Subject: Re: finding star-like objects in images
Posted by Markus Schmassmann on Wed, 08 Nov 2017 10:25:39 GMT
View Forum Message <> Reply to Message

On 11/08/2017 11:12 AM, Helder wrote:
> I'm not an astronomer and I guess that this is something that
> astronomers have been confronted with quite often in their lives.
> I have a detector where particle events generate intensity across
> some pixels (2-5 x 2-5) [*]. Typically their integral intensity is
> constant (lets say 100 +/- 20). These events show over a noisy bkg.
> Apart from having a constant intensity, these events are similar to
> stars (that have a varying luminosity).
>
> What approaches are typically used for detecting/locating such
> events?
>
> Any IDL solution readily available out there?
>
> Thanks for reading so far and for any suggestions.
>
> [*] - threshold methods would not work very well, because the total
> intensity of 100 may be distributed over 2x2 pixels (~25 per pixel)
> or 5x5 (~10 per pixel).
Hi Helder,

just a guess, but have you tried

star=where(smooth(img,[5,5]) gt 100./5^2/2)

you will have to change the threshold value and maybe also how much
smoothing you apply, but it could work.

good luck, Markus