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Subject: Re: Extracting the resultant angles from the Hough transform

Posted by [txominhermos](#) on Thu, 03 Nov 2005 11:53:32 GMT

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THE ANSWER TO THIS QUESTION HAS BEEN GIVEN BY THE RSI TECH SUPPORT

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The THETA output variable can be used to find the angle for a line.  
Here is a short example demonstrating how this is done:

```
.*****  
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pro test  
  
; Choose two points in the range  
; 1 < x < 199  
; 1 < y < 199  
p0 = [40.,20]  
p1 = [120,180]  
  
nx = 200d  
ny = 200d  
  
array = fltarr(nx,ny)  
array[[p0[0],p1[0]],p0[1],p1[1]] = 1b  
  
; Display the data:  
window, 0, xs = nx, ys = ny, $  
xpos = 0, ypos = 0, $  
title = 'original data'  
tvsc1, array  
  
; HOUGH input parameters:  
dx = 1.2  
dy = 1.0  
xmin = 0.0  
ymin = 0.0  
  
r = hough(array, rho = rho, theta = theta, $  
dx = dx, dy = dy, xmin = xmin, ymin = ymin)  
  
sz = size(r, /dim)  
  
; Locate the line  
maxcount = where(r eq max(r))  
  
; Use the output variable THETA to get the line's angle:
```

```
radangles = theta[maxcount mod sz[0]] - !pi/2
print, 'Angle(s) : '
print, radangles
print
```

```
end
```

```
.*****
```

```
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