A_all Beta2 of C runs	dA_all Beta2	C runs	A_Q	sign of A_beta2*A_q	Run	A_unpol Q norm	A_LT	A_unpol norm+LT	LT consistent with A_raw?
1.78%	2.47%	Carbon	-1.28%	-1	72205	3.05%	-97.86%	97.98%	OK 2
0.02%	0.14%	Carbon	-0.06%	-1	72206	0.08%	-97.71%	97.71%	OK 2
0.14%	0.06%	C+He	0.04%	1	72287	0.10%	-0.04%	0.14%	OK 2
0.09%	0.06%	C+He	0.04%	1	72288	0.04%	-0.07%	0.11%	OK 2
0.21%	0.15%	C+He	0.05%	1	72289	0.16%	-0.04%	0.20%	OK 2
0.19%	0.07%	Carbon	0.05%	1	72290	0.14%	-0.05%	0.19%	OK 2
0.05%	0.09%	Carbon	0.05%	1	72291	0.00%	-0.01%	0.01%	OK 2
0.11%	0.07%	C+He	-0.02%	-1	72341	0.13%	-0.04%	0.17%	OK 2
0.06%	0.07%	C+He	-0.03%	-1	72342	0.09%	-0.03%	0.12%	OK 2
-0.08%	0.18%	C+He	-0.02%	1	72343	-0.07%	0.17%	-0.24%	OK
-0.05%	0.14%	C+He	-0.01%	1	72344	-0.04%	0.00%	-0.03%	NOT OK
0.00%	0.14%	C+He	-0.02%	1	72345	0.02%	-0.03%	0.05%	NOT OK
0.33%	0.40%	C+He	-0.05%	-1	72346	0.38%	0.42%	-0.04%	NOT OK
-0.06%	0.11%	C+He	-0.03%	1	72347	-0.02%	0.02%	-0.04%	OK
-0.06%	0.19%	C+He	-0.04%	1	72348	-0.01%	0.05%	-0.06%	OK
-0.20%	0.12%	Carbon	-0.06%	1	72375	-0.14%	-0.06%	-0.08%	NOT OK
0.16%	0.13%	Carbon	-0.06%	-1	72377	0.22%	0.02%	0.20%	NOT OK
-0.26%	0.07%	Carbon	-0.08%	1	72380	-0.18%	-0.04%	-0.14%	NOT OK
-0.33%	0.07%	Carbon	-0.07%	1	72381	-0.26%	-0.05%	-0.20%	NOT OK
-0.15%	0.11%	Carbon	-0.10%	1	72435	-0.05%	-0.08%	0.02%	NOT OK
-0.23%	0.08%	Carbon	-0.10%	1	72436	-0.13%	-0.09%	-0.05%	NOT OK
-0.19%	0.08%	C+He	-0.10%	1	72442	-0.09%	0.02%	-0.11%	OK
-0.27%	0.10%	C+He	-0.10%	1	72697	-0.17%	0.08%	-0.25%	OK
-0.07%	0.09%	C+He	-0.10%	1	72698	0.04%	0.08%	-0.04%	OK
-0.17%	0.05%	C+He	-0.09%	1	72705	-0.08%	0.05%	-0.13%	OK
-0.13%	0.07%	Carbon	-0.09%	1	72754	-0.04%	0.21%	-0.24%	OK
-0.18%	0.09%	Carbon	-0.10%	1	72782	-0.08%	0.14%	-0.22%	OK
-0.88%	0.52%	Carbon	-0.06%	1	72912	-0.82%	-0.51%	-0.31%	NOT OK
0.05%	0.12%	C+He	-0.03%	-1	72937	0.08%	-0.07%	0.14%	OK 2
0.13%	0.14%	Carbon	-0.03%	-1	72940	0.15%	-0.16%	0.31%	OK 2
-0.22%	0.28%	C+He	-0.03%	1	72952	-0.20%	-0.19%	0.00%	NOT OK
0.05%	0.14%	Carbon	-0.04%	-1	72953	0.08%	-0.11%	0.20%	OK 2
0.06%	0.22%	Carbon	-0.04%	-1	72954	0.10%	0.00%	0.10%	NOT OK
-0.14%	0.12%	Carbon	-0.05%	1	72955	-0.09%	-0.06%	-0.03%	NOT OK
-0.42%	0.14%	C+He	-0.08%	1	72970	-0.34%	-0.04%	-0.30%	NOT OK
-0.02%	0.18%	C+He	-0.07%	1	72971	0.06%	-0.03%	0.08%	NOT OK
-0.72%	0.18%	C+He	-0.08%	1	72972	-0.65%	-0.14%	-0.51%	NOT OK
-0.09%	0.09%	C+He	-0.02%	1	72993	-0.07%	-0.05%	-0.02%	NOT OK
0.02%	0.10%	Carbon	-0.02%	-1	72994	0.03%	-0.08%	0.11%	OK 2
0.11%	0.10%	Carbon	-0.01%	-1	72995	0.12%	-0.09%	0.21%	OK 2
-0.22%	0.17%	C+He	-0.06%	1	73006	-0.16%	-0.08%	-0.08%	NOT OK
-0.18%	0.13%	C+He	-0.05%	1	73008	-0.13%	-0.12%	-0.01%	NOT OK
0.06%	0.11%	C+He	-0.05%	-1	73009	0.11%	-0.12%	0.23%	OK 2
0.00%	0.11%	C+He	-0.03%	1	73026	0.03%	-0.12%	0.15%	NOT OK
-0.06%	0.14%	Carbon	-0.03%	1	73027	-0.03%	-0.06%	0.03%	NOT OK
			N(opposite sign)	11				N(OK)	24
			N(same signs)	32				N(Not OK)	21

