

Guide for FLAMeS Segmentation Model

Research Paper about FLAMeS Model: [FLAMeS: A Robust Deep Learning Model for Automated Multiple Sclerosis Lesion Segmentation - PMC](#)

Step by Step Guide:

1. Download ms_lesion_segmentation folder in : [Menna&Amira - Google Drive](#) and extract it

 config.json	1/25/2026 9:37 PM	JSON Source File	1 KB
 P1_T1_FLAIR.nii	1/25/2026 9:37 PM	NII File	28,208 KB
 run_ms_segmentation.py	1/25/2026 9:37 PM	Python Source File	8 KB
 FLAMeS_MODEL	1/25/2026 9:41 PM	File folder	

It contains configuration file, sample to test on , python script you will run, FLAMeS_MODEL you will put the Model in

2. Open this link: [FLAMeS: FLAIR Lesion Analysis in Multiple Sclerosis](#)
3. Choose version 2

Versions

Version 2.0	Dec 16, 2025
10.5281/zenodo.17955359	
Version 1.0	Feb 9, 2023
10.5281/zenodo.7626121	

[View all 2 versions](#)

Cite all versions? You can cite all versions by using the DOI [10.5281/zenodo.7626120](https://doi.org/10.5281/zenodo.7626120). This DOI represents all versions, and will always resolve to the latest one. [Read more](#).

4. Download the Zip file

The screenshot shows a file download interface for "Dataset004_WML.zip".

File Tree:

- Dataset004_WML
- nnUNetTrainer_8000epochs__nnUNetPlans__3d_fullres
 - dataset.json (227 Bytes)
 - dataset_fingerprint.json (109.5 kB)
- fold_0
 - checkpoint_best.pth (249.2 MB)
 - checkpoint_final.pth (249.2 MB)
 - debug.json (13.2 kB)
 - progress.png (958.2 kB)
 - training_log_2024_11_21_10_39_24.txt (2.6 MB)
- fold_1
 - checkpoint_best.pth (249.2 MB)

Summary Table:

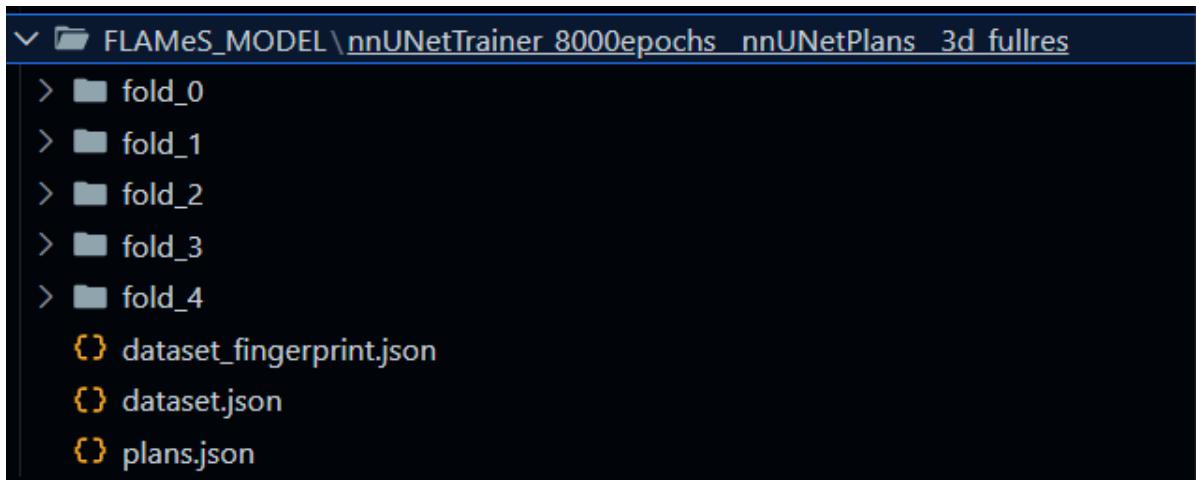
Name	Size
Dataset004_WML.zip	2.4 GB

Download Buttons:

- [Download all](#)
- [Preview](#)
- [Download](#) (highlighted with a red box)

5. Extract and put nnUNetTrainer_8000epochs__nnUNetPlans__3d_fullres folder inside FLAMEs_MODEL folder

It should look like that:



6. Open ms_lesion_segmentation folder in vs code and ensure you have python 3.11
7. To run the python script and set up the required libraries

Type In cmd:

```
python3.11 run_ms_segmentation.py input_path output_path
```

EX:

```
python3.11 run_ms_segmentation.py P1_T1_FLAIR.nii  
output_mask.nii.gz
```

Notes:

1. I ensured the setup will be on any laptop, but I didn't try it on another laptop or OS
2. I couldn't use CUDA in my device, and I used CPU, so it was so slow.