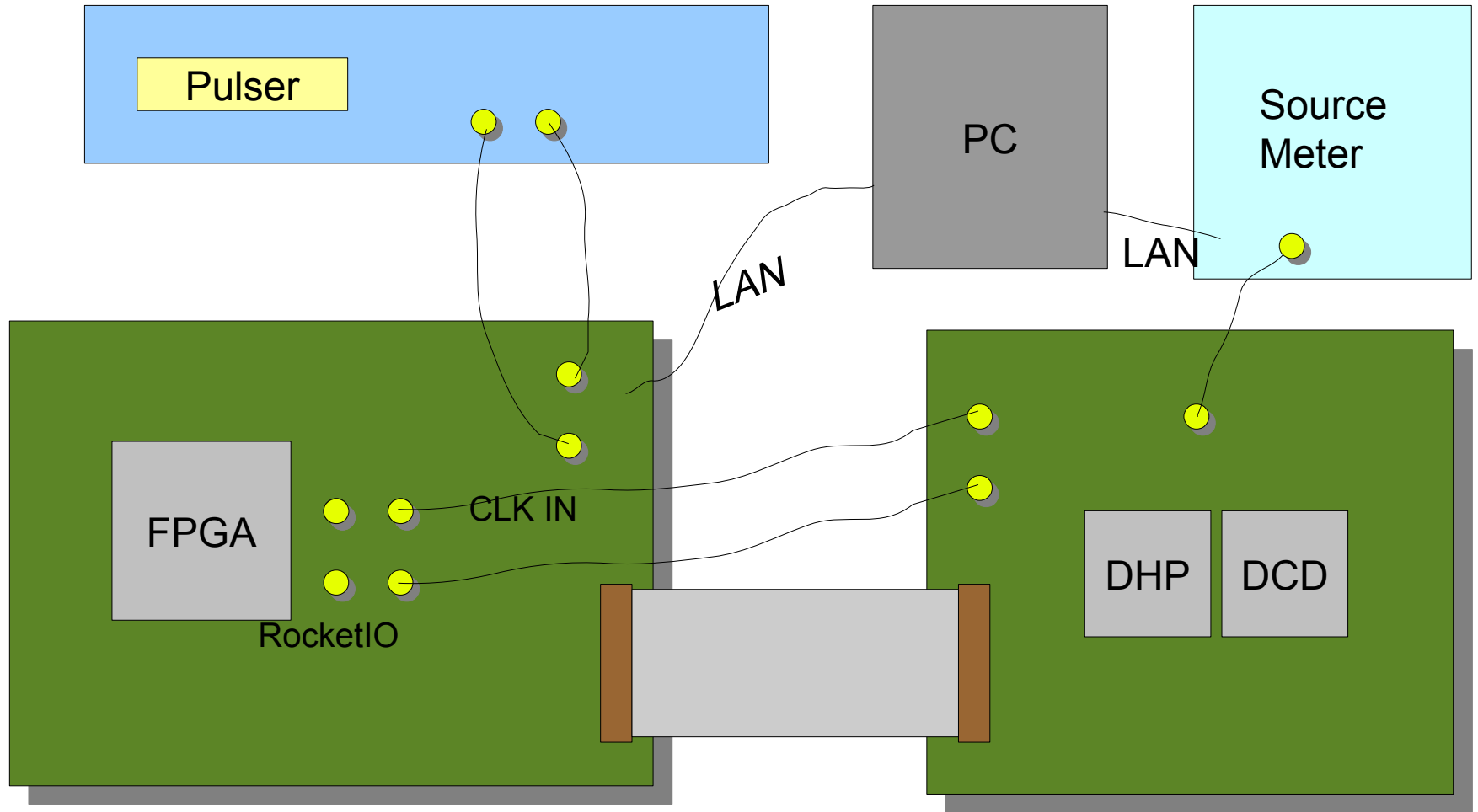


Status Report DHP-DCD Testsetup

Evo Meeting, 31.05.2011

Philip Pütsch



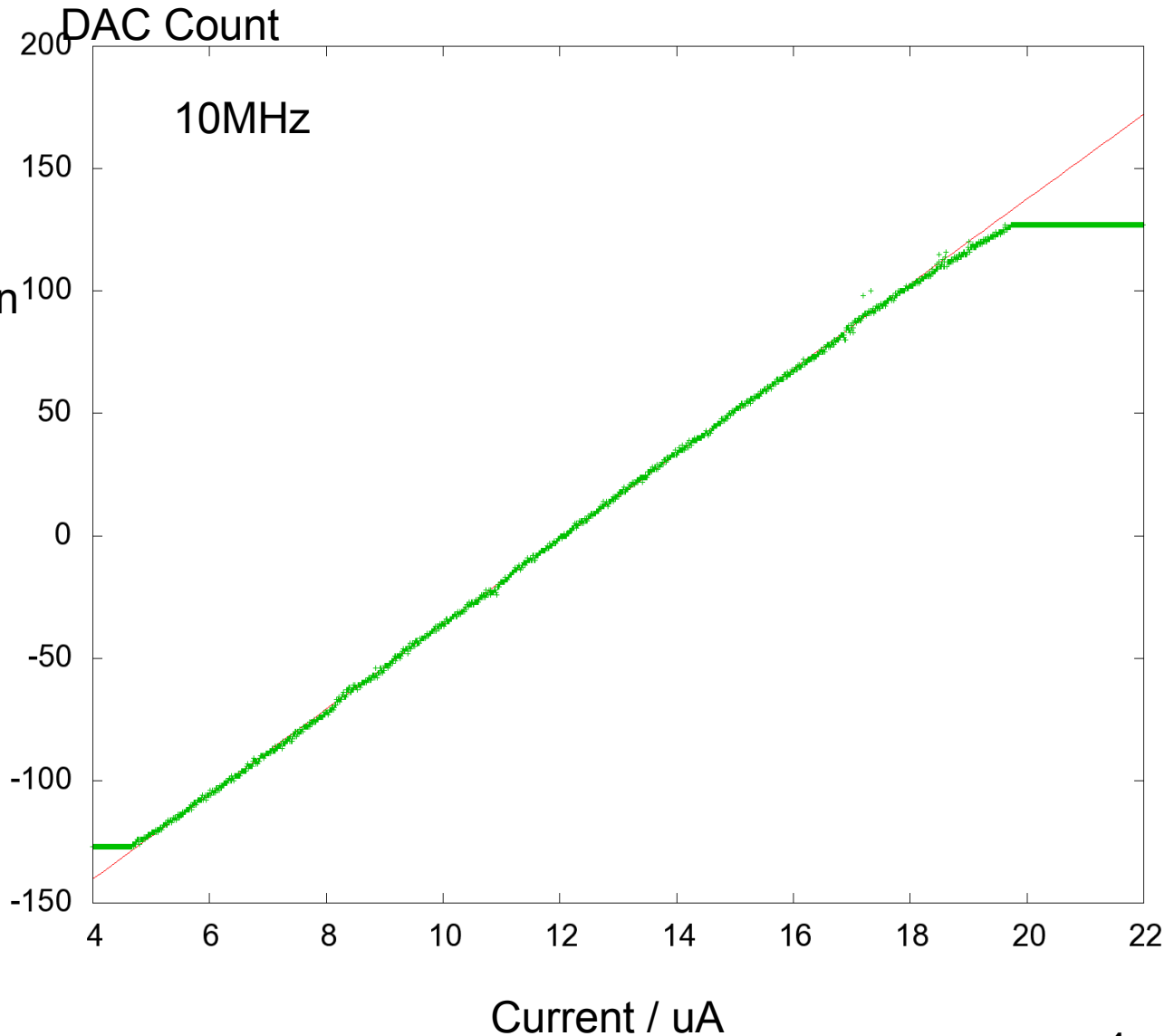
Results – DHP Memory

- Stored random Data to DHP Memory
- Read back every 30s via High Speed Link
- After 4 Days of Operation no errors Detected
- → Memory Working in no-Irradiation Condition

