

# fADC/drift time update

3/24/2017

# fADC

## PROBLEMS

## STATUS

- Lookback window shifting (03/2016)

FIXED

Critical error during long DAQ sessions (06/2016 -- 01/2017)

- Setting up different FPGA DAQ (07/2016)
- PEB0/ROC failing to configure

FIXED

FIXED

Corrupted data from long DAQ sessions (02/2017 -- ??)

UNRESOLVED

# Q: IS IT THE FADC OR THE VOSTRO CPU?

A: BOTH

	OLD DATA	NEW DATA
Vostro (old)	NO	NO
OptiPlex (new)	YES	NO

**CONCLUSION:** There's a bug in the code AND the fADC is creating corrupted data.

# AS OF THURSDAY 3/23/17

The Vostro *will not* turn on.

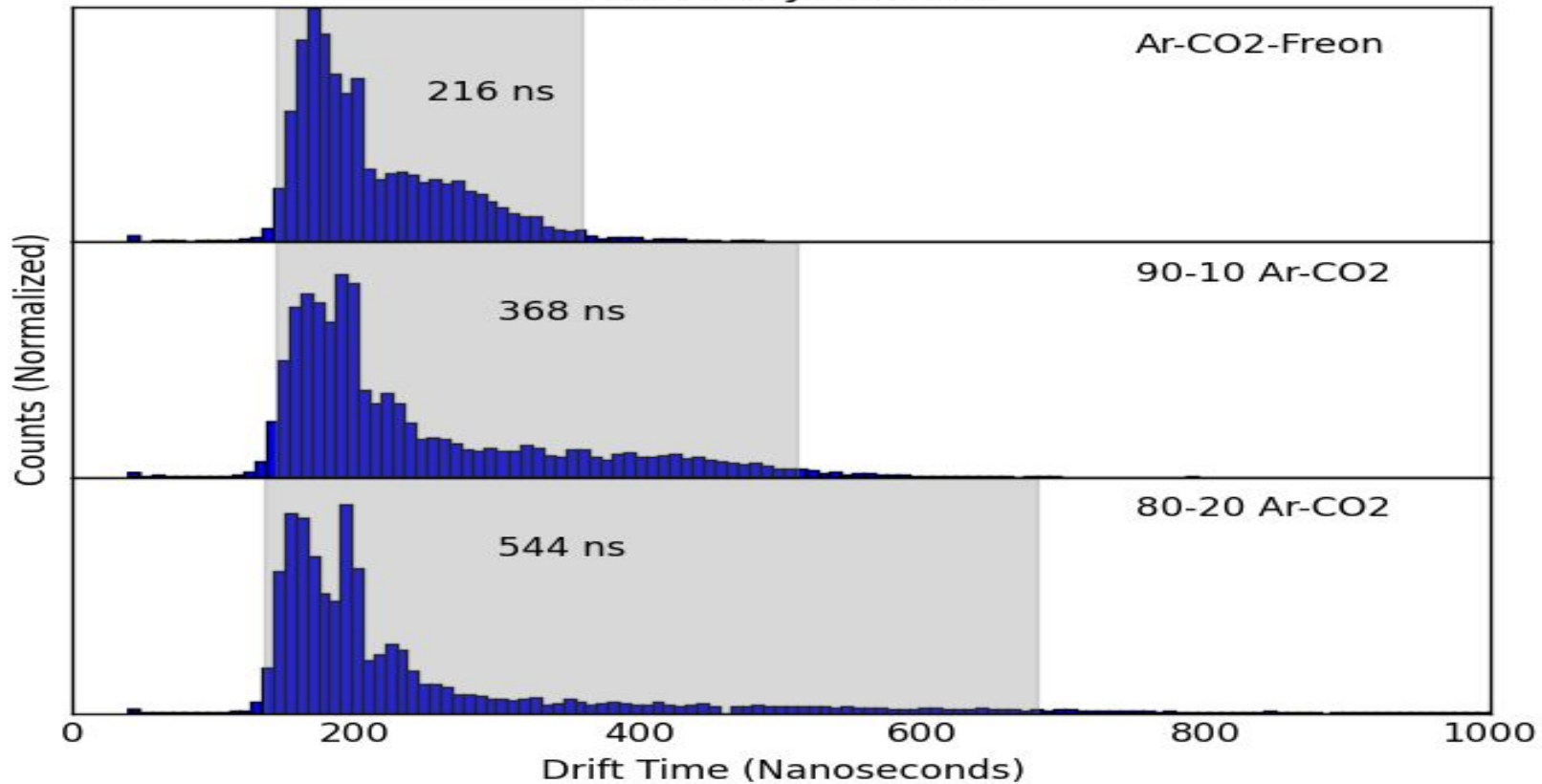
Just gets a yellow light for a brief second before turning off → Motherboard is fried

Need to hook hard drive into another machine and clone it.

