Tutorial: Batch Processing

In this tutorial, we will demonstrate batch processing with two sample videos: **FiveWorms.avi** and **swimming.avi**.

- 1. Start WormLab.
- 2. Process the FiveWorms.avi video:
 - a. Open the video: Go to **Help>Tutorials** and open the **Video** folder.



- b. Follow the steps outlined in the **WormLab Quick Tutorial** to set the parameters, but **DO NOT** start tracking.
- c. In the Workflow, click the **Save Project** button and save project file.
- d. Close the video.
- 3. Process the **swimming.avi** video (as described in step 2 above).

NOTE: For multiple videos in which the parameters are mostly kept constant, use the **Configuration Manager.** This tool saves tracking settings so that they can be re-used from video to video.

To open the Configuration Manager, click this icon in the toolbar:





WormLab® Tutorial

Tutorial: Batch Processing

4. In the Workflow panel, click the **Batch** button to display the Batch Processing Panel.



5. Under the **File Selection** heading, click the **Add** button and select the projects you just saved.

You should now see the projects listed in the Project List panel.

| Batch Processing 🖌 🔀 | | | | |
|--------------------------|------------|--------------|--|--|
| | | 0 | | |
| Project List | | U | | |
| Path | Status | Progress | | |
| | 1 | Progress | | |
| C:/Temp/5 Wor | кеаду | | | |
| C:/Temp/Swim | Ready | | | |
| File Selection | | | | |
| | | | | |
| (+) Add | P - Remove | × Remove All | | |
| Batch Processing Control | | | | |
| Start | II) Pause | Stop | | |
| | | | | |
| | | | | |

Note: Individual project files with one video per project file must be loaded for batch processing. If more than one video is associated with a single project file, only the first video will be processed.

- 6. Click **Start** to begin processing. The progress bars for each project will update accordingly.
- Once Batch Processing is completed, you can use **Group** Analyses (learn more about Group Analysis in our user guide <u>here</u>).
 - a. Click this icon in the toolbar to open the Analysis window:



- b. Use the Project panel (circled in orange below) to add the two project files you processed.
- c. Click the **Add** button.

WormLab® Tutorial

Tutorial: Batch Processing

| roup Analysis | Data Report |)ject : Data set Grou |
|--------------------------|--|-----------------------|
| Select an Analysis | Data Set | ject : Data set Grou |
| Position & Speed | | |
| Speed (um/s) | | |
| Moving Average Spee | | |
| Smoothed Speed (um/s) | | |
| Kalman Smoothing | Copy Selected Data Export | |
| Track length threshold 5 | | |
| Speed 😵 | Speed | |
| | a .sool F | Add |
| Refresh Data | Formatting Center Plot Copy Plot Save Plot | Remove |
| | | |

- d. Once the files have been added, select one of the analyses from the list on the left (we selected **Speed**). The results are displayed under **Data**.
 - i. To export the data for this analysis, click the **Export** button. If MS Excel is installed, data is automatically loaded into Excel. Otherwise, you'll be prompted to select a program to open the exported .CSV file.
 - ii. To save the plot for this analysis, click the Save plot button.

 Image: Select an Analysis
 Image: Data Set



Questions or Problems?

Contact MBF Customer Support: (802) 288 9290 or support@mbfbioscience.com