

First Wire Chamber data from SNS beam tests on Dec 16, 2014

Irakli Garishvili on behalf of the
“Cave-13 crew”

Information

The goal of the test was to verify

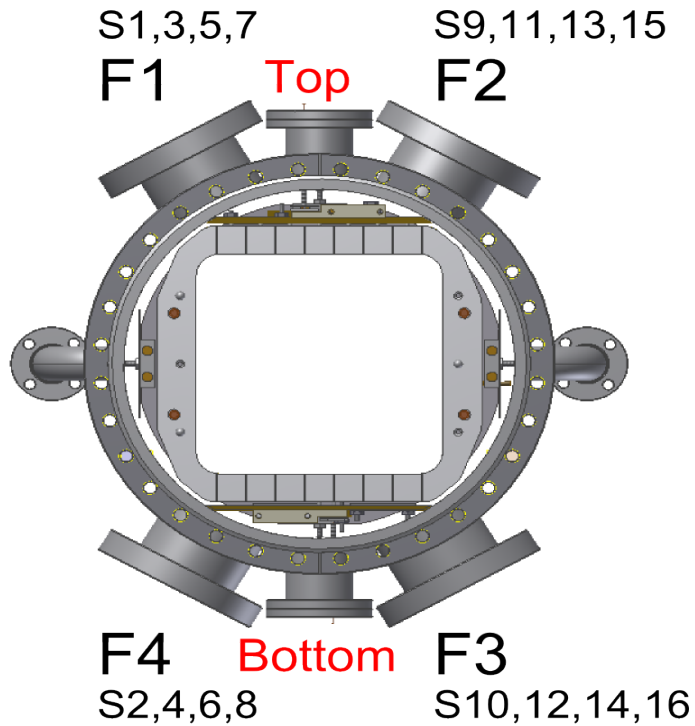
By 8:00 AM on December 16 the wire chamber was placed at the “approximate” beam position and running with HV power supply on at 400V and LV power supplies at 15V

Shutter was closed we took initial data, which showed very small signal. We had to stop.

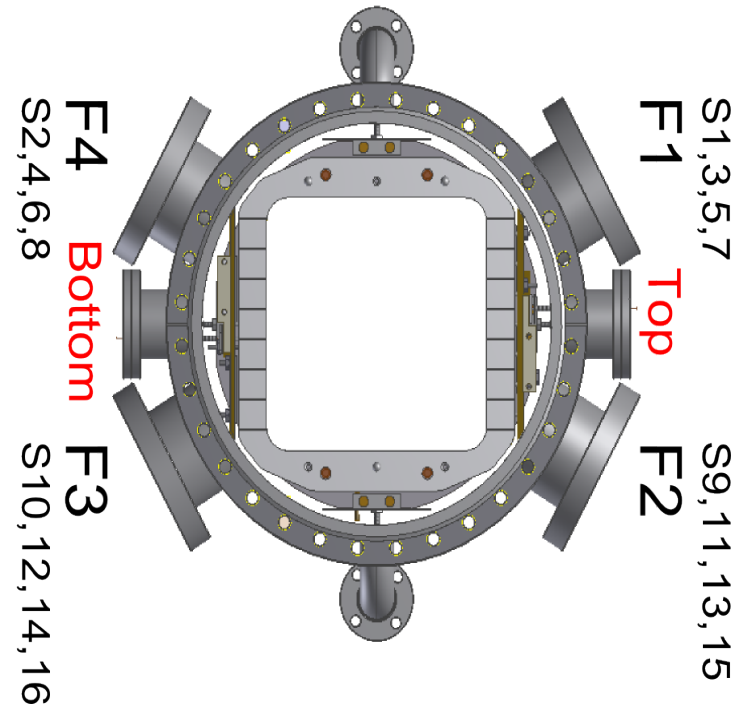
After entering Cave we discovered that HV power supplies tripped.

Seppo decided to switch to 300 Volts.

