

---

Subject: step function  
Posted by [sid](#) on Tue, 05 Jul 2011 10:07:09 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi all,  
Is there a standard programme for using step function in idl.  
If so please let me know.  
thank you  
Sid

---

---

Subject: Re: step function  
Posted by [sid](#) on Wed, 06 Jul 2011 08:29:41 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

On Jul 6, 1:37 am, Gray <[grayliketheco...@gmail.com](#)> wrote:  
> On Jul 5, 12:24 pm, sid <[gunvicsi...@gmail.com](#)> wrote:  
>  
>> Hi all,  
>> Please let me know if there is any standard program to use step  
>> function.  
>> thank you  
>> Sindhuja  
>  
> In what context do you want to use a step function?

Actually I am using data taken using photographic plates. So there are six step wedge, each step wedge transmits light in different way, say for example the first step will be the darker than the second one and so on as the last step is lightest one. So if I take a column cut along the data, I can find six step like profile. Now I need to separate each step automatically to proceed further. So I thought if I can fit a step function with the data and can find the turn over point of each step. Please give some suggestions.  
thanking you  
G.Sindhuja

---

---

Subject: Re: step function  
Posted by [Craig Markwardt](#) on Wed, 06 Jul 2011 11:08:29 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

On Jul 6, 4:29 am, sid <[gunvicsi...@gmail.com](#)> wrote:  
> On Jul 6, 1:37 am, Gray <[grayliketheco...@gmail.com](#)> wrote:  
>  
>> On Jul 5, 12:24 pm, sid <[gunvicsi...@gmail.com](#)> wrote:  
>

>>> Hi all,  
>>> Please let me know if there is any standard program to use step  
>>> function.  
>>> thank you  
>>> Sindhuja  
>  
>> In what context do you want to use a step function?  
>  
> Actually I am using data taken using photographic plates. So there are  
> six step wedge, each step wedge transmits light in different way, say  
> for example the first step will be the darker than the second one and  
> so on as the last step is lightest one. So if I take a column cut  
> along the data, I can find six step like profile. Now I need to  
> separate each step automatically to proceed further. So I thought if I  
> can fit a step function with the data and can find the turn over point  
> of each step. Please give some suggestions.

Michael Galloy gave some suggestions.

---

---

Subject: Re: step function  
Posted by [Gray](#) on Wed, 06 Jul 2011 13:27:02 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

On Jul 6, 4:29 am, sid <gunvicsi...@gmail.com> wrote:  
> On Jul 6, 1:37 am, Gray <grayliketheco...@gmail.com> wrote:  
>  
>> On Jul 5, 12:24 pm, sid <gunvicsi...@gmail.com> wrote:  
>  
>>> Hi all,  
>>> Please let me know if there is any standard program to use step  
>>> function.  
>>> thank you  
>>> Sindhuja  
>  
>> In what context do you want to use a step function?  
>  
> Actually I am using data taken using photographic plates. So there are  
> six step wedge, each step wedge transmits light in different way, say  
> for example the first step will be the darker than the second one and  
> so on as the last step is lightest one. So if I take a column cut  
> along the data, I can find six step like profile. Now I need to  
> separate each step automatically to proceed further. So I thought if I  
> can fit a step function with the data and can find the turn over point  
> of each step. Please give some suggestions.  
> thanking you  
> G.Sindhuja

If I understand you correctly, basically what you want to do is bin your continuous data based on 6 "steps", i.e. cuts. My suggestion is `value_locate`:

```
steps = [s1,s2,s3,s4,s5]
step_func = value_locate(steps,data)
```

Your data will now run in integers from -1 to 4 (6 steps).

If this isn't what you meant, then I'm not sure what you're asking.

---