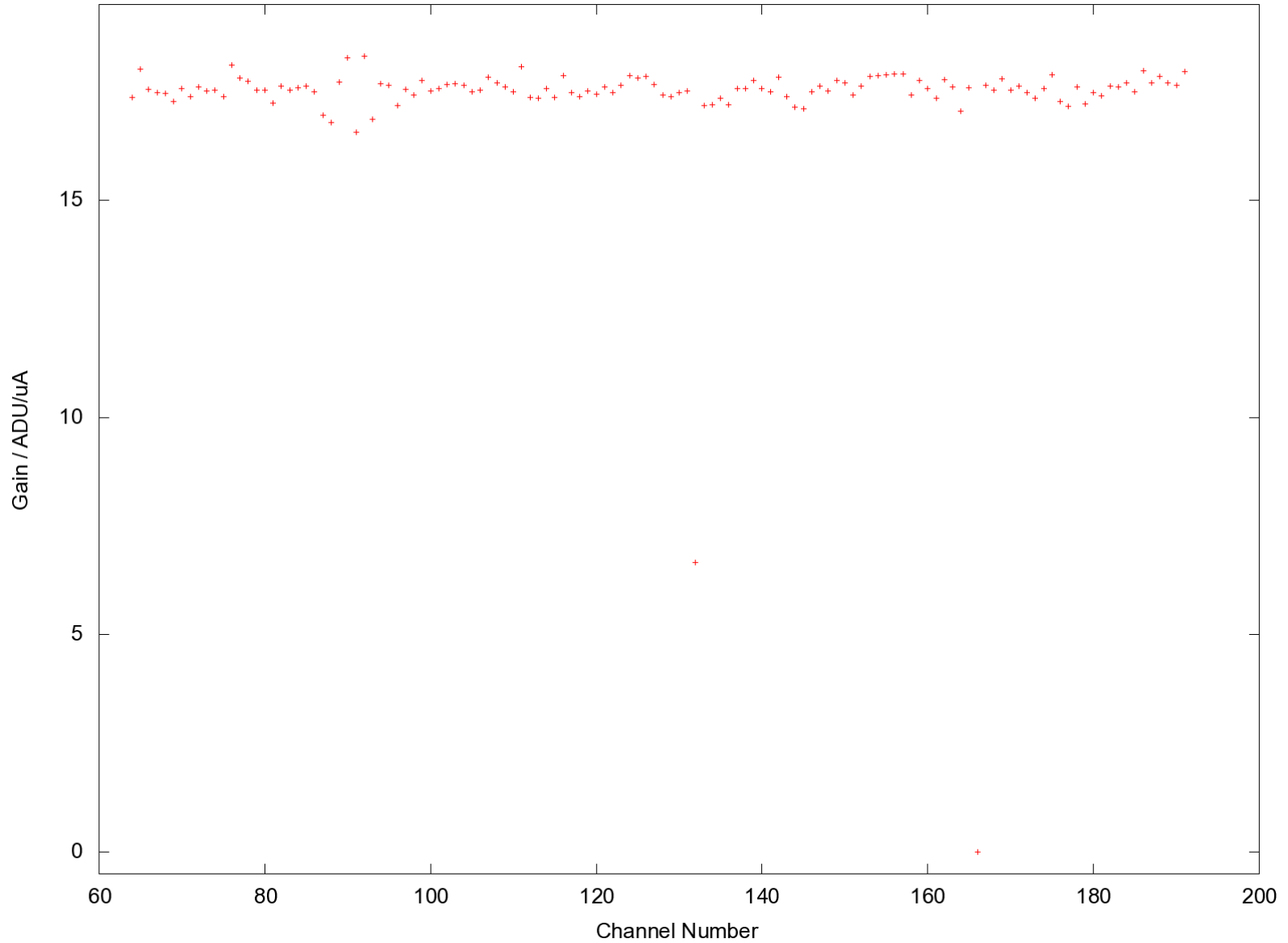


Problems and Results

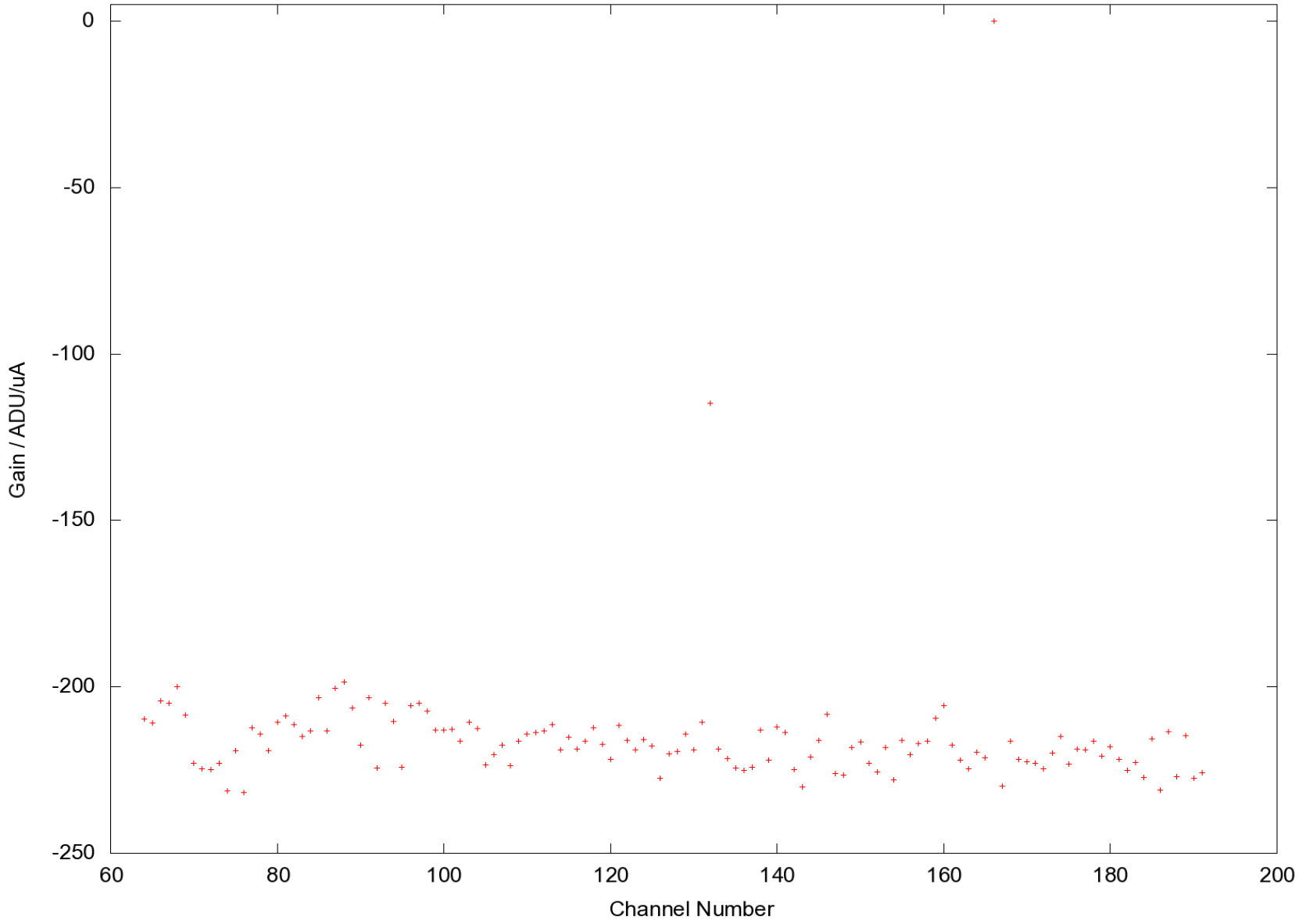
- Bonding Yield
 - Communication
- DHP-DCD:
- Test Pattern
 - Synchronisation
 - JTAG
 - Configuration
- Remote Control
- Source Meter
- Unstable Ethernet Communication



