
Subject: Re: Initialize new variable array with nan or -9999 values

Posted by [Heinz Stege](#) on Fri, 21 Feb 2014 01:36:24 GMT

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On Thu, 20 Feb 2014 14:14:54 -0800 (PST), wlandsman wrote:

> For large arrays, there is a speed advantage to using REPLICATE or MAKE_ARRAY in which the array is initialized with the correct value, as opposed to

>

> fltarr(304,336,500) - 9999

>

> in which the array is first initialized with zeros, and then 9999 is subtracted from each element.

Yes, one should think so. But it is not true. "fltarr()-9999" is faster than make_array():

```
IDL> t0=systime(1) &for i=0,9 do a=fltarr(1000,1000,100)-9999.
```

```
&print,systime(1)-t0 &help,a
```

```
1.8280001
```

```
A          FLOAT    = Array[1000, 1000, 100]
```

```
IDL> t0=systime(1) &for i=0,9 do
```

```
a=make_array(1000,1000,100,value=-9999.) &print,systime(1)-t0 &help,a
```

```
2.7969999
```

```
A          FLOAT    = Array[1000, 1000, 100]
```

```
IDL> print,!version
```

```
{ x86 Win32 Windows Microsoft Windows 8.0.1 Oct  5 2010    32
```

```
64}
```

Don't ask me why.

Cheers, Heinz
