

Contents

1	Notations	2
2	Summary	3
3	Regression(5bpm) vs Dithering	4
4	Lagrange(6bpm) vs Dithering	5
5	Lagrange(allbpm) vs Dithering	6
6	Regression(allbpm) vs Dithering	7
7	Regression(5bpm) vs Regression(6bpm)	8
8	Regression(allbpm) vs Regression(5bpm)	9
9	Lagrange(6bpm) vs Regression(6bpm)	10
10	Lagrange(allbpm) vs Regression(allbpm)	11
11	Lagrange(6bpm) vs Lagrange(allbpm)	12

1 Notations

- $\Delta A_i = A_i^I - A_i^{II}$: difference in corrected asymmetry central values between Method-I and Method-II in i -th minirun.
- $\langle \Delta A \rangle$: averaged ΔA_i over miniruns in a slug

$$\langle \Delta A \rangle = \frac{1}{N} \sum_i^N \Delta A_i.$$

- $\sqrt{\langle (\Delta A)^2 \rangle}$: averaged distance between two methods over N miniruns in a slug

$$\sqrt{\langle (\Delta A)^2 \rangle} = \sqrt{\frac{\sum_i^N (A_i^I - A_i^{II})^2}{N}}.$$

- $\sigma(\langle \Delta A \rangle)$: error bar on $\langle \Delta A \rangle$

$$\sigma(\langle \Delta A \rangle) = \frac{\sqrt{\langle (\Delta A)^2 \rangle}}{\sqrt{N}}.$$

where N is the number of miniruns in a given slug.

- A_{PV} sign correction: corrected according to insertable half-wave plate and Wien flip.

2 Summary

	$\Delta A(\text{ppb})$	$\sigma(\Delta A)(\text{ppb})$	χ^2	NDof
dit vs reg_5bpm	-3.1	2.7	126.2	95
dit vs lagr_6bpm	0.1	0.5	89.7	95
dit vs lagr_all	2.9	3.5	86.6	95
dit vs reg_all	1.0	3.9	87.1	95
reg_5bpm vs reg_6bpm	-0.3	0.4	105.3	95
reg_5bpm vs reg_all	5.5	2.6	104.0	95
lagr_6bpm vs reg_6bpm	-1.9	2.7	126.5	95
lagr_all vs reg_all	-0.8	1.2	91.0	95
lagr_6bpm vs lagr_all	4.3	3.3	107.5	95
Fixed Parameter				
dit vs reg_5bpm	0	0	127.5	96
dit vs lagr_6bpm	0	0	89.7	96
dit vs lagr_all	0	0	87.2	96
dit vs reg_all	0	0	87.2	96
reg_5bpm vs reg_6bpm	0	0	105.9	96
reg_5bpm vs reg_all	0	0	108.6	96
lagr_6bpm vs reg_6bpm	0	0	126.9	96
lagr_all vs reg_all	0	0	91.4	96
lagr_6bpm vs lagr_all	0	0	109.1	96