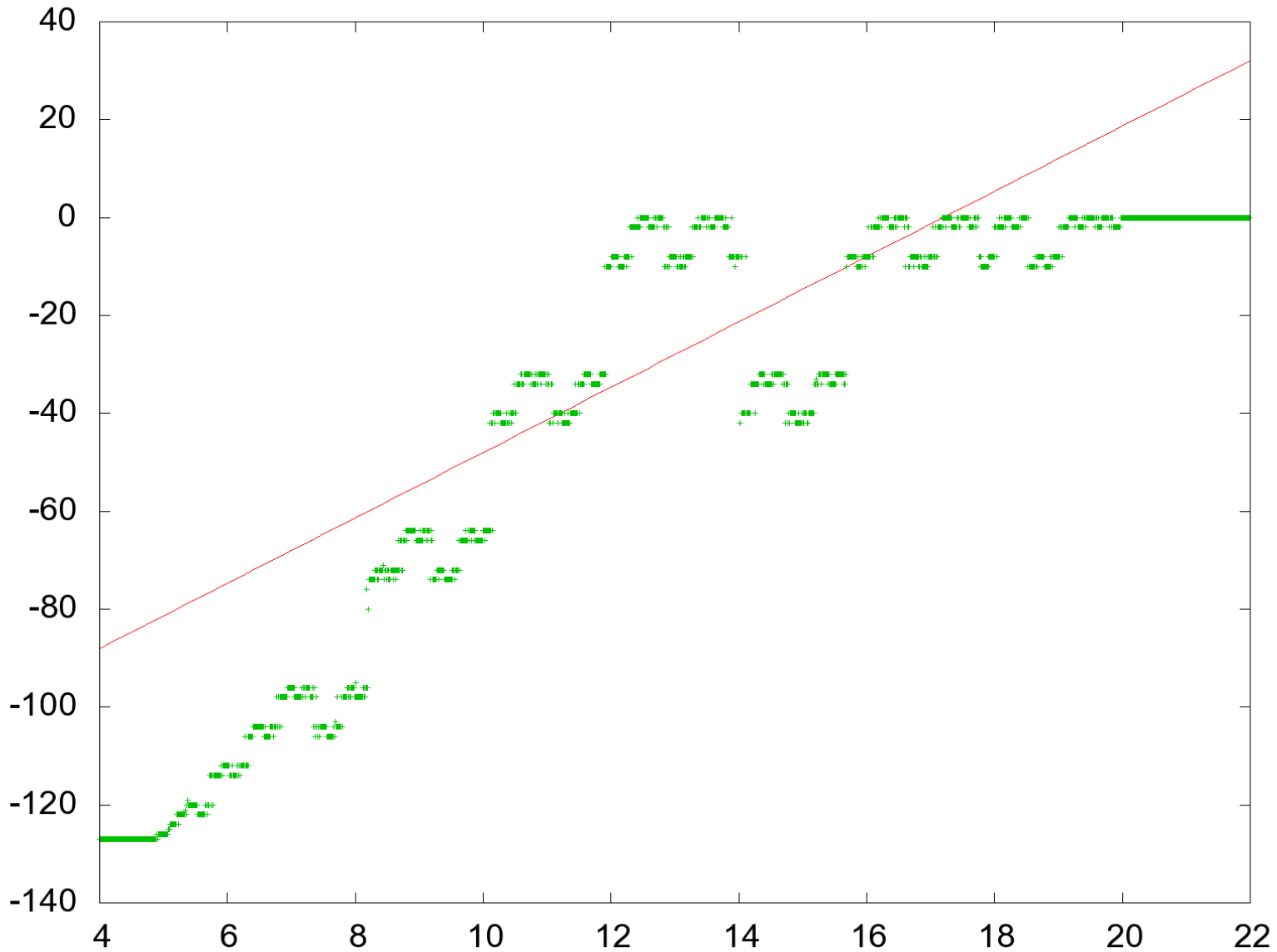
Results - Gain



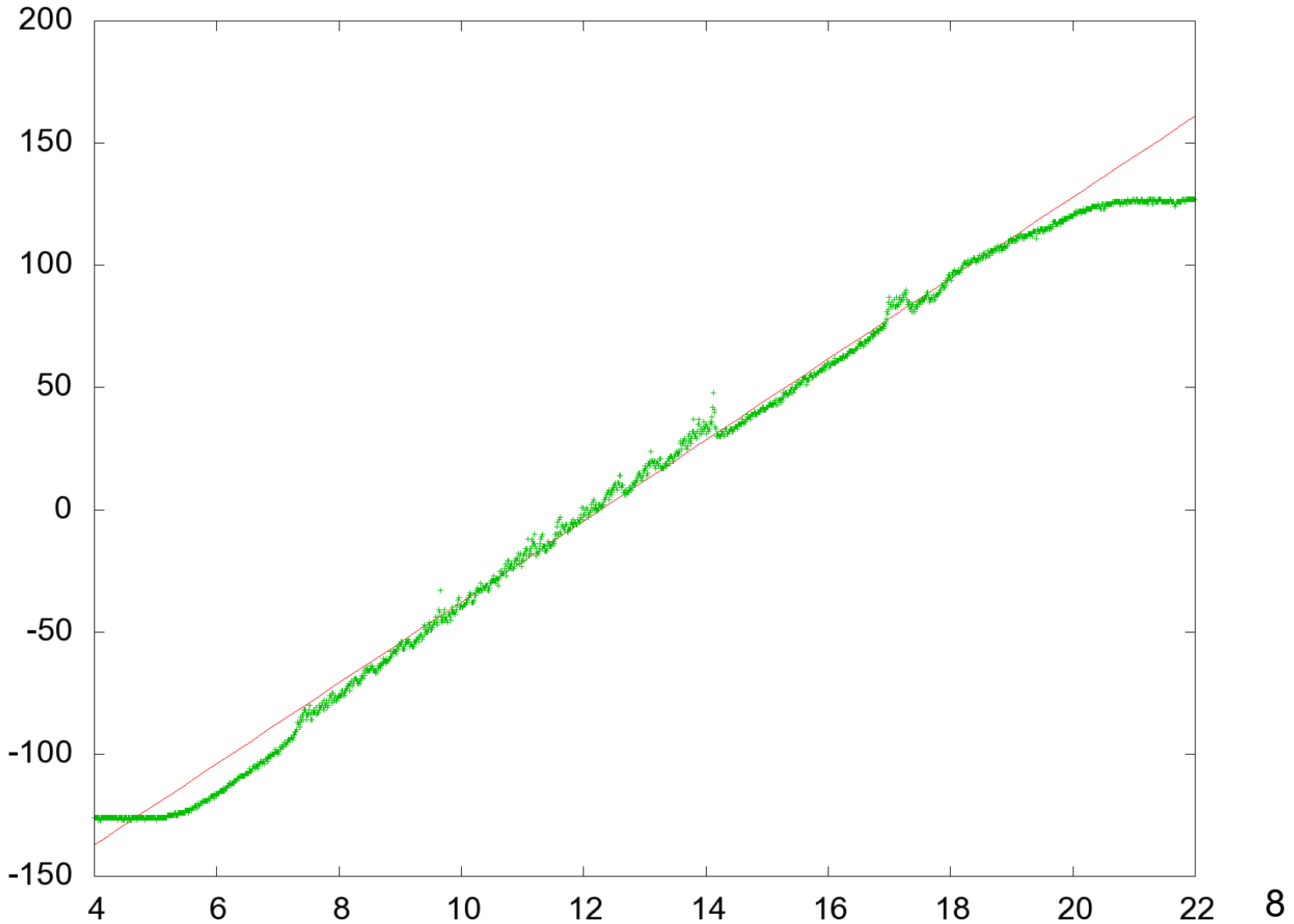
Results – Offset



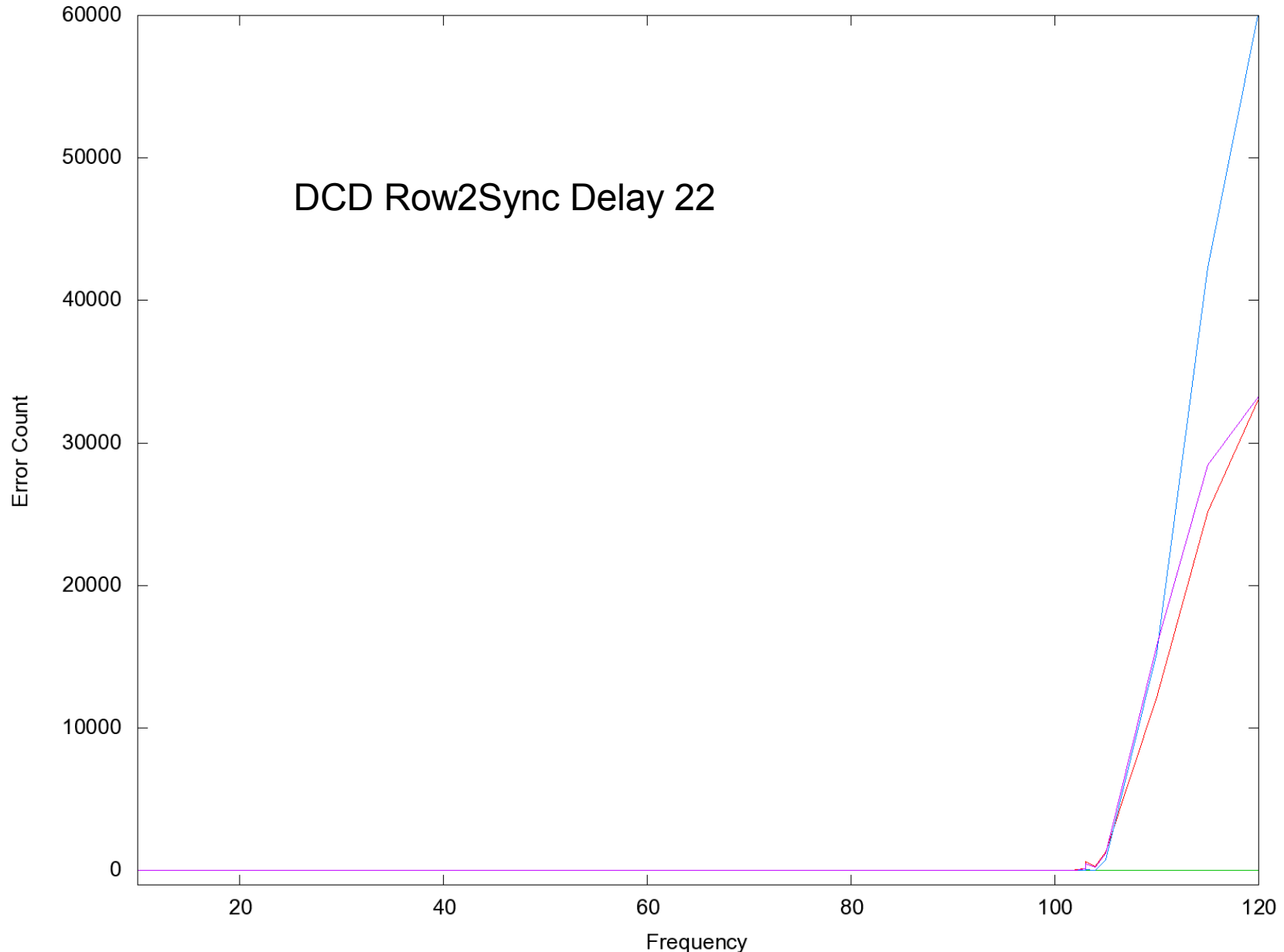
Results Channel 132



