

REMOLL PULL REQUEST (PR) VALIDATION STUDY

Sayak Chatterjee

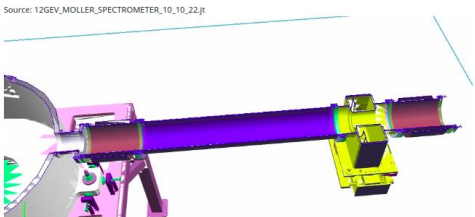
UMass, Amherst

Simulation parameters

- **REMOLL:** Default (develop), PR_579, PR_581, PR_584 (includes 579 & 581)
- **Field map: umap:** V2U.1a.50cm.parallel.txt ; **dmap:** subcoil_2_3_3mm_full.txt ; **Detector No:** 28
- **Generators (# events):** Elastic (7.5×10^6), Inelastic (7.5×10^6), Moller (5×10^6), ElasticAI (7.5×10^6), InelasticAI (7.5×10^6), QuasielasticAI (7.5×10^6), pion (5×10^6), beam (10^7)
- **Scripts used:** /w/halla-scsshelf2102/moller12gev/sayak/pr_validation_study/remoll-job-submission/simulation/macro.py
/w/halla-scsshelf2102/moller12gev/sayak/pr_validation_study/remoll-job-submission/analysis/analyse.py
/w/halla-scsshelf2102/moller12gev/sayak/pr_validation_study/remoll-job-submission/plot/deconvolution/deconvolution.C
- **File path:** /volatile/halla/moller12gev/sayak/

Add bellows 1 and 2, pipe segments and flanges in the region between target and US enclosure #579

rahmans1 wants to merge 26 commits into JeffersonLab:develop from rahmans1:579-Feature-RegionBetweenTargetCollimators



The following components were added:

```
target/subTargetRegion.dgmt
1) bellowsUSflange_log=G4_STAINLESS-STEEL
2) bellows1_log=S5bellows
3) tgt2US_pipe2_USflange_log=G4_STAINLESS-STEEL
4) tgt2US_pipe2_log=G4_AI
5) tgt2US_pipe2_Dofflange_log=G4_STAINLESS-STEEL
upstream/upstreamTorusRegion.dgmt:
6) flangeUScollar_log=G4_STAINLESS-STEEL
7) beampipeUScollar_log=G4_AI
8) beampipeUScollar_log=G4_AI
9) bellows2USflange_log=G4_STAINLESS-STEEL
10) bellows2_log=S5bellows
11) bellows2USflange_log=G4_STAINLESS-STEEL
```

581 update upstream 2bounce shield #582

rahmans1 wants to merge 5 commits into develop from 581-update-upstream-2bounce-shield

rahmans1 commented last week · edited

Update 2 bounce shield modified to closely match MIT CAD specs.

Inner r is 25 mm, outer r is 36 mm. Slots are cut out from 32 mm to 36 mm in radius to fit coils. Length is 2152.65 mm. The upstream face is at 936.5 mm, not right against C2.

Additional context
[Studies showed no adverse effect from modified 2bounce design on spectrometer dose.]
(https://moller.jlab.org/DocDB/0010/001029/001/UpstreamDose_status.pdf)

Would be good to check the effect on detector background before merge. **High priority item.**

rahmans1 added 3 commits last week

- Update 2bounce definition to closely match MIT CAD (Verified) x e1f911b
- Reinstate mother volume solid (Verified) x 216eac7
- Extend the mother volume to allow extending two bounce downstream end (Verified) x 4a9ae75

rahmans1 linked an issue last week that may be closed by this pull request

Update upstream 2bounce shield #581

rahmans1 requested review from cipriangal and zdemirog last week

584 feature mit upstream torus enclosure #586

rahmans1 wants to merge 76 commits into JeffersonLab:develop from rahmans1:584-Feature-MITupstreamTorusEnclosure

rahmans1 commented 5 days ago

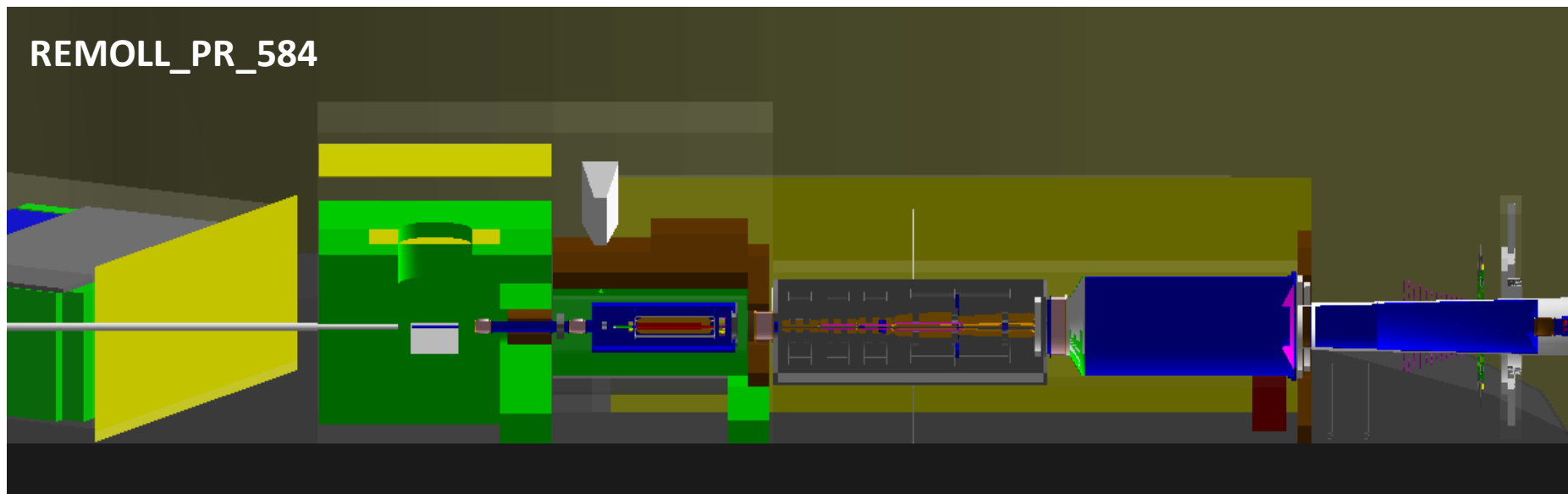
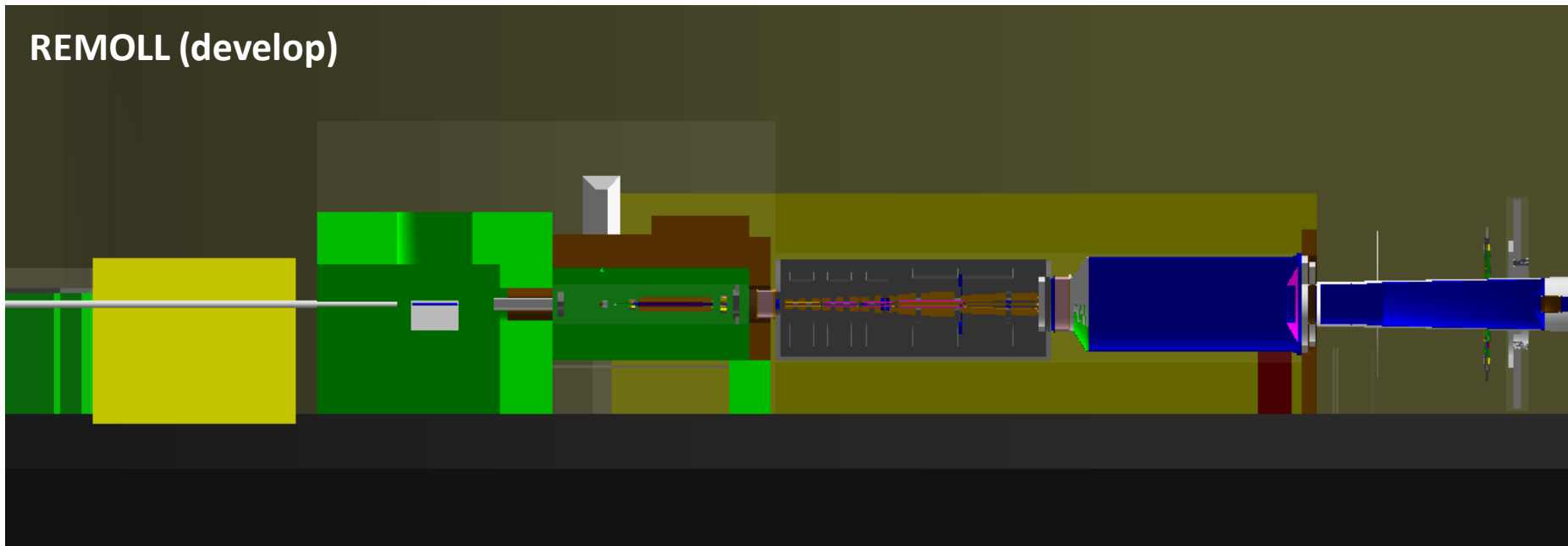
Introduce the MIT upstream torus enclosure into the simulation geometry based on the file SPECTROMETER_INTERFACE_ASSY_03_02_23

