

Status of CTB2 electronic calibration

◆ Mostly done

- ◆ All necessary data for CondDB produced (after few iterations, thanks to Sven and Andrei M. for checking) and filled
- ◆ Some consistency checks done, waiting for more feedback

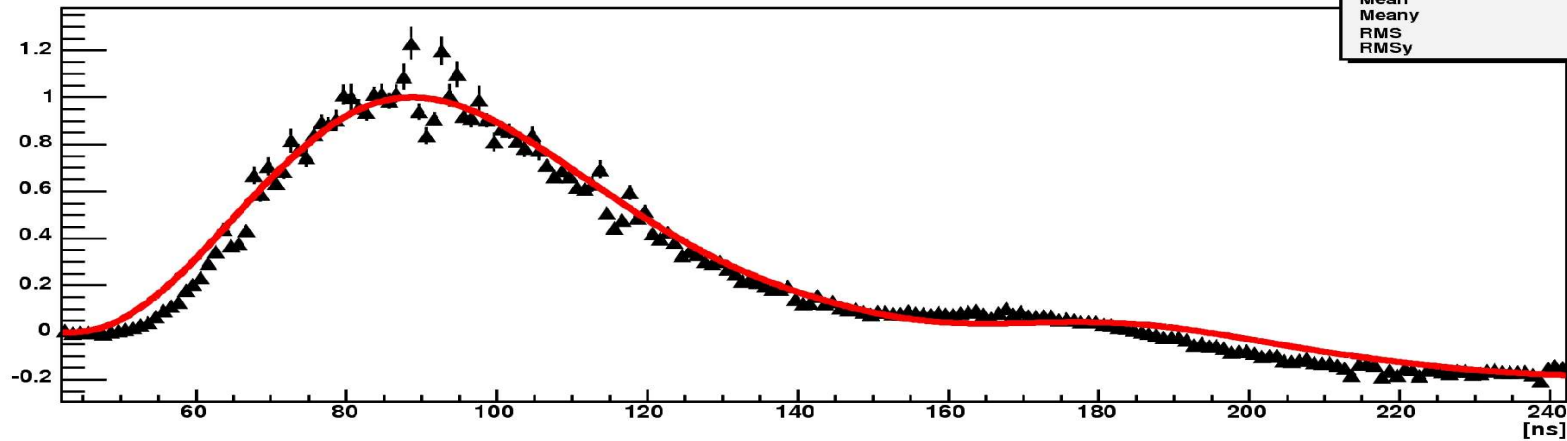
◆ Open problems

- ◆ Shape reconstruction in EMEC3
 - ◆ Results recently obtained by Andrei M. showed the wrong shape prediction in EMEC3. They were not checked during production.
 - ◆ Try to improve by changing the reconstruction parameters blindly – it works, but no systematics found so far
 - ◆ Need to be discussed with electronics expert
- ◆ Anything else ?

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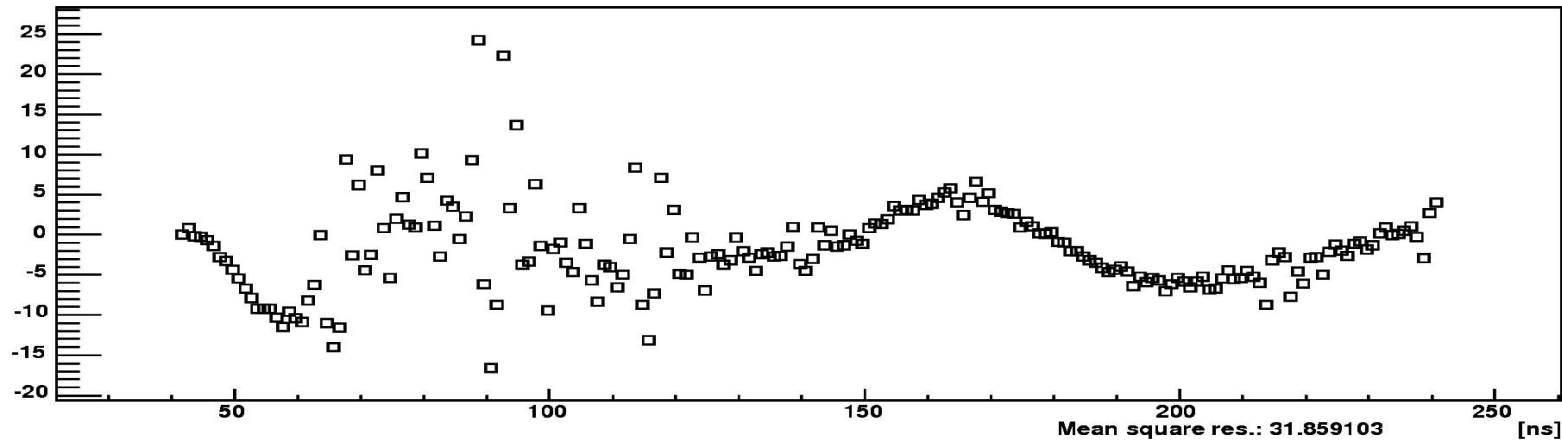
Current EMEC3 shape prediction

