

ctools - Bug #3261

Issues with the correction in the devel version of Csrctdetect (related to the bug fix in <https://github.com/ctools/ctools/commit/d086ddbbe4c5e23409611d455c7a6c340b06d369>)

07/03/2020 06:16 PM - Adelfio Andrea

Status:	Closed	Start date:	07/03/2020
Priority:	Normal	Due date:	
Assigned To:	Knödseder Jürgen	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	1.7.0		
Description			
<p>I'm reporting a problem in the correction added in the script csrctdetect.py after the smoothing of the skymap: all values of std and mean < 1 are set to zero. This may delete some information of the signal, resulting in a source position not correct. Also, csrctdetect finds many sources around that position.</p> <p>Setting some values to 0.0 after the smoothing could seriously modify the smoothing operation if there are multiple sources.</p> <p>Can you check if I am doing something wrong? Attached, you can find a basic example you can check, for which csrctdetect does not work properly with that correction.</p> <p>A suggestion: instead of setting to zero negative values, you can search the minimum in std and mean and, if the minimum is negative, you add the absolute value of the minimum to all pixels. This should not change the result of the smoothing operation.</p>			

History

#1 - 07/15/2020 12:31 PM - Knödseder Jürgen

- Target version set to 1.7.0

#2 - 07/15/2020 02:27 PM - Knödseder Jürgen

- Status changed from New to Pull request

- Assigned To set to Knödseder Jürgen

- % Done changed from 0 to 100

I implemented your suggestion and it seems to work fine. Here the corresponding code:

```
# Compute minimum value of standard deviation
std_offset = 0.0
for index in range(std.npix()):
    if std[index] < std_offset:
        std_offset = std[index]
```

```
# If minimum value is negative then subtract minimum value to guarantee
# a non-negative map of standard deviations
if std_offset < 0.0:
    for index in range(std.npix()):
        std[index] -= std_offset
```

#3 - 07/15/2020 03:49 PM - Knödseder Jürgen

- Status changed from Pull request to Closed

Merged into devel.

Files

test_data.tar	2.31 MB	07/03/2020	Adelfio Andrea
---------------	---------	------------	----------------