rahmans1 added 30 commits 3 weeks ago

- Changed pipe dimensions to values obtained from JT file (Verified) x 24f70b4
- Adding Link flanges (Verified) x 6ac7382
- Fix typo (Verified) x 8364418
- First iteration of bellows 2 (Verified) x 7e44562
- No need to define local position for polycone object (Verified) x 1757b2c
- Use the correct offset to determine relative positioning in the upstr... (Verified) x 76fb116
- Change sign on the offset (Verified) x a06b418
- Use the correct solid (Verified) x 701a29f
- Add upstream flange of bellows 2 (Verified) x 2ab6e0e
- Adding beampipe segments before and after collar 0 (Verified) x 79d383b
- Add part of flange upstream of collar 0 (Verified) x 1de4e79

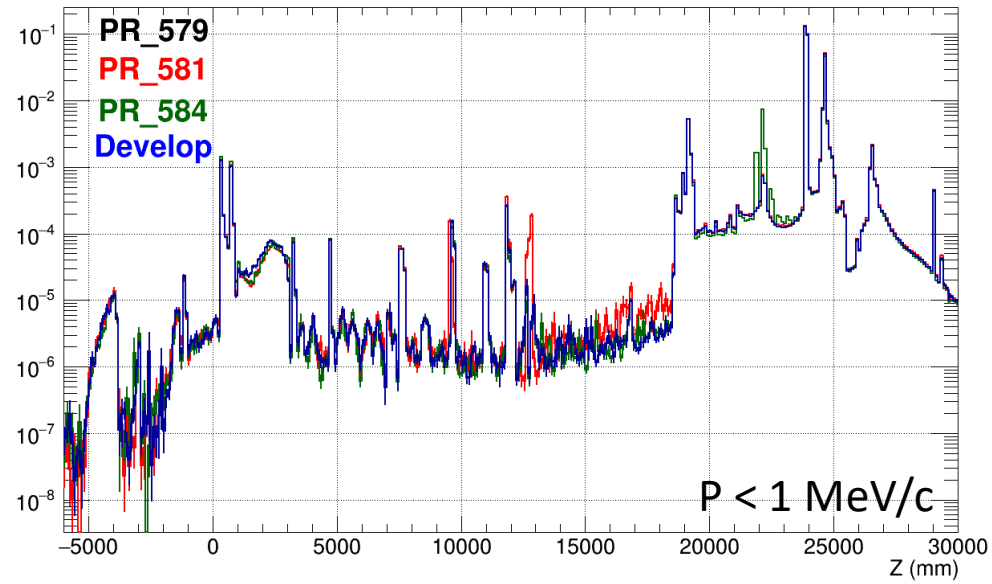
1 participant

Geometry visualization

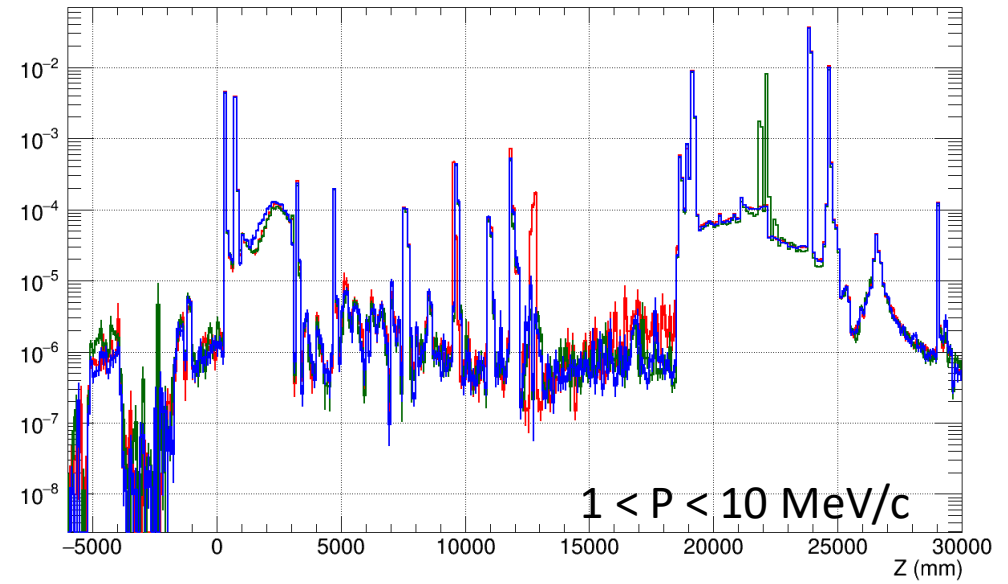


Z-vertex distribution (Generator: Moller)

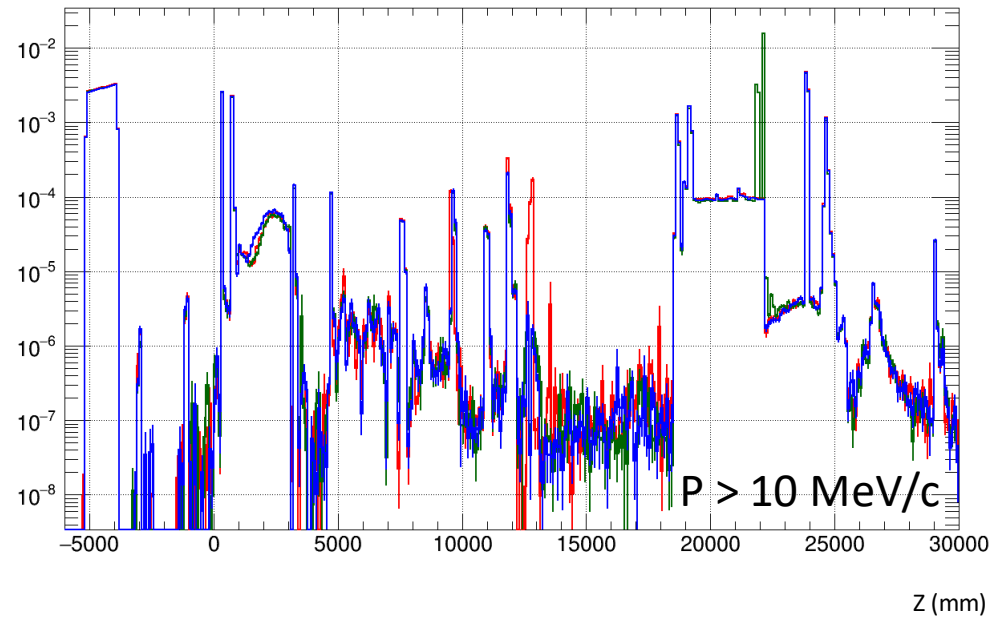
pr_all_pless1MeV_out_vz rate-weighted vertex (Generator=moller)