Waveform true, cell=0601(EMEC3)



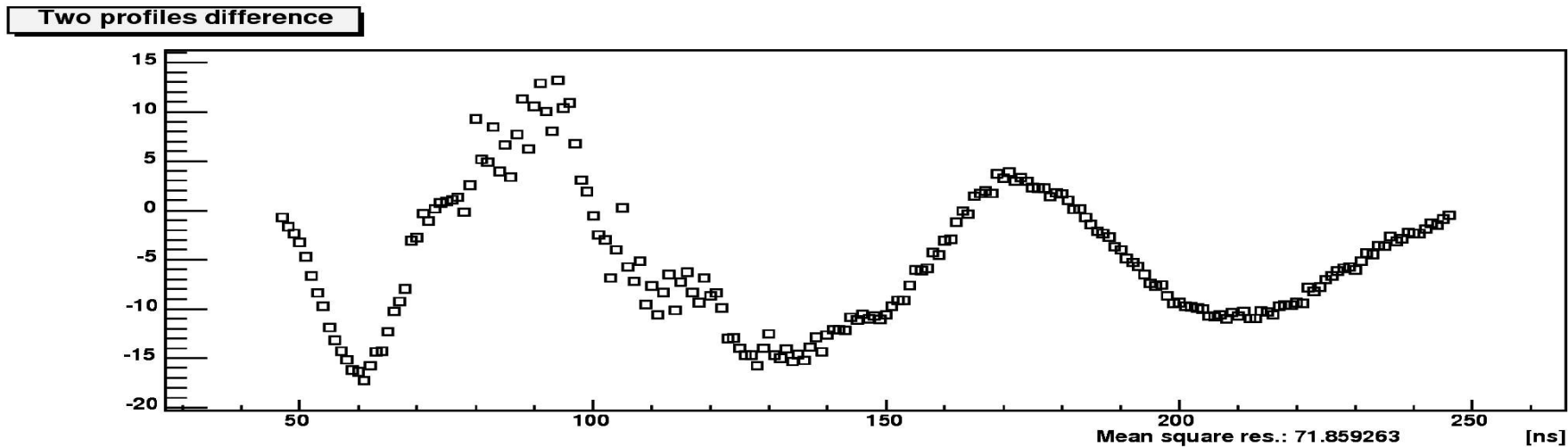
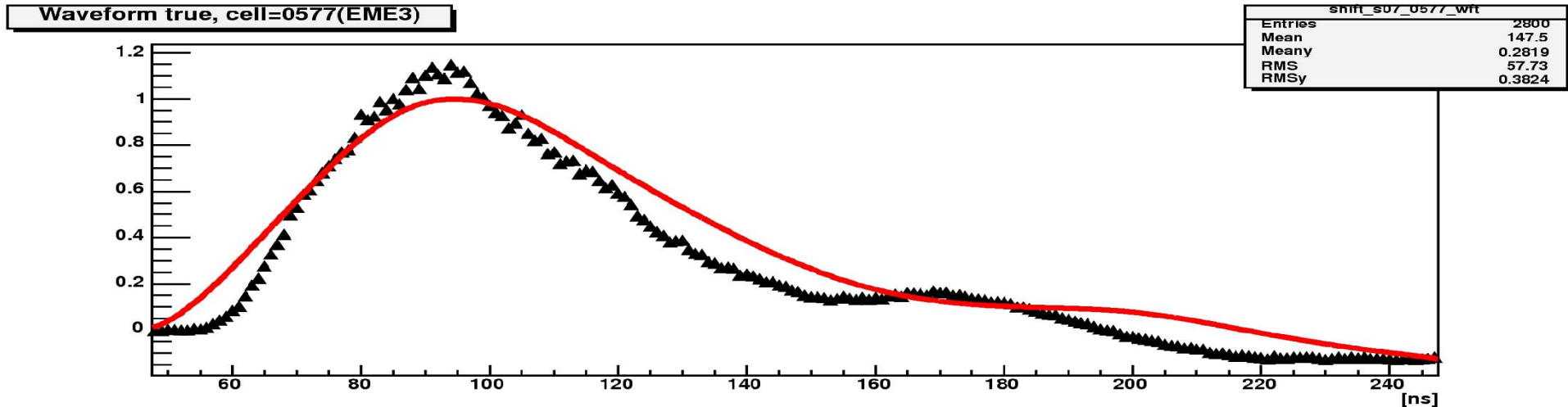
shift_s07_0601_wfit	
Entries	2800
Mean	142.1
Meany	0.2439
RMS	57.73
RMSy	0.3892

