Subject: Re: Removing equal elements from an array
Posted by Jean H. on Wed, 16 Aug 2006 16:12:43 GMT
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Hi,

just sort your array based on the 2 fields...
you can do something like:
maxCol2 = max(a[1,*])
sortedIndices = sort([a[0,*]*maxCol2 + a[1,*]])
now do as you did before, but using a[0,sortedIndices] and
a[1,sortedIndices]

Jean

Julio wrote:
> Dear Maarten,
>
> I used your code to remove equal elements from an array. It worked fine
> for a small array. But I tested using a greater amount of points and
> some equal elements (pairs of coords) remains. There are 434 pairs...
> an example of them:
>
> 234.000 208.000
> 228.000 208.000
> 234.000 208.000
> 234.000 208.000
> 178.000 209.000
> ....
> 153.000 314.000
> 146.000 318.000
> 181.000 318.000
>
> The pair (234.000, 208.000) repeats 3 times, so 2 pairs should be
> removed. In the output array for these 434 input pairs I have:
>
> 234.000 208.000
> 228.000 208.000
> 234.000 208.000
> 178.000 209.000
> ... and so on
>
> We see the pair (234.000, 208.000) repeats 2 times! Do you have any
> idea about what is going on??
>
> Julio
>
> Maarten escreveu:

>
>
>> Mike wrote:
>>
>>> Julio wrote:
>>>
>>>> I have an array 'A' with two columns, latitudes and longitudes, and
>>>> several lines. A need to make another array with the elements of A that
>>>> don't repeat.
>>>
>>> Take a look at the uniq function. Here's an example:
>>
>> [snip]
>>
>> Which still doesn't take into account the following situation:
>>
>> A = [[20.4, 40.3, 50.2, 50.2], $
>>   [30.2, 60.2, 32.4, 32.5]]
>>
>> in which case no items should be removed. Just thinking out aloud here.
>> With:
>> lat = A[*,0] & lon = A[*,1]
>>
>> we have
>> idx_lat = uniq(lat) & idx_lon = uniq(lon)
>>
>> At the very least both index arrays should be the same, if you want to
>> apply this automagically.
>>
>> If the precision of the coordinates is limited, you can try to combine
>> the lat and lon in a single number. If the coordinates are floats, the
>> following ought to work:
>>
>> I = lat + (2.0D0^23)*lon
>> idx = uniq(I)
>> lat = lat[idx] & lon = lon[idx]
>>
>> Maarten
>
>