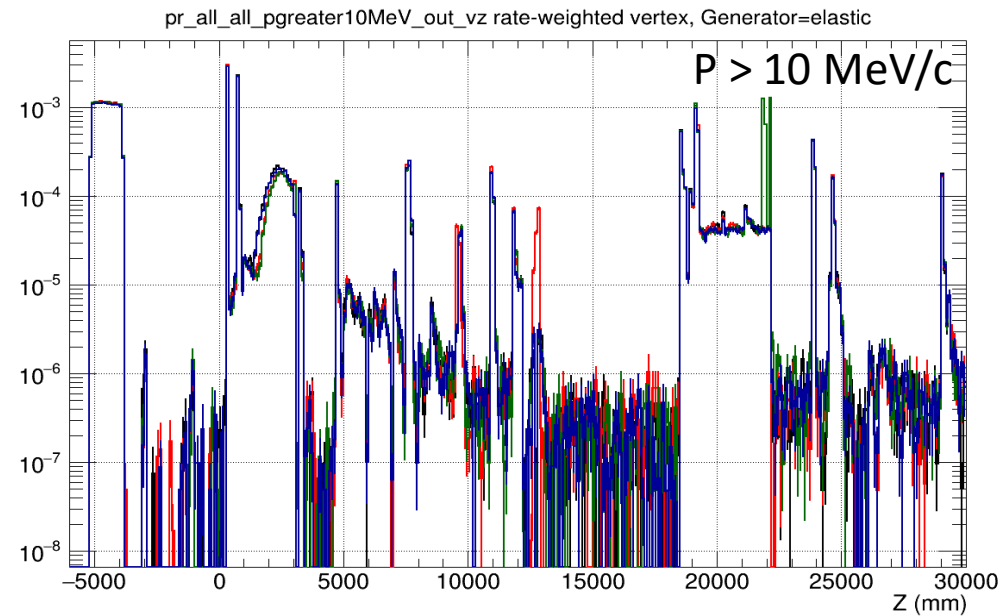
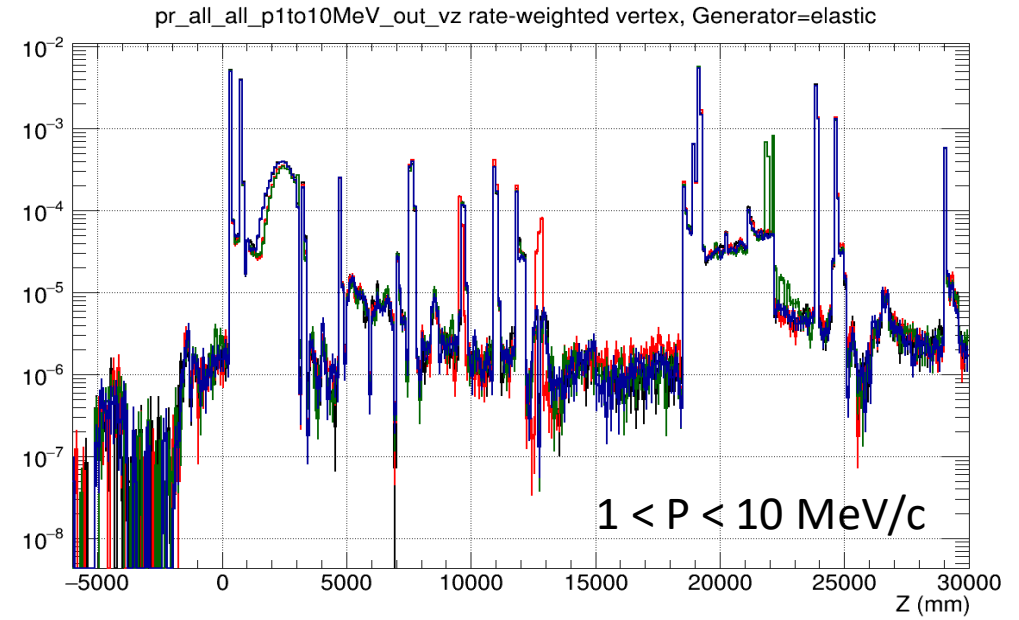
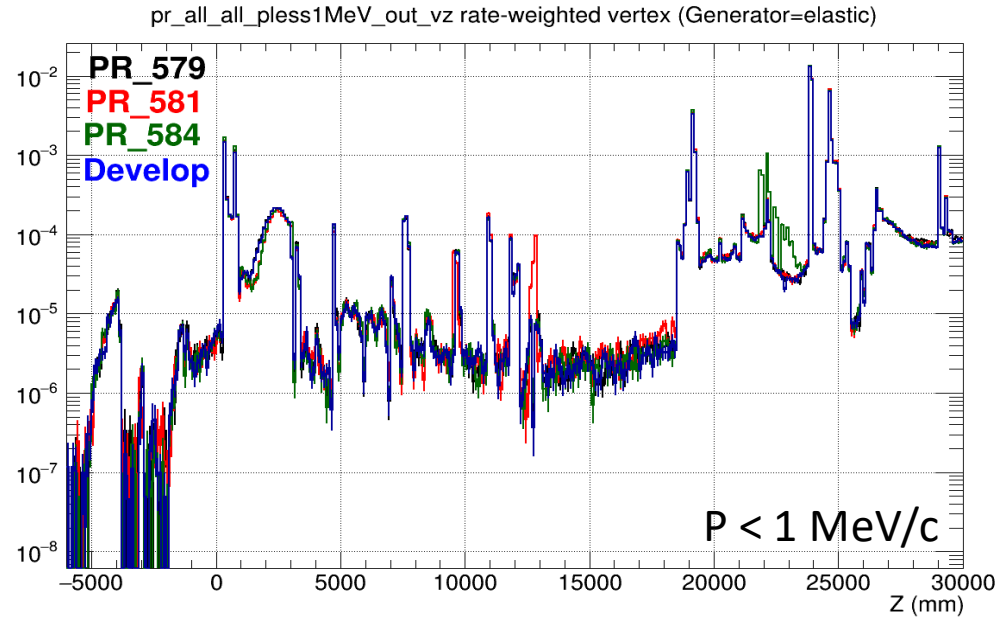
pr_all_all_p1to10MeV_out_vz rate-weighted vertex, Generator=moller



pr_all_all_pgreater10MeV_out_vz rate-weighted vertex, Generator=moller

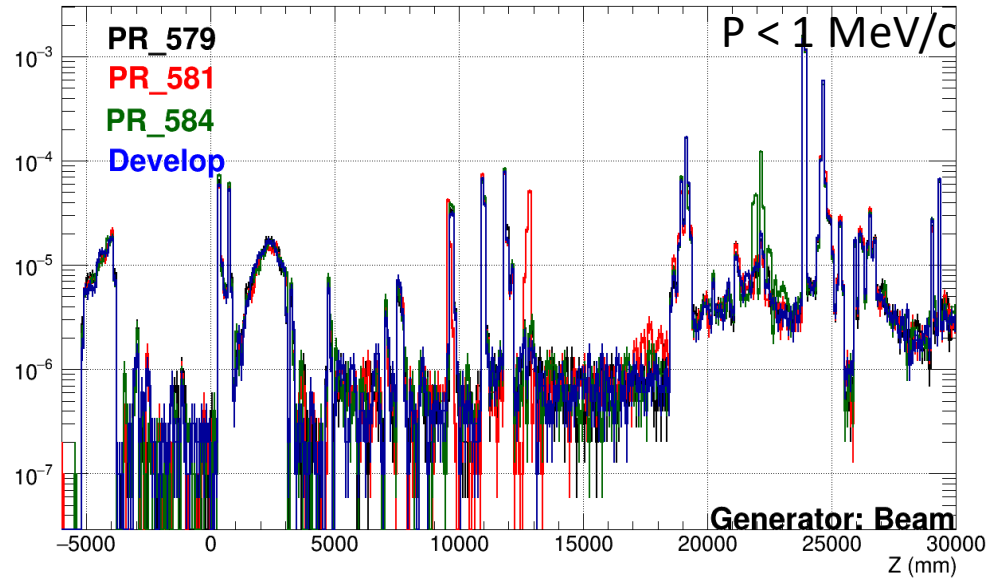


Z-vertex distribution (Generator: Elastic)

