
Subject: constant time cadence

Posted by [gunvicsin11](#) on Thu, 20 Apr 2017 10:39:16 GMT

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Hi all,

I have a set of data with time cadence of 6s , 7s , 8s sometimes 11s, 80s, 300s like that. But I want them to be of constant 360s time cadence. How can I do that, anybody have idea.
thanks

Subject: Re: constant time cadence

Posted by [natha](#) on Thu, 20 Apr 2017 12:46:07 GMT

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Interpolation (see function interpol) or nearest neighbor. Example:

```
n=10
new_data=replicate(!values.f_nan,n)
new_time=lindgen(n)*300L

for i=0L, n-1 do begin
    dist=min(abs(your_time - new_time[i]),pos)
    if dist lt 5 then new_data[i]=your_data[pos]
endfor
```

In this example "your_time" and "your_data" are you arrays. Note that I set a tolerance of 5 seconds, you could change that...

Using interpol, would be something like:

```
new_data=interpol(your_data,your_time,new_time)
```

Subject: Re: constant time cadence

Posted by [Matthew Argall](#) on Thu, 20 Apr 2017 12:46:12 GMT

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Via interpolation.

```
;Create sample time and data arrays
time = [0:720:6]
time = [time, [time[-1] + 7:time[-1]+728:7] ]
time = [time, [time[-1] + 8:time[-1]+728:8] ]
time = [time, [time[-1] + 11:time[-1]+770:11] ]
time = [time, [time[-1] + 80:time[-1]+800:80] ]
time = [time, [time[-1] + 300:time[-1]+900:300] ]
```

```
data = FlndGen( N_Elements(time) )
```

```
;Create desired time cadence and interpolate data
```

```
tout = [time[0]:time[-1]:360.0]
```

```
dout = Interpol(data, time, tout)
```

Subject: Re: constant time cadence

Posted by [lecacheux.alain](#) on Thu, 20 Apr 2017 12:58:24 GMT

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Le jeudi 20 avril 2017 12:39:19 UTC+2, sid a écrit :

> Hi all,

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But I want them to be of constant 360s time cadence. How can I do that, anybody have idea.

> thanks

```
new_data = INTERPOLATE(data, INTERPOL(dindgen(times.length), times, new_times))
```

Subject: Re: constant time cadence

Posted by [lecacheux.alain](#) on Thu, 20 Apr 2017 12:59:48 GMT

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Le jeudi 20 avril 2017 12:39:19 UTC+2, sid a écrit :

> Hi all,

> I have a set of data with time cadence of 6s , 7s , 8s sometimes 11s, 80s, 300s like that.
But I want them to be of constant 360s time cadence. How can I do that, anybody have idea.

> thanks

```
new_data = INTERPOLATE(data, INTERPOL(dindgen(times.length), times, new_times))
```

Subject: Re: constant time cadence

Posted by [gunvicsin11](#) on Fri, 21 Apr 2017 07:21:42 GMT

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On Thursday, April 20, 2017 at 4:09:19 PM UTC+5:30, sid wrote:

> Hi all,

> I have a set of data with time cadence of 6s , 7s , 8s sometimes 11s, 80s, 300s like that.
But I want them to be of constant 360s time cadence. How can I do that, anybody have idea.

> thanks

Thanks everyone for the help, But I dont want to do interpolation. Its ok if I have approximately 360s. I need to addup the time cadence and bring to approximately 360s. How can I do this automatically.

Subject: Re: constant time cadence
Posted by [natha](#) on Fri, 21 Apr 2017 12:42:31 GMT
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Use my nearest neighbor code
