## Subject: Re: Merits of different ways of 'extending' arrays Posted by Andy Sayer on Sun, 15 Sep 2013 01:11:07 GMT

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Thanks for the continuing tips!

The first suggestion (allocate a 'big enough' array up-front, rather than continually extend) worked great for my purposes, so that's what I stuck with, given that it was also very simple. Although I appreciate the continued suggestions.

## Andy

On Tuesday, September 10, 2013 4:08:40 PM UTC-4, suicida...@gmail.com wrote: > On Monday, September 9, 2013 4:41:10 PM UTC-6, suicida...@gmail.com wrote:

>> Another option is to set up a pointer array nfiles long before the loop, inside the loop load the file and find the valid points, then put that array into that file's pointer, while incrementing a counter to keep track of the total number of points. When you're done, you have all of your data saved in pointers (one per file), and a count of the total number of valid points. Then you allocate your array, loop back through the elements of the pointer array, and fill the array as necessary. Something like:

```
>>
>
>>
>
>>
>> f = file search(path, count=nfiles)
>
>>
>
>> ptrs = ptrarr(nfiles)
>>
>> num = 0l
>
>>
>
>> for i=0l,nfiles-1 do begin
>>
>
     :: load contents of file
>>
>
>>
>
```

```
is_valid = where(stuff, n_valid)
>
>>
>
     if n_valid gt 0 then begin
>>
>>
>
       num += n_valid
>>
>
>>
       ptrs[i] = ptr_new(f.var_1[is_valid])
>>
>
>>
>
     endif
>
>>
>> endfor
>>
>
>>
>
>>
>> data = fltarr(num)
>>
>> idx = 0l
>>
>> for i=0l,nfiles-1 do begin
>>
>
     if ptr_valid(ptrs[i]) then begin
>>
>>
       num = n_elements(*ptrs[i])
>>
>
>>
>
```

```
data[idx:idx+num-1] = *ptrs[i]
>>
>
>>
>
       ptr_free, ptrs[i]
>>
>>
>
     endif
>
>>
>> endfor
>
> Wish I could edit my post...
>
>
> There should be an "idx += num" next to the ptr_free at the end of the second loop.
```