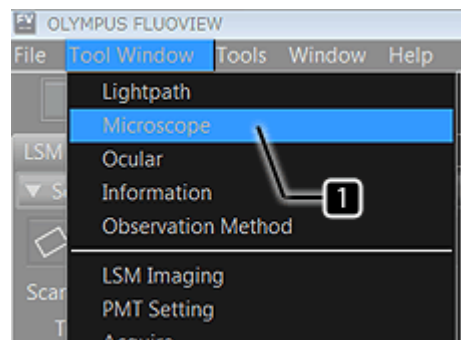


## Performing the Z drift compensation when starting series scan

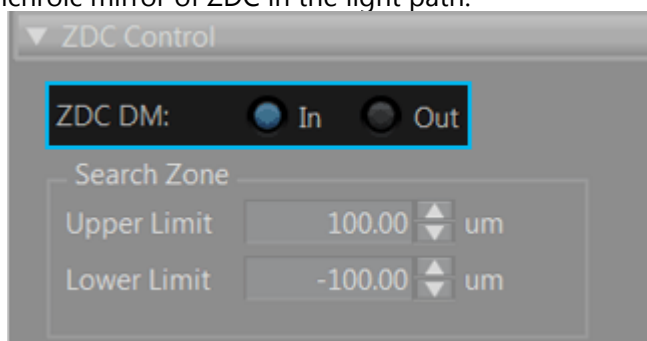
This function performs the Z drift compensation before starting the series scan. If the Rest time<sup>\*1</sup> longer than 30 seconds is set for acquiring T series images, the Z drift compensation is performed before starting to acquire the next frame. If the coverslip position<sup>\*2</sup> is changed by drift, the Origin coordinate<sup>\*3</sup> of Z is compensated to offset that variation to retain the focus position.

### Setting for acquiring the series image

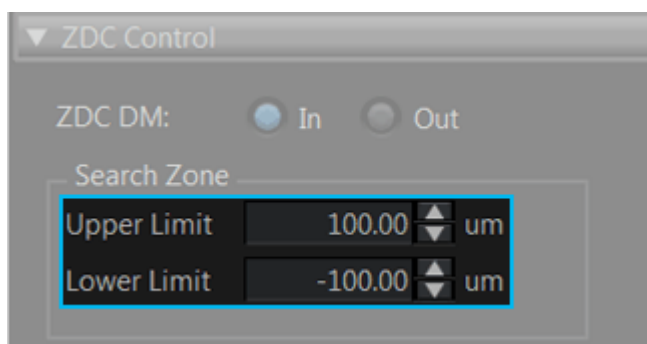
- 1 Select [Microscope] in [Tool Window] menu. [\[Microscope\] Tool Window](#) appears.



- 2 Set [ZDC DM] in [\[ZDC Control\]](#) in [\[Microscope\] Tool Window](#) to "In" and place the dichroic mirror of ZDC in the light path.



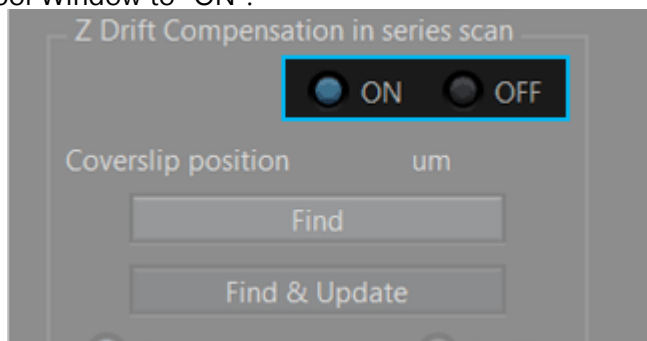
- 3 Specify the search zone of the coverslip position<sup>\*2</sup> in [Upper Limit] / [Lower Limit] in [Search Zone] using the Origin coordinate<sup>\*3</sup> of Z as a base point.



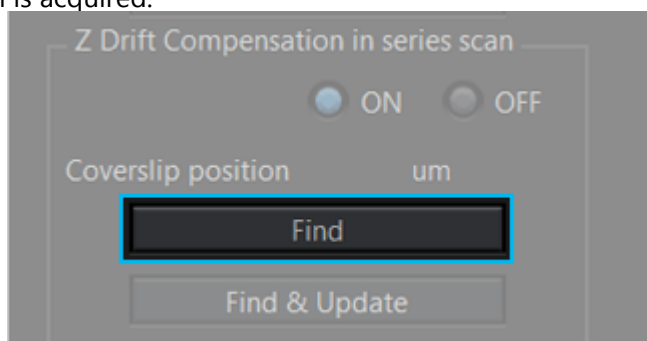
- 4 Set for acquiring the series image according to "Acquiring the series image" in "Acquiring the image" in Operating procedure section.

### Acquiring the coverslip position

- 5** Set [Z Drift Compensation in series scan] in [ZDC Control] in [Microscope] Tool Window to "ON".



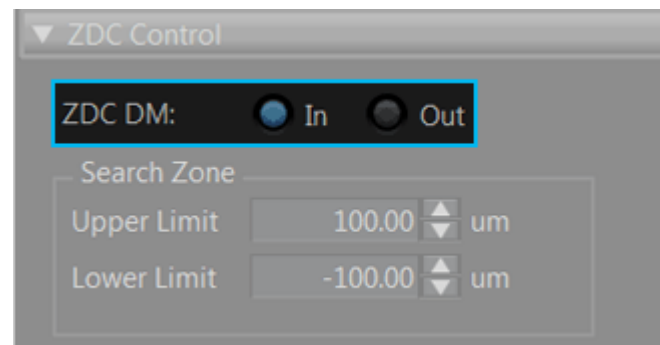
- 6** Press the [Find] button of [Coverslip position]. The coverslip top surface position is acquired.



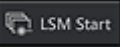
### Selecting the status of the dichroic mirror of ZDC

- 7** Select the status of the dichroic mirror of ZDC whether it is in the light path or not in [ZDC DM] in [ZDC Control] on [Microscope] Tool Window.

ZDC DM	Status of dichroic mirror of ZDC	Features
In	Placed in the light path	Since the dichroic mirror of ZDC will not be inserted or removed, the scan starts early, but the observation using the wavelength range where the dichroic mirror of ZDC reflects (790 nm) as a excitation wavelength or a photometry wavelength is not available.
Out	Removed from the light path	The dichroic mirror of ZDC is placed in the light path only when performing the Z drift compensation. Therefore, it takes longer time to place or remove the dichroic mirror in or from the light path comparing to the case when [ZDC DM] is set to "In". However, since the dichroic mirror is removed from the light path during the scan, the observation using the wavelength range where the dichroic mirror of ZDC reflects (790 nm) as a excitation wavelength or the photometry wavelength is available.



### Starting to acquire the series image

- 8 Press the  button in [\[Normal\] tab in \[Acquire\] Tool Window](#) to start acquisition.

 **The drift compensation value is not recorded to the Z position information of the acquired image.**

- <sup>\*1</sup> The Rest time is the time between finishing acquisition of the first cycle and starting the acquisition of the second cycle.
- <sup>\*2</sup> The coverslip position is the position focused on the top surface of the coverslip.
- <sup>\*3</sup> Origin coordinate is the reference position of Z registered in [Origin] in the [\[Series\] Tool Window](#).