ECAL Alignment 2018: Monitoring

MoCa Meeting
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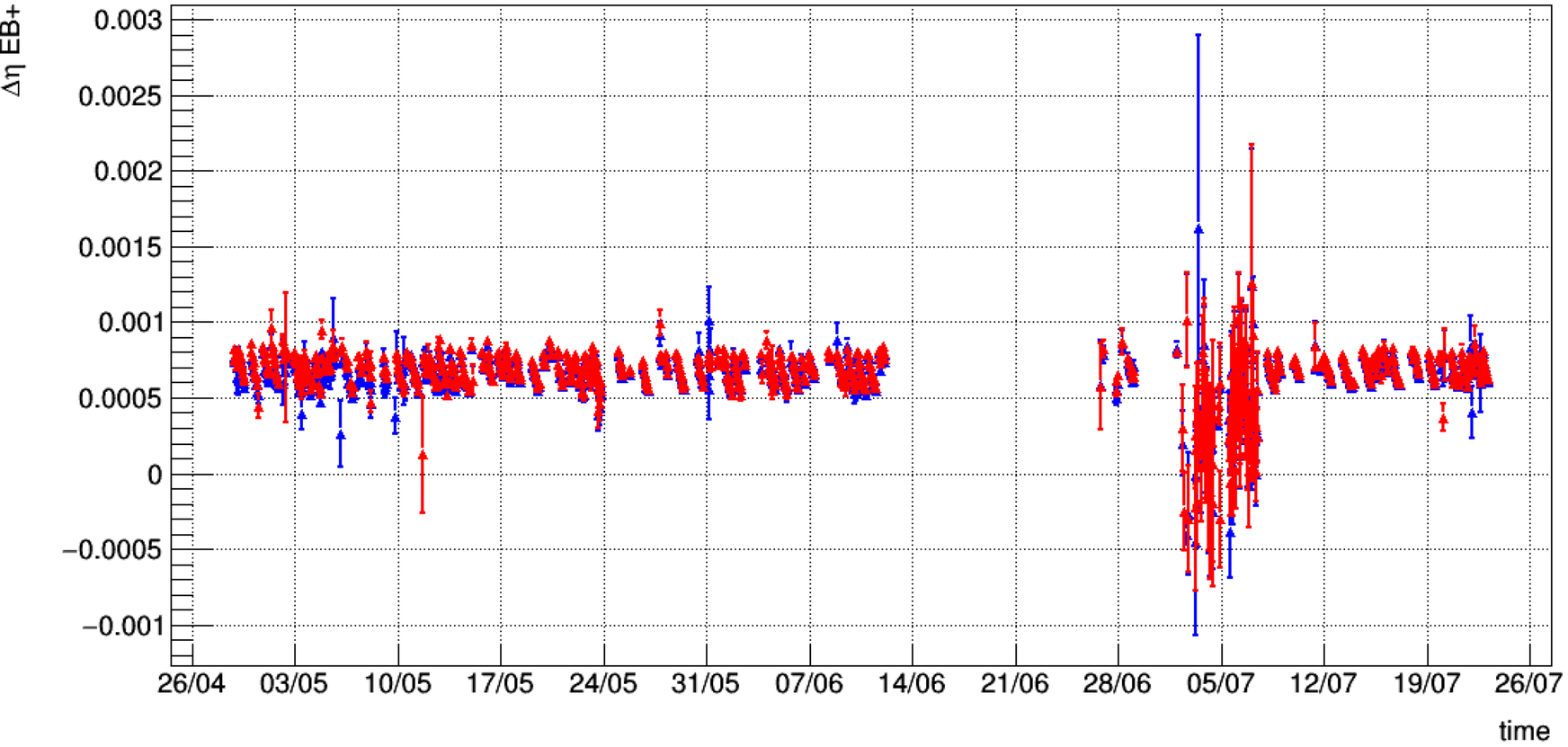
ECAL Alignment Monitoring

- Final tracker alignment tags were provided on 5th September
- Global tag w/ tracker alignment conditions: 102X_dataRun2_MuAl_SeptRereco_v1
- Check the effect, if any, on ECAL alignment conditions
- Datasets used:

/EGamma/Run2018A-ZElectron-PromptReco-v1/RAW-RECO
/EGamma/Run2018A-ZElectron-PromptReco-v2/RAW-RECO
/EGamma/Run2018A-ZElectron-PromptReco-v3/RAW-RECO
/EGamma/Run2018B-ZElectron-PromptReco-v1/RAW-RECO
/EGamma/Run2018B-ZElectron-PromptReco-v2/RAW-RECO
/EGamma/Run2018C-ZElectron-PromptReco-v1/RAW-RECO
/EGamma/Run2018C-ZElectron-PromptReco-v2/RAW-RECO
/EGamma/Run2018C-ZElectron-PromptReco-v3/RAW-RECO

ECAL Alignment Monitoring

- Compare the values of Δη Vs time
- **Red points**: Older tracker alignment conditions (GT 101X_dataRun2_Prompt_v11)
- **Blue points**: Latest tracker alignment conditions (GT 102X_dataRun2_MuAl_SeptRereco_v1)



EB +

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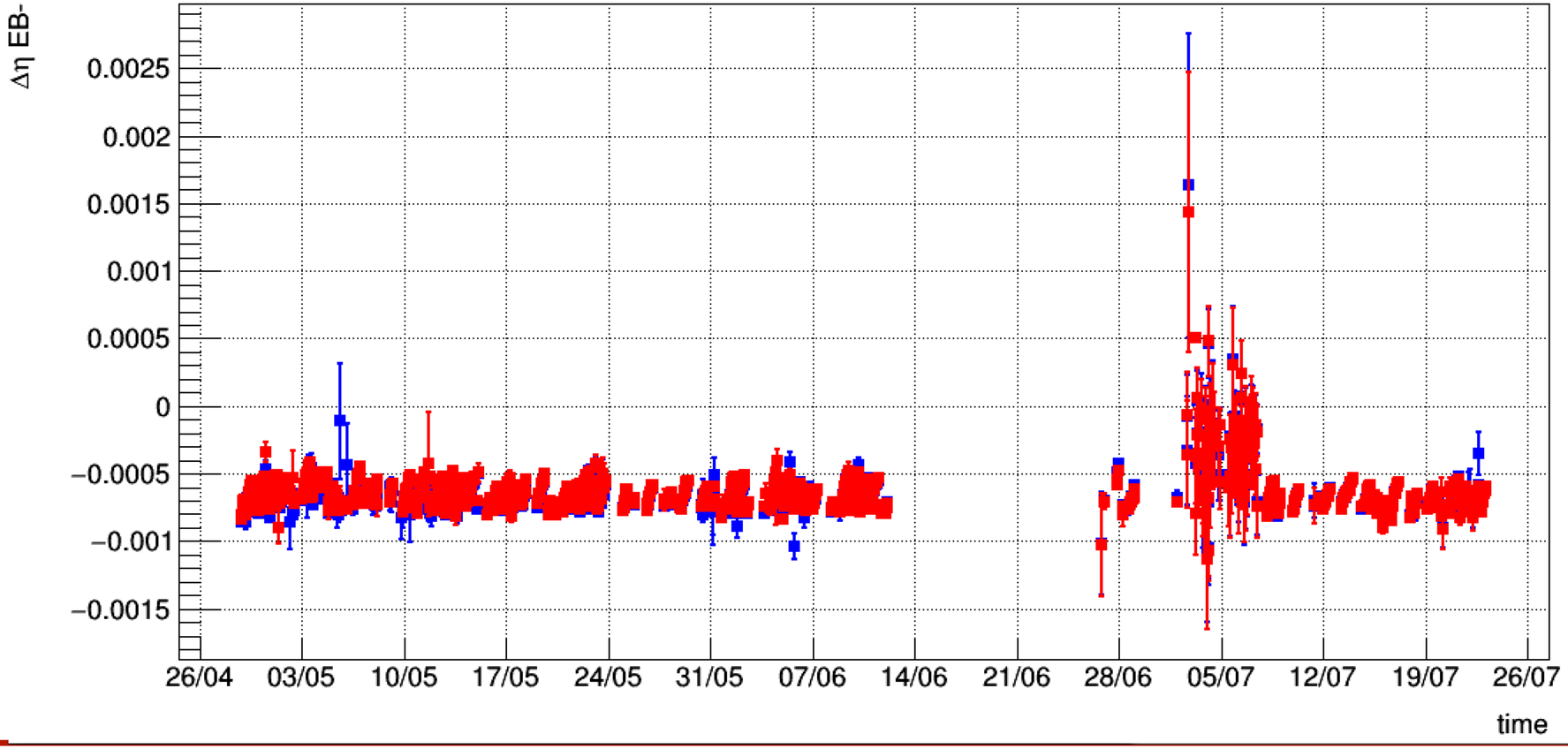

