

MilleFieldOff for CDC

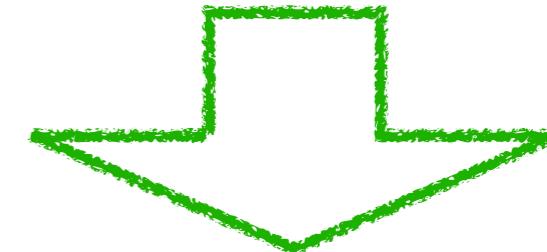
- Now, MilleFieldOff works and “pede” program runs with its output files.
- Quality cuts for track selection in MilleFieldOff have been tighten so that pede runs without errors.
- Still, analysis stops at ~500k events. (-PEVENT_TO_KEEP)
 - MilleFieldOff has nothing to do with this behavior.
 - The behavior does not change even if you remove all the options/plugins.

E = 0.054073	(508.0k events read)	488.0Hz	(avg.: 362.3Hz)
E = 0.054402	(513.2k events read)	690.0Hz	(avg.: 363.7Hz)
E = 0.094224	(520.5k events read)	512.0Hz	(avg.: 365.6Hz)
E = 0.085082	(522.4k events read)	678.0Hz	(avg.: 366.2Hz)
0 point cluster			
E = 0.083272	(526.3k events read)	486.0Hz	(avg.: 367.3Hz)
E = 0.069941	(527.9k events read)	464.0Hz	(avg.: 367.6Hz)
E = 0.054761	(528.3k events read)	650.0Hz	(avg.: 367.7Hz)
E = 0.051417	(529.4k events read)	610.0Hz	(avg.: 368.0Hz)
E = 0.085677			
538.4k events processed	(538.4k events read)	0.0Hz	(avg.: 319.0Hz)

