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Subject: Extracting array with same date, lat, long  
Posted by [michelle.tomlinson](#) on Tue, 02 May 2017 16:40:09 GMT  
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I have a structure of data which contains multiple reading for the same date and location. For example:

|          |         |           |
|----------|---------|-----------|
| -76.4347 | 37.2563 | 9/26/2016 |
| -76.4347 | 37.2563 | 9/26/2016 |
| -76.4347 | 37.2563 | 9/26/2016 |
| -76.4347 | 37.2563 |           |
| -76.4347 | 37.2563 |           |
| -76.4347 | 37.2563 |           |
| -76.4347 | 37.2563 |           |
| -76.4347 | 37.2563 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |
| -76.5069 | 37.2385 |           |

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Subject: Re: Extracting array with same date, lat, long  
Posted by [Markus Schmassmann](#) on Wed, 03 May 2017 13:50:26 GMT  
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On 05/02/2017 06:40 PM, michelle.tomlinson@noaa.gov wrote:

> I have a structure of data which contains multiple reading for the same date and location. For example:

It's not really clear what you want, but maybe this helps:

```
;----- file: ord.pro
function ord, array
;+
;  Calculates the ordinal of each value of an array in terms of the
;  sorted values.
;  inspired by jbiu's ord & uniqify
;  IDL> result=ord(array)
```

```

;-
  compile_opt defint32, strictarr
  return, reform( value_locate(array[uniq(array,sort(array))],array),$
    size(array,/dimensions),/overwrite)
end
;----- EOF

ord1=ord(lon)
ord2=ord(lat)
ord3=ord(date)
idx=ord1+(max(ord1)+1)*(ord2+(max(ord2)+1)*ord3)
ord4=ord(idx)
h=histogram(ord4,reverse_indices=ri)
for j=0,n_elements(h)-1 do begin
  w=ri[ri[j]:ri[j+1]-1]
  print, lon[w[0]], lat[w[0]], date[w[0]]
  array=data[w,*]
  ;do something with the array of data for this triple of lon,lat,date
endfor

;-----
good luck, Markus

```

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