



Update MBHA-001

2020-03-12

TE-MS-C-TF

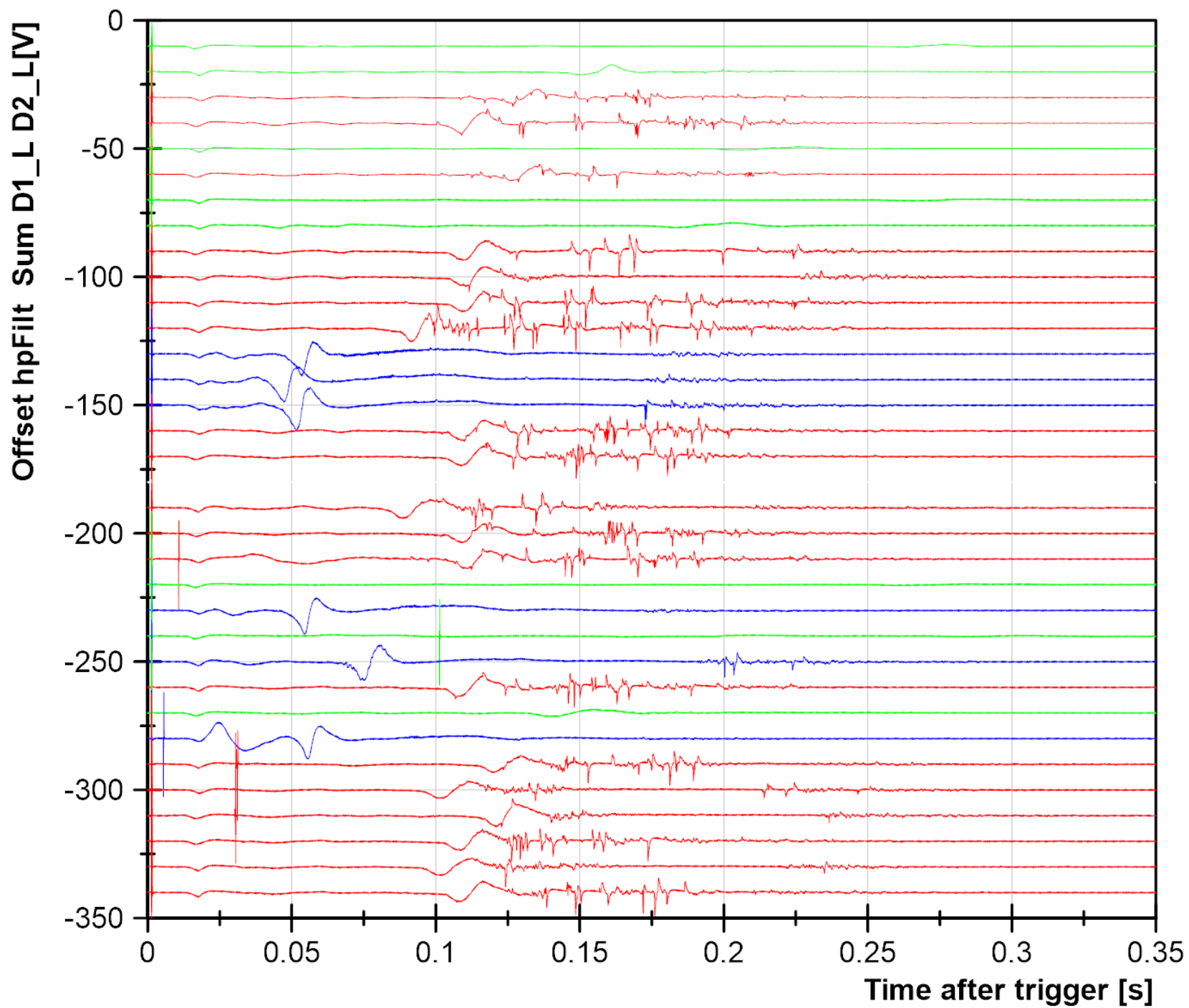
F. Mangiarotti, G. Willering, G. Ninet, V. Desbiolles, M. Bajko
E. Ravaioli, J. Ludwin, M. Bednarek, J. Steckert, S. Haas

Acknowledgements to all involved.

