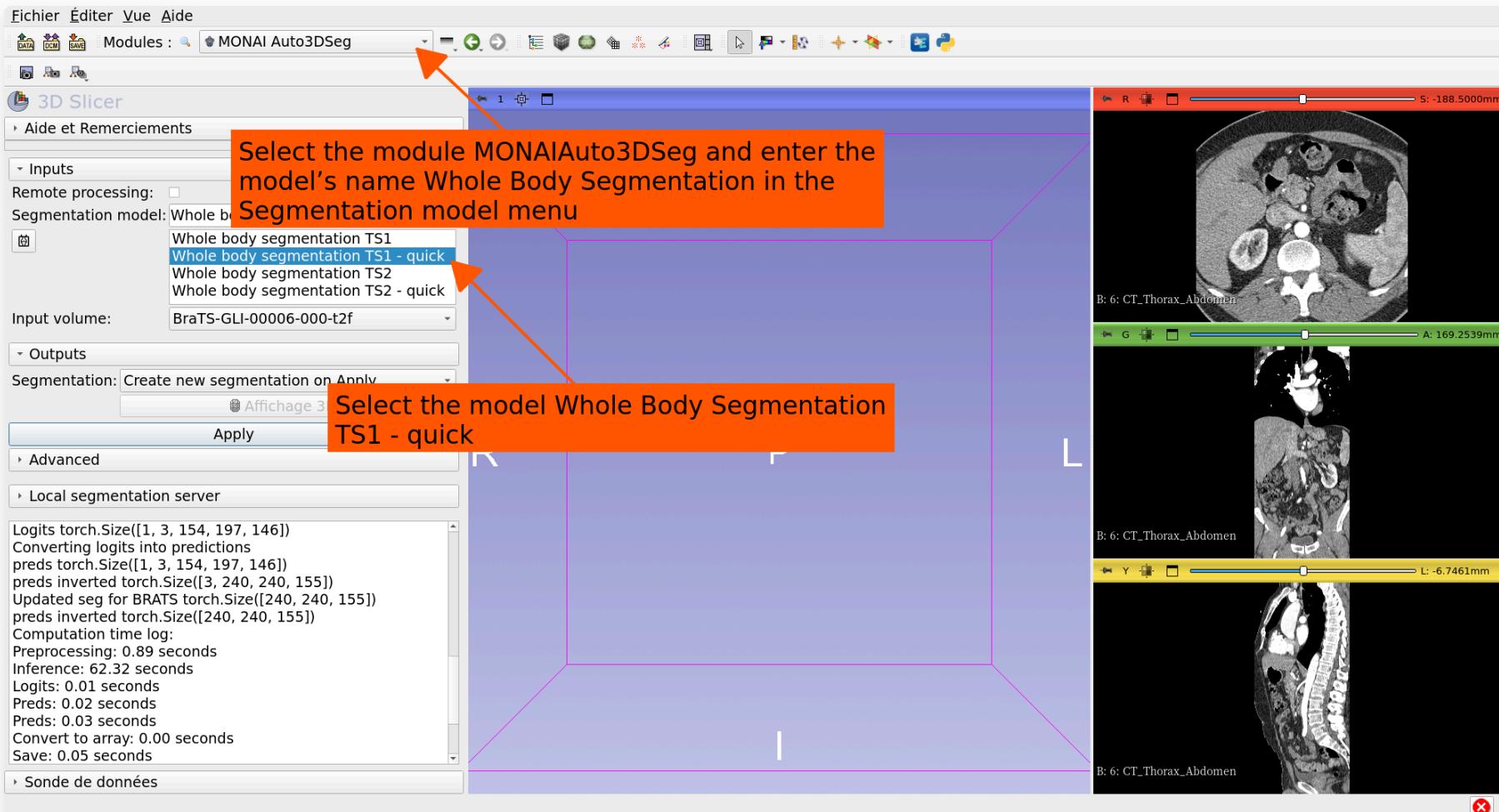