<A_Q>	-0.043%	Non-NH3 <A_Beta2>	-0.058%	+/-	0.015%
<|A_Q|>	0.053%	Q normalized	-0.019%	+/-	0.015%
(from BCM1)		With LT	0.000%	+/-	0.015%

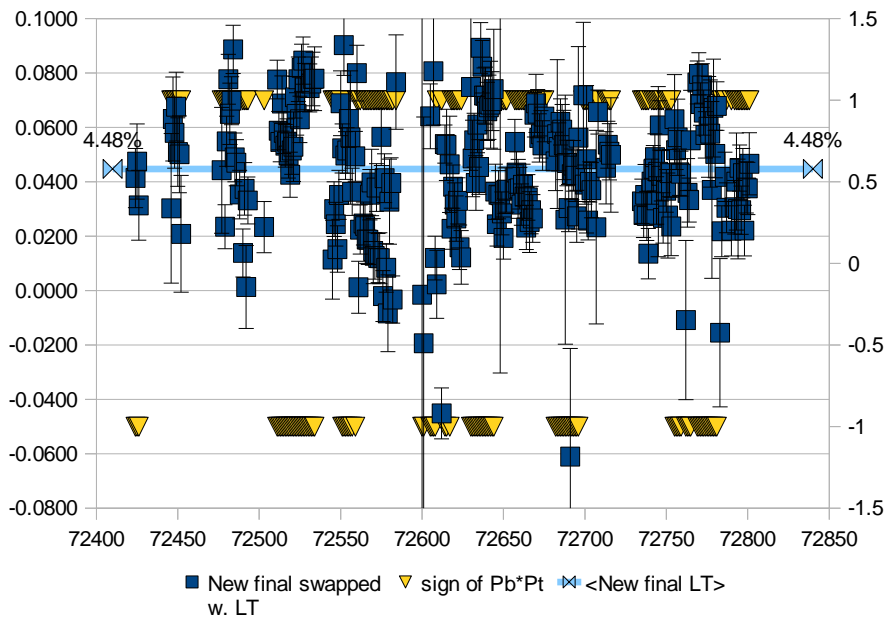Shaded runs were used in previous study: <A_Beta2> -0.15% +/- 0.06%

Excluded runs

Swapped helicity labels?	LT- = h-/538	LT correct first?		Optimize LT?	c in c*510 – 538
Y		N		Y	0.986089