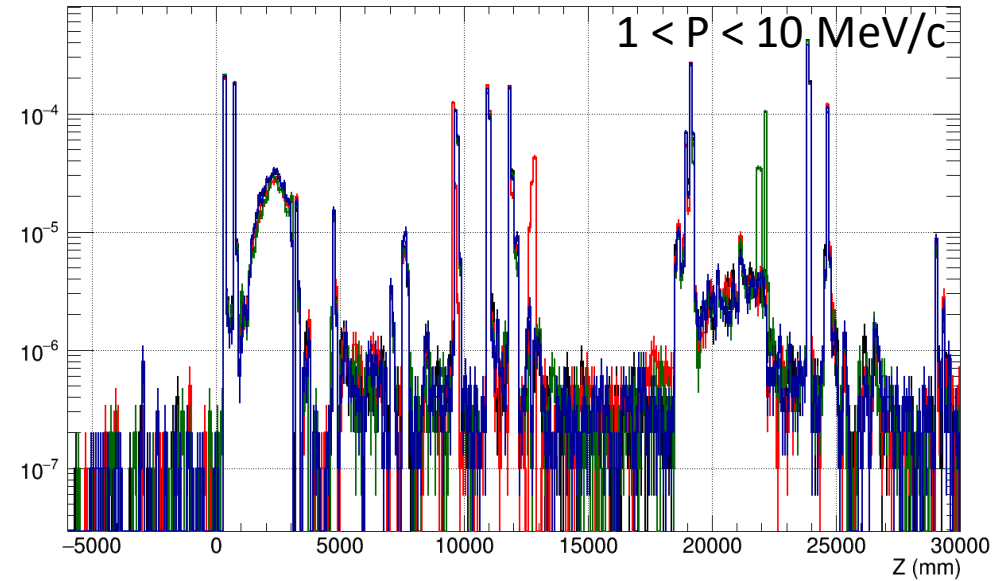


Z-vertex distribution (Generator: Beam)

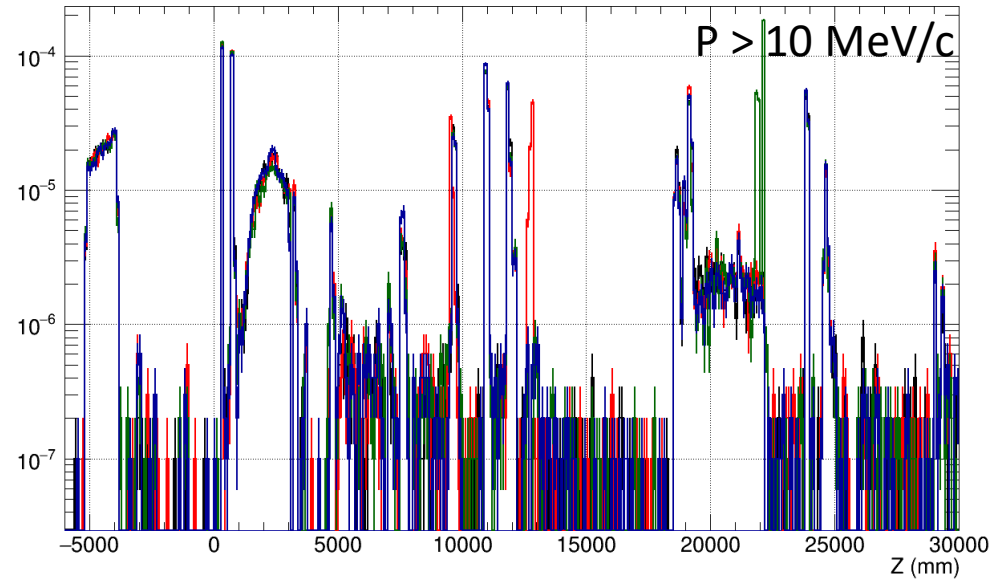
pr_all_pless1MeV_out_vz rate-weighted vertex



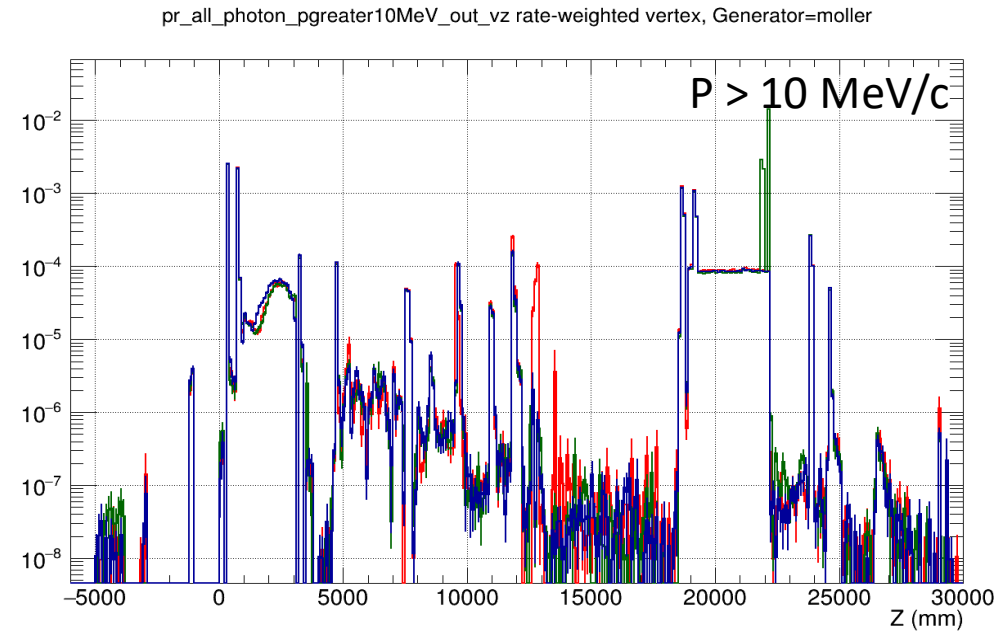
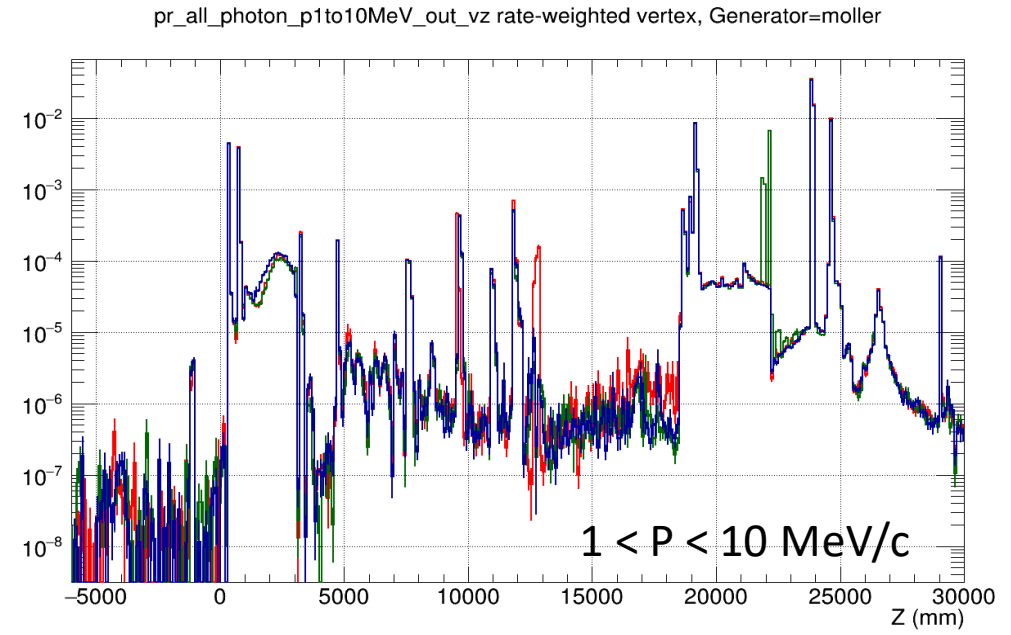
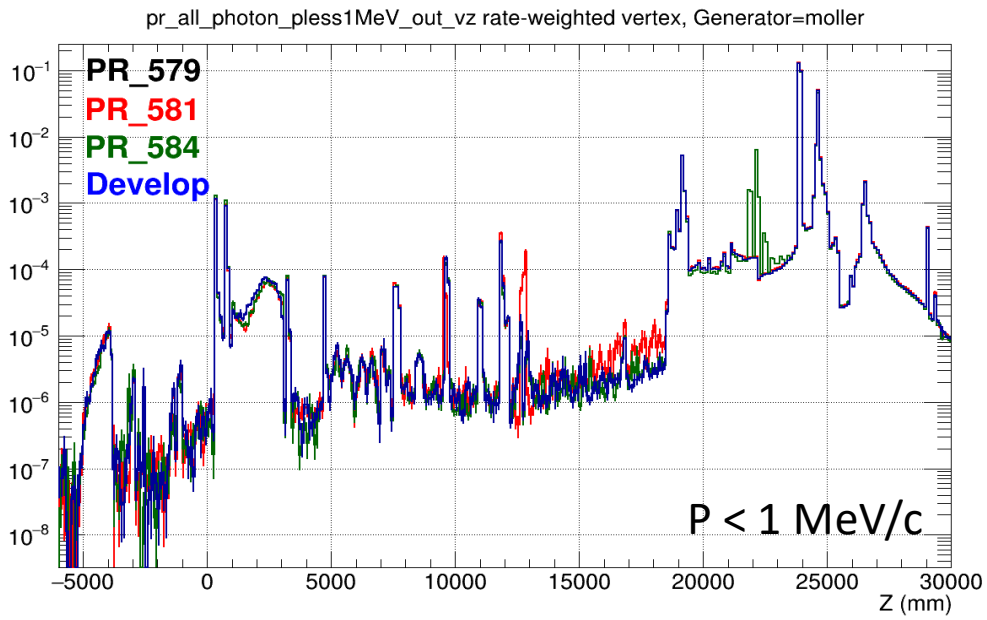
pr_all_p1to10MeV_out_vz rate-weighted vertex (Generator=beam)