Two profiles difference



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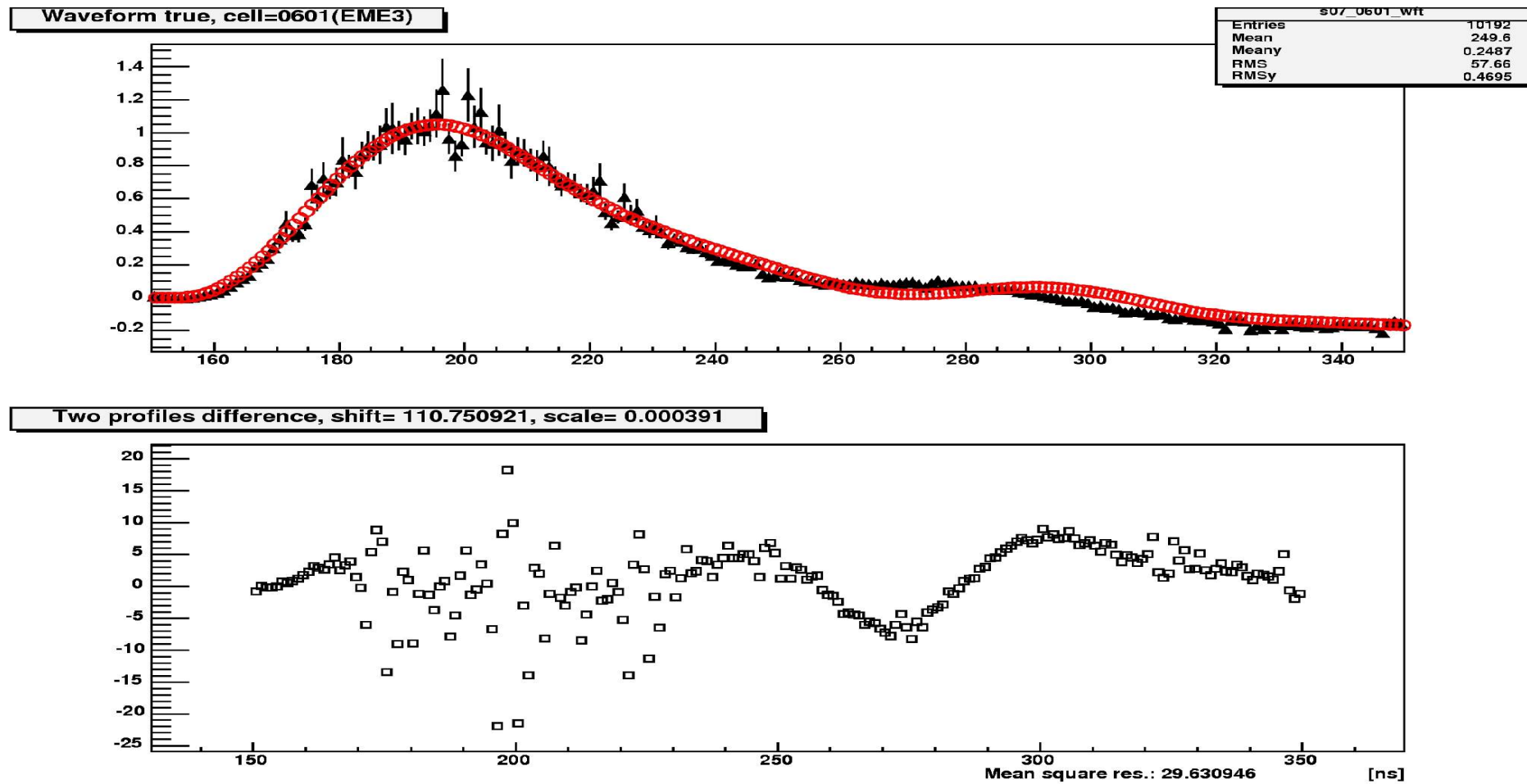
◆ Current EMEC3 shape prediction



