



Spots: 用以計算顆數數量

File Edit View Image Processing Fiji 3D View Help

Arena Surpass Vantage Open Save Save As 3D View Slice Section Image Proc Coloc Annotate Animation Snapshot Newsletter

Spots 1 - Properties

Scene

- ☒ Light Source 1
- ☒ Frame 1
- ☒ Volume
- ☒ Spots 1

Create Settings Color

Algorithm

☒ Skip automatic creation, edit manually

Favorite Creation Parameters

Default *

Algorithm Settings

- ☐ Segment only a Region of Interest
- ☐ Process entire Image finally
- ☐ Different Spot Sizes (Region Growing)
- ☐ Track Spots (over Time)
- ☐ Classify Spots
- ☐ Object-Object Statistics

Creation Preferences

- ☐ Start creation with Slicer view

1/3

30 μm

Zoom: 88% Fit Reset Full Screen Navi

點選 Spots 功能

勾選可進行有興趣區域框選, 同時只進行框選區域的分析

勾選可進行不同大小物件量測

勾選可對於已分析之 Spots 進行分類

勾選可進行Spots to Spots, Spots to Surfaces 物件最短距離分析

下一步



Spots

Segment only a Region of Interest

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Region of Interest

Region of Interest 1

Min:	Max:	Size:
X: 65	370	306
Y: 61	323	263
Z: 1	38	20

Memory Usage: 2.916 MB

Regions of Interest

- Region of Interest 1
 - Add
 - Delete

Total Memory Usage: 2.916 MB

2/4

30 μ m

Zoom: 97% Fit Reset Full Screen Navi

調整白色箭號可縮放區域大小

點選黃色方框可平移區域框選位置

增加區域

刪除選取區域

下一步



Spots

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Create Settings Color

Source Channel

Source Channel

Channel 2 - chloroplast

Spot Detection

Estimated XY Diameter: 4.00 μm

☐ Model PSF-elongation along Z-axis

Estimated Z Diameter: 4.00 μm

☒ Background Subtraction

選擇要分析的Channel

填入物件直徑長度
(可於Slice頁面進行量測)

下一步

2/6

30 μm

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Create Settings Color

Filter Spots

Filters
Add Delete
"Quality" above automatic threshold

Filter Type
Quality

12.2 40.1

200 of 605 selected (33%)

30 μm

3/6

Zoom: 96% Fit Reset Full Screen Navi

調整數值至所有物件都有一個Spots標定於上
調整最小數值: 滑鼠左鍵拖拉
調整最大數值: 滑鼠右鍵拖拉

下一步



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Create Settings Color

Spot Region Type

Spot Regions from

- ☒ Absolute Intensity
- ☐ Local Contrast

產生Spots 依據訊號絕對強度

產生Spots 依據訊號與其附近背景值差異, 適用於背景不均影像

4/6

30 μ m

Zoom: 96% Fit Reset Full Screen Navi

下一步



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- ☒ Volume
- ☒ Spots 1

Create Settings Color

Spot Regions

Region Threshold

115

Diameter from

- ☒ Region Volume
- ☐ Region Border

產生Spots大小會與實際預值所設定預值區域體積相同

產生Spots大小會依據Spot中心點至所設定預值區域邊緣的最短距離為半徑,產生Spot

5/6

30 μm

Zoom: 96% Fit Reset Full Screen Navi

下一步



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統計數值結果

Average Values

Variable	Min	Max	Mean
Intensity Mean Ch=2 Img=1	37.2	120	72.8
Intensity Median Ch=1 Img=1	3.00	161	29.8
Intensity Median Ch=2 Img=1	31.0	123	73.6
Intensity Min Ch=1 Img=1	1.00	156	15.1
Intensity Min Ch=2 Img=1	6.00	86.0	47.2
Intensity StdDev Ch=1 Img=1	1.31	30.0	7.84
Intensity StdDev Ch=2 Img=1	3.20	26.2	9.51
Intensity Sum Ch=1 Img=1	1157	5.77e4	1.06e4
Intensity Sum Ch=2 Img=1	8726	4.38e4	2.57e4
Intensity Sum of Square Ch=1 Img=1	4357	8.94e6	4.86e5
Intensity Sum of Square Ch=2 Img=1	5.36e6	2.01e6	
Number of Spots	382	354	
Position X	154	79.3	
Position Y	11.4	23.4	48.6

目前選擇之參數項目
結果儲存.csv,.xls,.xml

所有分析參數項目結果
結果儲存.csv,.xls,.xml

Y [μm] 50

15 μm



Spots: 用以計算顆數數量

PlantCell.lims - Preferences

File Edit View I

Arena Surpass

Scene

- ☒ Light
- ☒ Fracture
- ☒ Volume
- ☒ Spots

Statistics

System
Display
Loading
Calculation
Time
3D View
Creation Parameters
Vantage Plots
Statistics
Statistical Tests
Snapshot
CustomTools
Batch
Licenses
Update
Data Collection
3D Cursor
Annotate
Arena
Advanced

Overall Detailed

Average Values

Variable

Intensity Mean C

Intensity Median

Intensity Median

Intensity Min Ch

Intensity Min Ch

Intensity StdDev

Intensity StdDev

Intensity Sum Ch

Intensity Sum Ch

Intensity Sum of

Statistics

Show Statistic Values

- ☒ Soma
- ☒ Soma Track
- ☒ Spine
- ☒ Measurement Points
- ☒ Spots
 - ☒ Class
 - ☒ Distance
 - ☒ Event
- ☒ Intensity Max
- ☒ Intensity Mean
- ☒ Intensity Median
- ☒ Intensity Min
- ☒ Intensity StdDev
- ☒ Intensity Sum
- ☒ Intensity Sum of Square
- ☐ Number of Voxels
- ☒ Track Intensity Center Mean
- ☒ Track Intensity Max
- ☒ Track Intensity Mean
- ☐ Track Intensity Median
- ☒ Track Intensity Min
- ☒ Track Intensity StdDev
- ☒ Track Intensity Sum
- ☒ Spatial
- ☐ Spot
- ☐ Track
- ☒ Surfaces
 - ☒ Class
 - ☒ Distance

☐ Show All

Filament Statistics Parameters

Sholl Spheres Resolution: 1.00 μm

Imaris Configurator...

OK Cancel

Navi

可自行勾選或取消需要量測的參數項目



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Color Type

- Base
- Object ID
- Track ID
- Statistics Coded**
- Time Mapped

Statistics Type

- Intensity Mean Ch=2 Img=1
- Intensity Center Ch=2 Img=1
- Intensity Max Ch=1 Img=1
- Intensity Max Ch=2 Img=1
- Intensity Mean Ch=1 Img=1
- Intensity Mean Ch=2 Img=1**
- Intensity Median Ch=1 Img=1
- Intensity Median Ch=2 Img=1
- Intensity Min Ch=1 Img=1
- Intensity Min Ch=2 Img=1
- Intensity StdDev Ch=1 Img=1
- Intensity StdDev Ch=2 Img=1

Spot 依照選定參數項目結果數值呈現不同顏色

選擇要呈現的參數項目數值, 直接利用顏色變化代表此項目結果差異

30 μ m

37.190 Intensity Mean Ch=2 Img=1 120.464

Zoom: 100% Fit Reset Full Screen Navi



Spots: 用以計算顆數數量

celldemo.ims - z-stack.zvi - Imaris x64

