Tile Scanning on Zeiss Microscopes

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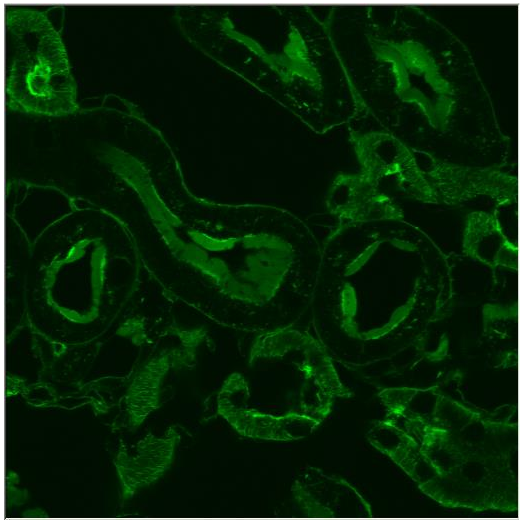
Tile Scanning enables you to image a large field at high resolution.

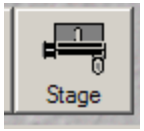
Tile scanning is used when you need a larger area in order to get your whole sample in the image. For example Drosophila. It is also used when you have a large tissue sample or need a lot of cells imaged.

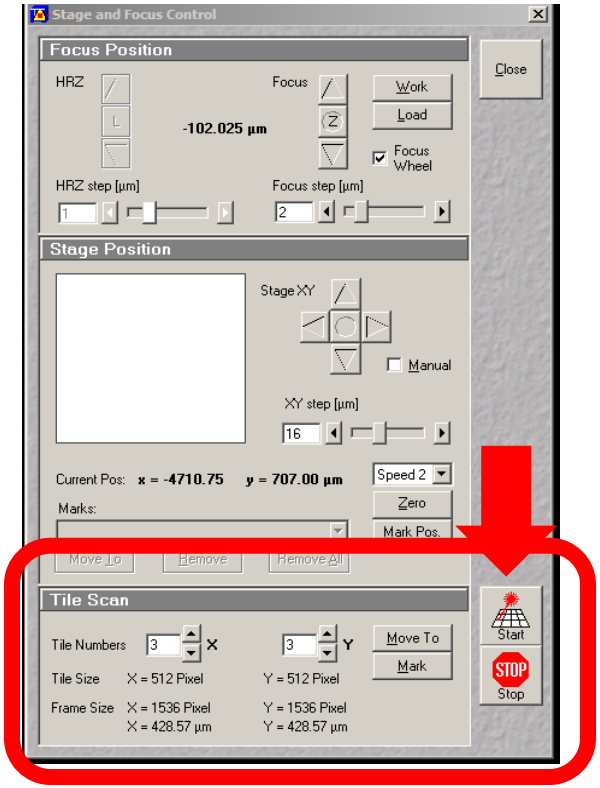
LSM510

The easiest way to explain tiling is using a 3x3 tile example. Seen below is a standard single image.

1. Click the **Stage** Button to open up the **Stage and Focus Control** window.
2. At the bottom of the window you will see the **Tile Scan** box.
3. Enter the **Tile Numbers**. In this example we are doing a 3x3 tile. The tiling does not have to be a square tile so numbers do not have to be the same.
4. To start tile scanning you need to click the **Start** button in this same window [red arrow].

