
Subject: Daily to monthly
Posted by [manikbali](#) on Tue, 16 Dec 2014 04:10:15 GMT
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Hi
I have daily satellite scan files of soil moisture from 1979 - 2008. I want to convert it into monthly values.
What is the best way to to it.
-GlanPlon

Subject: Re: Daily to monthly
Posted by [Craig Markwardt](#) on Tue, 16 Dec 2014 17:49:27 GMT
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On Monday, December 15, 2014 11:10:17 PM UTC-5, mani...@gmail.com wrote:
> Hi
> I have daily satellite scan files of soil moisture from 1979 - 2008. I want to convert it into monthly values.
> What is the best way to to it.

Decimation, averaging, and taking the median are all viable methods. What do you need?

Subject: Re: Daily to monthly
Posted by [manikbali](#) on Tue, 16 Dec 2014 18:21:44 GMT
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Hi Craig,
I need Monthly means where missing values are taken care of
Glan

Subject: Re: Daily to monthly
Posted by [Craig Markwardt](#) on Wed, 17 Dec 2014 20:54:15 GMT
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On Tuesday, December 16, 2014 1:21:46 PM UTC-5, mani...@gmail.com wrote:
> Hi Craig,
> I need Monthly means where missing values are taken care of

Average = sum / n_points

The only trick is that n_points could be different depending on missing data. So if I had an array of values DATA[*,*] where DATA[i,j] is the ith position on the jth day, and missing value is -999, I could sum them like this,

```

tot = 0 ;; cumulative sum of data values
npt = 0 ;; cumulative sum of number of good data values
for j = 0, NDAYS-1 do begin
  mask = data[:,j] NE -999 ;; mask of good values only, 1=good
  npt = npt + mask          ;; add to number of good values
  tot = tot + (data[:,j]*mask) ;; add good vals to cumulative data sum
endfor

;; Compute average
av = tot / npt

```

Craig

Subject: Re: Daily to monthly

Posted by [lecacheux.alain](#) on Fri, 19 Dec 2014 09:31:59 GMT

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On Wednesday, December 17, 2014 9:54:17 PM UTC+1, Craig Markwardt wrote:

> On Tuesday, December 16, 2014 1:21:46 PM UTC-5, mani...@gmail.com wrote:

>> Hi Craig,

>> I need Monthly means where missing values are taken care of

>

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> endfor

>

> ;; Compute average

> av = tot / npt

>

> Craig

Hi Craig,

Note that you might simply do:

mask = data ne -999

av = Total(data*mask, 2)/Total(mask, 2); daily average

av = Total(data*mask)/Total(mask); overall average

etc...

alx.