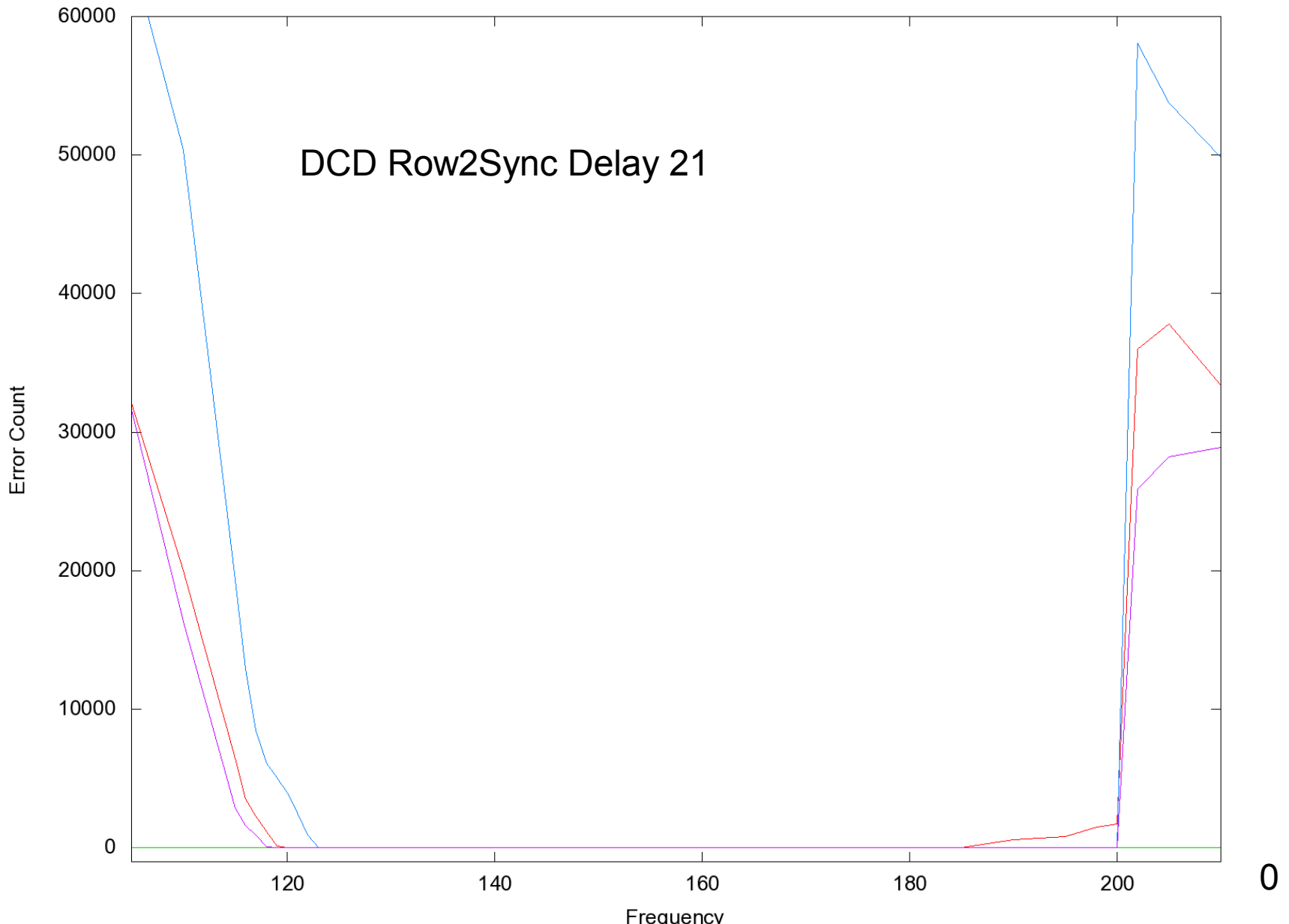
Results – Channel 91



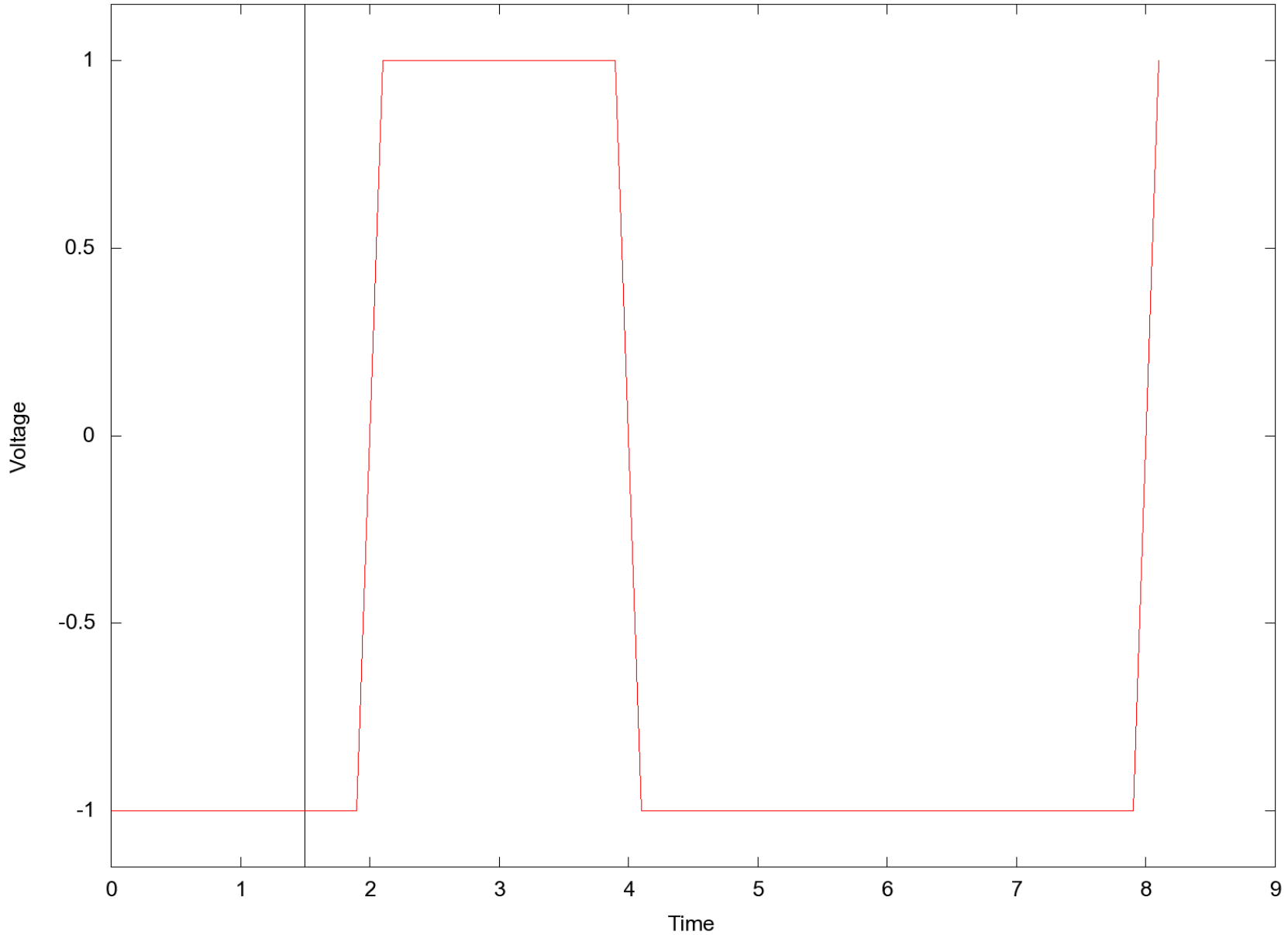
Results – Frequency Scan



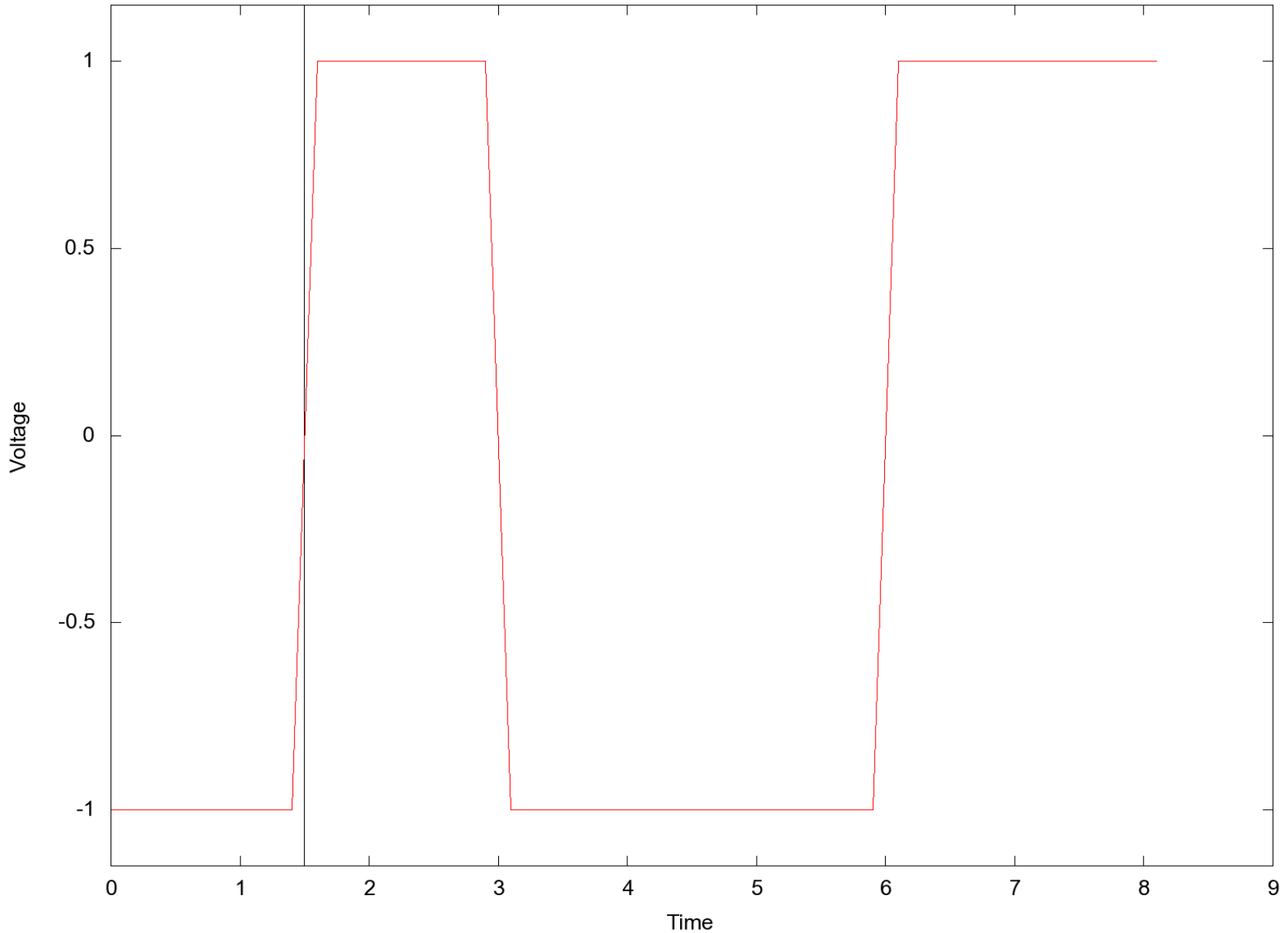