Alignment by Field-OFF data

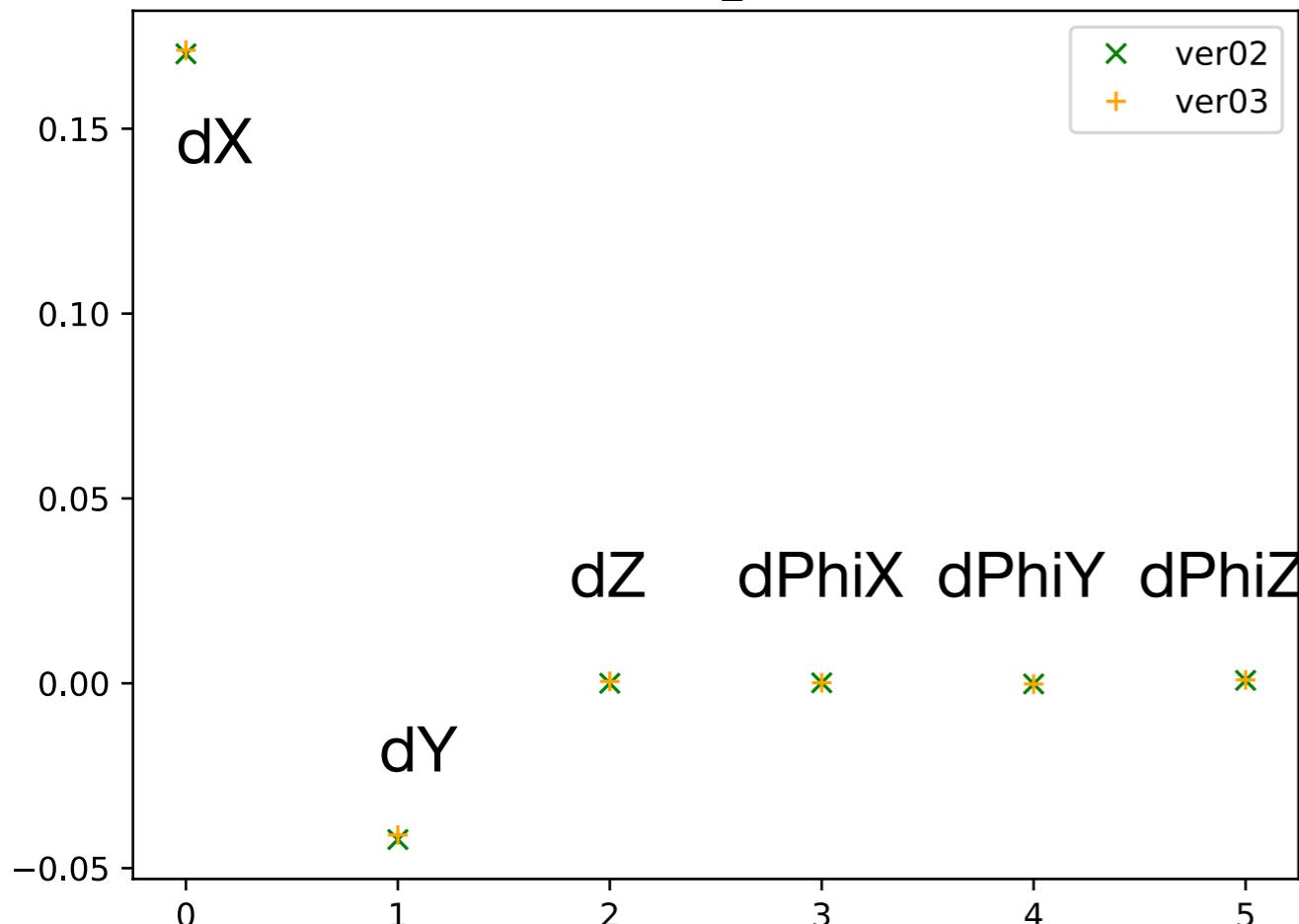
- x Official CCDB value
- + Millepede

4 parameters for each wire
(determine wire edge positions)