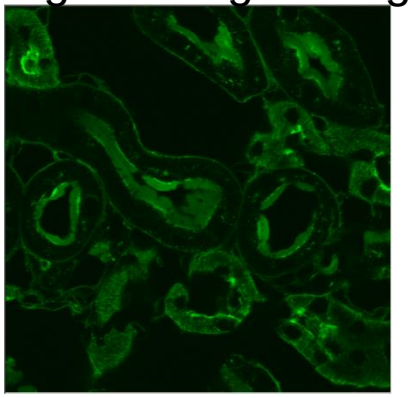




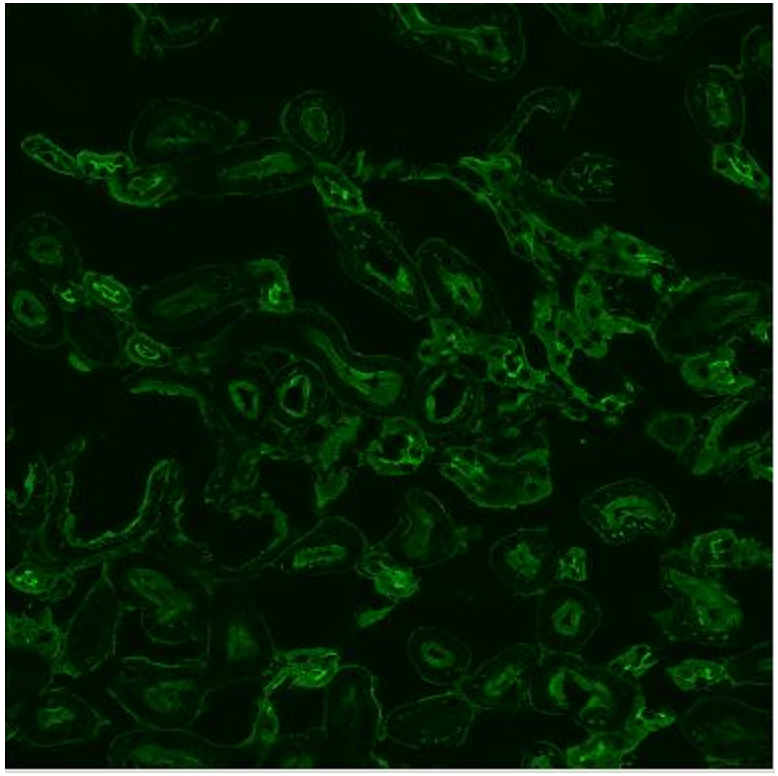


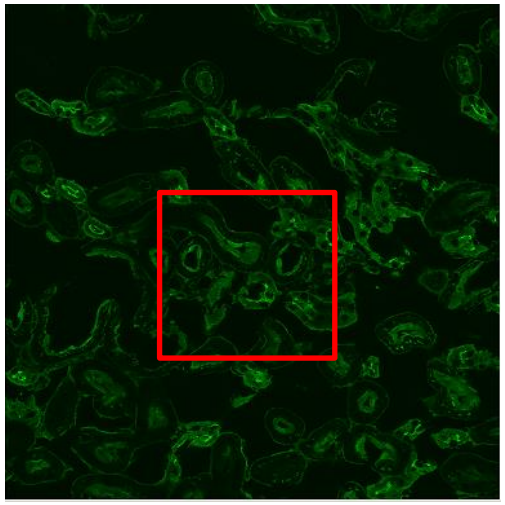
On the left is the tile image. To try to give you some orientation the original image is on the top right. Below it is the tile with the original image roughly outlined.

Original Single Image



3x3 Tile Image



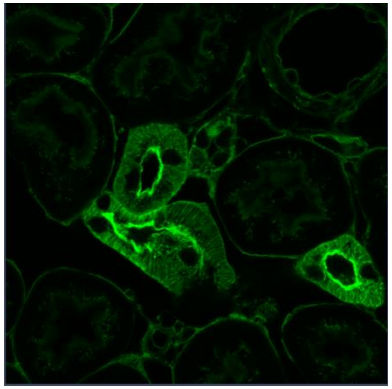


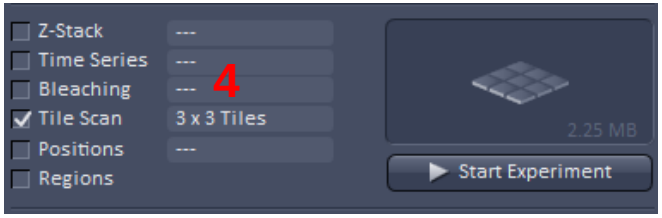
LSM710 AND LSM780

The easiest way to explain tiling is using a 3x3 tile example. Seen below is a standard single image.

1. Get your focus and settings as you would for normal imaging.
2. Check the **Tile Scan Box** to open up the **Tile Scan Window [see arrow].**
3. Enter the number of tiles you wish to have. In this example we are doing a 3x3 tile. You do not need to have an even number of tiles to make a square.
4. You will see that the tiles are listed in the box next to Tile Scan as well as a grid in the Tile Scan box.
5. Click Start Experiment.

1

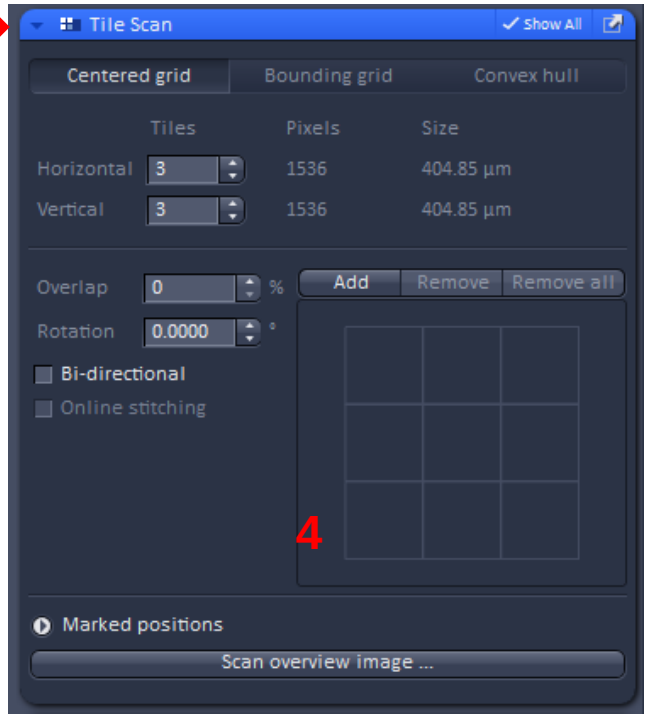




2

5

3



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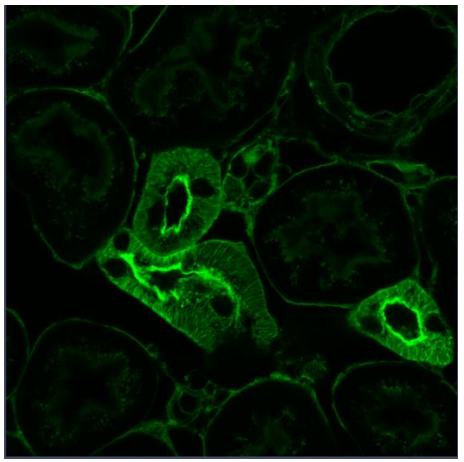
Original Single Image



3x3 Tile Image