
Subject: Re: Array Tiling - The IDL Way

Posted by [Michael Galloy](#) on Mon, 12 Mar 2012 18:54:59 GMT

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On 3/12/12 11:31 AM, Percy Pugwash wrote:

> I have a large array that I'd like to break up into tiles (square tiles of side T). I would like to have those tiles in the form of a stack, such that my array goes from dimensions [Nx*T,Ny*T] to [T,T,Nx*Ny].

>

> Is there any way I can do this using only functions like REFORM and TRANSPOSE and no for-loops? Ideally I'd like to do it in-place too. I've been racking my brain for a nice IDLesque way to do this, but no luck thus far...

>

> P

I think this is what you are trying to do:

```
IDL> a = indgen(10, 10)
```

```
IDL> b = transpose(reform(a, 2, 5, 2, 5), [1, 3, 0, 2])
```

This will break the image a into 5 tiles of size 2 in each dimension. So you can do the following, e.g., to retrieve the tile at (4, 4):

```
IDL> print, reform(b[4, 4, *, *])
```

```
88    89
```

```
98    99
```

Mike

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Modern IDL, A Guide to Learning IDL: <http://modernidl.idldev.com>

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