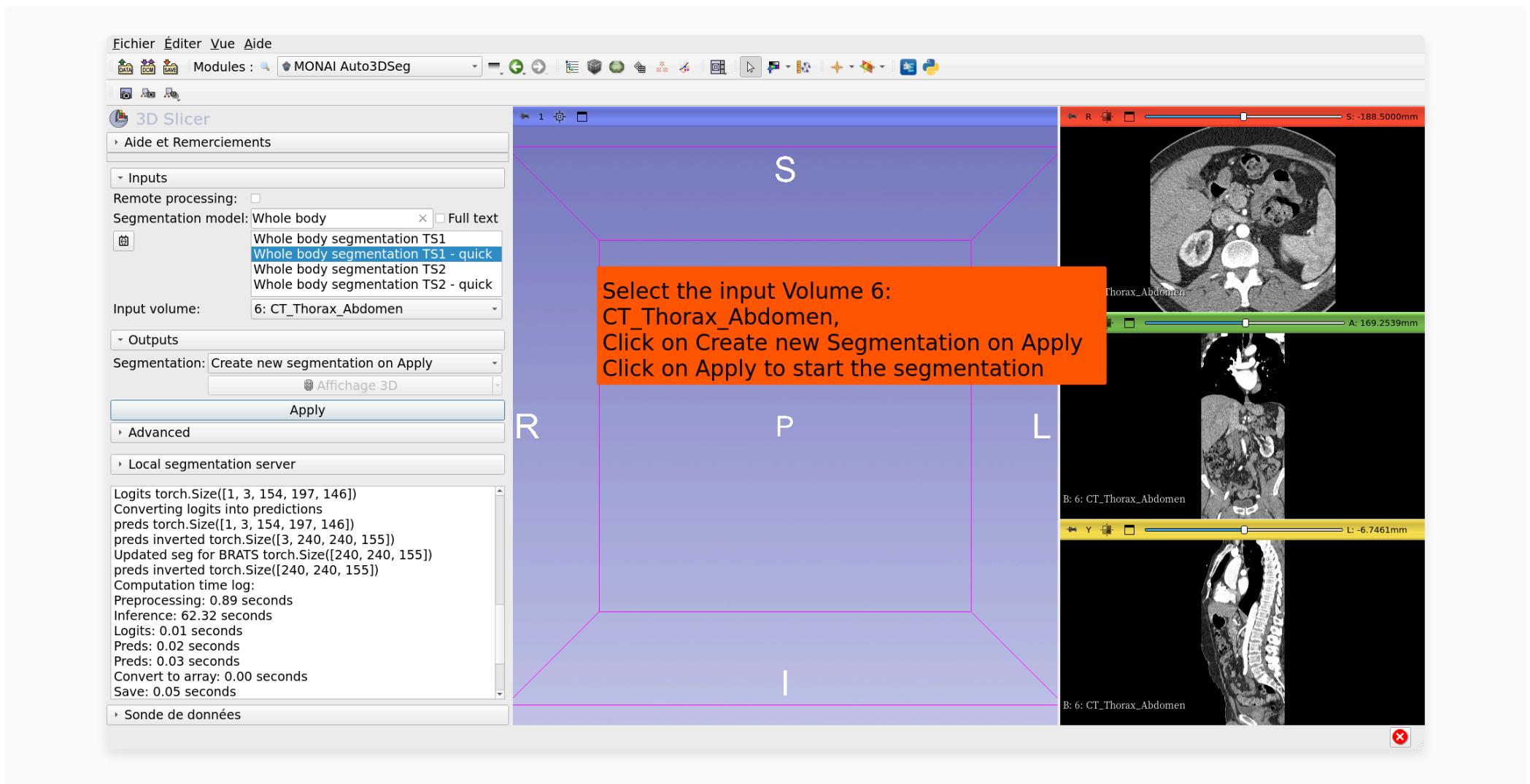
B: BraTS-GLI-00006-000-t2w

