Subject: Re: replacing "NAN" values using interpolation in IDL
Posted by Dick Jackson on Wed, 30 Jan 2013 00:47:19 GMT
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Dear idlhelp,

That's even easier, assuming that you mean that your data 'x' values are evenly spaced, and can be considered to be [0, 1, 2, ...]

Building on Jeremy's work:

```
; sample data
data = [0., !values.f_nan, 10., 15., !values.f_nan, !values.f_nan, 5., 4., 5.]

; figure out where there are NaNs and where the useful data are
; Dick prefers "Finite(data)" to "data EQ data" for finding non-NaN :-)
gooddata = where(Finite(data), ngooddata, comp=baddata, ncomp=nbaddata)

; interpolate at the locations of the bad data using the good data
if nbaddata gt 0 then data[baddata] = interpol(data[gooddata], gooddata, baddata)
```

Hope this helps!
-Dick

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On Monday, January 28, 2013 9:27:36 AM UTC-8, idlhelp wrote:
> On Thursday, January 17, 2013 4:05:11 PM UTC+1, Jeremy Bailin wrote:
>
>> On 1/17/13 4:02 AM, idlhelp wrote:

>>> Dear all, I have an data array. I have many "NaN" values. I want to replace those "NaN" values by the nearby values either using interpolation. Is there any way to do that in IDL.
>>>
>>> Thanks in advance
>
>> Yes, there is.
>>
>> Oh, you want to know how? ;-)
>>
>> I would do something like this, if I had an array of locations x and a
>> data array data:
>>
>> ; sample data
>> x = [1., 2., 3., 5., 7., 7.5, 9., 12., 12.1]
>> data = [0., !values.f_nan, 10., 15., !values.f_nan, !values.f_nan, 5.,

>> 4., 5.]
>>
>> ; figure out where there are NaNs and where the useful data are
>> gooddata = where(data eq data, ngooddata, $
>> comp=baddata, ncomp=nbaddata)
>>
>> ; interpolate at the locations of the bad data using the good data
>> if nbaddata gt 0 then begin
>> data[baddata] = interpol(data[gooddata], x[gooddata], x[baddata])
>> endif
>
>> -Jeremy.
>
> Thanks Jeremy, but the problem I am having is that I don't have any sample data 'x'. I have only 'data' and want to use that 'data' file again for interpolating and replacing the NaN value. Any Idea how to do that.
>
> thanks
