
Subject: Re: Images

Posted by [Paul Van Delst\[1\]](#) on Wed, 23 Sep 2015 15:06:36 GMT

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On 09/22/15 18:42, Paulo Penteado wrote:

> On Tuesday, September 22, 2015 at 7:10:50 PM UTC-3, Joyrles Fernandes wrote:

>> I have many images of dimensions [512,512], 320 images.

>> I want to take a piece of each([1,512] and I want to join the

>> images'pieces in a only array, for example [320,512].

>

> The answer depends on what you mean by "having images". Are the

> images in files? One file per image? Guessing the answer to both questions is

> yes, and that you have an array with the 320 file names (let's call it

> filenames), one possible way might be something like

>

> compound_image=dblarr(320,512) ;guessing that your image data are doubles

> for i=0,319 do compound_image[i,*]=(read_image(filenames[i]))[1,*]

Or, if we assume the image data is in bytes:

```
image_stack = bytarr(512,512,320)
```

```
help, image_stack
```

```
IMAGE_STACK  BYTE    = Array[512, 512, 320]
```

```
for i = 0,319 do image_stack[:,*,i] = read_image(filenames[i])
```

That works out to < 100MB by my reckoning. And < 300MB if there are RGB channels as well. Doesn't seem too large(?).

Then, also assuming the indexing order is correct, any slice required can be selected:

```
slice_index = 6 ; pick the 6'th longitudinal slice
```

```
image_slice = transpose(image_stack[slice_index,*,*],[2,1,0])
```

```
help, image_slice
```

```
IMAGE_SLICE  BYTE    = Array[320, 512]
```

```
slice_index = 100 ; pick the 100'th transverse slice
```

```
image_slice = transpose(image_stack[:,slice_index,*],[2,0,1])
```

```
help, image_slice
```

```
IMAGE_SLICE  BYTE    = Array[320, 512]
```

cheers,

paulv