Table 1: Grand Averaged over slugs

3 Regression(5bpm) vs Dithering

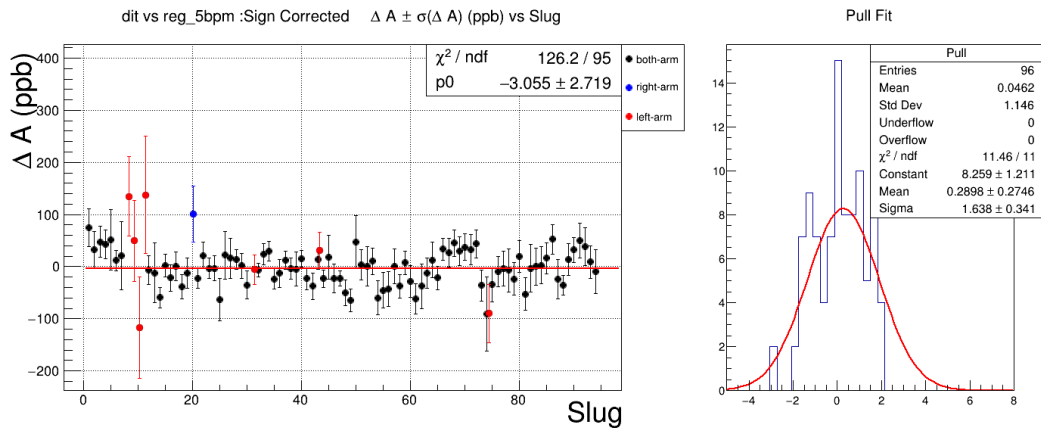


Figure 1: Free parameter fit over slugs

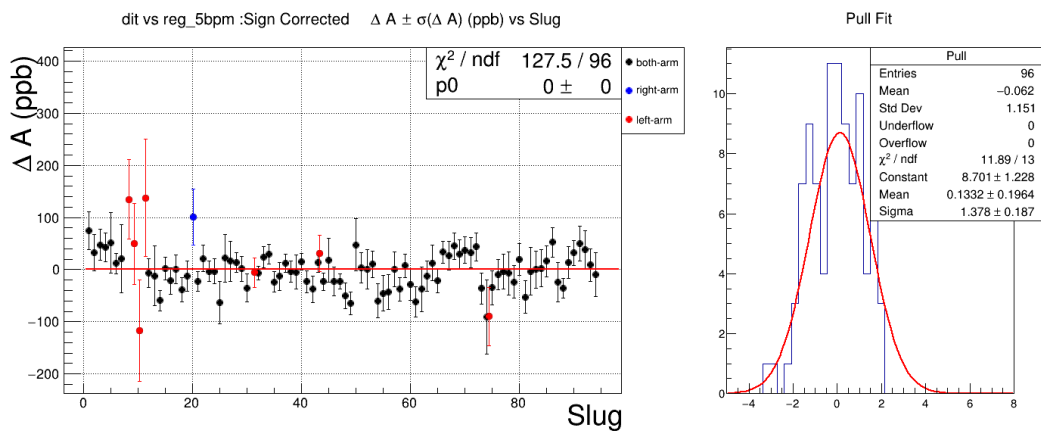
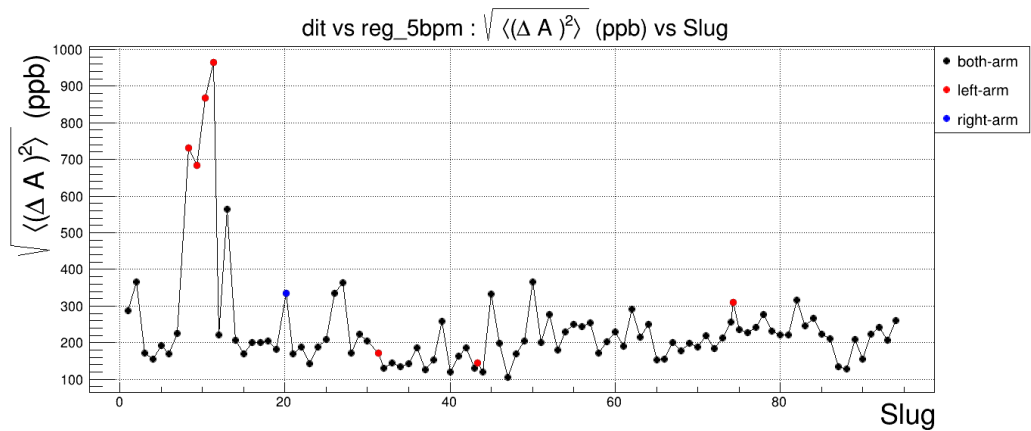


Figure 2: Fixed parameter fit over slugs



4 Lagrange(6bpm) vs Dithering

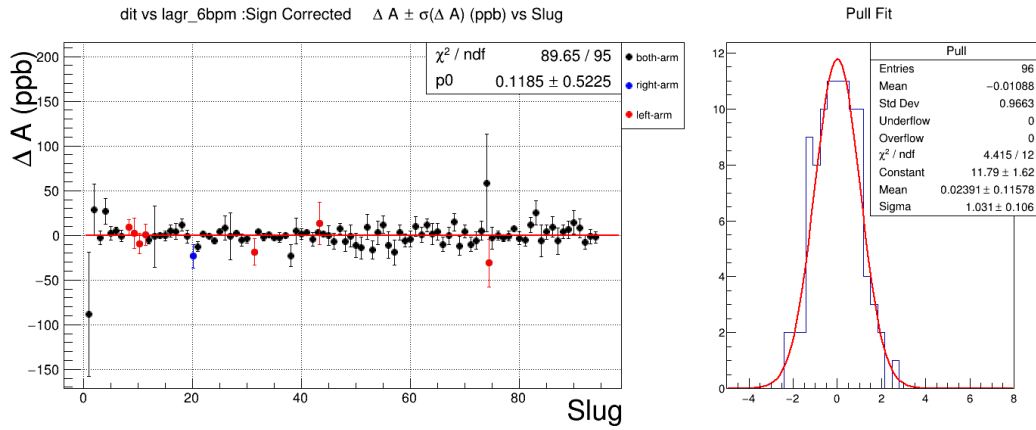


Figure 3: Free parameter fit over slugs

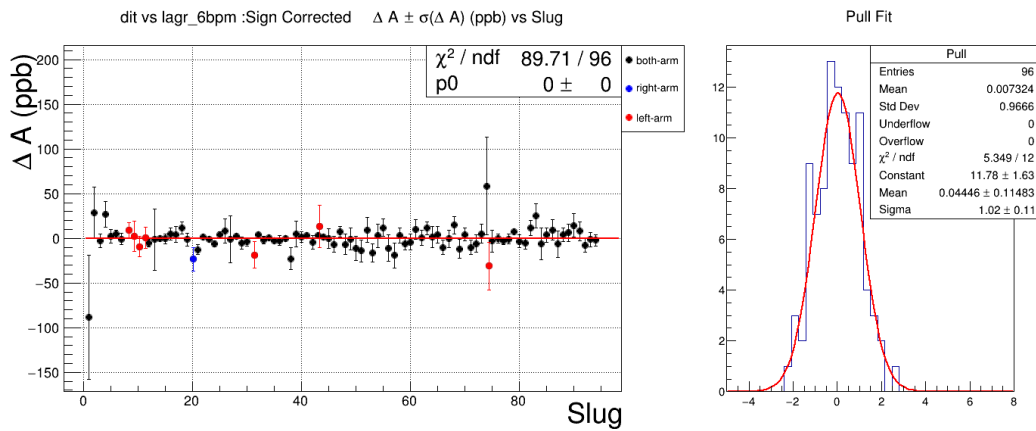
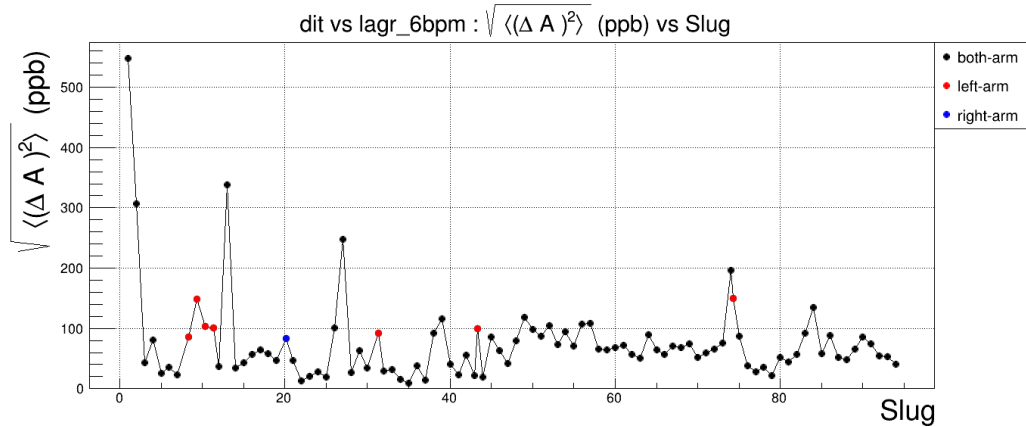