Chamber orientation & Mapping

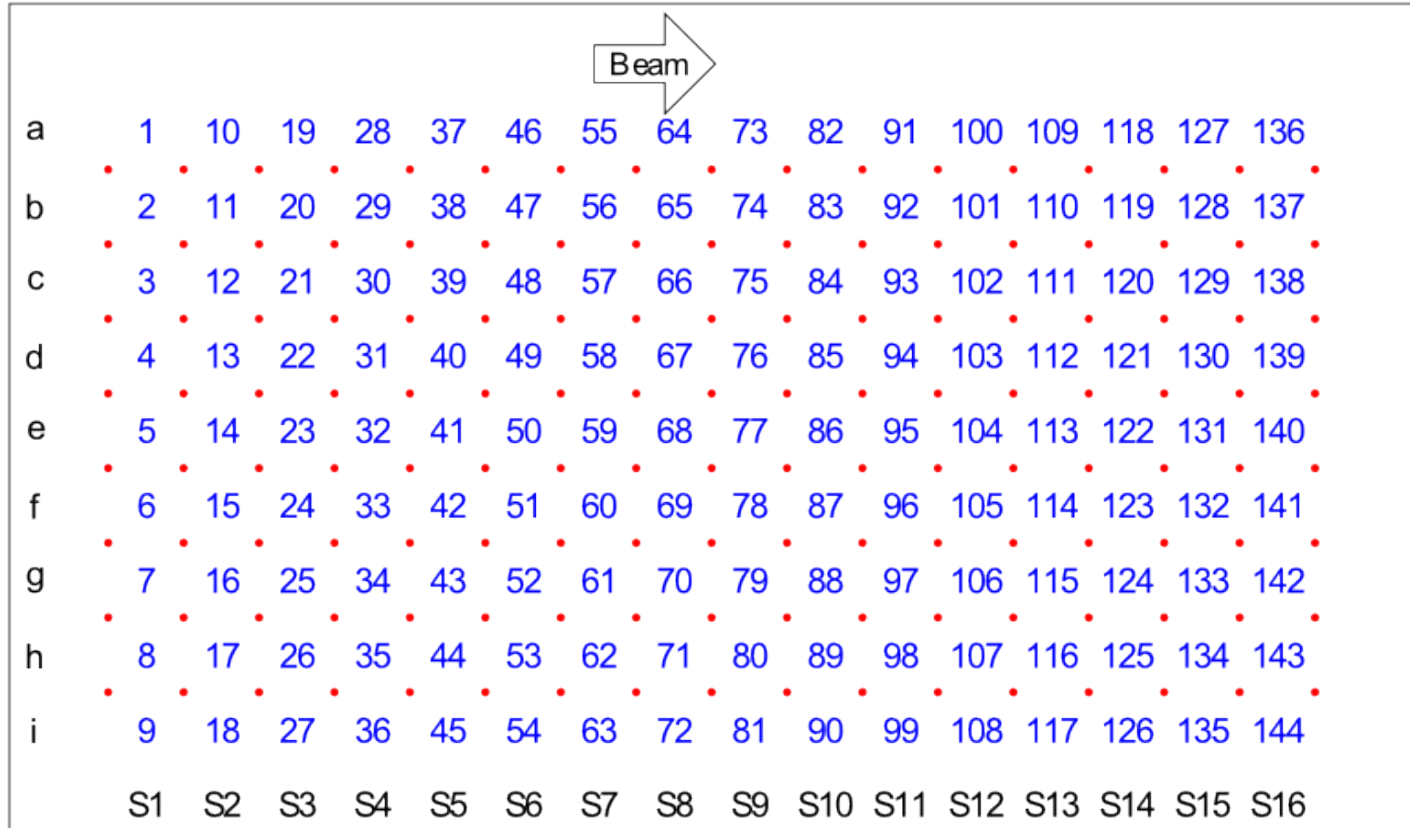


Originally planned orientation



Adjusted position for