Results – Frequency Scan



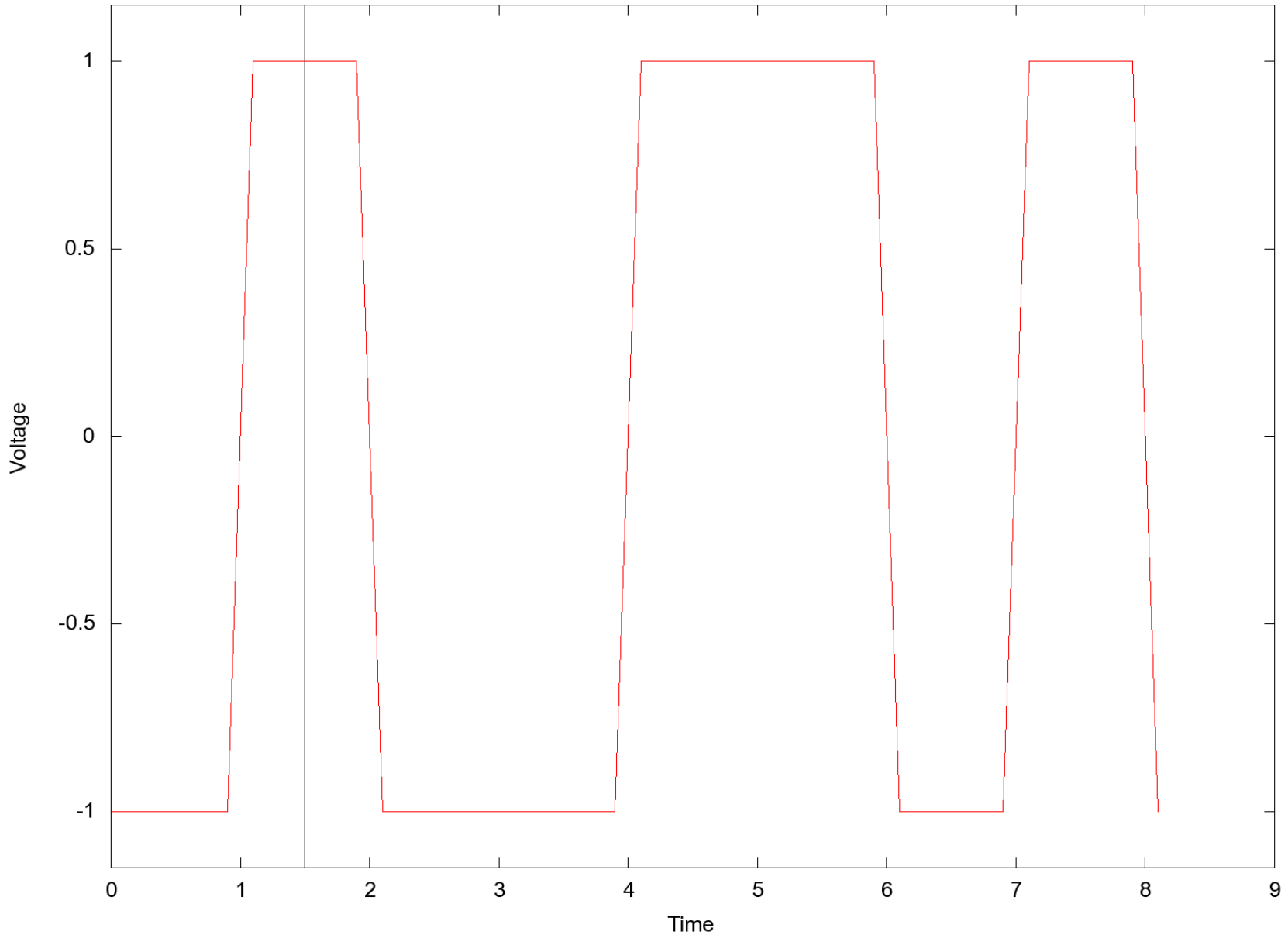
Results – Frequency Scan



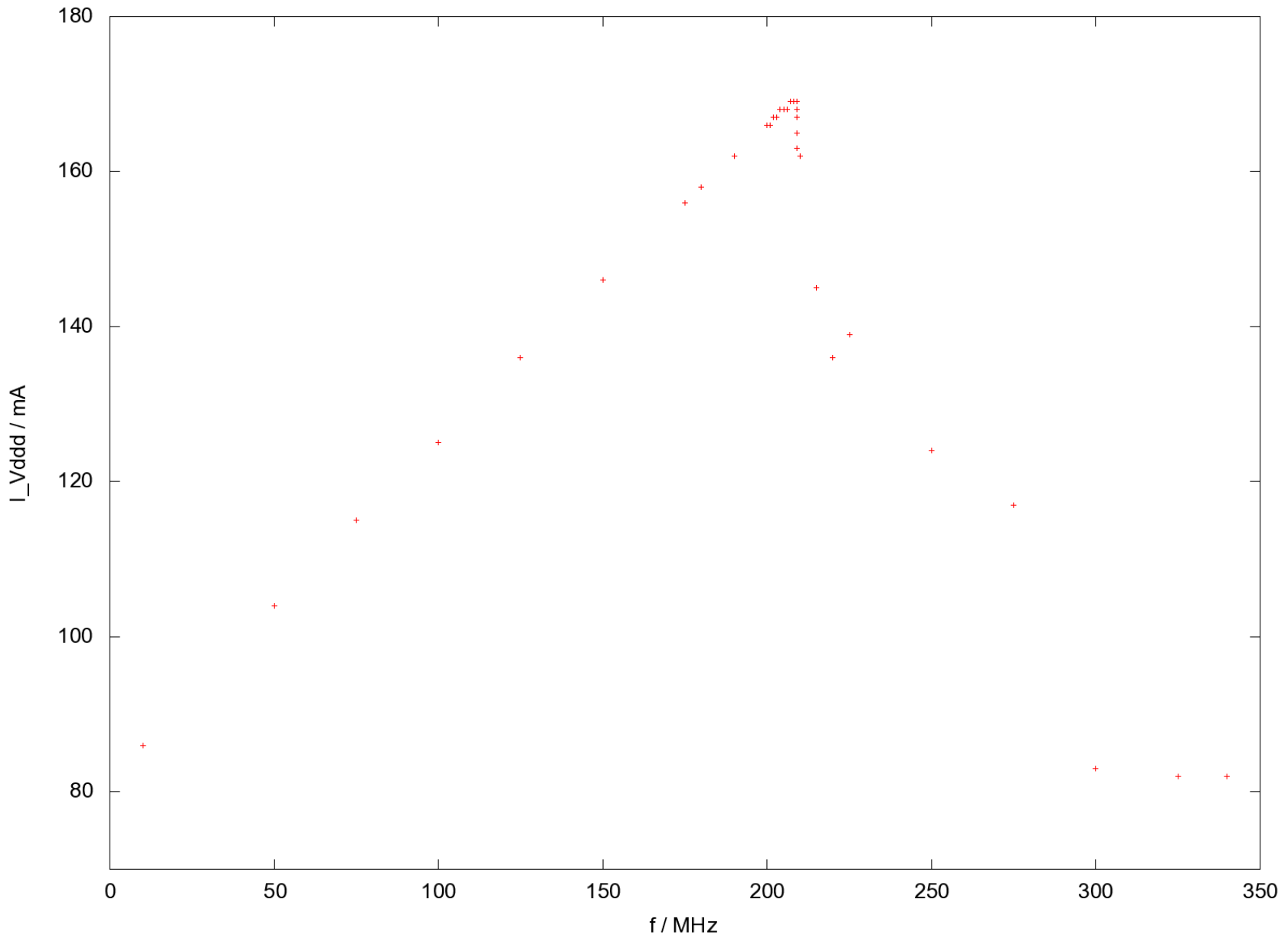
Results – Frequency Scan



Results – Frequency Scan



DCD Power Consumption



Summary & Outlook

- DCD and DHP communication operating
- Bugs in DHP found, will be fixed in 0.2
- DHP Memory working
- Synchronisation Problem
 - Shifting Voltages?
 - ~~Maybe solved by additional Wirebonds~~
- Final Speed not reached yet – DHP Driver Problems
- Irradiation with Protons/Electrons???