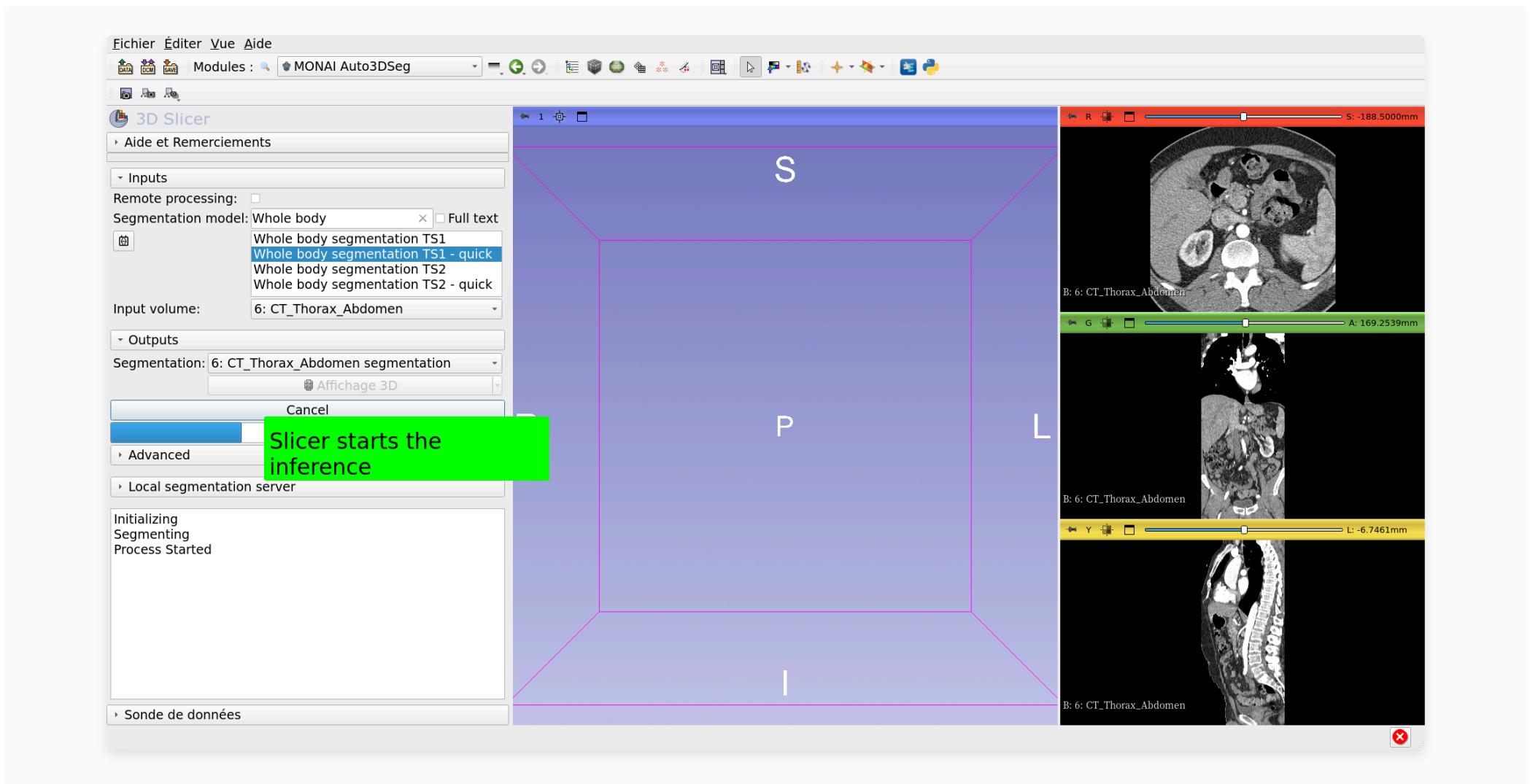