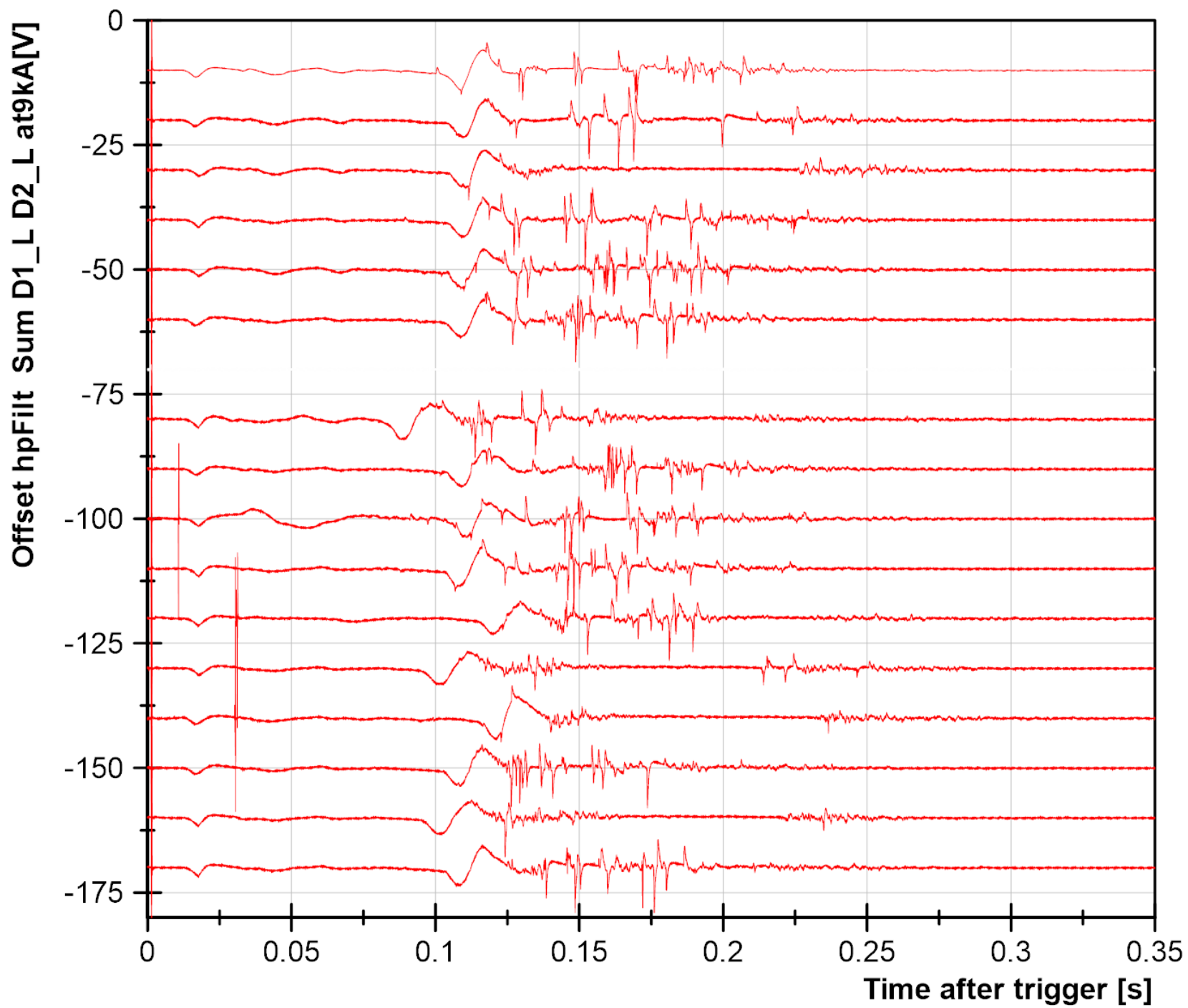


Tests since last meeting

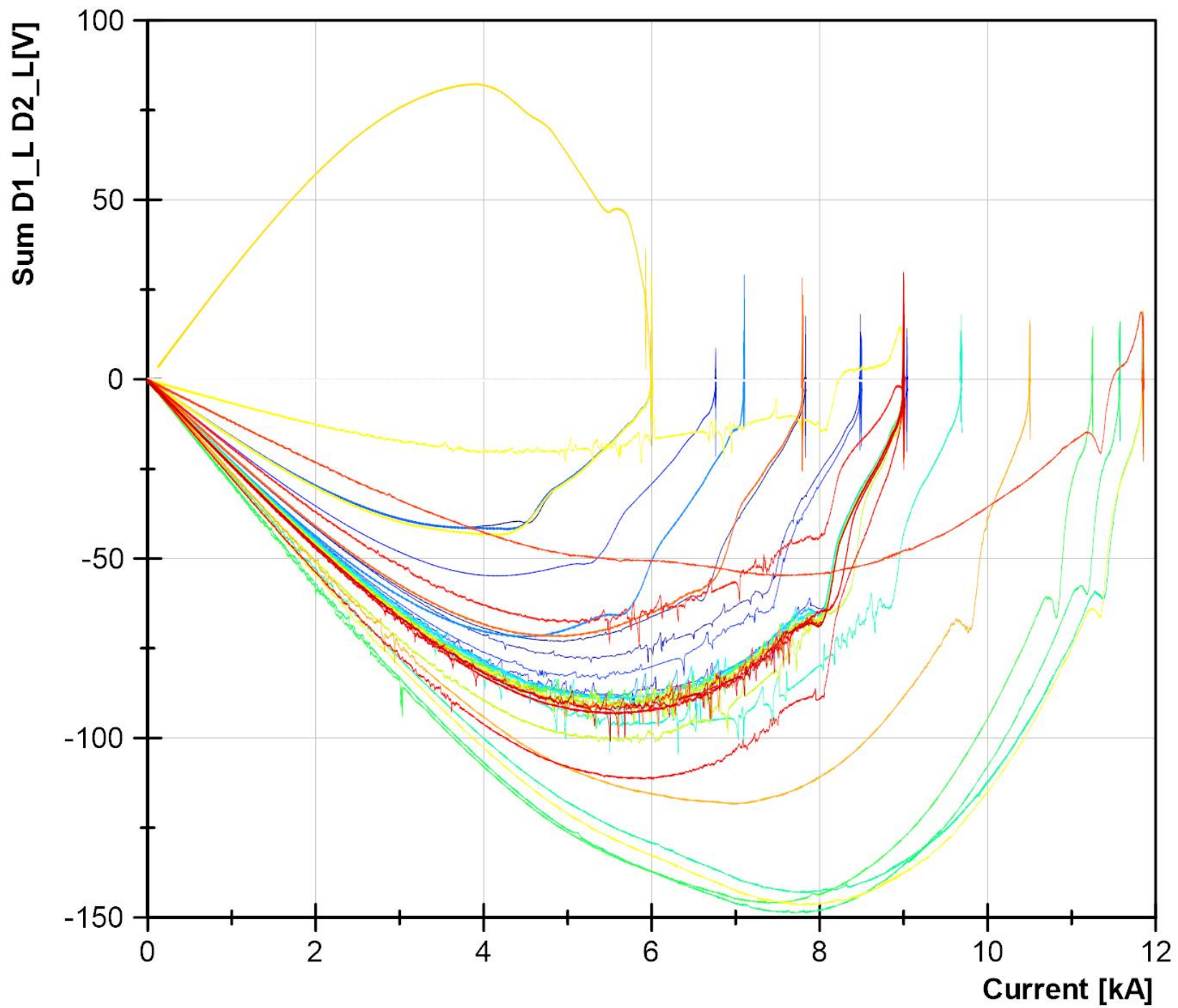
- Discharge at 9 kA, D2 QH delayed 30 ms
- Standard discharge at 9 kA
- Pre-ramp to 11.85 kA, discharge at 9 kA
- Pre-cycle 50 A-11.85 kA-50 A, discharge at 9 kA