Figure 4: Fixed parameter fit over slugs



5 Lagrange(allbpm) vs Dithering

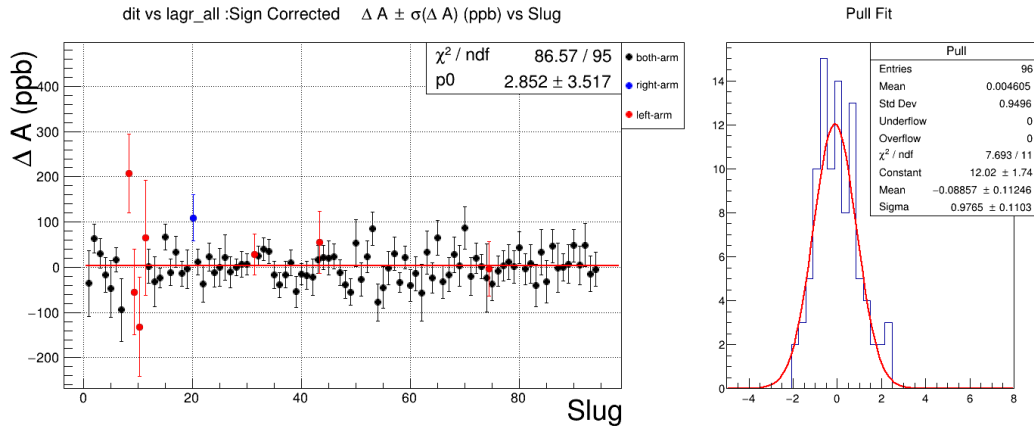


Figure 5: Free parameter fit over slugs

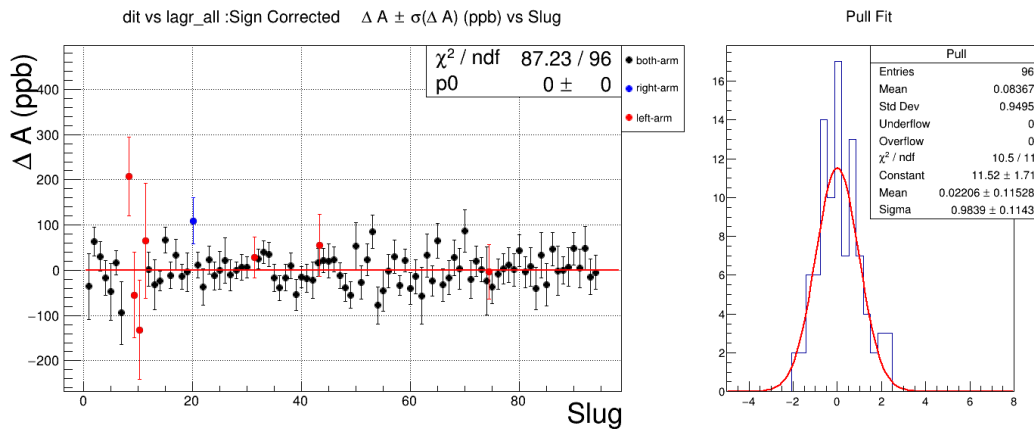
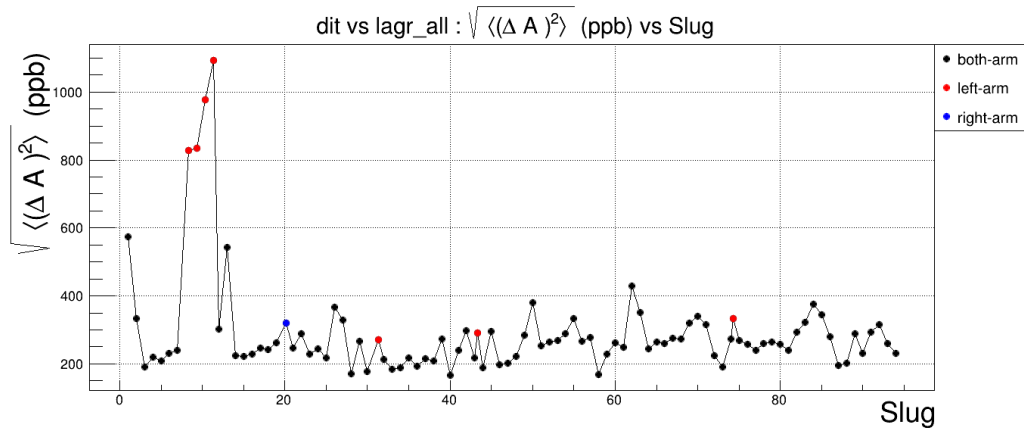


