Subject: Re: unwrap modulo 2pi
Posted by Pavel A. Romashkin on Wed, 07 Feb 2001 20:39:11 GMT
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I just don't see that you can do this at all. Modulo operator discards information about the number of multiples of B from A, leaving only the remainder of the division operation. For example, if:

c = [2., 4., 6., 1.71681, 3.71681, 5.71681]
b = 2*!PI

; Each of the following A will produce the given
; C through "C=A mod B" :

a=[2.,4.,6.,8.,10.,12.]
a=[2.,4.,6.,8.,10.,12.] + b
a=[2.,4.,6.,8.,10.,12.] +2*b

a=[2.,4.,6.,8.,10.,12.] & a[3:5] = a[3:5] + 3*b

Unless I am missing something, I see no way how a unique solution can be obtained from the *remainder of division* and *divisor*. But I studied arithmetics a long time ago :-)

Cheers,
Pavel

graham_wilson@my-deja.com wrote:
>
> My appologies for not being explicit enough...
>
> IDL> a=[2,4,6,8,10,12]
> IDL> a=[2.,4.,6.,8.,10.,12.]
> IDL> b=2*!PI
> IDL> c=a mod b
> IDL> print, c
> 2.00000 4.00000 6.00000 1.71681 3.71681 5.71681
>
> What I mean by 'unwraping' is: Given I know 'c' and 'b' how do I
> explicitly find a?
>
> GW
>
> In article <3A817F92.1DBCDCCA@noaa.gov>,
> "Pavel A. Romashkin" <pavel.romashkin@noaa.gov> wrote:
>> I am sorry, but I am still a little behind here, please bear with me.
>> Must be the lack of coffe. What is the "unwrapping of the function
>> mod(x,y)" ? I might think of a solution if I knew what I am looking

> at.
>>
>> Cheers,
>> Pavel
>
> Sent via Deja.com
> http://www.deja.com/
