

## ctools - Feature #3433

### Improve support for source localization and extension fitting

11/04/2020 12:28 PM - Tbaldo Luigi

<b>Status:</b>	New	<b>Start date:</b>	11/04/2020
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>	Di Venere Leonardo	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
Create dedicated functions/scripts for localization and extension fitting and add dedicated tutorial			

#### History

##### #1 - 02/03/2021 02:12 PM - Tbaldo Luigi

- Assigned To changed from Tbaldo Luigi to Di Venere Leonardo

##### #2 - 02/03/2021 02:32 PM - Di Venere Leonardo

Main idea of the implementation: create a cscript (csextension), inheriting from csobservation.

General parameters:

- observation parameters (same as ctlike)
- fitting parameters (ex: "statistic" parameter)

Extension specific parameters

- source name
- localization flag (whether of not fit the position)
- extension flag (whether of not fit the extension)
- extended model (disk/gaussian/...)

##### #3 - 02/04/2021 02:29 PM - Di Venere Leonardo

Additional features to be added:

- calculate  $ts\_extension = 2 * (\log L\_extended - \log L\_pointsource)$
- extended source vs multiple point-like sources
- extension fit in energy bins

##### #4 - 03/15/2022 12:49 PM - Knödlseher Jürgen

- Target version deleted (2.0.0)