Figure 6: Fixed parameter fit over slugs



6 Regression(allbpm) vs Dithering

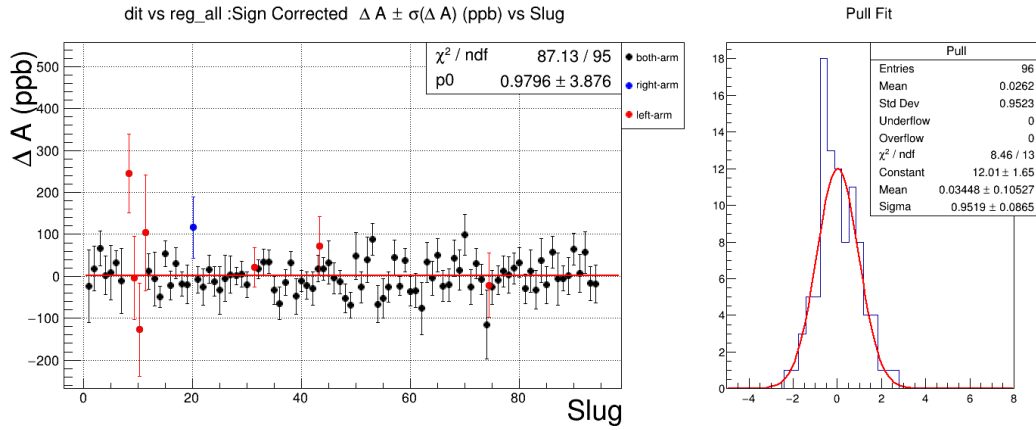


Figure 7: Free parameter fit over slugs

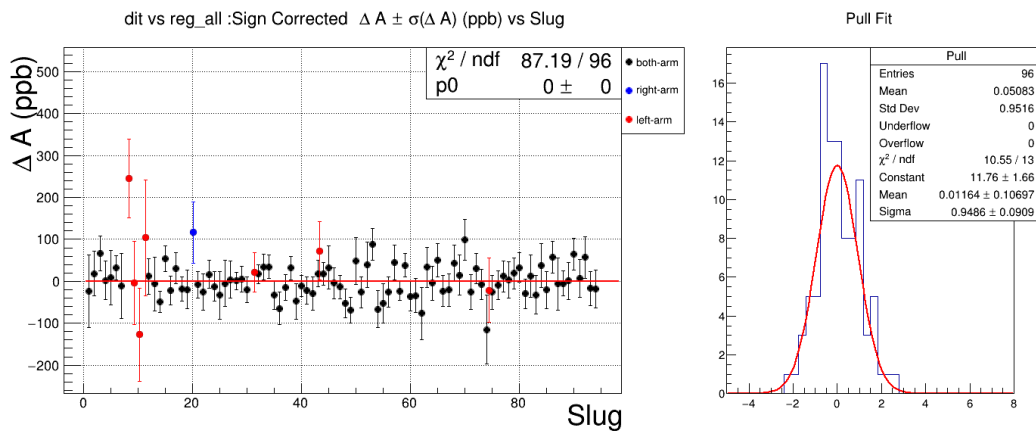
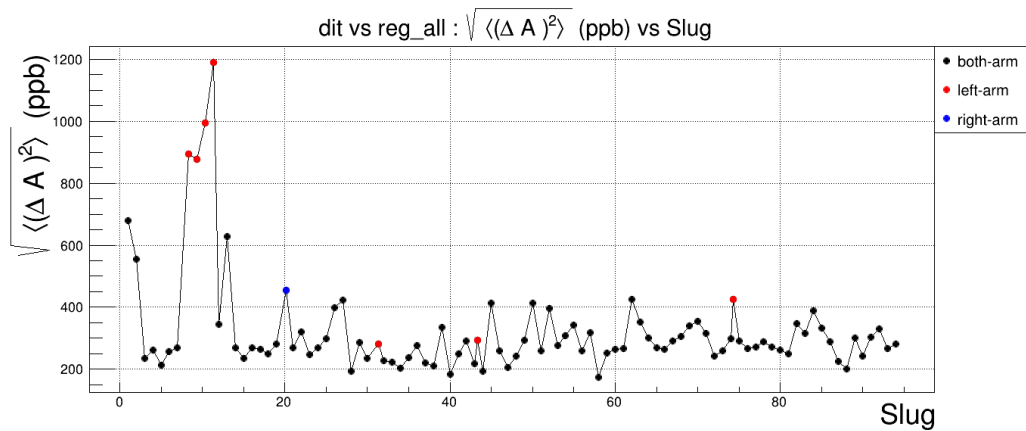


