Custom Module: Flat File Export

Version: 1.0.1

Description: Export Flat files used in Seurat's LoadNanostring function

countMatrix, cellMetadata, transcripts, & polygons are required for the LoadNanostring function

[Vignette](https://satijalab.org/seurat/articles/spatial_vignette_2#human-lung-nanostring-cosmx-spatial-molecular-imager) to analyze data. **Flat File Export v1.0.1 currently works on Seurat v4.3**

Setup:

|  |  |  |  |
| --- | --- | --- | --- |
| R version | CPU cores | RAM (GB) | Max run (h) |
| Any | 16 | 128+ | 4+ |

\* RAM and Max run time listed above are suggested minimums. Values may be increased (note that increasing RAM or Max run time may increase costs). If the module exceeds either value, it will immediately fail.

Variables:

Name must be spelled exactly as shown for script to work.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type | Name | Display name | Range | Default | Required |
| BOOL | countMatrix | Generate count matrix file |  |  | Yes |
| BOOL | cellMetadata | Generate cell metadata file |  |  | Yes |
| BOOL | transcripts | Generate transcripts file |  |  | Yes |
| BOOL | polygons | Generate cell boundaries |  |  | Yes |
| BOOL | fovPositions | Generate FOV position file |  |  | Yes |
| BOOL | gzip | gzip files, does not affect LoadNanostring function |  |  | Yes |
| STRING | studyName | Output Folder Name |  |  | Yes |
| STRING | outPath | Destination S3 file path |  |  | Yes |
| STRING | access\_key | Destination AWS access key |  |  | Yes |
| STRING | secret\_key | Destination AWS secret key |  |  | Yes |
| STRING | s3Region | Destination AWS region |  |  | Yes |
| STRING | session\_token | Destination AWS session token, if configured |  |  | No |

Packages: None

Outputs:

* Count matrix flat csv file
* Cell metadata flat csv file
* Global transcripts flat csv file
* Global cell boundaries flat csv file
* Global FOV position file