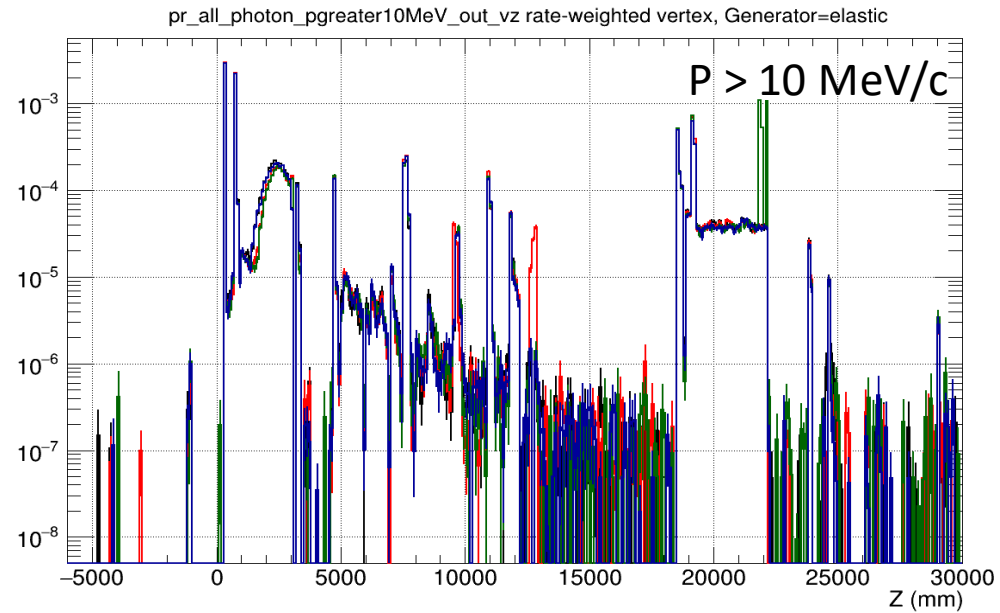
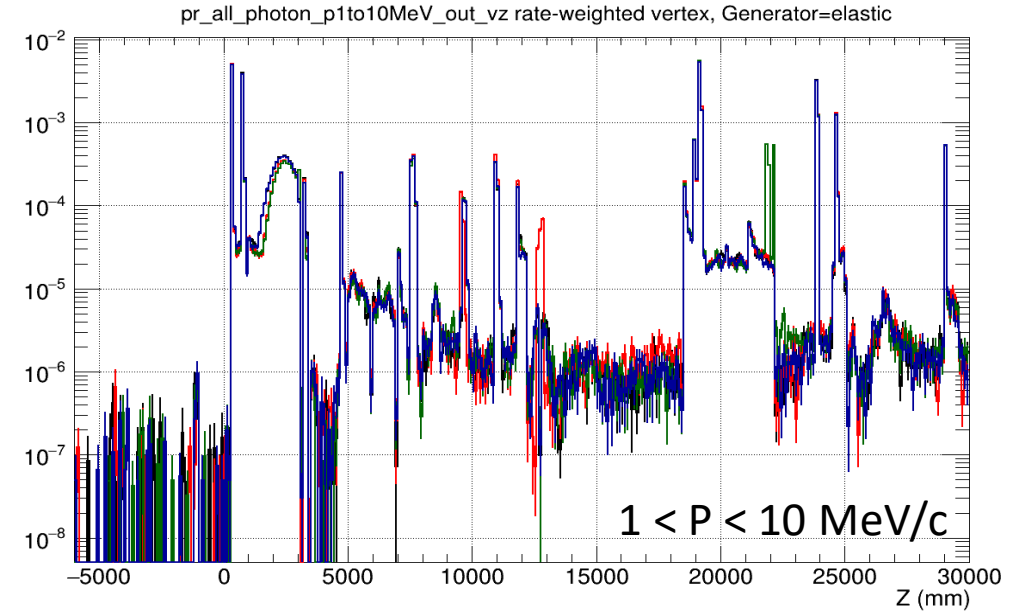
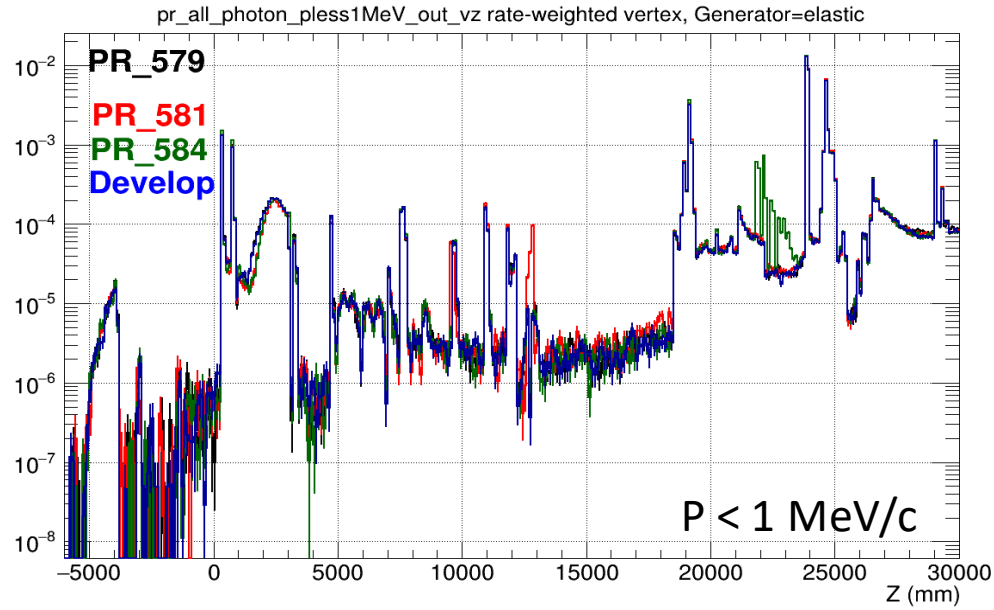
pr_all_pgreater10MeV_out_vz rate-weighted vertex (Generator=beam)



