Subject: Re: code help Posted by lecacheux. alain on Thu, 31 Mar 2011 15:14:22 GMT View Forum Message <> Reply to Message On 31 mar, 14:22, smuzz <smussol...@gmail.com> wrote: > Hi ---> > I am new to programming in IDL and am trying to write a code to avoid > wasting hundreds of hours fighting with excel. > My data: I have a .csv file with 2 columns. One column has the date > (mm/dd/yyyy) and the second column has timestamps (hh:mm:ss). Each > timestamp represents an incidence of a whale call occurrence. See > below: > 11/20/2007 00:00:53 > 11/20/2007 00:10:42 > 11/20/2007 00:17:50 > 11/20/2007 05:23:56 > 11/20/2007 05:00:10 > 11/20/2007 07:10:01 > 11/21/2007 01:20:23 > 11/21/2007 01:21:34 > ..... > > My objectives: I would like to sum the number of whale call > occurrences in each hour for the day (hours 0 - 23). Most days have > hours without any whale call occurrences, so those are not accounted > for in my .csv file above. Ideally for each day I am trying to get my > data to look like this (including both absence and presence of whale call occurrences): > 11/20/2007 0 3 > 1 0 > 2 0 3 0 > 4 0 5 2 6 0 > 7 1 8 0 9 0 > 10 0

> 23

> 11/21/2007

```
> 0
> 1
> 2
> 3
> ....
> 23
> Any suggestions would be greatly appreciated!
> Thanks, S
```

First transform your original string array in a julian day (double precision) array, by using C formatting: IDL> jd = dblarr(N\_elements(your\_string\_array)) IDL> reads, your\_string\_array, jd, FORMAT='some\_C\_format' in your case, some\_C\_format is (C(CDI2,1x,CMOI2,1x,CYI4,3x,CHI2,1x,CMI2,1x,CSI2)) Then you can use the histogram function (with reverse indices) to sort and count your data first by day, then by hours. alx.

Subject: Re: code help

Posted by Jeremy Bailin on Thu, 31 Mar 2011 16:00:04 GMT

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You should be able to do it with one histogram - if you have a day "jd" and a time in hours "hour", create a new index that is hours since midnight on the first day:

```
day0 = min(jd)
index = hour + (jd-day0)*24
```

and then histogram index. You can then reform the result into a number-of-days x 24 array.

-Jeremy.