Subject: Re: "bootstrap" statistics
Posted by Ivan Valtchanov on Tue, 21 May 2002 07:54:26 GMT
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On 20 May 2002 20:41:44 +0100
wmc@bas.ac.uk wrote:

> Hello group. I want to do what I think of as "bootstrap" statistics, viz
> given a timeseries I take a random subsample (with, say, half the number
> of elements), compute some statistic (say, then mean); then take another
> random subsample; then again lots of times (say 1000 or 10000) and end
> up with a distribution of the statistic concerned.
>
> So: to do this I need a means to generate n/2 random (non-repeating)
> indices from 0...n-1. At the moment I do this by:
> once I have m indices I generate one more at
> random; see if its in the list of m; if not, good; if it is, generate another
> one. This is hideously inefficient and slow: there *must* be a better way.
>

Hello,

It is some sort of jacknife technique. I can propose you one solution:

```
ndata = float(n_elements(myarray)) ; myarray is the input array

for i=0, ngen-1 do begin
 x = randomu(s,ndata)
 flag = nint(x) ; nearest integer, so should have half times zeros and half times ones
 ixx = where(flag EQ 0)

 tmp = myarray ;
 remove,ixx,tmp ; using Wayne Landsman astrlib REMOVE.PRO

 mx[i] = mean(tmp)
endfor
```

Hope this helps.

Ivan
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