Subject: Re: Given many images, find bounding box
Posted by Dick Jackson on Fri, 05 Nov 1999 08:00:00 GMT
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Herbert wrote:

> I have many spatially seperated (but maybe overlapped) images patches
> which I would like to make a big mosaic image with them.
>
> For each of the patch, I have the coor. (lat, lon) of the upper left
> hand corner and the # of rows and # of cols. I would like to find the
> biggerest bounding box that will contain all the patches.
>
> Can anyone point me to any existing algorithm that will find this
> bounding box

This is pretty straightforward, but I have to make a few assumptions:

- you have four arrays (lat, lon, rows, cols) containing values
  for each of your patches
- all four are measured in pixels
- 'lat' increases as you go up, 'lon' increases as you go to the right
  (no wrapping at lat +/- 90 or lon +/- 180 here, do you need that?
   My, that would be interesting...)
- you want the *smallest* bounding box that contains the patches

Then the four edges of that bounding box are:

left = Min(lon)
top = Max(lat)
right = Max(lon + cols - 1)
bottom = Min(lat - rows + 1)

Hope this helps!

Cheers,
-Dick

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