EB -

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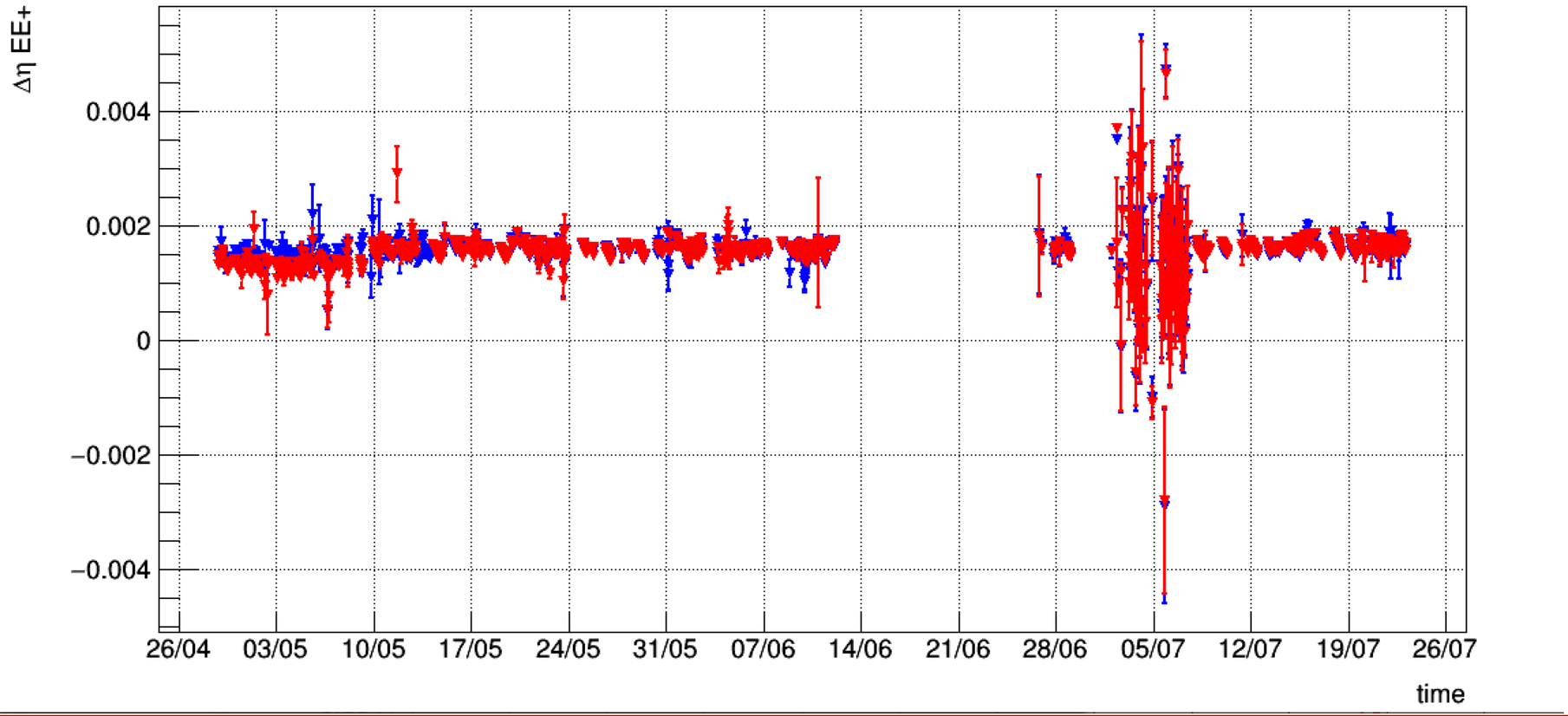