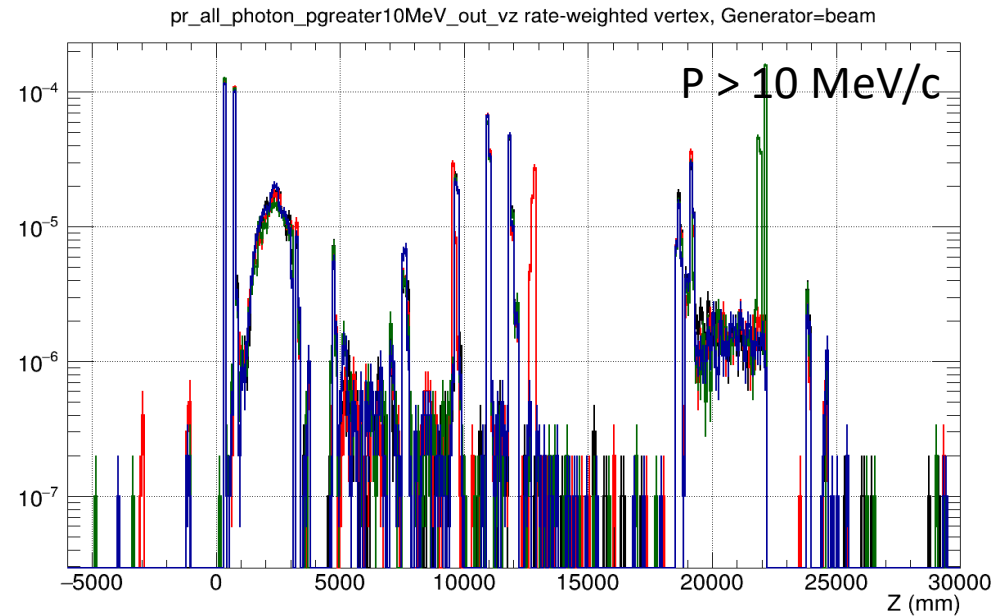
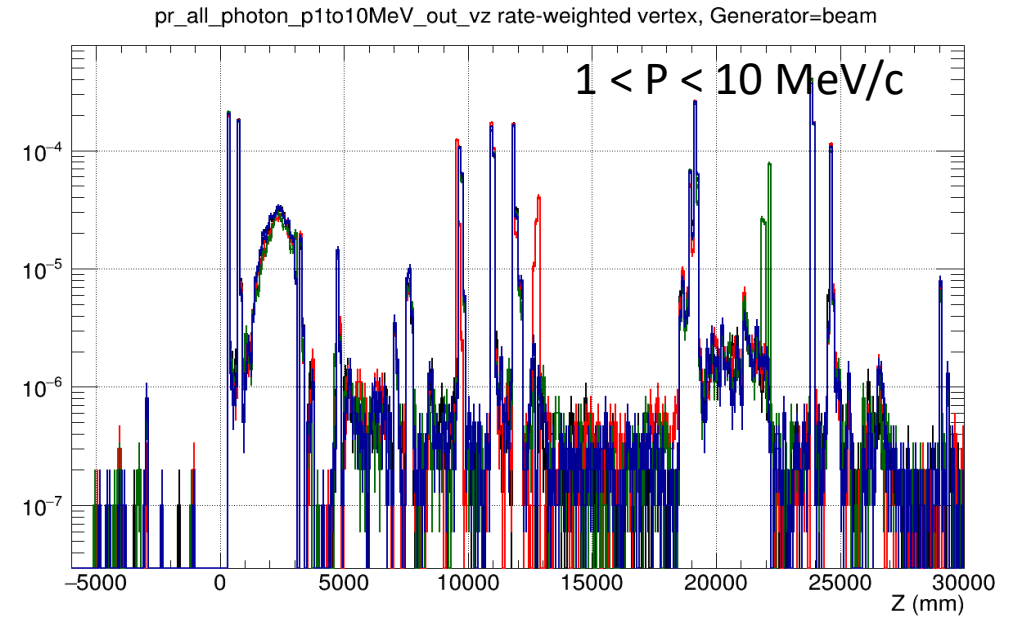
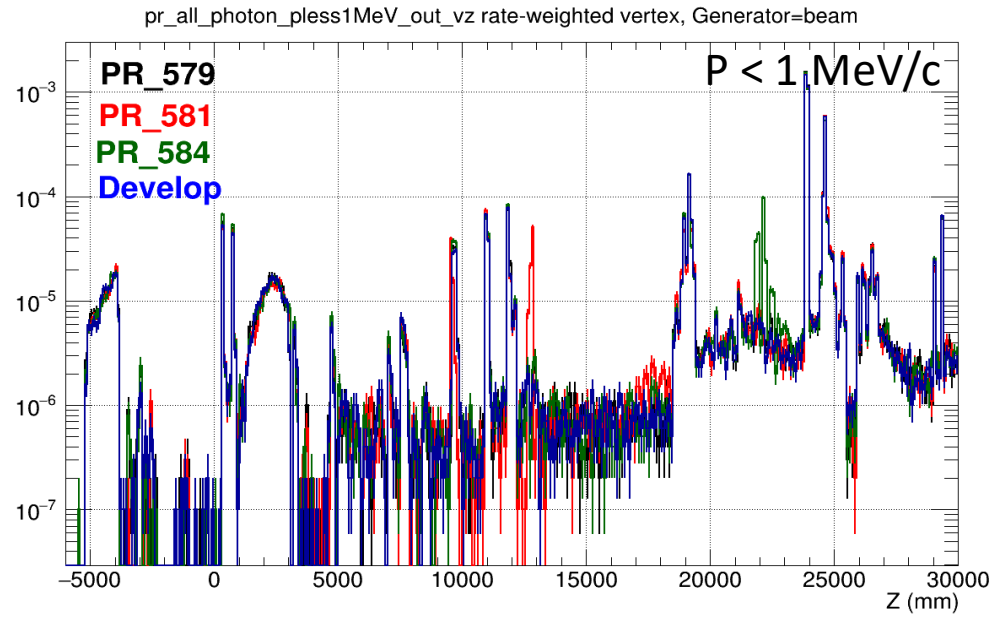
Z-vertex distribution of photons (Generator: Moller)



Z-vertex distribution of photons (Generator: Elastic)



Z-vertex distribution of photons (Generator: Beam)



Deconvolution analysis summary

REMOLL version	Name	Overall Asymmetry	Uncert [ppb]	Relative_uncer [ppb]
develop	moller	-34.9516	0.7119	-0.0204
	epElastic	-29.4638	1.7053	-0.0579
	epInelasticW1	-505.6043	70.5394	-0.1359
	epInelasticW2	-504.0259	35.9988	-0.0714
	epInelasticW3	-441.2040	70.3931	-0.1595
PR_579	moller	-34.9582	0.7039	-0.0201
	epElastic	-29.9086	1.5921	-0.0532
	epInelasticW1	-501.9220	65.2146	-0.1299
	epInelasticW2	-498.4399	33.8501	-0.0679
	epInelasticW3	-438.8236	71.7428	-0.1635
PR_581	moller	-34.9433	0.6991	-0.0200
	epElastic	-29.9681	1.6387	-0.0547
	epInelasticW1	-499.5619	68.8698	-0.1379
	epInelasticW2	-532.5514	36.4993	-0.0685
	epInelasticW3	-445.0530	69.0786	-0.1552
PR_584 (includes 579 & 581)	moller	-34.9738	0.7074	-0.0202
	epElastic	-28.9905	1.3332	-0.0460
	epInelasticW1	-469.5039	51.2155	-0.1091
	epInelasticW2	-534.2601	38.5163	-0.0721
	epInelasticW3	-441.4811	71.5417	-0.1620