A_all Beta2 of C runs	dA_all Beta2	C runs	A_Q	sign of A_beta2*A_q	Run	A_unpol Q norm	A_LT	A_unpol norm+LT	LT consistent with A_raw?
1.78%	2.47%	Carbon	1.28%	1	72205	0.50%	-97.86%	97.88%	OK 2
0.02%	0.14%	Carbon	0.06%	1	72206	-0.05%	-97.71%	97.71%	OK 2
0.14%	0.06%	C+He	-0.04%	-1	72287	0.18%	-0.12%	0.30%	OK 2
0.09%	0.06%	C+He	-0.04%	-1	72288	0.13%	-0.15%	0.27%	OK 2
0.21%	0.15%	C+He	-0.05%	-1	72289	0.26%	-0.12%	0.38%	OK 2
0.19%	0.07%	Carbon	-0.05%	-1	72290	0.23%	-0.13%	0.36%	OK 2
0.05%	0.09%	Carbon	-0.05%	-1	72291	0.10%	-0.09%	0.18%	OK 2
0.11%	0.07%	C+He	0.02%	1	72341	0.08%	-0.12%	0.20%	OK 2
0.06%	0.07%	C+He	0.03%	1	72342	0.02%	-0.11%	0.13%	OK 2
-0.08%	0.18%	C+He	0.02%	-1	72343	-0.10%	0.10%	-0.20%	OK
-0.05%	0.14%	C+He	0.01%	-1	72344	-0.06%	-0.08%	0.02%	NOT OK
0.00%	0.14%	C+He	0.02%	-1	72345	-0.02%	-0.11%	0.09%	NOT OK
0.33%	0.40%	C+He	0.05%	1	72346	0.28%	0.34%	-0.06%	NOT OK
-0.06%	0.11%	C+He	0.03%	-1	72347	-0.09%	-0.06%	-0.03%	NOT OK
-0.06%	0.19%	C+He	0.04%	-1	72348	-0.10%	-0.03%	-0.07%	NOT OK
-0.20%	0.12%	Carbon	0.06%	-1	72375	-0.25%	-0.14%	-0.12%	NOT OK
0.16%	0.13%	Carbon	0.06%	1	72377	0.11%	-0.06%	0.17%	OK 2
-0.26%	0.07%	Carbon	0.08%	-1	72380	-0.34%	-0.12%	-0.22%	NOT OK
-0.33%	0.07%	Carbon	0.07%	-1	72381	-0.40%	-0.13%	-0.27%	NOT OK
-0.15%	0.11%	Carbon	0.10%	-1	72435	-0.25%	-0.16%	-0.10%	NOT OK
-0.23%	0.08%	Carbon	0.10%	-1	72436	-0.33%	-0.17%	-0.16%	NOT OK
-0.19%	0.08%	C+He	0.10%	-1	72442	-0.28%	-0.06%	-0.23%	NOT OK
-0.27%	0.10%	C+He	0.10%	-1	72697	-0.38%	0.00%	-0.38%	OK
-0.07%	0.09%	C+He	0.10%	-1	72698	-0.17%	0.00%	-0.17%	OK
-0.17%	0.05%	C+He	0.09%	-1	72705	-0.26%	-0.03%	-0.22%	NOT OK
-0.13%	0.07%	Carbon	0.09%	-1	72754	-0.22%	0.13%	-0.34%	OK
-0.18%	0.09%	Carbon	0.10%	-1	72782	-0.28%	0.06%	-0.35%	OK
-0.88%	0.52%	Carbon	0.06%	-1	72912	-0.94%	-0.59%	-0.36%	NOT OK
0.05%	0.12%	C+He	0.03%	1	72937	0.02%	-0.14%	0.16%	OK 2
0.13%	0.14%	Carbon	0.03%	1	72940	0.10%	-0.24%	0.34%	OK 2
-0.22%	0.28%	C+He	0.03%	-1	72952	-0.25%	-0.27%	0.02%	NOT OK
0.05%	0.14%	Carbon	0.04%	1	72953	0.01%	-0.19%	0.20%	OK 2
0.06%	0.22%	Carbon	0.04%	1	72954	0.02%	-0.08%	0.10%	OK 2
-0.14%	0.12%	Carbon	0.05%	-1	72955	-0.19%	-0.14%	-0.05%	NOT OK
-0.42%	0.14%	C+He	0.08%	-1	72970	-0.49%	-0.12%	-0.38%	NOT OK
-0.02%	0.18%	C+He	0.07%	-1	72971	-0.09%	-0.10%	0.02%	NOT OK
-0.72%	0.18%	C+He	0.08%	-1	72972	-0.80%	-0.22%	-0.59%	NOT OK
-0.09%	0.09%	C+He	0.02%	-1	72993	-0.12%	-0.13%	0.02%	NOT OK
0.02%	0.10%	Carbon	0.02%	1	72994	0.00%	-0.16%	0.16%	OK 2
0.11%	0.10%	Carbon	0.01%	1	72995	0.10%	-0.17%	0.26%	OK 2
-0.22%	0.17%	C+He	0.06%	-1	73006	-0.29%	-0.16%	-0.13%	NOT OK
-0.18%	0.13%	C+He	0.05%	-1	73008	-0.23%	-0.19%	-0.04%	NOT OK
0.06%	0.11%	C+He	0.05%	1	73009	0.00%	-0.20%	0.20%	OK 2
0.00%	0.11%	C+He	0.03%	-1	73026	-0.04%	-0.20%	0.16%	NOT OK
-0.06%	0.14%	Carbon	0.03%	-1	73027	-0.09%	-0.14%	0.05%	NOT OK

| | | | N(opposite sign) | 32 | | | | N(OK) | 22 |
| | | | N(same signs) | 11 | | | | N(Not OK) | 23 |