transverse Polarization

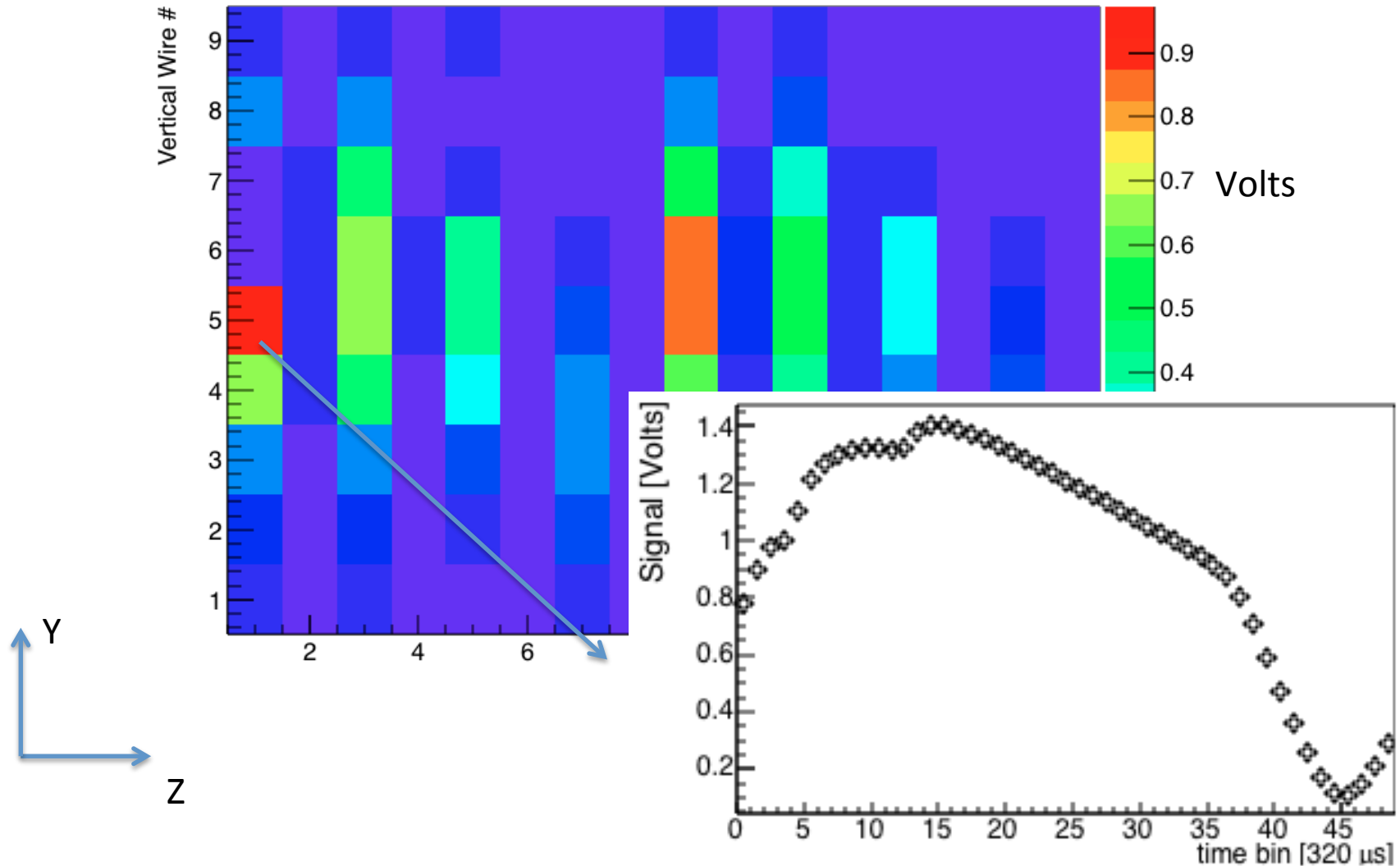
Chamber orientation and Mapping



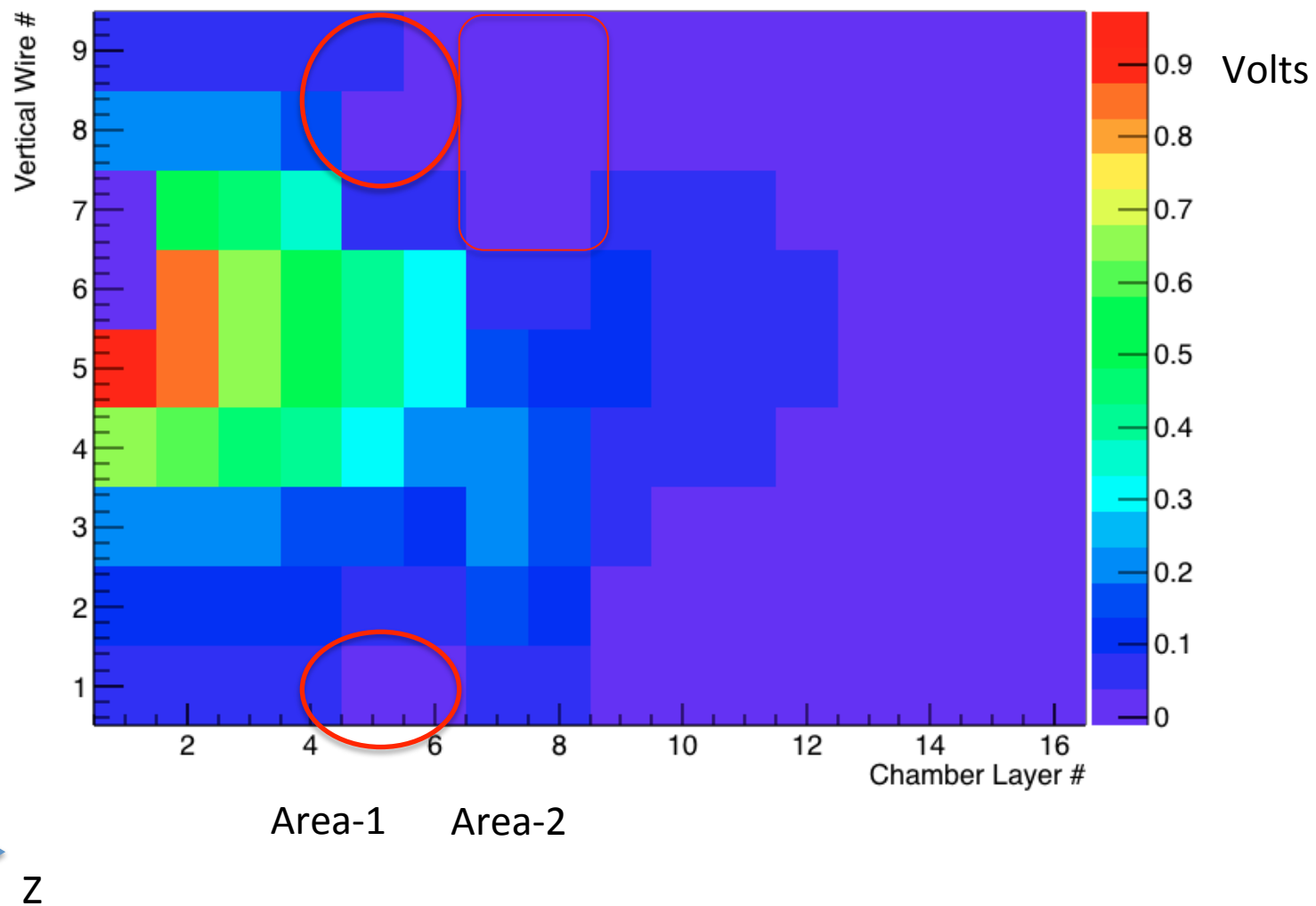
- HV 17 HV Frames with 8 wires each
- Signal 16 signal Frames with 9 wires each

Chamber Signal Map (Initially observed)