Status of CTB2 electronic calibration

- EMEC3 shape optimized so far

$$\tau_0 = 8.\text{ns}, \tau_{\text{cab}} = 11.\text{ns}, \tau_g = 3.\text{ns}$$

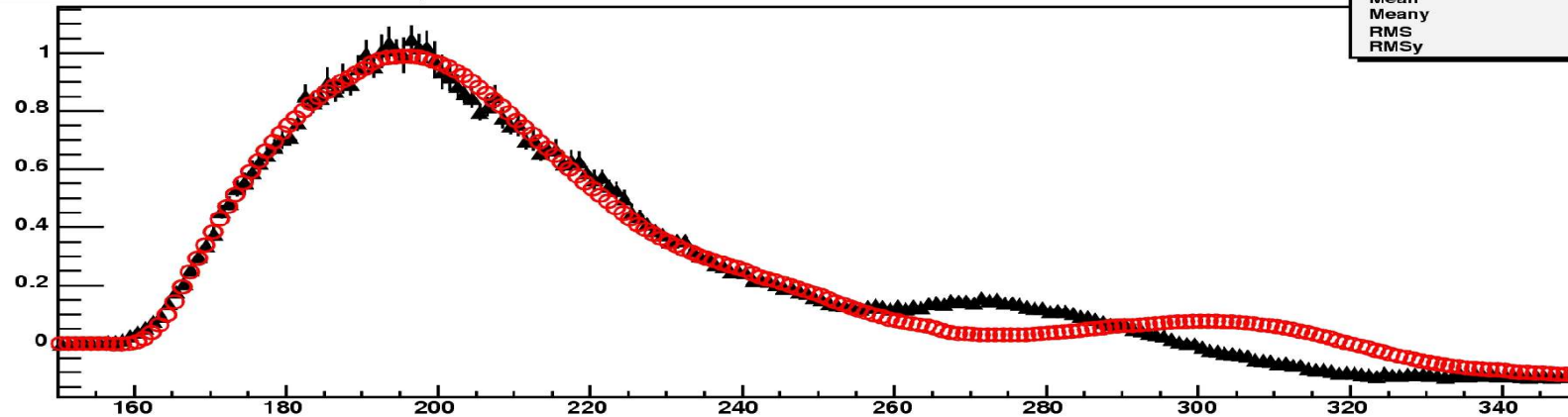


Status of CTB2 electronic calibration

- EMEC3 shape optimized so far

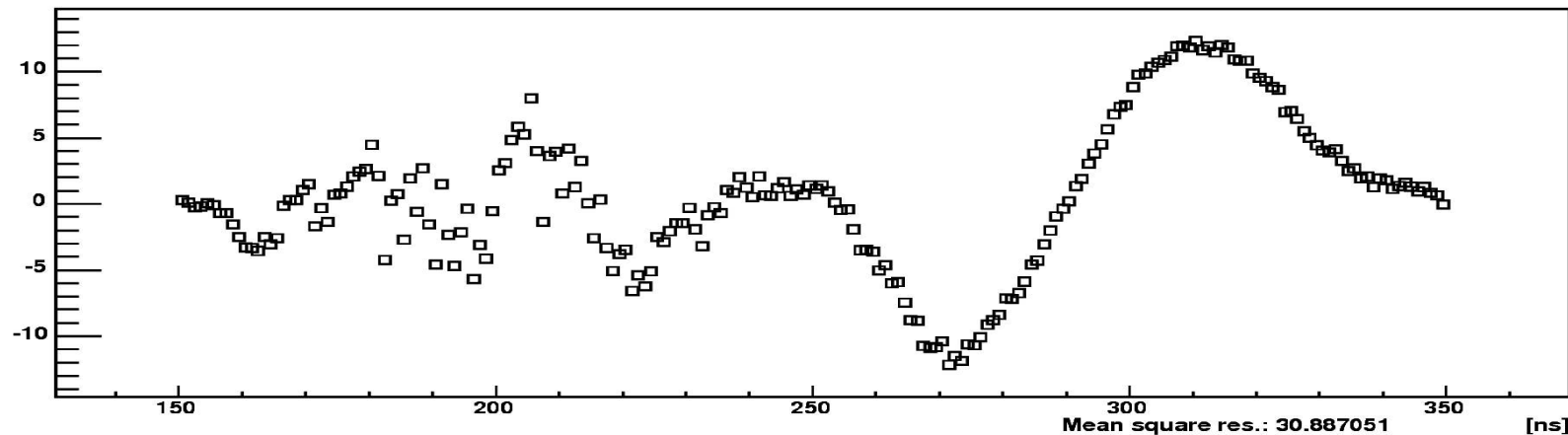
$$\tau_0 = 8.\text{ns}, \tau_{\text{cab}} = 11.\text{ns}, \tau_g = 18.\text{ns}$$

Waveform true, cell=0577(EME3)



s07_0577_wfit	
Entries	22400
Mean	249.2
Meany	0.255
RMS	57.66
RMSy	0.3778

Two profiles difference, shift= 115.314781, scale= 0.000423



Mean square res.: 30.887051 [ns]

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◆ Conclusions

- ◆ Improving of the EMEC3 shape description could be achieved, but in “blind” way – so far no understanding for necessary parameter values
- ◆ This would be the only change in the current iteration for the new constants in CondDb
- ◆ Next iteration after some results from data analysis will be available