
Subject: combining arrays

Posted by [Sharad C Tripathi](#) on Wed, 15 Jun 2016 14:22:00 GMT

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How to combine following arrays in a single file?

A FLOAT = Array[195]

B FLOAT = Array[1440, 195]

C FLOAT = Array[195]

D LONG = Array[1440]

Subject: Re: combining arrays

Posted by [wlandsman](#) on Wed, 15 Jun 2016 17:00:29 GMT

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One of many ways to do this:

IDL> save,a,b,c,d

to place the variables into an IDL save set idlsave.dat that can be RESTORED

On Wednesday, June 15, 2016 at 10:22:02 AM UTC-4, Sharad wrote:

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> D LONG = Array[1440]

Subject: Re: combining arrays

Posted by [Sharad C Tripathi](#) on Thu, 16 Jun 2016 10:25:49 GMT

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On Wednesday, 15 June 2016 20:00:32 UTC+3, wlandsman wrote:

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>

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I didn't mean this. What i wanted to do is to make an array [195,1440] after combining these variables.

Subject: Re: conbining arrays
Posted by [Sharad C Tripathi](#) on Thu, 16 Jun 2016 10:53:41 GMT
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On Thursday, 16 June 2016 13:25:51 UTC+3, Sharad wrote:
> On Wednesday, 15 June 2016 20:00:32 UTC+3, wlandsman wrote:
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as array [196,1441]

Subject: Re: conbining arrays
Posted by [Heinz Stege](#) on Thu, 16 Jun 2016 12:45:05 GMT

On Thu, 16 Jun 2016 03:53:41 -0700 (PDT), Sharad wrote:

```
> On Thursday, 16 June 2016 13:25:51 UTC+3, Sharad wrote:
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>>>>
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variables.
>
> as array [196,1441]
```

Impossible.

```
IDL> print,195+1440*195+195+1440
      282630
IDL> print,196*1441
      282436
```

Cheers, Heinz

Subject: Re: conbining arrays
Posted by [wlandsman](#) on Thu, 16 Jun 2016 18:39:23 GMT
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The easiest way is to first make the output array

```
outarr = fltarr(1441,196)
```

and then add subarrays where you need them

```
outarr[0:1439,0:194] = findgen(1440,195)
outarr[1440,0:194] = findgen(195)
outarr[0:1439,195] = findgen(1440)
```

making the sure that the sizes of the arrays on the left and right hand side are the same. One of your subarrays was integer while others were floating point. If you really want ot maintain this distinction when combining them then I suggest using the LIST() function.

--Wayne

On Wednesday, June 15, 2016 at 1:00:32 PM UTC-4, wlandsman wrote:

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>

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>

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Subject: Re: conbining arrays

Posted by [Sharad C Tripathi](#) on Thu, 16 Jun 2016 22:23:56 GMT

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On Thursday, 16 June 2016 15:45:04 UTC+3, Heinz Stege wrote:

> On Thu, 16 Jun 2016 03:53:41 -0700 (PDT), Sharad wrote:

>

>> On Thursday, 16 June 2016 13:25:51 UTC+3, Sharad wrote:

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> Impossible.
>
> IDL> print,195+1440*195+195+1440
>    282630
> IDL> print,196*1441
>    282436
>
> Cheers, Heinz

Heinz,
it will be [1442,196]
```

Subject: Re: combining arrays
Posted by [Markus Schmassmann](#) on Fri, 17 Jun 2016 09:06:56 GMT
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On 06/17/2016 12:23 AM, Sharad wrote:> On Wednesday, June 15, 2016 at 10:22:02 AM UTC-4, Sharad wrote:

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```
>>
>> A    FLOAT    = Array[195]
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>> C    FLOAT    = Array[195]
>> D    LONG     = Array[1440]
> it will be [1442,196]
```

if i understand correctly what you want, i see 2 possibilities:

```
outarr=[[[reform(A,[1,195]),B,reform(C,[1,195])]], [0,D,0]]
```

or using Wayne's approach

```
outarr = fltarr(1442,196)
outarr[0,0:194]=reform(A,[1,195])
outarr[1:1440,0:194]=B
```

```
outarr[1441,0:194]=reform(C,[1,195])  
outarr[1:1440,195]=D
```

You could also use transpose instead of reform, but reform should be faster. However reform only gives the same result as transpose if A and C are vectors, i.e. if 2 dimensions have size >1 you have to use transpose.
