Subject: Re: AGATA Crystal positions (Look-Up Table)
Posted by thuyuk on Tue, 24 Mar 2015 11:51:52 GMT
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Hi, again,

After what Michael wrote regarding to the unknown position of the Target DSSSD in the measurements report, I remember that the hit points suggest a small shift in the -x axis in my experiment:

The centroid seems to have an offset of ~-3 mm in the x axis. The y axis seems fine.

Maybe the detector positions were not certain and there were "small" offsets in reality with respect to the theoretical positions. Is there any way that we can confirm the exact positions of the detectors?

I concern about another thing: I don't understand what these numbers suppose to mean inside the lookup table:

```
0  0     41.34692   39.57936  227.95091
   1      0.95033   -0.26615    0.16133
   2      0.23981    0.95660    0.16553
   3     -0.19839   -0.11862    0.97292
```

I don't understand what would mean the numbers that the absolute values are smaller than 1.

I also want to make another point clear regarding to what Michael wrote:
Thanks a lot for including the rotation part, but, since we have the exact measures in the lab frame, does it really necessary to make transformations inside the code? Would it be better to include only the offsets with respect to the "theoretical positions"?

If I'm following the whole conversation properly, one needs to create a new lookup table with the measured values, and take the x,y,z values given inside the report as -x,z,y; could someone confirm this?

Another point that I think I didn't get: Oliver wrote that the AGATA target position has an offset of 1.1 mm in the beam downstream and 3.6 mm in the horizontal axis. I didn't see this offset inside the report. Only thing that I can see is this:

```
Agata array target    3.6   -2.9   -2.7
```

So, the 3.6 mm offset is clear to see, but why 1 mm offset in the beam axis?

In addition, we have been taking the offset for the target forward position as 150 mm, the measurements suggest that this is 142.7 mm, is this correct?

cheers,
tayfun

File Attachments

1) Screenshot from 2015-03-24 12:31:18.png, downloaded 1815 times

