
Subject: Speed Improvement

Posted by [Rony K Varghese](#) on Tue, 25 Jan 2011 09:24:22 GMT

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Dear All,

How can i improve the speed of below IDL source through code optimizing..Now the performance is not satisfactory..

```
;Processing a picture
for sCount = 0, 9 do begin
    for sRow = UpperRow, LowerRow do begin
        for sCol = sLeftCol, sRightCol do begin
            ; Check whether high pixels.
            if E_F_ATTMAP_HIGH_PIXEL eq PixelArr[sCol, sRow] then
begin
                sXCol = sCol
                sYRow = sRow
            endif
            ; from the center to the left
            for sIndex = 0, sHalfWid do begin
                if HIGH_PIXEL eq vTemp[sXCol - sIndex, sYRow] then
begin
                    PixelArr[sXCol - sIndex, sYRow] = HIGH_PIXEL
                endif else begin
                    break ; break from for sIndex
                endelse
            endfor
            ; from the center to the right
            for sIndex = 0, sHalfWid do begin
                if HIGH_PIXEL eq vTemp[sXCol + sIndex, sYRow] then
begin
                    PixelArr[sXCol + sIndex, sYRow] = HIGH_PIXEL
                endif else begin
                    break ; break from for sIndex
                endelse
            endfor
            ; from the center to down
            for sIndex = 0, sHalfHght do begin
                if HIGH_PIXEL eq vTemp[sXCol, sYRow+ sIndex] then
begin
                    PixelArr[sXCol, sYRow+ sIndex] = HIGH_PIXEL
                endif else begin
                    break ; break from for sIndex
                endelse
            endfor
            ; from the center to up
            for sIndex = 0, sHalfHght do begin
```

```

        if HIGH_PIXEL eq vTemp[sXCol, sYRow - sIndex] then
begin
    PixelArr[sXCol, sYRow - sIndex] = HIGH_PIXEL
endif else begin
    break ; break from for sIndex
endelse
endfor
endfor; end for sCol
endfor; end for sRow
endfor;end for sCount

```

Thanks in advance..

Rony

Subject: Re: Speed Improvement

Posted by [Jeremy Bailin](#) on Thu, 27 Jan 2011 15:38:41 GMT

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On Jan 26, 10:56 pm, Rony K Varghese <ronykvargh...@gmail.com> wrote:

> On Jan 25, 10:03 pm, jeanh

>

>

>

>

>

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>

> <jghasb...@DELETETHIS.environmentalmodelers.ANDTHIS.com> wrote:

>> Hi,

>

>> first, you are not using sCount anywhere... remove this loop

>

>> Instead of looping through all pixels, look for the needed ones

>

>> pixelsToProcess = where(PixelArr eq E_F_ATTMAP_HIGH_PIXEL,

>> countPixToProcess)

>

>> sXYcol = array_indices(pixelArr, pixelsToProcess) ;get the 2D coords

>

>> for i=0L, countPixToProcess -1 do begin

>> ;process

>> endfor

>

>> Jean

>

```

>> On 25/01/2011 4:24 AM, Rony K Varghese wrote:
>
>>> ;Processing a picture
>>> for sCount = 0, 9 do begin
>>>     for sRow = UpperRow, LowerRow do begin
>>>         for sCol = sLeftCol, sRightCol do begin
>>>             ; Check whether high pixels.
>>>             if E_F_ATTNMAP_HIGH_PIXEL eq PixelArr[sCol, sRow] then
>>> begin
>>>         sXCol = sCol
>>>         sYRow = sRow
>>>     endif
>>>     ; from the center to the left
>>>     for sIndex = 0, sHalfWid do begin
>>>         if HIGH_PIXEL eq vTemp[sXCol - sIndex, sYRow] then
>>> begin
>>>             PixelArr[sXCol - sIndex, sYRow] = HIGH_PIXEL
>>>         endif else begin
>>>             break ; break from for sIndex
>>>         endelse
>>>     endfor
>>>     ; from the center to the right
>>>     for sIndex = 0, sHalfWid do begin
>>>         if HIGH_PIXEL eq vTemp[sXCol + sIndex, sYRow] then
>>> begin
>>>             PixelArr[sXCol + sIndex, sYRow] = HIGH_PIXEL
>>>         endif else begin
>>>             break ; break from for sIndex
>>>         endelse
>>>     endfor
>>>     ; from the center to down
>>>     for sIndex = 0, sHalfHght do begin
>>>         if HIGH_PIXEL eq vTemp[sXCol, sYRow+ sIndex] then
>>> begin
>>>             PixelArr[sXCol, sYRow+ sIndex] = HIGH_PIXEL
>>>         endif else begin
>>>             break ; break from for sIndex
>>>         endelse
>>>     endfor
>>>     ; from the center to up
>>>     for sIndex = 0, sHalfHght do begin
>>>         if HIGH_PIXEL eq vTemp[sXCol, sYRow - sIndex] then
>>> begin
>>>             PixelArr[sXCol, sYRow - sIndex] = HIGH_PIXEL
>>>         endif else begin
>>>             break ; break from for sIndex
>>>         endelse
>>>     endfor

```

```
>>>         endfor; end for sCol
>>>         endfor; end for sRow
>>>     endfor;end for sCount
>
> Thank you all for the help to me.....
> This function is to scan and process each pixel of the 128*128 picture
> as in the source code.
> I cannot remove the for loop of scout, because that much times the
> code needs to be executed.
```

Well, yes, I got that much. :-)= I was trying to understand what processing you are doing in order to suggest a more efficient method.

-Jeremy.
