
Subject: DISP_ROI_GROW_REGION

Posted by [Leonardo R. Sbaraini](#) on Wed, 26 Mar 2008 15:31:45 GMT

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Hello all,

Example of the problem:

I need to resize a ROI (oversample) obtained from image1 (100x100) and show it in image2 (200x200).

I had success in creating a tool to downsample the ROI (the inverse problem), but do oversample, the ROI is not exactly what I want, have some borders problem.

Well, seeing the file "envi_all_functions.txt" that I don't know from where it came, there is a method with a syntax:

DISP_ROI_GROW_REGION, p_data, /ASK, /GROUP, /REDO

I ask if someone had used this routine, and don't know how to initiate p_data.

Maybe I can help showing my code here (to oversample):

```
. *****  
;  
; Growing for x axis  
. *****  
;  
; x is a long array with the xaxis positions  
  
xSize = n_elements(x)  
  
xNewSize = xSize * intScaleFactor * intScaleFactor  
  
xNew = lonarr(xNewSize)  
  
xNew[*] = -1  
  
currentXnewIndex = 0  
  
for xi=0, xSize-1 do begin  
  
    numberToWrite = x[xi]  
  
    ; The box side for every x  
    for sfRepeater = 0, intScaleFactor-1 do begin  
  
        ; The box side for current element of x (xi)  
        for sfRepeaterNested = 0, intScaleFactor-1 do begin
```

```

; Verifying the image limit
if numberToWrite lt lngDestinationWidth then begin

    xNew[currentXnewIndex++] =
numberToWrite

    endif

    endfor

    numberToWrite++

    endfor

    endfor

; Removing invalid indexes
goodIndex = where(xNew ne -1)
if goodIndex[0] ne -1 then xNew = xNew[goodIndex]

x = temporary(xNew)

;
*****

```

Subject: Re: DISP_ROI_GROW_REGION
Posted by [Leonardo R. Sbaraini](#) on Fri, 04 Apr 2008 11:14:47 GMT
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It's me again.

The problem do not have a good solution because when you downsample an image you lost information and when you oversample an image you put wrong information. So, the roi indexes will never match exactly the coherence expected. The nearest solution is oversample/downsample and verify later where we can really withdraw data from modified indexes. (There must be exist a data value marker signing the no valid data)