Figure 8: Fixed parameter fit over slugs



7 Regression(5bpm) vs Regression(6bpm)

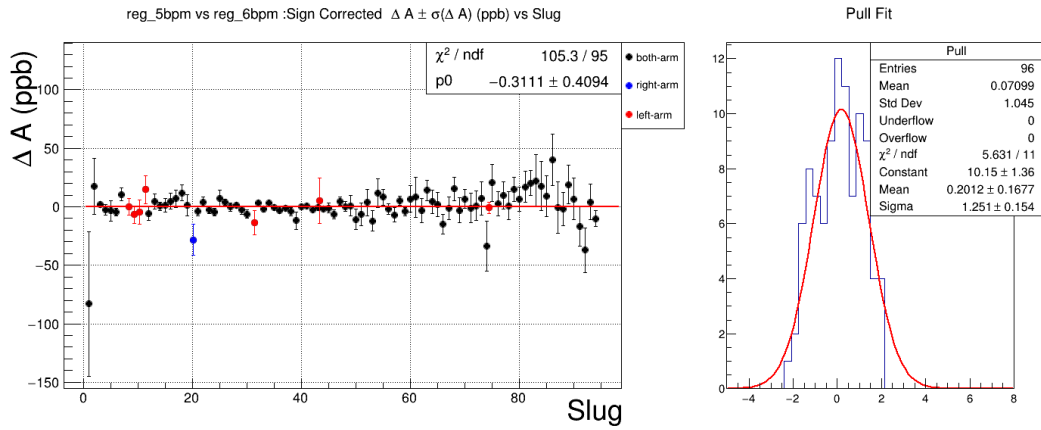


Figure 9: Free parameter fit over slugs

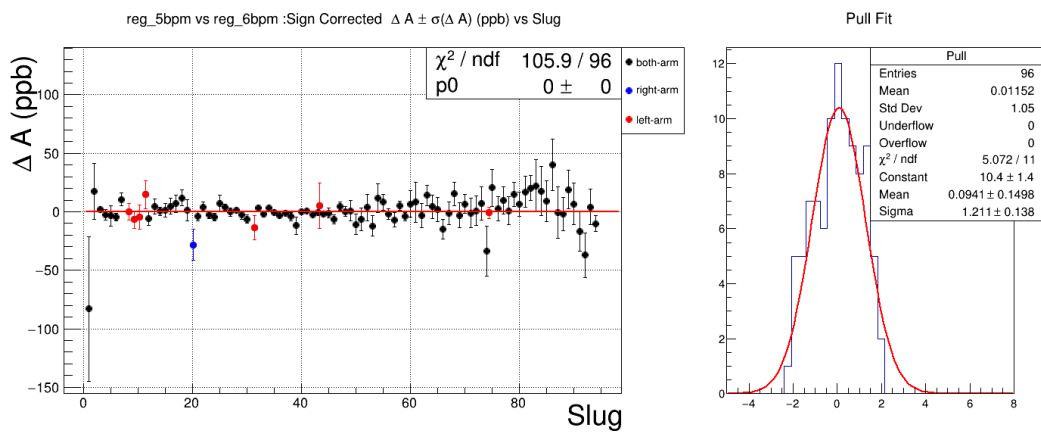
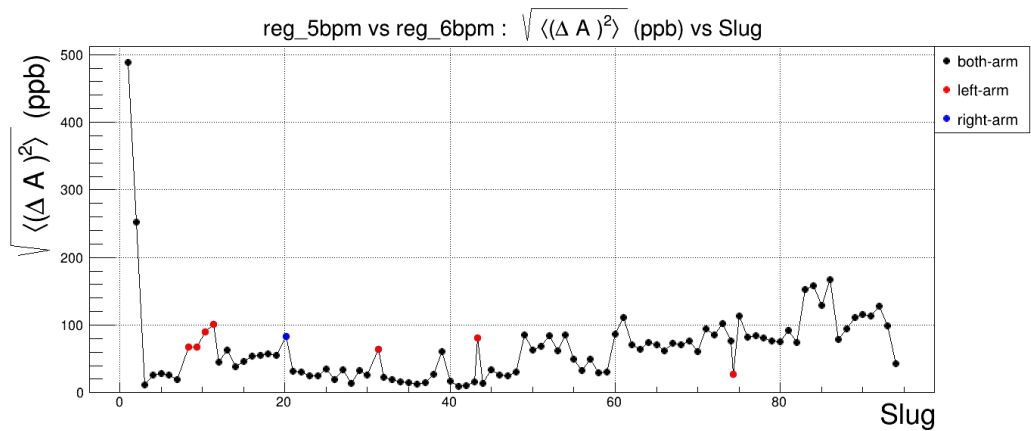