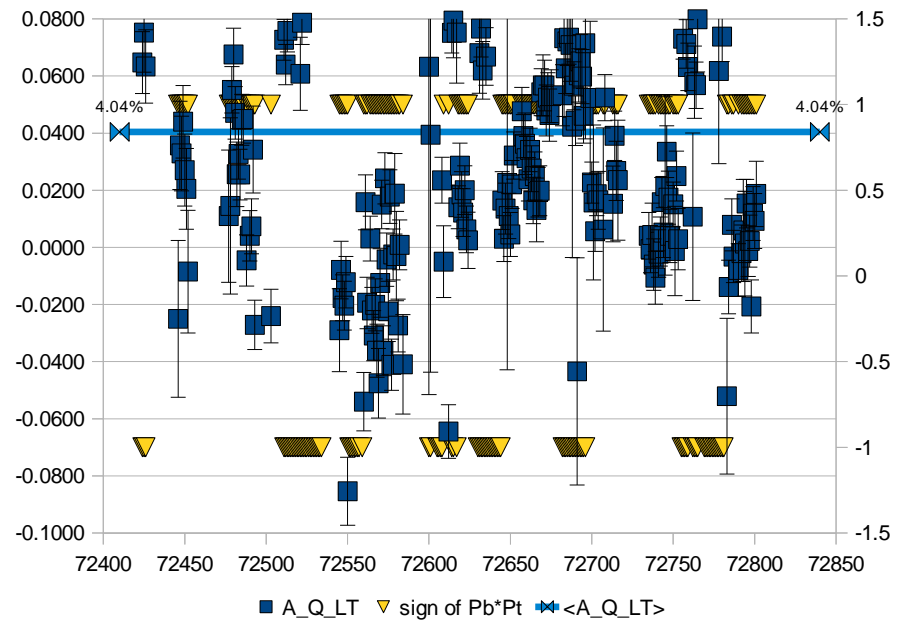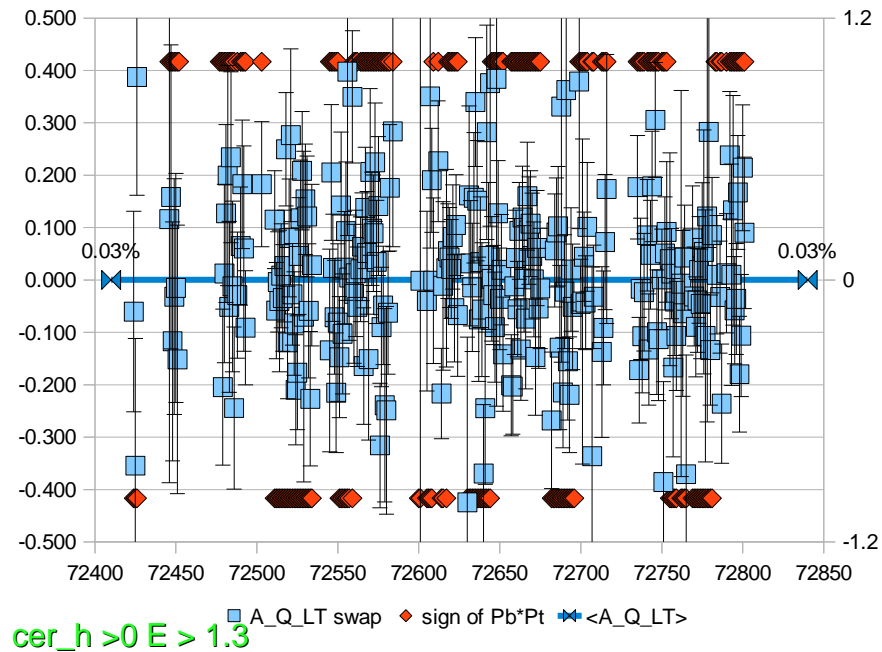|									
<A_Q>	0.043%		Non-NH3 <A_Beta2>	-0.058%	+/-	0.015%			
<|A_Q|>	0.053%		Q normalized	-0.098%	+/-	0.015%			
	(from BCM1)		With LT	0.000%	+/-	0.015%			

Shaded runs were used in previous study: <A_Beta2>   -0.15%   +/-   0.06%
Excluded runs