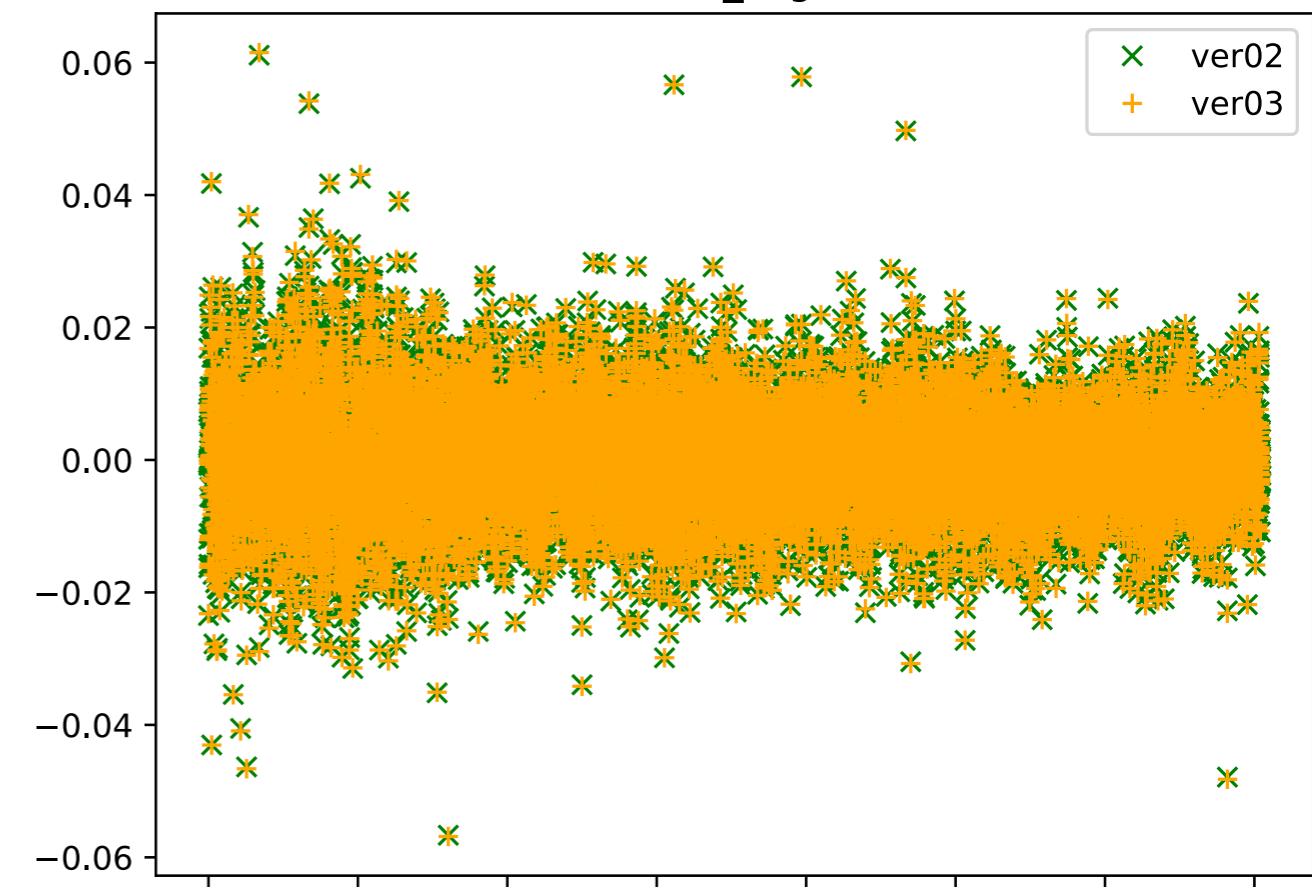


Shifts and rotation parameters

/CDC/global_alignment



/CDC/wire_alignment



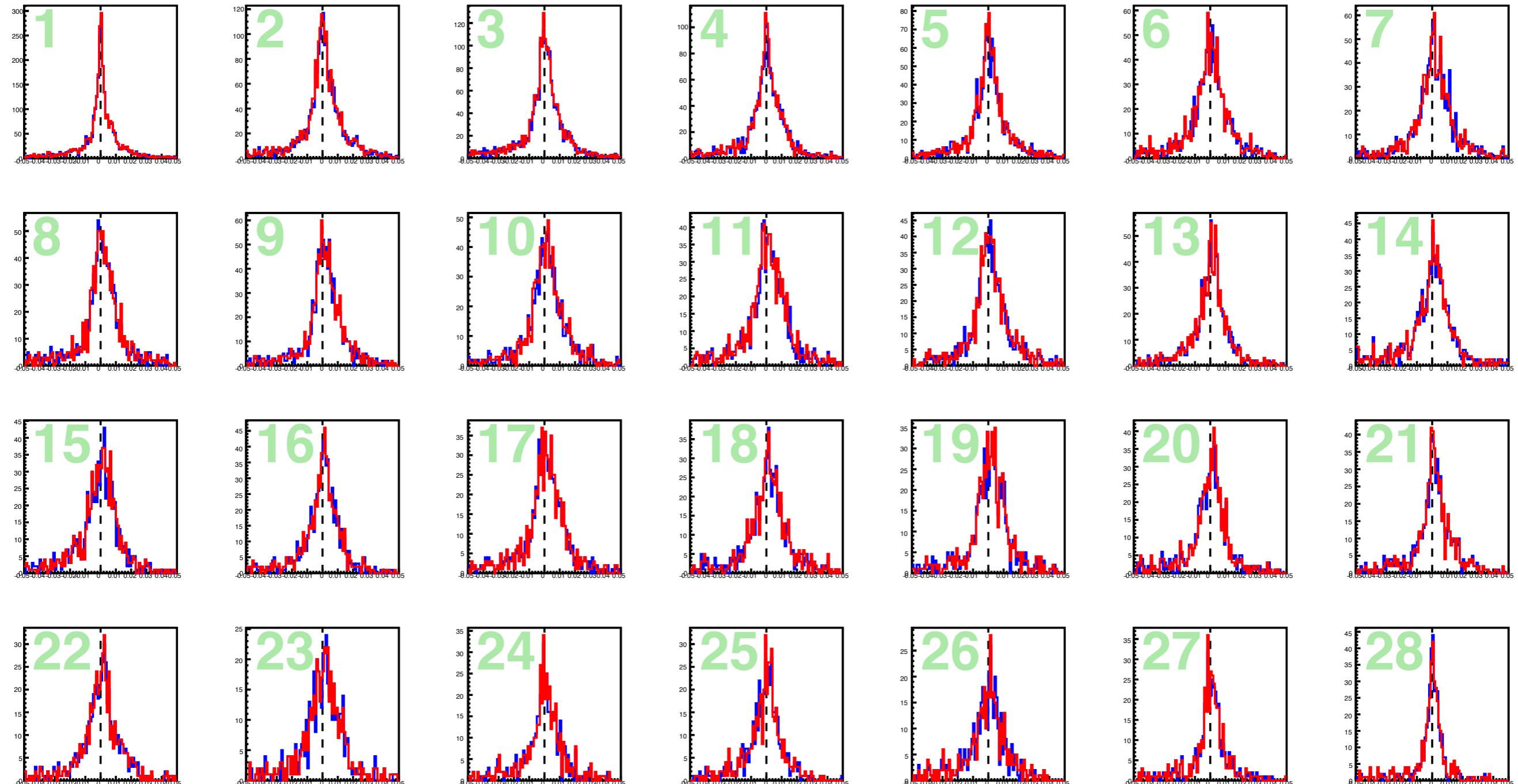
Field-OFF data also indicates the alignment parameters are not changed.

Residual (Run 40129, Field-OFF)

3

histogram range: [-0.05, 0.05] cm

— official CCDB values
— Millepede



Question about /CDC/sag_parameters

/CDC/global_alignment (dX, dY, dZ, dPhiX, ..)

/CDC/wire_alignment (determines edge positions of each wire)

These CCDB parameters are aligned by Millepede.

We have another table “/CDC/sag_parameters” in CCDB, which is used in libraries/TRACKING/.

Is this table still active and if so, which plugin should be used to determine obtain this table?