EE +

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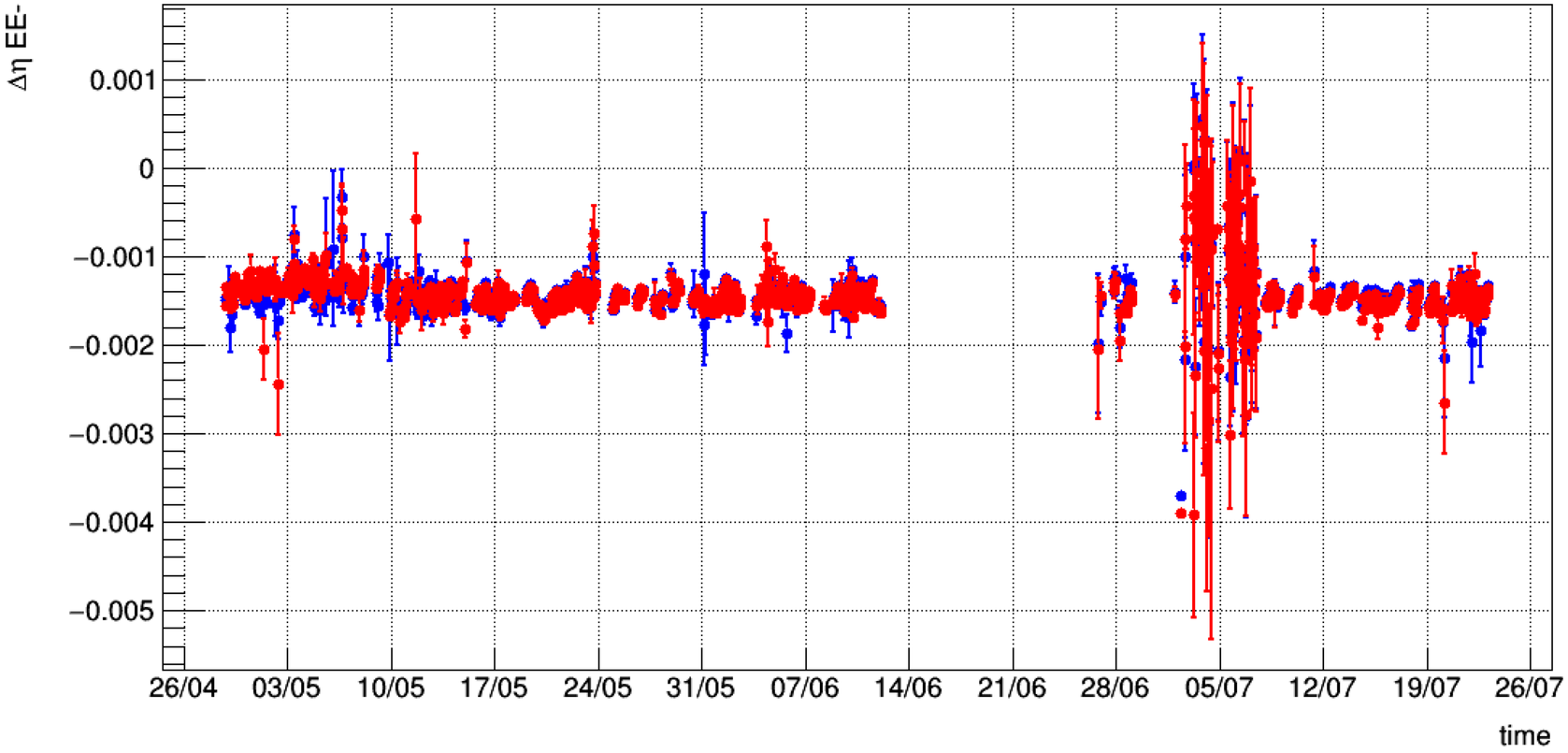

EE -

Conclusion

- We established earlier that the changing tracker alignment conditions did not affect ECAL alignment
- These plots show that the final tracker alignment conditions also follows the pattern of not affecting ECAL alignment
- Therefore, we do not need to perform a re-alignment and can keep the EE/EB alignment conditions in prompt