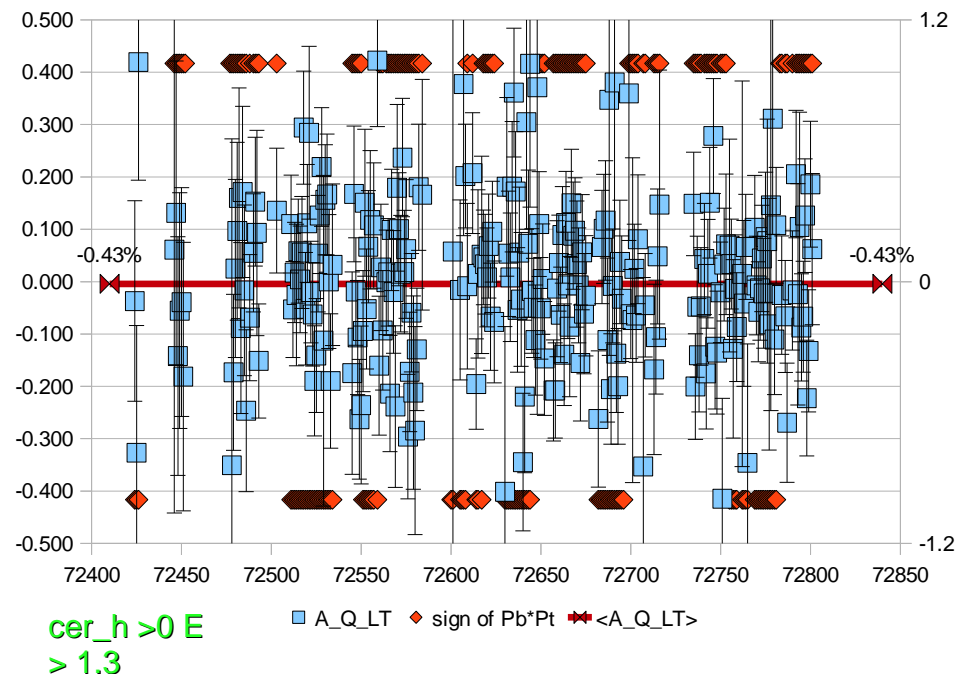| Swapped helicity labels?	LT- = h-/538	LT correct first?		Optimize LT?	c in c*510 – 538
N		N		Y	0.986868

LT 0.986089 (C optimum),with LT- = h-/538,
no A_false, Q norm. swap
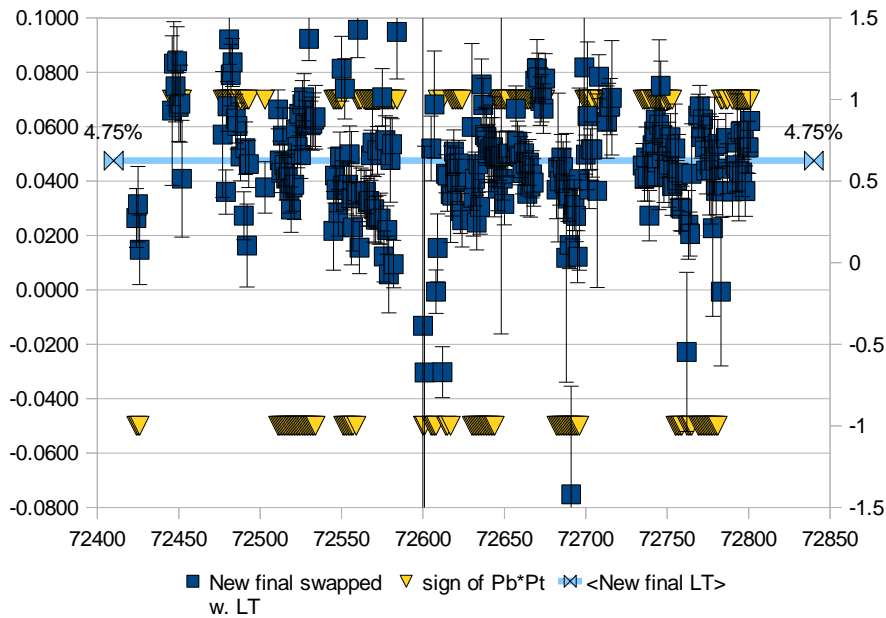
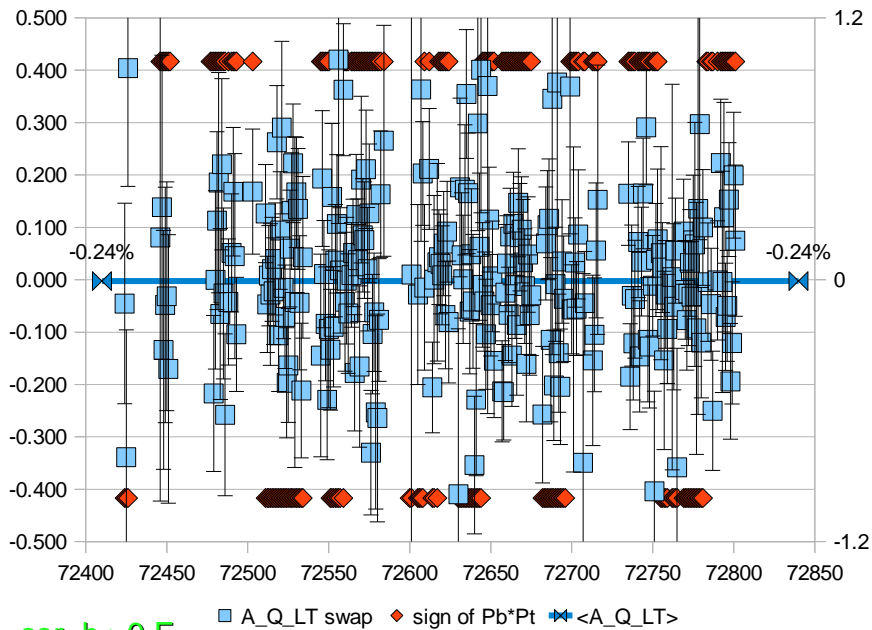LT 0.986868 (C optimum),with LT- = h-/538,
no A_false, Q norm. NO swap