Figure 10: Fixed parameter fit over slugs



8 Regression(allbpm) vs Regression(5bpm)

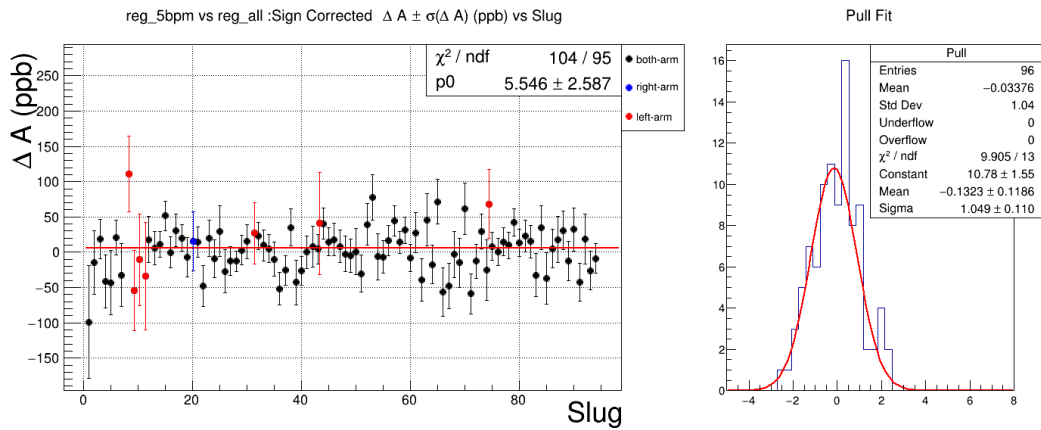


Figure 11: Free parameter fit over slugs

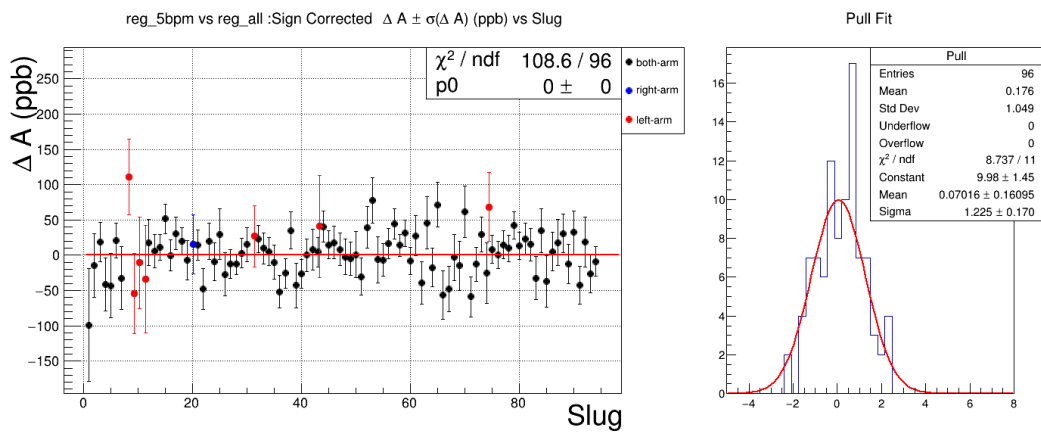
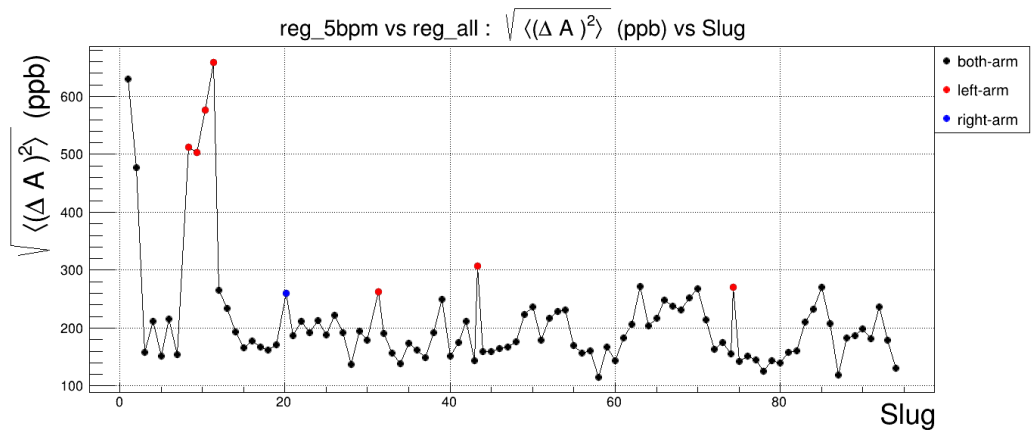


