Subject: Re: indexing arrays with arrays
Posted by JD Smith on Thu, 09 Aug 2007 16:45:17 GMT
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On Tue, 07 Aug 2007 06:39:54 -0700, Conor wrote:

> It seems to me that a highly useful syntax for IDL would be something
> like this:
>
> res = randomu(seed,10)
> start_ind = indgen(5)
> end_ind = start_ind + 1
>
> extract = res[start_ind:end_ind]
>
> In this case, I would envision extract being a 10 element array.
> Namely, it would be the equivelent of:
>
> extract = [res[start_ind[0]:end_ind[0]], res[start_ind[1]:end_ind[1]],
> res[start_ind[2]:end_ind[2]], etc...]
>
> Does anyone else think something like this would be useful? Anyone
> know how I can bug RSI and request something like this? I couldn't
> find a "feature request" option, or anything similar, on their site.
> Anyway, that point aside, can anyone think of a robust way to do this
> right now? I've been trying to come up with a speedy, robust, for-
> loop-less way to do this, but haven't come up with anything. Any
> thoughts would be appreciated.

Well, if end_ind is always a constant offset from start_ind, it's easy
just to contruct the index vector yourself:

```
 t=[end_ind[0]-start_ind[0]+1,n_elements(start_ind)]
  extract=res[reform(rebin(1#start_ind,t)+rebin(indgen(t[0]),t ),t[0]*t[1])]
```

If the start-end difference can be any variable amount, this is a
problem for HISTOGRAM related to chunk indexing. See the HISTOGRAM
tutorial and:

 http://www.dfanning.com/idl_way/chunkindex.html

JD