cer_h >0 E > 1.3

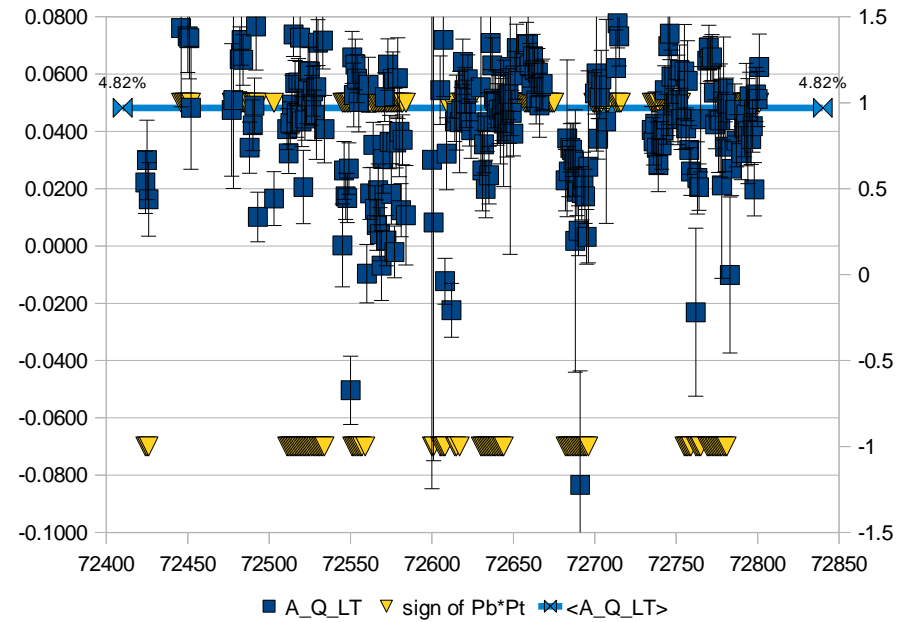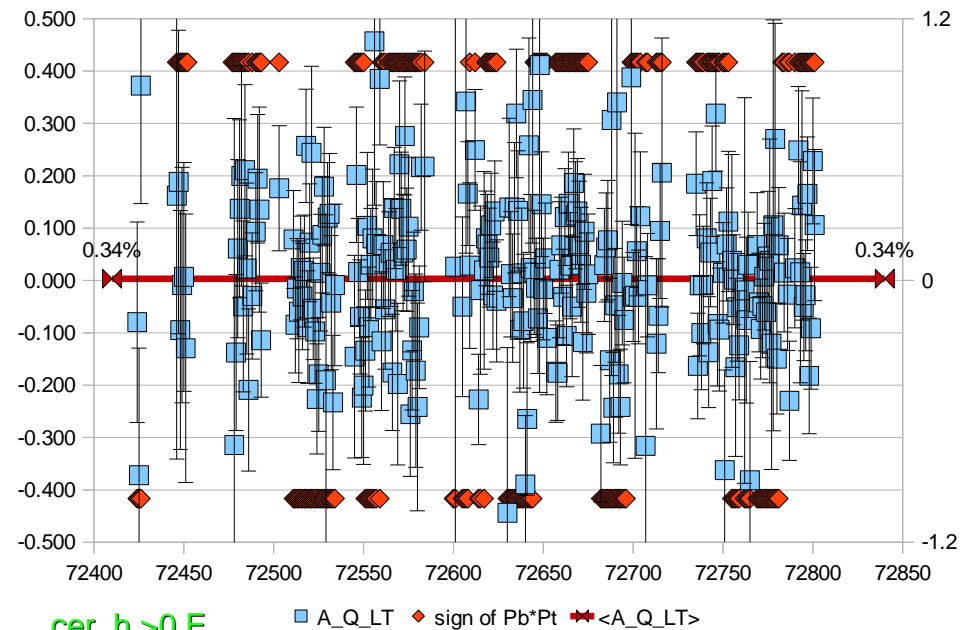cer_h >0 E
> 1.3

