
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)]

```
