morphology-processing-workflow

Release 0.0.1.dev0

unknown

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CONTENTS

CURATEDATASET

Run Curation step.

1.1 Collect

Collect dataset csv file and copy morphologies to local folder.

Also ensures extension is standard.

1.1.1 Validated features

AA0469, AA0470, AA0473, AA0475, AA0403, AA0462, AA0471, AA0472

1.1.2 Failed features

- **AA0474**

    - return code: 1

    - comment: The file /gpfs/bbp.cscs.ch/project/proj81/InputData/Morphologies/Neurons/Mouse/SSCx/WholeBrain/mouselight_isocortex_ASCII_Files/AA0474.ASC could not be copied.

    - exception:

      ```
      Traceback (most recent call last):
        File "/mnt/Stockage/Adrien/Work/BBP/codes/morphology-processing-
      ↪workflow/src/morphology_processing_workflow/utils.py", line 42,␣
      ↪in try_operation
          res = func(row, *args, **kwargs)
        File "/mnt/Stockage/Adrien/Work/BBP/codes/morphology-processing-
      ↪workflow/src/morphology_processing_workflow/curation.py", line 37,
      ↪ in collect
          shutil.copy(row.morph_path, full_new_morph_path)
        File "/usr/local/lib/python3.6/shutil.py", line 245, in copy
          copyfile(src, dst, follow_symlinks=follow_symlinks)
        File "/usr/local/lib/python3.6/shutil.py", line 120, in copyfile
          with open(src, 'rb') as fsrc:
      FileNotFoundError: [Errno 2] No such file or directory: '/gpfs/bbp.
      ↪cscs.ch/project/proj81/InputData/Morphologies/Neurons/Mouse/SSCx/
      ↪WholeBrain/mouselight_isocortex_ASCII_Files/AA0474.ASC'
      ```

- **AA0463**

– return code: 1

– comment: The file /gpfs/bbp.cscs.ch/project/proj81/InputData/Morphologies/Neurons/Mouse/SS Cx/WholeBrain/mouselight_isocortex_ASCII_Files/AA0463.ASC could not be copied.

– exception:

```
Traceback (most recent call last):
  File "/mnt/Stockage/Adrien/Work/BBP/codes/morphology-processing-
→workflow/src/morphology_processing_workflow/utils.py", line 42,␣
→in try_operation
    res = func(row, *args, **kwargs)
  File "/mnt/Stockage/Adrien/Work/BBP/codes/morphology-processing-
→workflow/src/morphology_processing_workflow/curation.py", line 37,
→ in collect
    shutil.copy(row.morph_path, full_new_morph_path)
  File "/usr/local/lib/python3.6/shutil.py", line 245, in copy
    copyfile(src, dst, follow_symlinks=follow_symlinks)
  File "/usr/local/lib/python3.6/shutil.py", line 120, in copyfile
    with open(src, 'rb') as fsrc:
FileNotFoundError: [Errno 2] No such file or directory: '/gpfs/bbp.
→cscs.ch/project/proj81/InputData/Morphologies/Neurons/Mouse/SSCx/
→WholeBrain/mouselight_isocortex_ASCII_Files/AA0463.ASC'
```

• **AA0464**

– return code: 1

– comment: The file /gpfs/bbp.cscs.ch/project/proj81/InputData/Morphologies/Neurons/Mouse/SS Cx/WholeBrain/mouselight_isocortex_ASCII_Files/AA0464.ASC could not be copied.

– exception:

```
Traceback (most recent call last):
  File "/mnt/Stockage/Adrien/Work/BBP/codes/morphology-processing-
→workflow/src/morphology_processing_workflow/utils.py", line 42,␣
→in try_operation
    res = func(row, *args, **kwargs)
  File "/mnt/Stockage/Adrien/Work/BBP/codes/morphology-processing-
→workflow/src/morphology_processing_workflow/curation.py", line 37,
→ in collect
    shutil.copy(row.morph_path, full_new_morph_path)
  File "/usr/local/lib/python3.6/shutil.py", line 245, in copy
    copyfile(src, dst, follow_symlinks=follow_symlinks)
  File "/usr/local/lib/python3.6/shutil.py", line 120, in copyfile
    with open(src, 'rb') as fsrc:
FileNotFoundError: [Errno 2] No such file or directory: '/gpfs/bbp.
→cscs.ch/project/proj81/InputData/Morphologies/Neurons/Mouse/SSCx/
→WholeBrain/mouselight_isocortex_ASCII_Files/AA0464.ASC'
```

1.2 ExtractMarkers

Extract marker informations from the original morpholog files, if any.

1.2.1 Validated features

AA0469, AA0470, AA0473, AA0475, AA0403, AA0462, AA0471, AA0472

1.3 Sanitize

Sanitize the morphologies with NeuroR and a mock soma if missing.

1.3.1 Validated features

AA0469, AA0470, AA0473, AA0475, AA0403, AA0462, AA0471, AA0472

1.4 CheckNeurites

Sanitize the morphologies with NeuroR and a mock soma if missing

Try some sphinx features:

```python
import toto

a = 1

def test(arg):
    print(arg)
    return arg
```

Link example: *Example website*: http://www.example.com/

Note: This is a short note.

Note: This is a long note.

Short math block included in paragraph: $a^2 + b^2 = c^2$.

Math block:

$$(a + b)^2 = a^2 + 2ab + b^2$$
$$(a - b)^2 = a^2 - 2ab + b^2$$

And this is the end.

1.4.1 Validated features

AA0469, AA0470, AA0473, AA0475, AA0403, AA0462, AA0471, AA0472

1.5 Recenter

Recenter morphologies.

1.5.1 Validated features

AA0469, AA0470, AA0473, AA0475, AA0403, AA0462, AA0471, AA0472

1.6 DetectErrors

Detect morphology errors, annotate them on the .asc file, and save a summary.

1.6.1 Validated features

AA0469, AA0470, AA0473, AA0475, AA0403, AA0462, AA0471, AA0472