LT 0.986089 (C optimum),LT- = h-/538,
A_false =0.09%, sigma 3.62%, Q norm. swap
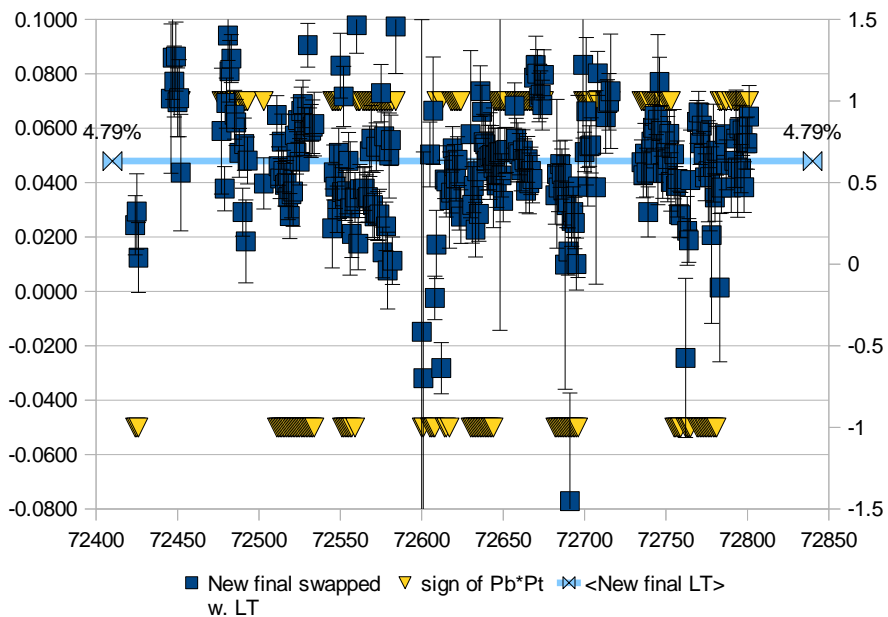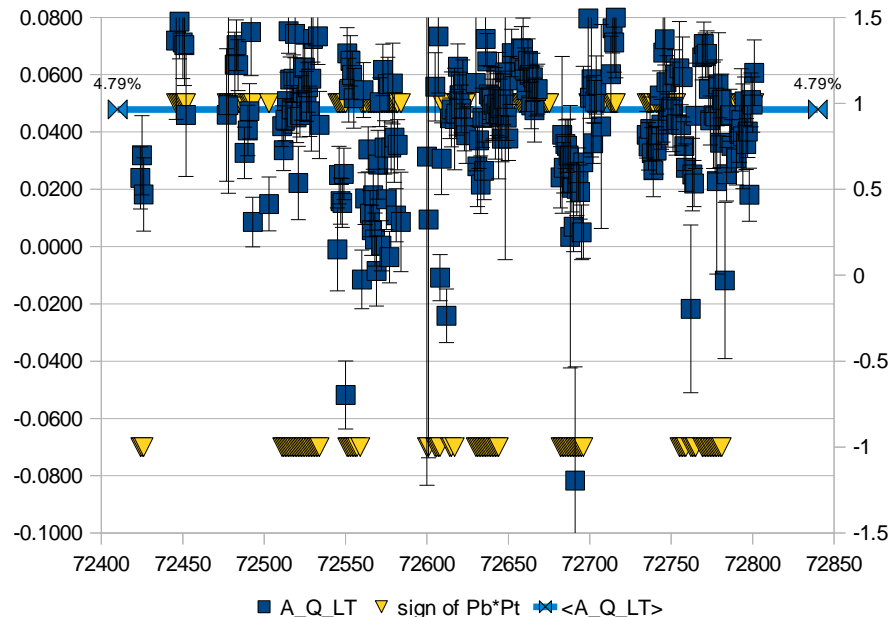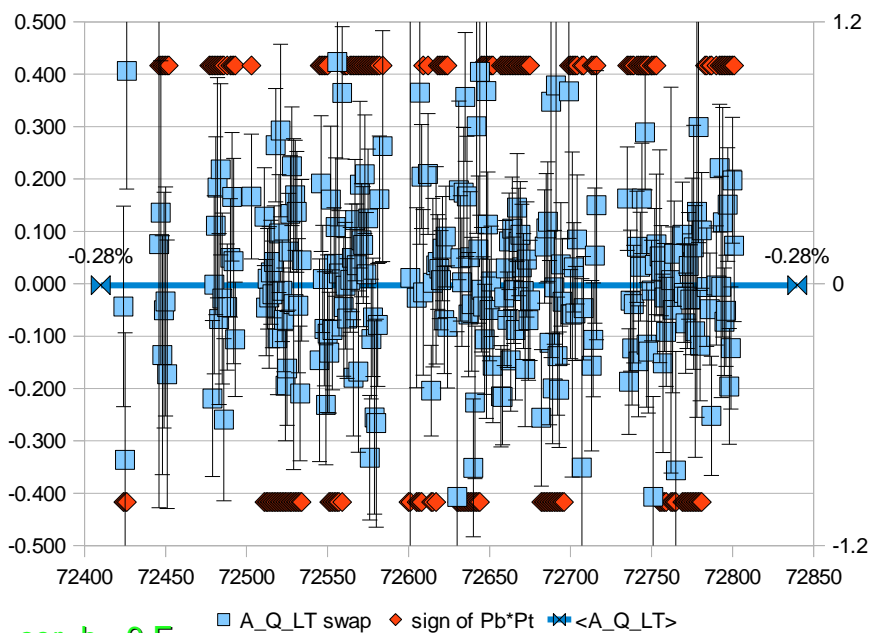
LT 0.986868 (C optimum),with LT- = h-/538,
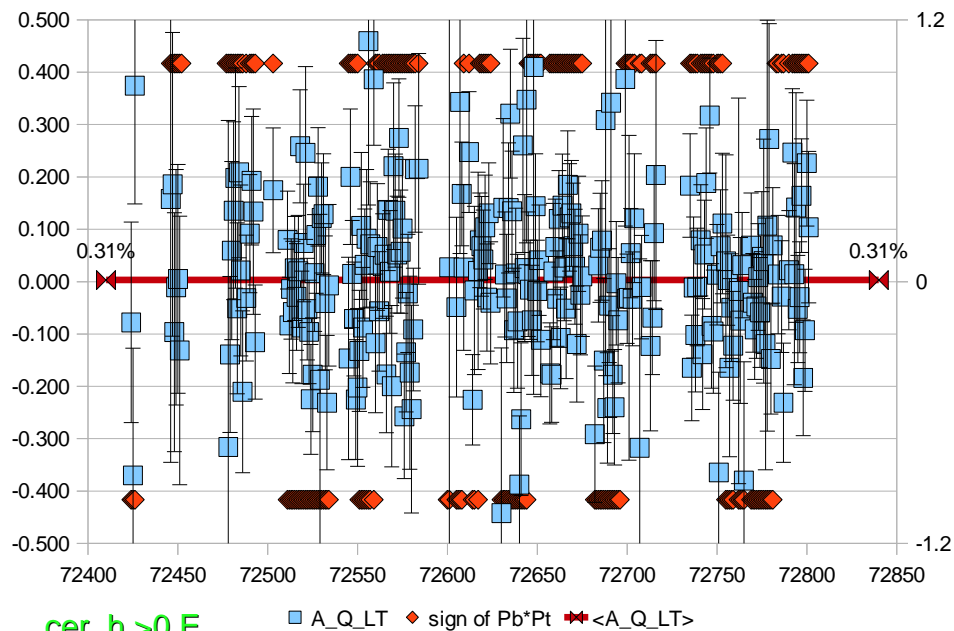A_false = 0.255%, sigma 4.53%, Q norm. NO swap

cer_h >0 E
> 1.3

cer_h >0 E
> 1.3

LT 0.986089 (C optimum),LT- = h-/538,
A_false =0.10%, sigma 3.63%, Q norm. swap

LT 0.986868 (C optimum),with LT- = h-/538,
A_false = 0.245%, sigma 4.53%, Q norm. NO swap

cer_h >0 E
> 1.3

cer_h >0 E
> 1.3

<A_Q>	-0.043%	Non-NH3 <A_Beta2>	-0.058%	+/-	0.015%
<|A_Q|>	0.053%	Q normalized	-0.019%	+/-	0.015%
	(from BCM1)	With LT	0.000%	+/-	0.015%

Swapped helicity labels?	LT- = h-/538	LT correct first?		Optimize LT?	c in c*510 − 538
Y		N		Y	0.986089

<A_Q>	0.043%	Non-NH3 <A_Beta2>	-0.058%	+/-	0.015%
<|A_Q|>	0.053%	Q normalized	-0.098%	+/-	0.015%
	(from BCM1)	With LT	0.000%	+/-	0.015%

Swapped helicity labels?	LT- = h-/538	LT correct first?		Optimize LT?	c in c*510 − 538
N		N		Y	0.986868