# Multiple ROIs

**Support for multiple ROIs in a single slice.**

Having multiple ROIs in a single slice is useful if one needs to define an ROI position relative to another ROI, or if multiple measurements must be made in a single slice. ROIs could be of any variety, could be named and saved, and measurements could be exported.

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   ROI Manager
Posted by Michael Schmid at 2007-04-20 12:53
Couldn&#039;t one use the roi manager?


   Sorry, I wasn&#039;t clear
Posted by John Pratt at 2007-04-20 17:05
I am interested in displaying 2 or more independent ROIs at the same time,
and being able to draw a new ROI while other ROIs are still displayed, and
being able to move ROIs relative to other ROIs. For example, I want to
measure the distance and angle between two ROIs, and in another case, I want
to make sure two ROIs don&#039;t overlap.

Maybe this already exists in ImageJ. I haven&#039;t figure out how to do it.
But if not, it would be useful. Most image analysis software allows you to do
that.

Thanks for your reply.


   I think this can be done already
Posted by G. Landini at 2007-04-22 21:39
Draw a ROI, press &quot;t&quot;, it goes to the ROI Manager,
Draw another ROI, press &quot;t&quot;, it also goes there.
You can call any ROI by clicking on the number in the ROI Manager list.
You can move them around and save them again (press &quot;t&quot; and delete
the old one).
Want them all on the image? Select the ROIs from the list (clicking while
pressing Shift) and go to More&gt;Combine.

I have no idea what the &quot;angle between two ROIs&quot; may mean.
For the distance, you could draw the ROIs one at a time, extract the (border)
pixels and do a brute force distance search (using Pythagoras theorem)
between the pixels in ROI1 and ROI2.


   Is this what you want?
Posted by Lee Pang at 2007-05-26 11:07
Are you referring to something akin to layered control of object ROIs?

For example, the user draws ROI-1 around object 1. Then the user draws ROI-2
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in the same slice around object 2. Both ROIs remain visible, and each can be independently modified. Programatically, this could be done by placing each ROI in it&#039;s own virtual layer - kind of like drawing in Adobe Illustrator - that is non-destructive to the image data. In a similar sense, ROI boundaries can be treated like generic paths and appropriate logic - subtraction, addition, exclusion, inclusion, cropping, etc. - can be applied just to the ROIs.

In essence, replace the current ROI Manager with a Layer controller.


   You can do this already
Posted by G. Landini at 2007-05-28 13:42
You can have several ROIs per slice.
You can see them all by using Show All and even add more ROIs.
I do not think that adding a more complicated layer controller is necessary.


   &quot;Show all&quot; does the trick
Posted by John Pratt at 2007-05-29 17:38
&quot;Show all&quot; is the function I was looking for. I like it.

Thanks for your help.


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