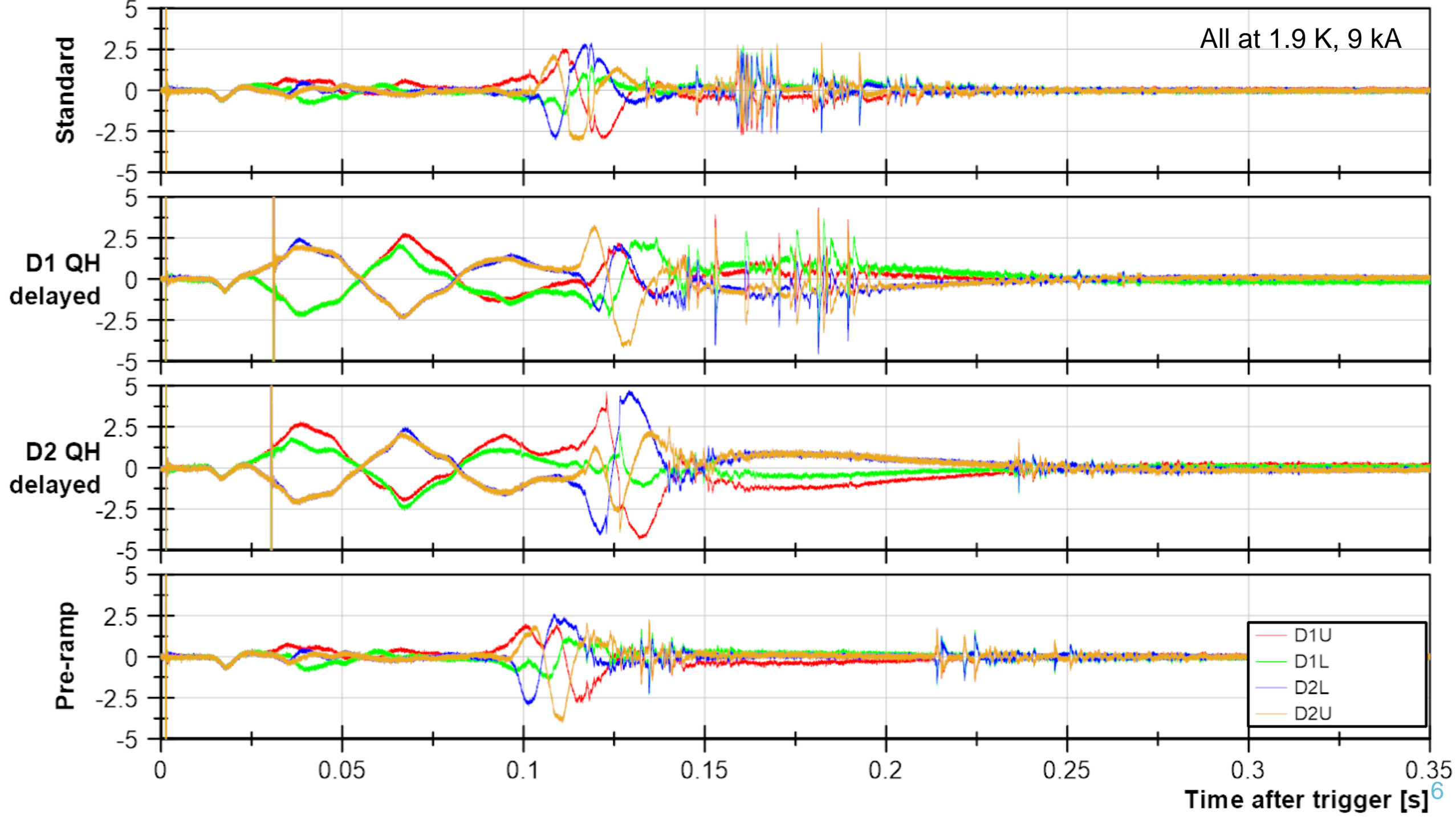
- Discharge at 6 kA
- first quench
- Discharge at 8.5 kA
- Discharge at 9 kA
- Flux jump
- Discharge at 8.5 kA
- 6 kA QI
- 7100 A QPS check - 2 heaters fired - detection of the quench within 3 ms by QPS
- Discharge at 9kA
- Discharge at 9kA
- Discharge at 9kA
- Training quench 1
- Discharge at nominal current (11.85 kA)
- QUENCH 2 4.5K
- QUENCH 3 4.5K Small precursor 4ms before quench
- Discharge at 9kA
- Discharge at 9kA
- Discharge at 9kA only QPS connected to IFS
- Discharge at 9kA (4.5K)
- Discharge at 9kA with extra potaim crate to measure Qloc and single splices
- Discharge at 9kA with QH D1_U delayed 10ms
- Discharge at 6kA
- Discharge at 11850A
- Discharge at 6 kA D1U QH delayed 100 ms
- Discharge at 10.5 kA
- Discharge at 9kA QH polarity inversed
- Ramp up to 9kA then provoked quench at 7.8kA
- Discharge at 11.5 kA with D1U delayed by 5 ms
- Discharge at 9 kA with D1U and D1L QH delayed 30 ms
- Ramp to 11.85 kA then discharge at 9 kA
- Discharge at 9 kA with D2L and D2U QH delayed 30 ms
- Discharge @9kA
- Discharge at 9 kA with pre-ramp at 11.85 kA
- Discharge @9kA after Vshape cycle up to nominal



- Discharge at 9 kA
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- Discharge at 9kA
- Discharge at 9kA
- Discharge at 9kA only QPS connected to IFS
- Discharge at 9kA (4.5K)
- Discharge at 9kA with extra potaim crate to measure Qloc and single splices
- Discharge at 9kA with QH D1_U delayed 10ms
- Discharge at 9kA. QH polarity inversed
- Discharge at 9 kA with D1U and D1L QH delayed 30 ms
- Ramp to 11.85 kA then discharge at 9 kA
- Discharge at 9 kA with D2L and D2U QH delayed 30 ms
- Discharge @9kA
- Discharge at 9 kA with pre-ramp at 11.85 kA
- Discharge @9kA after Vshape cycle up to nominal



