

## EXP1904: Reference reaction - Analyzing #395

Analyzing # 436 (Открыта): Reference reaction: Data analysis

Analyzing # 459 (Открыта): Beam of 10Be

### Beam energy

11/14/2019 02:07 PM - Vratislav Chudoba

<b>Status:</b>	Открыта	<b>Start date:</b>	11/14/2019
<b>Priority:</b>	Нормальный	<b>Due date:</b>	
<b>Assignee:</b>	Ivan Muzalevsky	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
Provide the 1D plot with the distribution of the reconstructed beam energy (in MeV)			
<ul style="list-style-type: none"><li>reconstructed directly from ToF;</li><li>reconstructed for the (x,y,0) plane (center of the target plane);</li></ul>			
Provide parameters used for the reconstruction in the comment.			

### History

#### #1 - 11/15/2019 09:51 AM - Ivan Muzalevsky

- Description updated

- % Done changed from 0 to 100

#### #2 - 11/15/2019 10:00 AM - Ivan Muzalevsky

Andrey Fomichev wrote:

Ivan, could you please indicate units for Energu scale.

As it was asked in the issue description, all energies are in MeV

#### #3 - 04/23/2020 12:51 AM - Vratislav Chudoba

- Description updated

- Parent task changed from #393 to #459

#### #4 - 04/23/2020 01:06 AM - Vratislav Chudoba

- Project changed from EXP1904 to EXP1904: Reference reaction

#### #5 - 04/27/2020 08:51 PM - Ivan Muzalevsky

### parameters used for the reconstruction:

- ToF time constant: **68.475 ns**
- ToF distance: **12320 mm**
- thickness of the materials used for the reconstruction of the beam energy in the target plane in form of table

order	material
1	Si

**Energy of  $^{10}\text{Be}$  (MeV) in the second ToF plane (calculated from the ToF without reducing by the beam det energy deposits)**

**Screenshot%20from%202020-04-27%2020-49-53.png**

**Energy of the  $^{10}\text{Be}$  (MeV) at the central target plane (calculated by ToF and reduced by the energy deposit in the 630 microns of Si)**

Screenshot%20from%202020-04-27%2020-48-53.png