Subject: Re: extract circle from data with idl
Posted by Markus Schmassmann on Mon, 16 Oct 2017 09:20:56 GMT
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On 10/15/2017 06:08 PM, termybel@gmail.com wrote:
> Il giorno giovedì 12 ottobre 2017 16:27:18 UTC+2, Markus Schmassmann ha scritto:
>> On 10/12/2017 02:10 PM, termybel@gmail.com wrote:
>>> Thanks to answer but I have a probelm.
>>>
>>> You puth this: if n_elements(li) ne 1 then message, 'not exactly 1 contour'
>>>
>>> and my program say: not exactly 1 contour
>>>
>>> How I can solve it?
>>>
>>> If I ask in idl " help,/str,li" and the answer is:
>>>
>>> Structure CONTOUR_DBL_PATH_STRUCTURE, 6 tags, length=24, data length=20:
>>> TYPE BYTE 1
>>> HIGH_LOW BYTE 1
>>> LEVEL INT 0
>>> N LONG 7
>>> OFFSET LONG 0
>>> VALUE DOUBLE 9.0000000
>>>
>>> and for " help,/str,lines"
>>> LINES DOUBLE = Array[2, 5447]
>>>
>>> My contour isn't a perfect circle. Maybe is this the problem?
>>>
>>> This is my program where the image is a flat field panel minus dark:
>>>
>>> file_ff1='ff_100s_3.fits' ;immagine
>>> immagine_ff1=readfits (file_ff1, header1) ; leggo l'immagine del flat field panel
>>> file_dark='ff_100s_dark_3.fits' ;immagine
>>> immagine_dark=readfits (file_dark, header1) ; leggo l'immagine della dark
>>>
>>> n=100. ; secondi di esposizione dell'immagine
>>> ffp=(immagine_ff1-immagine_dark)/n
>>>
>>> ; contour per selezionare soglie di equivalore
>>>
>>> speriamo=fltarr(2048,2048) ; creo una matrice 2048x2048
>>> dimensioni=size(speriamo,/dimensions)
>>> cubo=where(ffp lt 9.5 or ffp gt 10)
>>>
>>>
>>>

```
>>>  wrong_matrix=array_indices(dimensioni, cubo,/dimensions)
>>>  indxw=reform(wrong_matrix(0,*))
>>>  indyw=reform(wrong_matrix(1,*))
>>>  ;ffp(indxw,indyw)=0.
>>>  ;c = CONTOUR(ffp, dimensions=[512,512], Title='prova cubo')
>>>
>>>  ; DATA   being the data to be contoured
>>>  level=9
>>>  contour, smooth(ffp(250:1700, 250:1700),3), path_info=li,closed=1 , path_xy=lines,
/path_data_coord, levels=[level], /path_double
>>>     ; lix=lines(0,*)
>>>     ; liy=lines(1,*)
>>>     ; liyd=deriv(lix,liy)
>>>     ;ind=where(abs(liyd) le 0.0001)
>>>
>>>  if n_elements(li) ne 1 then message, 'not exactly 1 contour'
>>>
>>>
>>>  cont_obj =obj_new('IDLanROI',lines)
>>>  void= cont_obj.ComputeGeometry(centroid=center)
>>>  ;fit_ellipse(
>>>  print, center[0:1]
>>>
>>>  end
>>
>>  contour, smooth(ffp(250:1700, 250:1700),3), path_info=li,closed=1 , $
>>        path_xy=lines, /path_data_coord, levels=[level], /path_double
>>  contour, smooth(ffp(250:1700, 250:1700),3), levels=[level]
>>  ; shows you there are more than 1 contour,
>>  ; you need to identify the correct one
>>  ; often the best is the longest
>>  void=max(li.n,j)
>>  line=[*,li[j].offset+lindgen(li[j].n)]
>>  plot, line[0,*],line[1,*]
>>  cont_obj =obj_new('IDLanROI',line)
>
>  I don't know why but IDL says this message (it doesn't read the *):
>
>  line=[*,li[j].offset+lindgen(li[j].n)]
>          ^
>  % Syntax error.
>
; sorry, it should be
line=lines[*,li[j].offset+lindgen(li[j].n)]
```