Subject: Re: Removing equal elements from an array
Posted by Julio[1] on Wed, 16 Aug 2006 15:24:31 GMT
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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