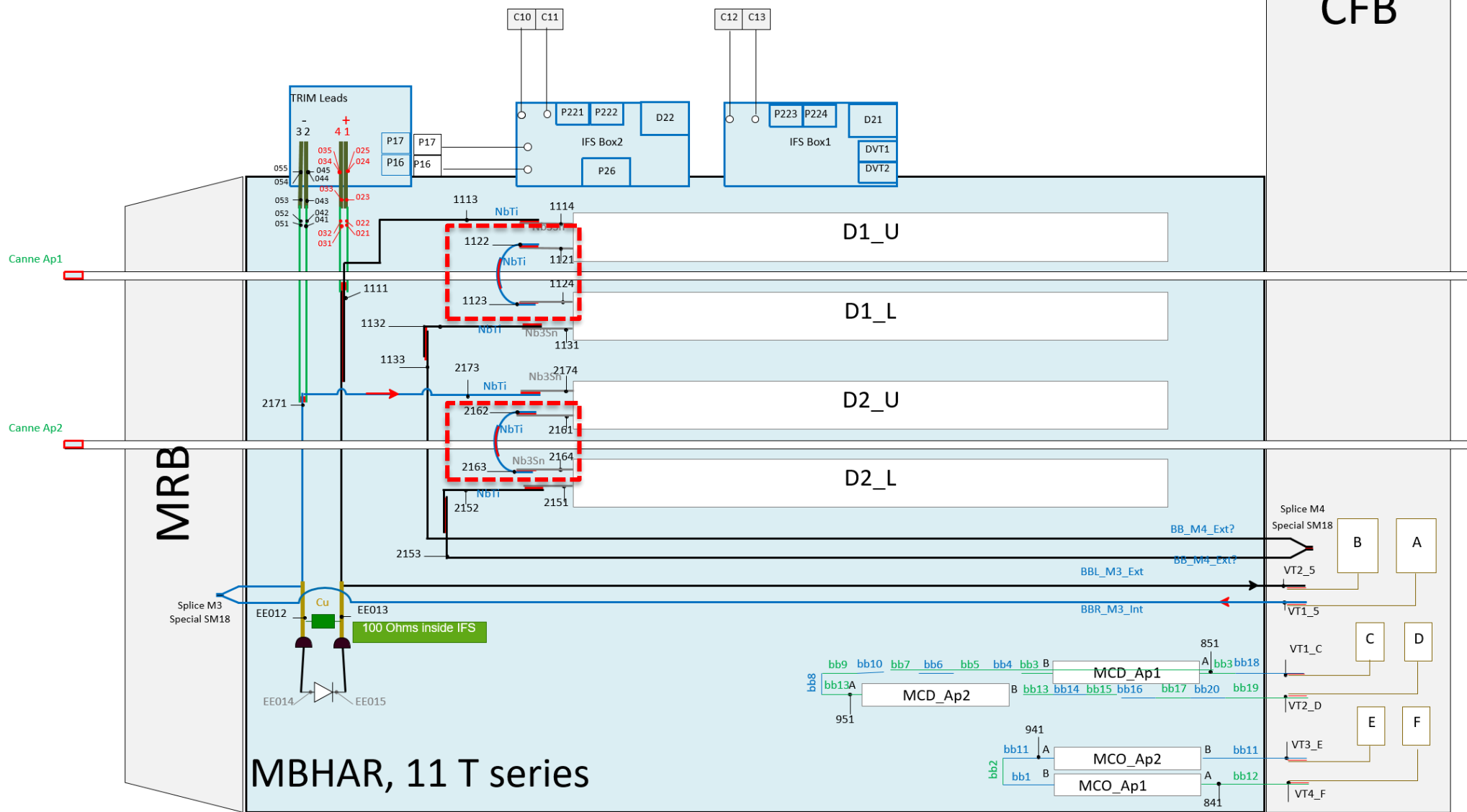
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- Discharge at 9 kA with pre-ramp at 11.85 kA
- Discharge @9kA after Vshape cycle up to nominal



Next steps

- Magnetic measurements
- Preparation for artificial short & impedance
- Impedance measurement during discharge
- Artificial short test with 100 Ohm, at 1.5, 6, 9 kA

CFB



MRB

MBHAR, 11 T series