Subject: Re: isodensity contours
Posted by David Fanning on Wed, 23 Feb 2011 18:39:28 GMT
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Gray writes:

> I have a scatterplot with a bunch of points on it. I'd like to plot
> isodensity contours to include 99%, 90%, 75%, and 50% of my points.
> How do I set up my data to give to cgContour? Thanks!

The simple answer is, you set up your data the way
you *always* set up your data!

Don't you really want to know, how do I choose
some percentage of my points? And, that question
we can't answer, because you haven't indicated
what the criteria are going to be. I guess
you will have to decide. Randomly, distance
from the centroid, based on height above surface,
etc. Lot's of possibilities here.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: isodensity contours
Posted by pgrigis on Wed, 23 Feb 2011 19:12:50 GMT
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On Feb 23, 1:24 pm, Gray <grayliketheco...@gmail.com> wrote:
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Then you can use the normal contour procedures.

So how you do partition the data into the density
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Ciao,
Paolo

Subject: Re: isodensity contours
Posted by Jeremy Bailin on Wed, 23 Feb 2011 20:04:27 GMT
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On Wednesday, February 23, 2011 1:24:30 PM UTC-5, Gray wrote:
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You may find contourlevels in JBIU useful:

 http://web.astroconst.org/jbiu/jbiu-doc/misc/contourlevels.h tml

-Jeremy.

Subject: Re: isodensity contours
Posted by Gray on Wed, 23 Feb 2011 20:06:58 GMT
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On Feb 23, 2:12 pm, Paolo <pgri...@gmail.com> wrote:
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An example image is at http://tinypic.com/r/2mepz4/7
The black points are pop A and the colored symbols are pop B.

Thanks for your help!

--Gray

Subject: Re: isodensity contours

On Feb 23, 3:06 pm, Gray <grayliketheco...@gmail.com> wrote:
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Subject: Re: isodensity contours
Posted by Gray on Wed, 23 Feb 2011 21:25:38 GMT

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On Feb 23, 3:04 pm, Jeremy Bailin <astroco...@gmail.com> wrote:
> On Wednesday, February 23, 2011 1:24:30 PM UTC-5, Gray wrote:
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>
> http://web.astroconst.org/jbiu/jbiu-doc/misc/contourlevels.h tml
>
> -Jeremy.

Oh, perfect! Thank you!

Subject: Re: isodensity contours
Posted by Gray on Thu, 24 Feb 2011 00:34:54 GMT
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On Feb 23, 3:24 pm, Paolo <pgri...@gmail.com> wrote:
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How does one smooth contours? :/

Subject: Re: isodensity contours
Posted by Gray on Thu, 24 Feb 2011 01:30:41 GMT
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On Feb 23, 1:39 pm, David Fanning <n...@idlcoyote.com> wrote:
> Gray writes:
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David -

When I actually try to plot the contour, it doesn't work. My x and y
inputs to cgContour are xb and yb:
IDL> print, minmax(xb), minmax(yb)
     5.92672   20.6767
    -9.38564   7.11436

Why does the contour plot out in space? http://tinypic.com/r/2viio7l/7

Subject: Re: isodensity contours
Posted by David Fanning on Thu, 24 Feb 2011 01:43:49 GMT
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Are you setting the OVERPLOT keyword, so that it
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Cheers,

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Subject: Re: isodensity contours
Posted by Gray on Thu, 24 Feb 2011 01:48:44 GMT
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On Feb 23, 8:43 pm, David Fanning <n...@idlcoyote.com> wrote:
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Yes. Here's my cgContour call:
cgcontour, contour_in, xb, yb, /overplot, levels=lev, label=0

Subject: Re: isodensity contours
Posted by David Fanning on Thu, 24 Feb 2011 02:02:49 GMT
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Gray writes:

> Yes. Here's my cgContour call:
> cgcontour, contour_in, xb, yb, /overplot, levels=lev, label=0

Well, I don't know. Maybe it's doing the right thing. :-)

What does the contour plot look like by itself?
Do you get the same thing when you use the Contour
command?

I'm off to play tennis tonight, but if you want to
send me a save file with the data, maybe I can look
at it later.

Cheers,

David

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Subject: Re: isodensity contours
Posted by pgrigis on Thu, 24 Feb 2011 16:28:29 GMT
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On Feb 23, 7:34 pm, Gray <grayliketheco...@gmail.com> wrote:
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IDL has a builtin function called min_curve_surf
It's a bit slow though - use it on small arrays

Ciao,
Paolo