

SMART L1ID FORWARDING: SOME RESULTS

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TESTS

Test 1: protection mechanism **disabled**, only **monitoring**

TRIGGER RATE (kHz)	SKIPPED (MAX)	PENDING (MAX)	
15	1	17	reasonable
30	9	25	
40	>15	OVERFLOW (~>64)	Not ok

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Test 2: protection mechanism **active**, threshold: **20 pending triggers**

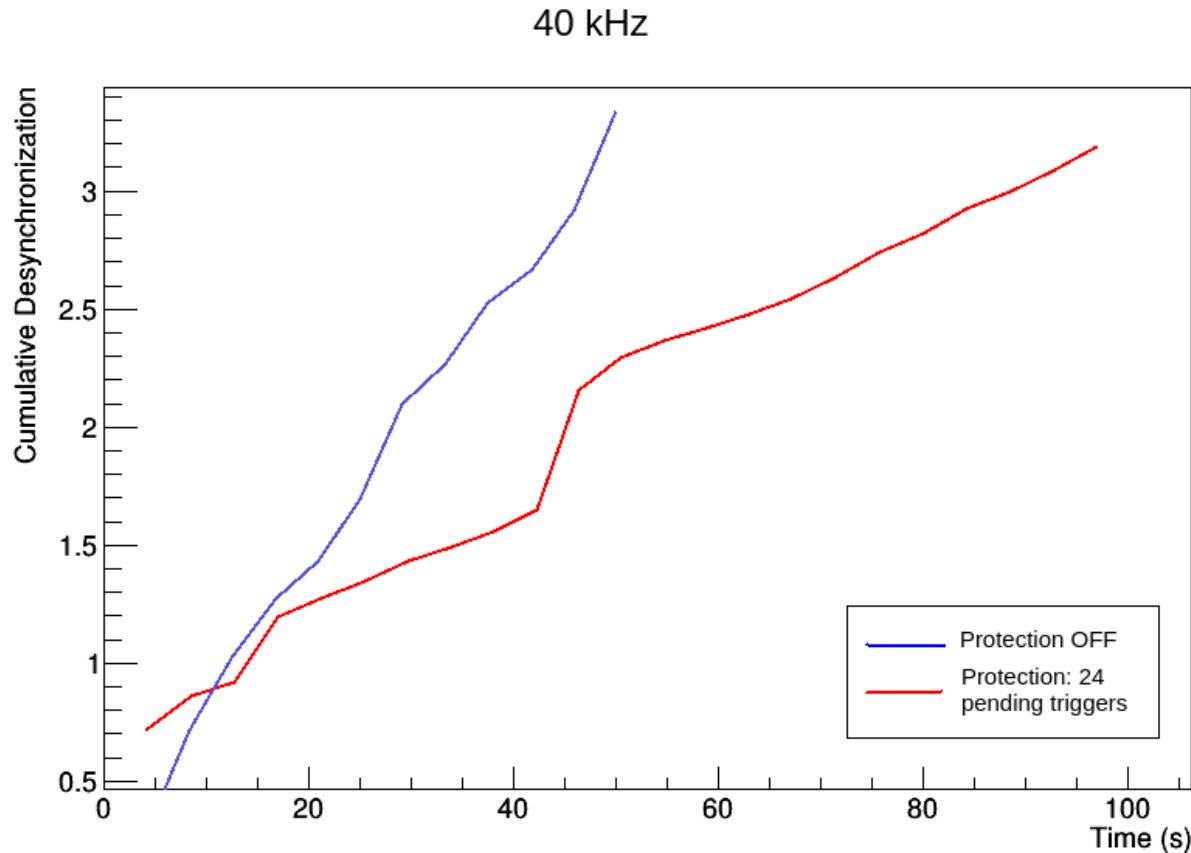
- **15 kHz:** no effect
- **30 kHz:** “protection induced desynchronization” (empty events added when trigger is not propagated) **~ 5 times higher** than previous test

TESTS

Test 3: protection mechanism **active**, threshold: **25 pending triggers**

- **15 kHz:** no effect
- **30 kHz:** no effect
- **40 kHz:** reduced amount of total desynchronization

TEST 3



Conclusions:

- **Detection mechanism** needs some **rework** → **not reliable**
- Mechanism still **useful** to keep system **under control**