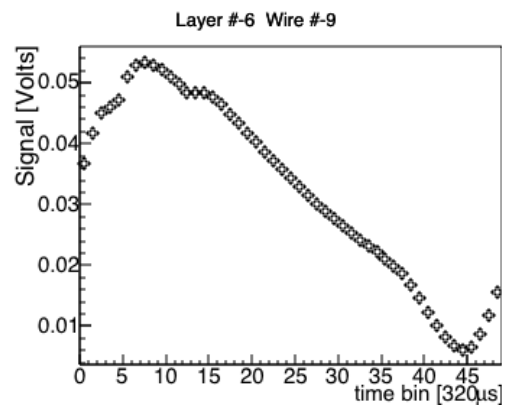
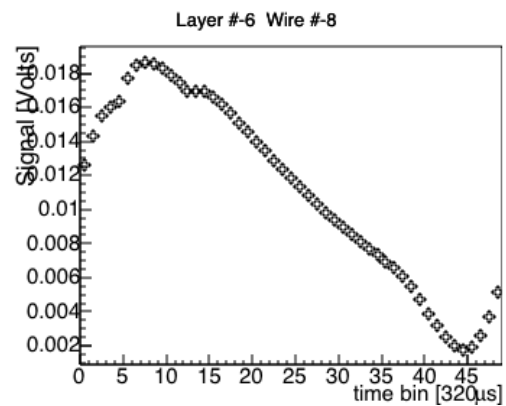
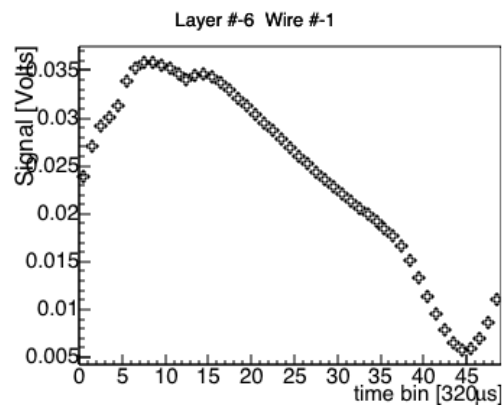
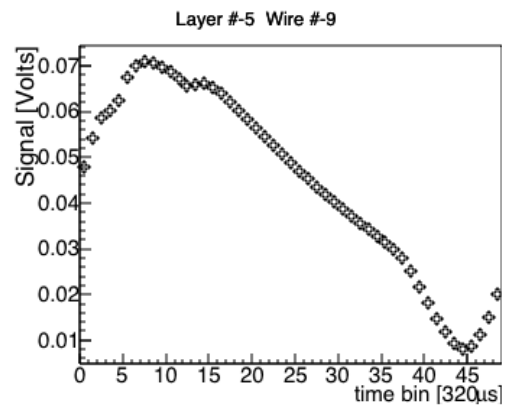
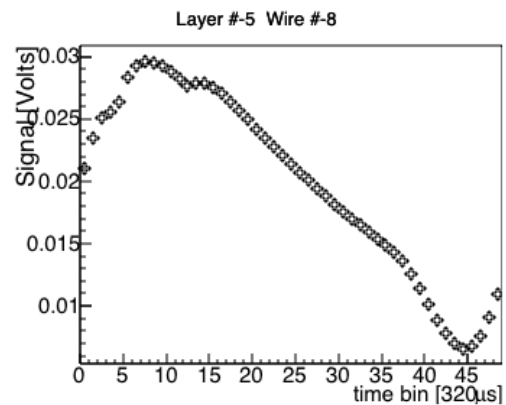
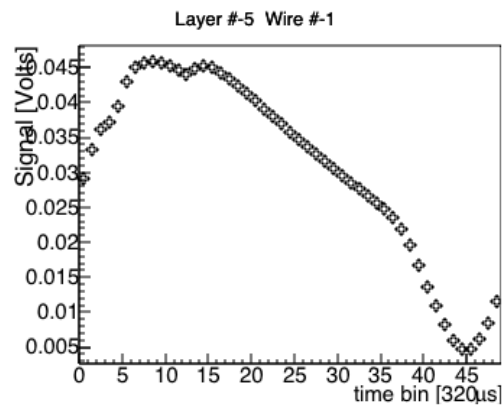
Chamber Signal map @ 300 V with 850W beam - Run#854