Figure 12: Fixed parameter fit over slugs



9 Lagrange(6bpm) vs Regression(6bpm)

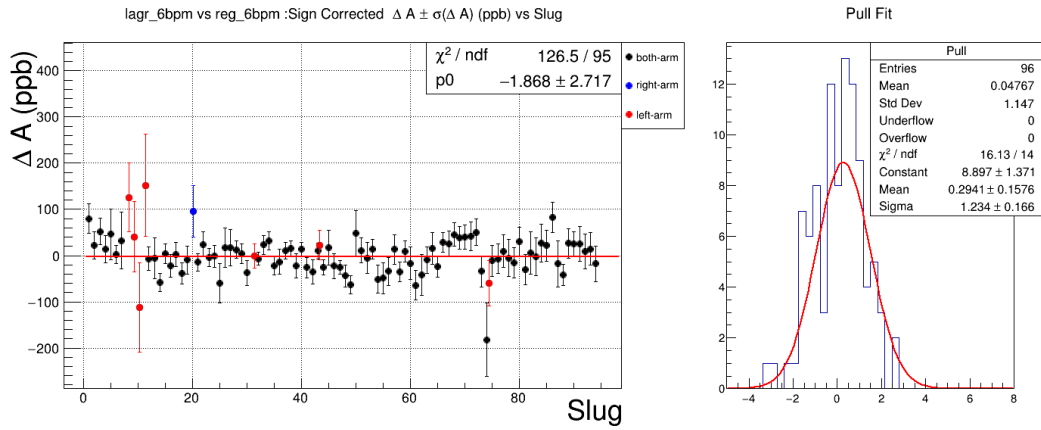


Figure 13: Free parameter fit over slugs

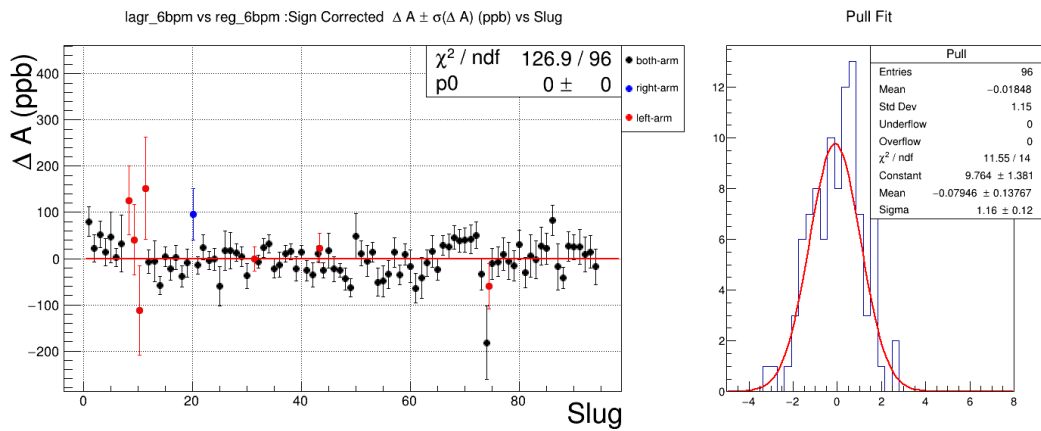
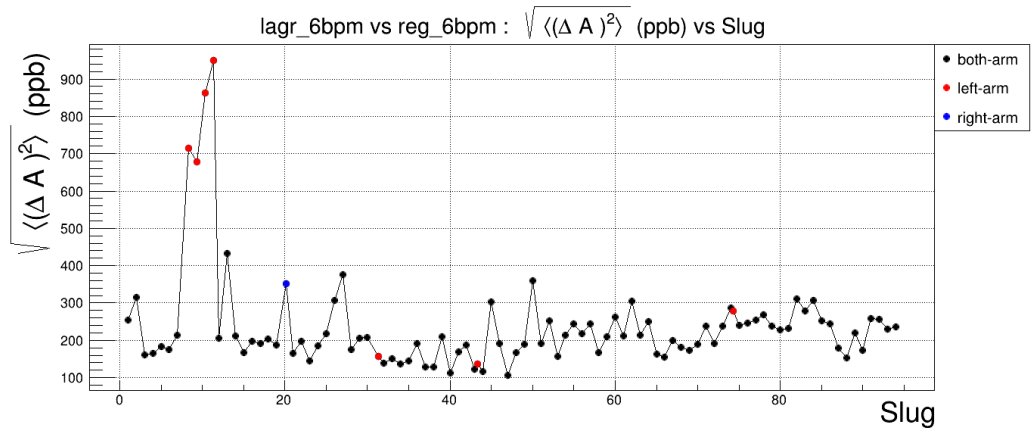


