

# ctools - Bug #1427

## Correct effective area in DESY and IFAE response files

02/19/2015 09:46 PM - Knödseder Jürgen

<b>Status:</b>	Closed	<b>Start date:</b>	02/19/2015
<b>Priority:</b>	Urgent	<b>Due date:</b>	
<b>Assigned To:</b>	Knödseder Jürgen	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	1.0.0		

**Description**

Following discussion with Gernot, the DESY and IFAE response files contain effective areas including a 68% containment cut. To get the full effective area, the values from the ROOT file have to be divided by 0.68.

The calibration database should be updated to correctly reflect the effective areas.

### History

#### #1 - 02/20/2015 09:24 PM - Knödseder Jürgen

- Status changed from New to In Progress
- % Done changed from 0 to 10

After discussion with Gernot it became clear that only the DESY IRFs can be corrected (by dividing the effective area by 0.68) while the IFAE IRF has an energy dependent cut.

#### #2 - 02/20/2015 10:14 PM - Knödseder Jürgen

- File aeff.png added
- File sensitivity.png added

I corrected the effective area and created a new calibration database (cta-caldb-20150220.tar.gz). Below a comparison of the effective area (left) and sensitivity (right) before (old) and after (new) the correction.

