# GammaLib - Bug #3731

# Make COMPTEL IAQ weighting compliant with COMPASS

06/14/2021 10:02 AM - Knödlseder Jürgen

Status: Closed Start date: 06/14/2021

Priority: High Due date:

Assigned To: Knödlseder Jürgen % Done: 100%

Category: Estimated time: 0.00 hour

Target version: 2.0.0

### **Description**

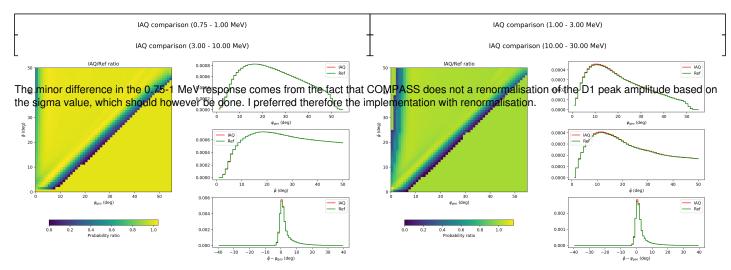
It turned out that the COMPTEL IAQ weighting was not compliant with the COMPASS software.

### History

### #1 - 06/18/2021 01:00 PM - Knödlseder Jürgen

- File comparison\_20210617\_0.75-1MeV.png added
- File comparison\_20210617\_1-3MeV.png added
- File comparison\_20210617\_3-10MeV.png added
- File comparison\_20210617\_10-30MeV.png added
- Status changed from New to Pull request
- % Done changed from 0 to 90

It turned out that the peak amplitudes of the D2 response were not divided by the square root of 2 pi multiplied by sigma. This was corrected. I also included the absorption in the veto shield and the PSD selection efficiency in the computation, and did a few minor adjustments to reproduce exactly the COMPASS energy thresholds. This gave the following results:



### #2 - 06/24/2021 05:56 PM - Knödlseder Jürgen

- Status changed from Pull request to Closed
- % Done changed from 90 to 100

#### **Files**

1 1100			
comparison_20210617_0.75-1MeV.png	158 KB	06/18/2021	Knödlseder Jürgen
comparison_20210617_3-10MeV.png	161 KB	06/18/2021	Knödlseder Jürgen
comparison_20210617_10-30MeV.png	164 KB	06/18/2021	Knödlseder Jürgen
comparison_20210617_1-3MeV.png	175 KB	06/18/2021	Knödlseder Jürgen

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