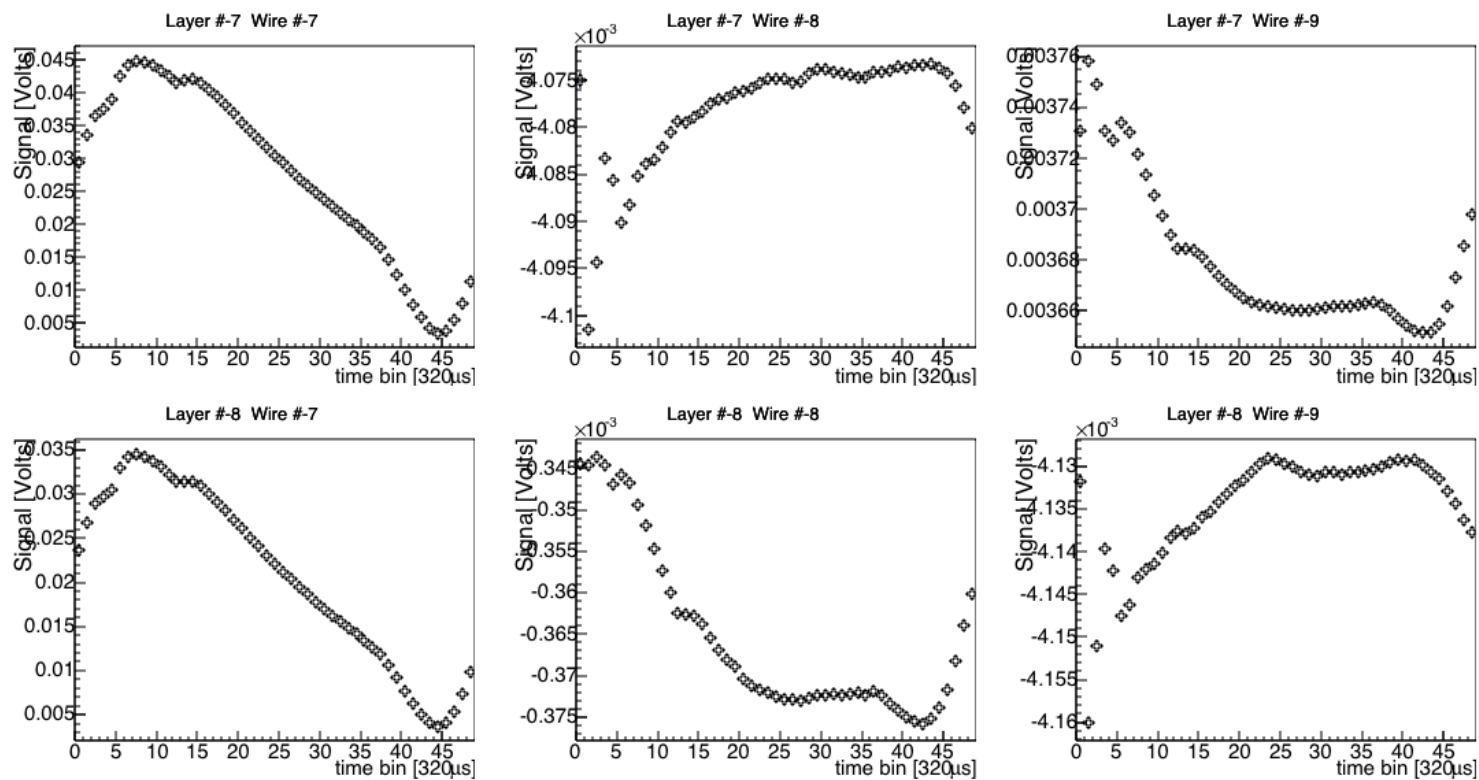
Chamber Signal map @ 300 V with 850W beam - Run#854



Area-1 Signal



Area-2 Signal



Backup Slides

M1 monitor signal profile

