

This graphical interface allows you to set up a database for the movie (raw data). This database contains links to the raw image, original metadata and links to the stored analysis result files as well as the parameters used for image processing.

Bio-Formats

Proprietary image files supported by Bio-Formats can be directly imported into movie databases for analysis. This functionality **requires** the Bio-Formats MATLAB toolbox to be installed. All details and download URL can be found at <http://www.openmicroscopy.org/site/products/bio-formats>.

Import movie using Bio-Formats:

After clicking on this button you will be asked to select a file containing the movie. If **Import metadata using Bio-Formats reader** is checked, the metadata contained in the file will be read and the movie and channels information will be automatically populated with values if they exist. If an output directory has been selected with the **Output Path** dialog, it will be used for storing the movie analysis. Else a directory will be automatically created in the same folder and with the same base name as the selected file containing the movie. If the file contains multiple series (e.g. multiple positions), one movie database will be created per series.

Once the movie is imported into Bio-Formats, the movie interface will be reloaded in preview mode.

Channels

This allows you to setup a movie database by selecting folders containing the images for each channel of the movie. Each channel (wavelength) must be in a separate folder, with one file per frame (time point). Note that all channels should have the same number of images, and their images should all be the same size.

Add channel:

This allows you to select a directory containing images from a channel of the movie.

Delete:

This allows you to delete the selected channel from the channels list.

Advanced channel settings (optional):

This allows you to enter additional channel-specific information like the excitation and emission wavelengths and the exposure time.

Output Path:

This allows you to specify the folder where the results of the processing will be stored. *Note that if multiple movies are being processed, each movie should have its own output folder or the results will be overwritten.*

Movie Information (optional):

This allows you to enter metadata specific to the movie (see Advanced Channel Settings for channel-

specific metadata). Metadata is usually optional but **can be required by some analysis packages**. For example, creating scale bars or time stamps in subsequent steps of the Tracking Package will require pixel size or time interval data respectively.

Pixel size:

This allows you to edit the pixel size of the camera in the object domain, i.e. the physical pixel size divided by the magnification (in nm).

Time interval:

This allows you to edit the time interval between successive frames of the movie (in s).

Numerical aperture:

This allows you to edit the numerical aperture of the microscope objective.

Camera bit depth:

This allows you to specify the bit depth of the camera (in bits).

Notes (optional):

This allows you to enter notes describing the condition, experiment number, the date, etc. - anything you want!