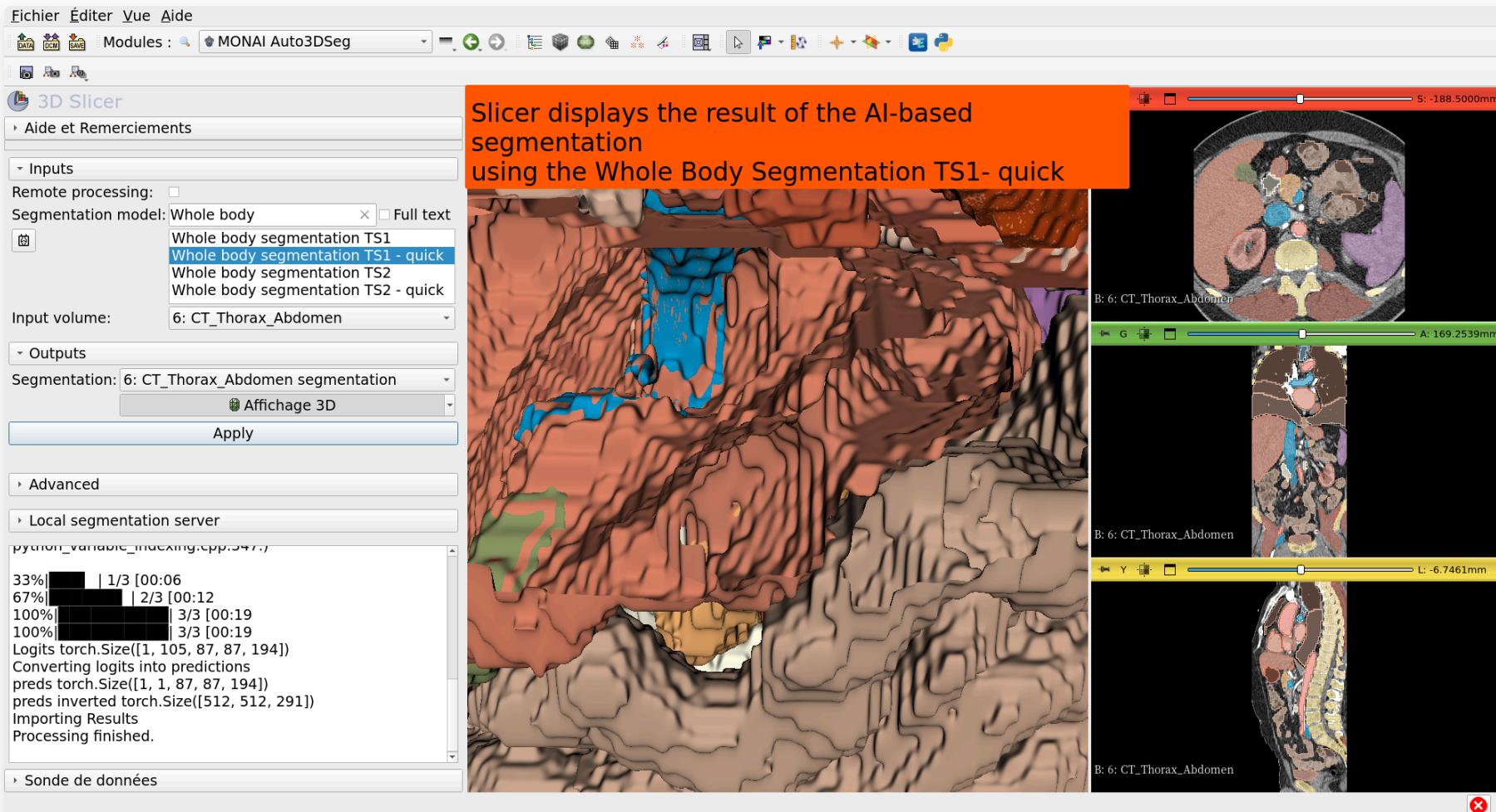












Acknowledgements

