
Subject: Array -Time

Posted by [joyrles1996](#) on Thu, 24 Sep 2015 12:16:18 GMT

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I have:

```
HH      FLOAT   = Array[1, 859]
MM      FLOAT   = Array[1, 859]
```

how Do create a only array with times value,e.g time=[1,859], with datas in array hh:mm. After I need to create a plot with day of year in funtion of time. Help me please.

Subject: Re: Array -Time

Posted by [Helder Marchetto](#) on Thu, 24 Sep 2015 12:34:12 GMT

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On Thursday, September 24, 2015 at 2:16:22 PM UTC+2, Joyrles Fernandes wrote:

> I have:

```
> HH      FLOAT   = Array[1, 859]
> MM      FLOAT   = Array[1, 859]
>
```

> how Do create a only array with times value,e.g time=[1,859], with datas in array hh:mm. After I need to create a plot with day of year in funtion of time. Help me please.

My first question should be: what have you tried so far and what didn't work?

But whatever, I don't have my IDL open at the moment and I don't think it's necessary. So how about multiplying HH by 60 and summing that to MM? That would look like(*):

```
time = HH*60.0+MM
```

And time would have units of minutes(**).

Apart from that, depending on what you do, it might be convenient to make HH and MM 1d-arrays:

```
time = reform(HH)*60.0+reform(MM)
```

As far as your second question is concerned, I don't understand what "plot with day of year in function of time" means. Plotting this would result in a line. There are 24 h in a day and the equation would be $\text{day} = 24.0 \times 60.0 \times \text{time}$.

Cheers,
Helder

(*) if you want to have time in hours instead of minutes, then use $\text{time} = \text{HH} + \text{MM}/60.0$.

(**) depending on your scientific field, minutes are generally not the unit to use. I would go for seconds, but astronomers might go for years or whatever else. But seconds would be my choice, so you would have to multiply everything by 60.0

Subject: Re: Array -Time
Posted by [Klemen](#) on Thu, 24 Sep 2015 12:39:49 GMT
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The most elegant is converting all time / date to Julian day format (using Julian function) and once you plot it (in functional graphics), you can define in which format is the date / time.
Cheers, Klemen

Subject: Re: Array -Time
Posted by [joyrles1996](#) on Thu, 24 Sep 2015 12:53:35 GMT
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Em quinta-feira, 24 de setembro de 2015 09:39:52 UTC-3, Klemen escreveu:
> The most elegant is converting all time / date to Julian day format (using Julian function) and once you plot it (in functional graphics), you can define in which format is the date / time.
> Cheers, Klemen

How do i convert just hours and minutes with julday?

Subject: Re: Array -Time
Posted by [Paul Van Delst\[1\]](#) on Mon, 28 Sep 2015 16:28:37 GMT
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On 09/24/15 08:53, Joyrles Fernandes wrote:
> Em quinta-feira, 24 de setembro de 2015 09:39:52 UTC-3, Klemen escreveu:
>> The most elegant is converting all time / date to Julian day
>> format(using Julian function) and once you plot it (in functional graphics),
>> you can define in which format is the date / time.
>>
>> Cheers, Klemen >

> How do i convert just hours and minutes with julday?

Here ya go:

http://www.exelisvis.com/docs/date_time_data.html

and

http://www.exelisvis.com/docs/LABEL_DATE.html

The latter has examples on how to plot formatted time axes. The examples are for direct graphics but I believe can be translated directly to function graphics.

cheers,

paulv