Figure 14: Fixed parameter fit over slugs



10 Lagrange(allbpm) vs Regression(allbpm)

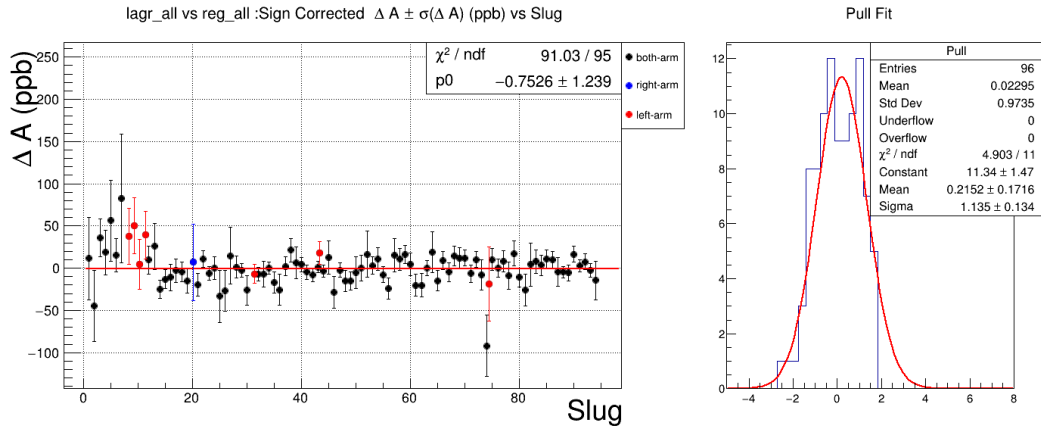


Figure 15: Free parameter fit over slugs

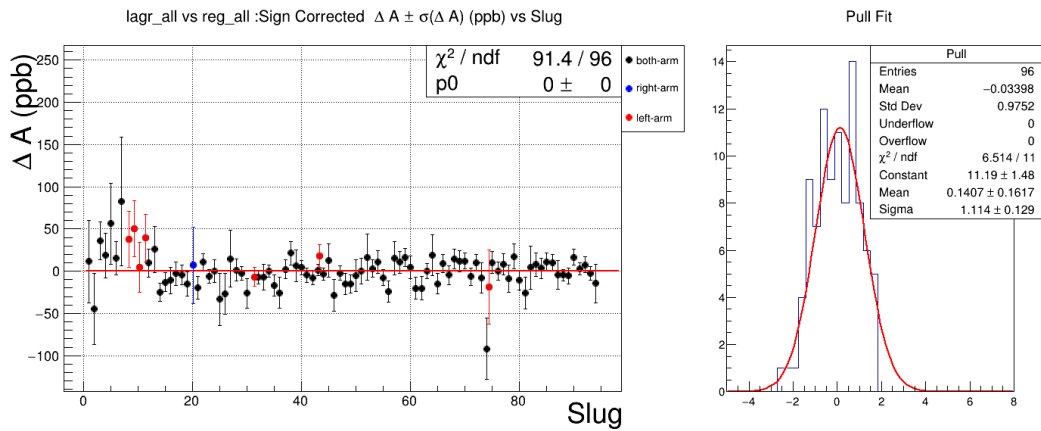
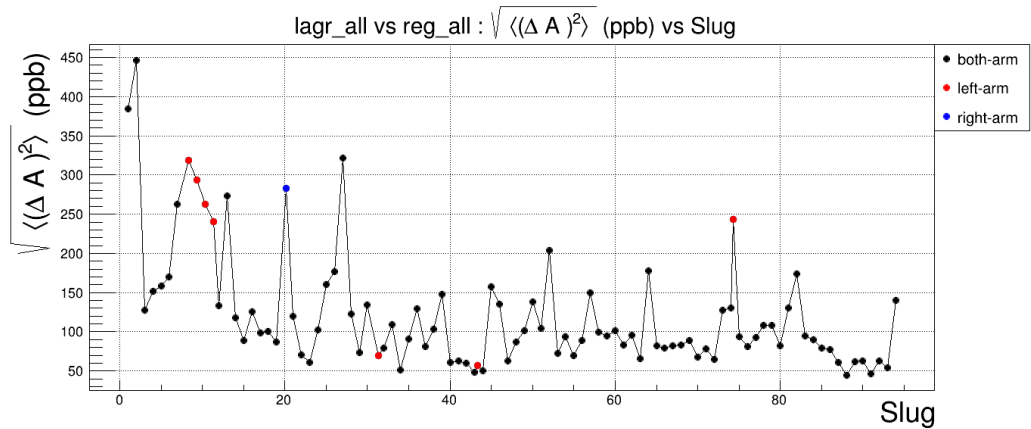


Figure 16: Fixed parameter fit over slugs



11 Lagrange(6bpm) vs Lagrange(allbpm)

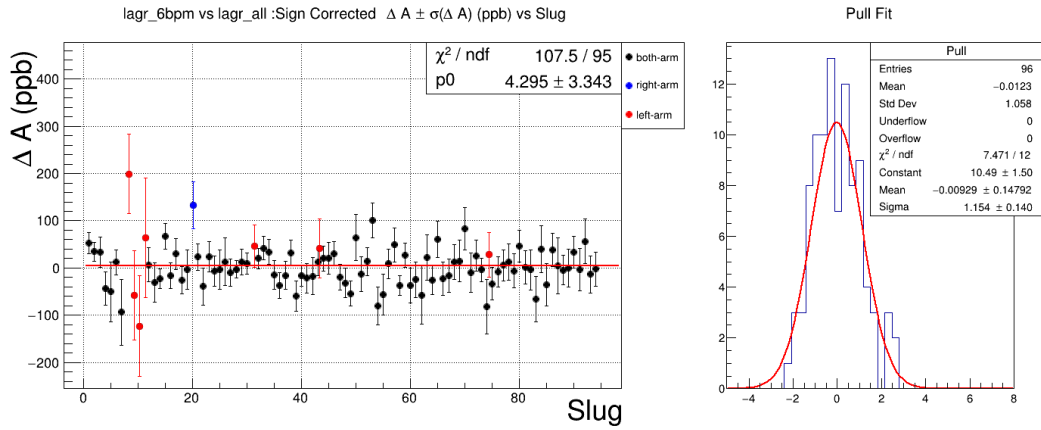


Figure 17: Free parameter fit over slugs

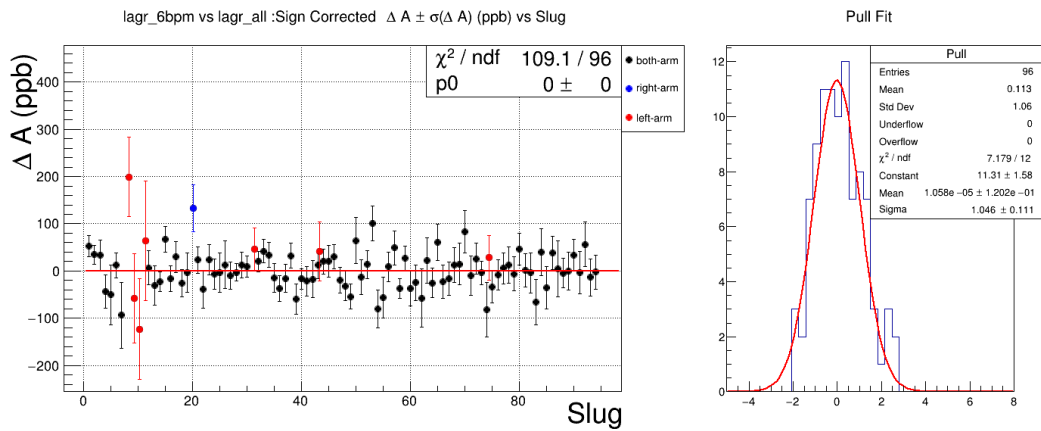


Figure 18: Fixed parameter fit over slugs