Deconvolution analysis summary

REMOLL_develop

		REMOLL_develop												
R	S	Moller	e-p Elastic	e-p Inelastic [1,1.4)	e-p Inelastic [1.4,2.5)	e-p Inelastic [2.5,6)	e-AI Elastic	e-AI Quasielastic	e-AI Inelastic	piMinus	A_meas [ppb]	dA [ppb]	dA/A[%]	
		f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	A_meas [ppb]	dA [ppb]	dA/A[%]
1	C	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	95.5%	-202.1	137.8	68.18%	
1	T	2.2%	4.2%	17.3%	0.0%	0.2%	-0.2%	0.0%	0.0%	76.4%	-176.3	89.9	51.01%	
1	O	4.8%	305.4%	0.0%	0.0%	0.1%	-304.6%	0.0%	0.0%	94.3%	-7.9	29.3	369.13%	
2	C	0.0%	49.4%	34.1%	19.3%	0.0%	-1.4%	0.0%	-2.0%	0.6%	-540.6	11.8	2.18%	
2	T	0.0%	57.3%	30.5%	17.9%	0.0%	-3.6%	0.0%	-2.2%	0.2%	-353.6	3.9	1.10%	
2	O	0.0%	81.8%	27.0%	11.2%	0.0%	-17.6%	-0.1%	-2.4%	0.1%	-87.4	1.8	2.11%	
3	C	0.0%	32.7%	21.8%	41.6%	5.3%	-1.6%	0.0%	-1.8%	1.9%	-508.2	11.5	2.26%	
3	T	0.0%	47.3%	25.5%	32.3%	2.1%	-5.8%	0.0%	-2.0%	0.7%	-224.6	3.1	1.37%	
3	O	0.0%	52.4%	28.5%	30.8%	1.2%	-11.2%	0.0%	-2.1%	0.4%	-111.4	2.3	2.03%	
4	C	1.0%	32.5%	16.2%	17.0%	19.5%	-3.5%	0.0%	-0.9%	18.1%	-252.5	9.4	3.72%	
4	T	0.8%	44.2%	13.1%	25.2%	15.2%	-6.3%	0.0%	-1.2%	9.1%	-161.8	4.0	2.50%	
4	O	26.4%	41.5%	10.6%	19.4%	8.2%	-8.9%	0.0%	-1.0%	3.8%	-55.3	2.0	3.68%	
5	C	84.5%	5.2%	1.0%	1.5%	1.7%	-0.8%	0.0%	-0.1%	7.1%	-31.2	1.5	4.81%	
5	T	86.1%	5.9%	1.1%	1.5%	1.9%	-1.2%	0.0%	-0.1%	4.7%	-35.2	1.0	2.94%	
5	O	88.7%	6.8%	1.0%	1.4%	1.7%	-1.7%	0.0%	-0.1%	2.3%	-35.9	1.0	2.66%	
6	C	64.9%	12.8%	1.2%	2.9%	2.5%	-2.5%	0.0%	-0.3%	18.5%	-29.8	4.7	15.78%	
6	T	66.4%	11.4%	3.1%	3.0%	2.6%	-3.0%	0.0%	-0.2%	16.6%	-28.9	2.1	7.18%	
6	O	70.1%	16.8%	2.3%	2.4%	2.9%	-4.8%	0.0%	-0.2%	10.4%	-26.7	2.0	7.37%	

Overall				Covariance matrix					Process
Name	Asymmetry	uncert[ppb]	relative uncer						
moller	-34.9516	0.7119	-0.0204						
epElastic	-29.4638	1.7053	-0.0579	9.64E-12	-2.97E-12	9.61E-11	5.52E-12	-9.20E-11	
epInelasticW1	-505.6043	70.5394	-0.1395	-2.97E-12	5.53E-11	-2.09E-09	3.89E-10	-9.62E-10	
epInelasticW2	-504.0259	35.9988	-0.0714	9.61E-11	-2.09E-09	9.46E-08	-3.15E-08	5.00E-08	
epInelasticW3	-441.204	70.3931	-0.1595	5.52E-12	3.89E-10	-3.15E-08	2.47E-08	-2.97E-08	
				-9.20E-11	-9.62E-10	5.00E-08	-2.97E-08	9.43E-08	

Deconvolution analysis summary

REMOLL_PR_579

		REMOLL_PR_579												
R	S	Moller	e-p Elastic	-p Inelastic [1,1.4p	Inelastic [1.4,2.5,6	-p Inelastic [2.5,6	e-AI Elastic	e-AI Quasielastic	e-AI Inelastic	piMinus	A_meas [ppb]	dA [ppb]	dA/A[%]	
		f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	f*A [% of Am]	A_meas [ppb]	dA [ppb]	dA/A[%]
1	C	3.5%	0.0%	0.0%	0.0%	2.5%	-0.3%	0.0%	0.0%	94.4%	-618.7	275.1	44.46%	
1	T	5.8%	0.0%	0.0%	0.1%	0.3%	-1.3%	0.0%	0.0%	95.1%	-86.6	77.2	89.14%	
1	O	16.6%	1120.6%	0.0%	0.0%	0.4%	-1221.9%	0.0%	-0.3%	184.5%	-2.2	29.3	1319.14%	
2	C	0.0%	52.6%	31.0%	19.3%	0.0%	-1.4%	0.0%	-2.0%	0.5%	-513.6	11.7	2.27%	
2	T	0.0%	57.0%	32.1%	16.5%	0.0%	-3.5%	0.0%	-2.2%	0.2%	-353.8	3.9	1.09%	
2	O	0.0%	83.0%	24.8%	11.2%	0.0%	-16.8%	-0.1%	-2.2%	0.1%	-87.1	1.8	2.08%	
3	C	0.0%	30.8%	22.2%	43.4%	5.3%	-1.6%	0.0%	-1.8%	1.7%	-544.8	11.9	2.18%	
3	T	0.0%	46.9%	25.8%	32.5%	1.9%	-5.7%	0.0%	-2.0%	0.6%	-224.0	3.0	1.36%	
3	O	0.0%	52.8%	27.9%	30.4%	1.1%	-10.6%	0.0%	-2.1%	0.4%	-111.0	2.2	1.98%	
4	C	1.0%	37.5%	10.6%	17.8%	20.2%	-3.5%	0.0%	-0.9%	17.4%	-237.8	9.2	3.85%	
4	T	0.9%	43.5%	14.5%	24.4%	15.4%	-6.1%	0.0%	-1.2%	8.7%	-161.6	4.0	2.49%	
4	O	27.1%	43.6%	8.3%	19.2%	8.3%	-9.1%	0.0%	-1.0%	3.7%	-53.5	2.0	3.75%	
5	C	84.6%	5.1%	1.2%	1.6%	1.5%	-0.8%	0.0%	-0.1%	6.9%	-31.2	1.5	4.76%	
5	T	86.2%	5.7%	1.3%	1.5%	1.9%	-1.2%	0.0%	-0.1%	4.7%	-35.2	1.0	2.92%	
5	O	88.8%	7.0%	0.9%	1.2%	1.6%	-1.6%	0.0%	-0.1%	2.2%	-35.9	0.9	2.63%	
6	C	62.6%	11.8%	4.3%	3.6%	2.5%	-2.2%	0.0%	-0.2%	17.7%	-30.8	4.6	15.00%	
6	T	66.9%	12.6%	2.4%	2.6%	2.5%	-3.1%	0.0%	-0.2%	16.3%	-28.5	2.0	7.17%	
6	O	70.2%	17.1%	1.8%	2.6%	2.8%	-4.3%	0.0%	-0.2%	10.1%	-26.5	1.9	7.33%	

Overall

Name	Asymmetry	uncert[ppb]	relative uncer[ppb]	Covariance matrix					Process
moller	-34.9582	0.7039	-0.0201	9.42E-12	-2.50E-12	7.84E-11	4.92E-12	-8.50E-11	ee
epElastic	-29.9086	1.5921	-0.0532	-2.50E-12	4.82E-11	-1.80E-09	3.83E-10	-1.04E-09	epElastic
epInelasticW1	-501.922	65.2146	-0.1299	7.84E-11	-1.80E-09	8.09E-08	-2.85E-08	5.12E-08	epInelasticW1
epInelasticW2	-498.4399	33.8501	-0.0679	4.92E-12	3.83E-10	-2.85E-08	2.18E-08	-2.95E-08	epInelasticW2
epInelasticW3	-438.8236	71.7428	-0.1635	-8.50E-11	-1.04E-09	5.12E-08	-2.95E-08	9.79E-08	epInelasticW3

