

MUCTPI -> Ph1Topo Tests

- Took place at the STF on 08/03 and 09/03 (Christian, Julio, Sabrina, Stefan)
- Elog: <https://atlasop.cern.ch/elisa/display/424043>
- Short summary:
 - 24 links, one fibre broken
 - Production f/w on L1Topo (v1.9.1) with spy memories + ILA +IBERTs
 - Data reception as such worked without problems, however:
 - after MuCTPi transmitter resets, random link numbers turned up with errors
 - No buffer over-/underflows, so modules were running with correct clocks
 - Looked into recorded data, it seems occasional bit errors (always in same position : byte of comma character in last subword, initial suspicion: timing violations on MuCTPi)
 - F/w v1.9.1 worked fine without any problems seen
- MUCTPI moved back to CTP lab, so they could repeat the tests with their setup
- We received a confirmation that they observed the same issue in their test setup
- We understand the problem has been solved

- Electrical breakout (MMCX/SMA/BNC) from source and sink
 - Confirmed **stable** latency
 - Absolute value not entirely clear (do not expect MUCTPI on critical path anyway)
 - Varied phase offset source/sink (ALTI fibre length)
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- Plans to repeat measurements after fix of link issues and possibly with programmable phase offset (ALTI)