Deconvolution analysis summary

REMOLL_PR_581

REMOLL_PR_581														
R	S	Moller f*A [% of Am]	e-p Elastic f*A [% of Am]	-p Inelastic [1,1,4p f*A [% of Am]	-p Inelastic [1,4,2. f*A [% of Am]	-p Inelastic [2,5,6 f*A [% of Am]	e-AI Elastic f*A [% of Am]	e-AI Quasielastic f*A [% of Am]	e-AI Inelastic f*A [% of Am]	piMinus f*A [% of Am]	A_meas [ppb]	dA [ppb]	dA/A[%]	
1	C	3.5%	0.2%	30.0%	0.0%	0.0%	-0.7%	0.0%	0.0%	67.0%	-264.9	126.7	47.83%	
1	T	6.7%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	93.5%	-67.7	59.7	88.27%	
1	O	15.4%	1179.9%	73.0%	0.0%	0.4%	-1492.4%	-36.2%	0.0%	360.1%	-1.8	26.5	1473.49%	
2	C	0.0%	49.8%	32.0%	21.0%	0.0%	-1.4%	-2.0%	0.0%	0.7%	-529.0	11.6	2.20%	
2	T	0.0%	58.5%	30.5%	16.6%	0.0%	-3.6%	-2.2%	0.0%	0.2%	-346.1	3.8	1.11%	
2	O	0.0%	83.3%	24.8%	10.9%	0.0%	-16.9%	-2.2%	-0.1%	0.1%	-87.2	1.8	2.07%	
3	C	0.0%	33.6%	20.9%	42.1%	5.0%	-1.6%	-1.9%	0.0%	1.9%	-507.1	11.4	2.24%	
3	T	0.0%	47.4%	25.1%	32.5%	1.9%	-5.7%	-1.9%	0.0%	0.7%	-224.2	3.0	1.35%	
3	O	0.0%	52.8%	27.8%	30.5%	1.2%	-10.6%	-2.1%	0.0%	0.4%	-112.1	2.2	1.98%	
4	C	1.0%	35.1%	14.4%	16.6%	19.7%	-3.5%	-0.9%	0.0%	17.6%	-254.2	9.3	3.67%	
4	T	0.9%	44.4%	13.2%	24.5%	15.8%	-6.6%	-1.2%	0.0%	8.9%	-155.4	4.0	2.56%	
4	O	27.2%	42.2%	9.7%	18.8%	8.2%	-8.9%	-1.0%	0.0%	3.8%	-54.3	2.0	3.70%	
5	C	84.6%	4.8%	1.6%	1.3%	1.5%	-0.8%	-0.1%	0.0%	7.0%	-31.2	1.5	4.75%	
5	T	86.1%	6.0%	1.3%	1.3%	1.8%	-1.2%	-0.1%	0.0%	4.7%	-35.1	1.0	2.90%	
5	O	88.5%	6.9%	1.1%	1.3%	1.6%	-1.6%	-0.1%	0.0%	2.3%	-36.0	0.9	2.61%	
6	C	65.0%	10.8%	2.9%	2.7%	2.6%	-2.1%	-0.4%	0.0%	18.6%	-30.0	4.6	15.42%	
6	T	67.5%	12.0%	1.8%	2.9%	2.5%	-3.0%	-0.2%	0.0%	16.6%	-28.6	2.1	7.18%	
6	O	70.1%	16.4%	2.7%	2.4%	2.7%	-4.4%	-0.2%	0.0%	10.2%	-26.6	1.9	7.27%	

Overall				Covariance matrix					Process
Name	Asymmetry	uncert[ppb]	relative uncer						
moller	-34.9433	0.6991	-0.02	9.30E-12	-2.40E-12	7.66E-11	6.66E-12	-9.00E-11	ee
epElastic	-29.9681	1.6387	-0.0547	-2.40E-12	5.11E-11	-1.96E-09	4.06E-10	-9.46E-10	epElastic
epInelasticW1	-499.5619	68.8698	-0.1379	7.66E-11	-1.96E-09	9.02E-08	-3.18E-08	4.81E-08	epInelasticW1
epInelasticW2	-532.5514	36.4993	-0.0685	6.66E-12	4.06E-10	-3.18E-08	2.53E-08	-2.86E-08	epInelasticW2
epInelasticW3	-445.053	69.0786	-0.1552	-9.00E-11	-9.46E-10	4.81E-08	-2.86E-08	9.08E-08	epInelasticW3

Deconvolution analysis summary

REMOLL_PR_584 (includes 579 & 581)

REMOLL_PR_584													
R	S	Moller f*A [% of Am]	e-p Elastic f*A [% of Am]	-p Inelastic [1,1.4] f*A [% of Am]	e-p Inelastic [1.4,2.5] f*A [% of Am]	e-p Inelastic [2.5,6] f*A [% of Am]	e-AI Elastic f*A [% of Am]	e-AI Quasielastic f*A [% of Am]	e-AI Inelastic f*A [% of Am]	piMinus f*A [% of Am]	A_meas [ppb]	dA [ppb]	dA/A[%]
1	C	6.2%	0.7%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	93.1%	-146.5	146.7	100.10%
1	T	5.4%	0.2%	0.0%	6.1%	0.1%	-0.2%	0.0%	-0.3%	88.6%	-186.2	120.0	64.42%
1	O	8.8%	1177.0%	0.5%	0.0%	0.0%	-1226.1%	0.0%	0.0%	139.8%	-2.1	27.2	1290.80%
2	C	0.0%	48.9%	35.1%	18.9%	0.0%	-1.4%	0.0%	-2.0%	0.5%	-541.8	11.8	2.18%
2	T	0.0%	56.5%	32.8%	16.5%	0.0%	-3.7%	0.0%	-2.2%	0.1%	-354.9	3.9	1.10%
2	O	0.0%	83.9%	24.8%	11.2%	0.0%	-17.6%	-0.1%	-2.3%	0.1%	-85.6	1.8	2.12%
3	C	0.0%	32.3%	25.9%	38.3%	5.1%	-1.6%	0.0%	-1.7%	1.6%	-506.2	11.2	2.22%
3	T	0.0%	46.7%	26.0%	32.4%	2.0%	-5.7%	0.0%	-2.0%	0.6%	-228.7	3.0	1.33%
3	O	0.0%	53.5%	28.0%	29.9%	1.2%	-10.8%	0.0%	-2.1%	0.3%	-110.0	2.2	1.99%
4	C	0.9%	36.0%	14.7%	18.2%	18.0%	-3.4%	0.0%	-0.8%	16.5%	-254.6	9.2	3.60%
4	T	0.8%	44.6%	13.7%	24.5%	15.3%	-6.4%	0.0%	-1.2%	8.6%	-159.6	4.0	2.51%
4	O	26.8%	42.7%	8.9%	19.7%	8.3%	-9.1%	0.0%	-0.9%	3.7%	-54.0	2.0	3.72%
5	C	84.7%	4.9%	1.2%	1.7%	1.6%	-0.8%	0.0%	-0.1%	6.8%	-31.2	1.5	4.80%
5	T	85.6%	6.1%	1.7%	1.4%	1.9%	-1.2%	0.0%	-0.1%	4.6%	-35.4	1.0	2.91%
5	O	88.6%	6.8%	1.1%	1.4%	1.6%	-1.7%	0.0%	-0.1%	2.2%	-35.9	0.9	2.64%
6	C	63.9%	12.8%	4.2%	2.7%	2.5%	-2.3%	0.0%	-0.3%	16.6%	-30.6	4.7	15.42%
6	T	67.2%	12.7%	2.4%	2.4%	2.5%	-3.1%	0.0%	-0.2%	16.1%	-28.7	2.1	7.20%
6	O	71.1%	17.2%	1.7%	2.2%	2.8%	-4.6%	0.0%	-0.2%	9.8%	-26.2	2.0	7.45%

Overall				Covariance matrix					Process
Name	Asymmetry	uncert[ppb]	relative uncer[ppb]	9.52E-12	-1.74E-12	4.13E-11	1.98E-11	-1.15E-10	ee
moller	-34.9738	0.7074	-0.0202	-1.74E-12	3.38E-11	-1.12E-09	2.34E-10	-6.86E-10	epElastic
epElastic	-28.9905	1.3332	-0.046	4.13E-11	-1.12E-09	4.99E-08	-2.45E-08	3.64E-08	epInelasticW1
epInelasticW1	-469.5039	51.2155	-0.1091	1.98E-11	2.34E-10	-2.45E-08	2.82E-08	-3.21E-08	epInelasticW2
epInelasticW2	-534.2601	38.5163	-0.0721	-1.15E-10	-6.86E-10	3.64E-08	-3.21E-08	9.74E-08	epInelasticW3
epInelasticW3	-441.4811	71.5417	-0.162						

Summary

- The PRs 579, 581, 584 are compared with the default(/develop) REMOLL version
- Deconvolution analysis is performed, and no significant changes are observed on the overall asymmetry values for the different PRs
- The Z-vertex distributions for elastic, moller and beam generator are investigated
- Small changes in the Z-vertex distribution is observed in PR 584 and that is most likely due to the updated material budget

Thank you for your attention!!!