# TO DO LIST

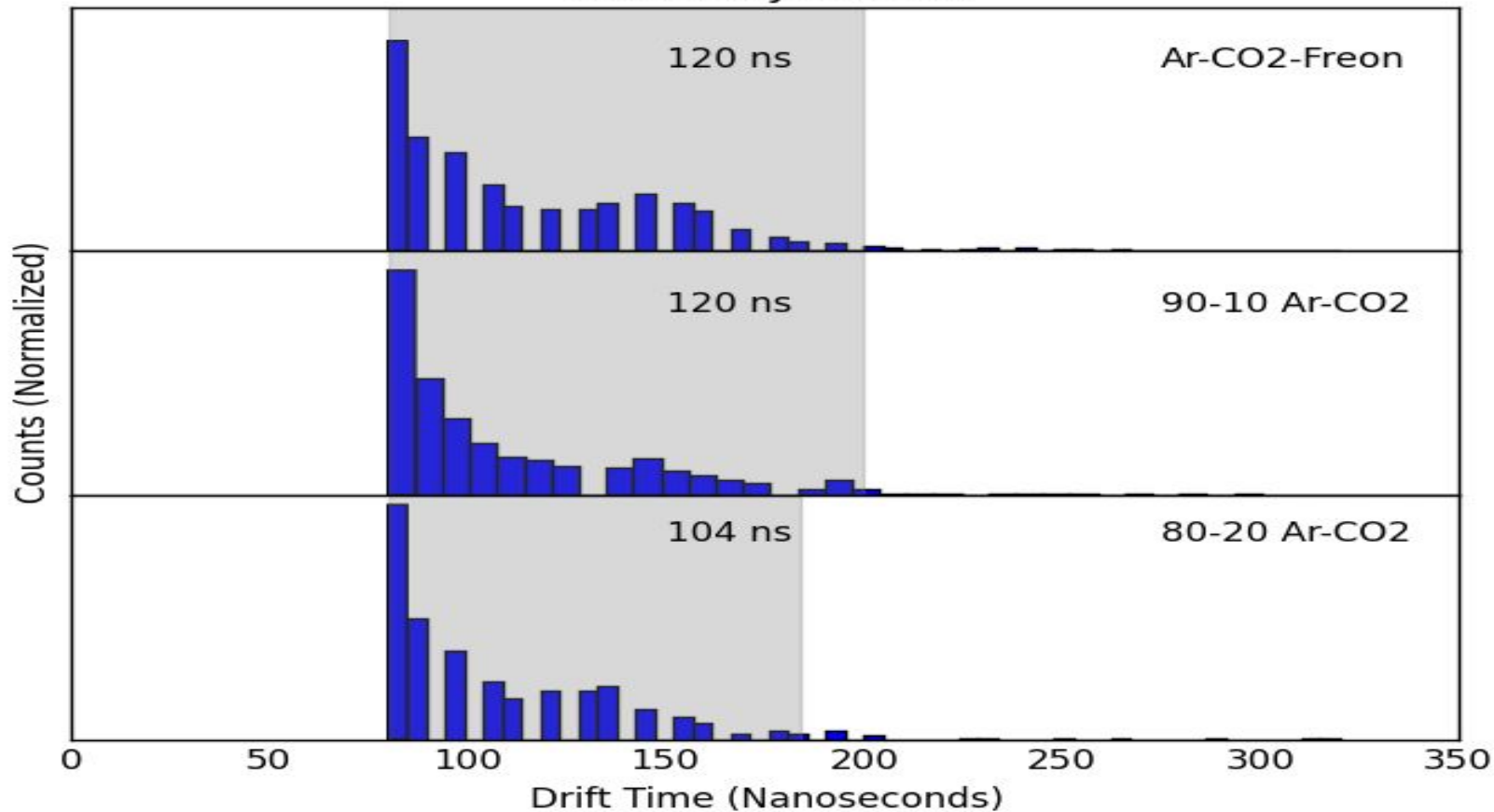
- Restore fADC to original image
- Get data off of Vostro CPU
- Install ROOT on Macbook Pro (or linux partition). Verify MBP performs same function as Vostro.

# Gas Study Results



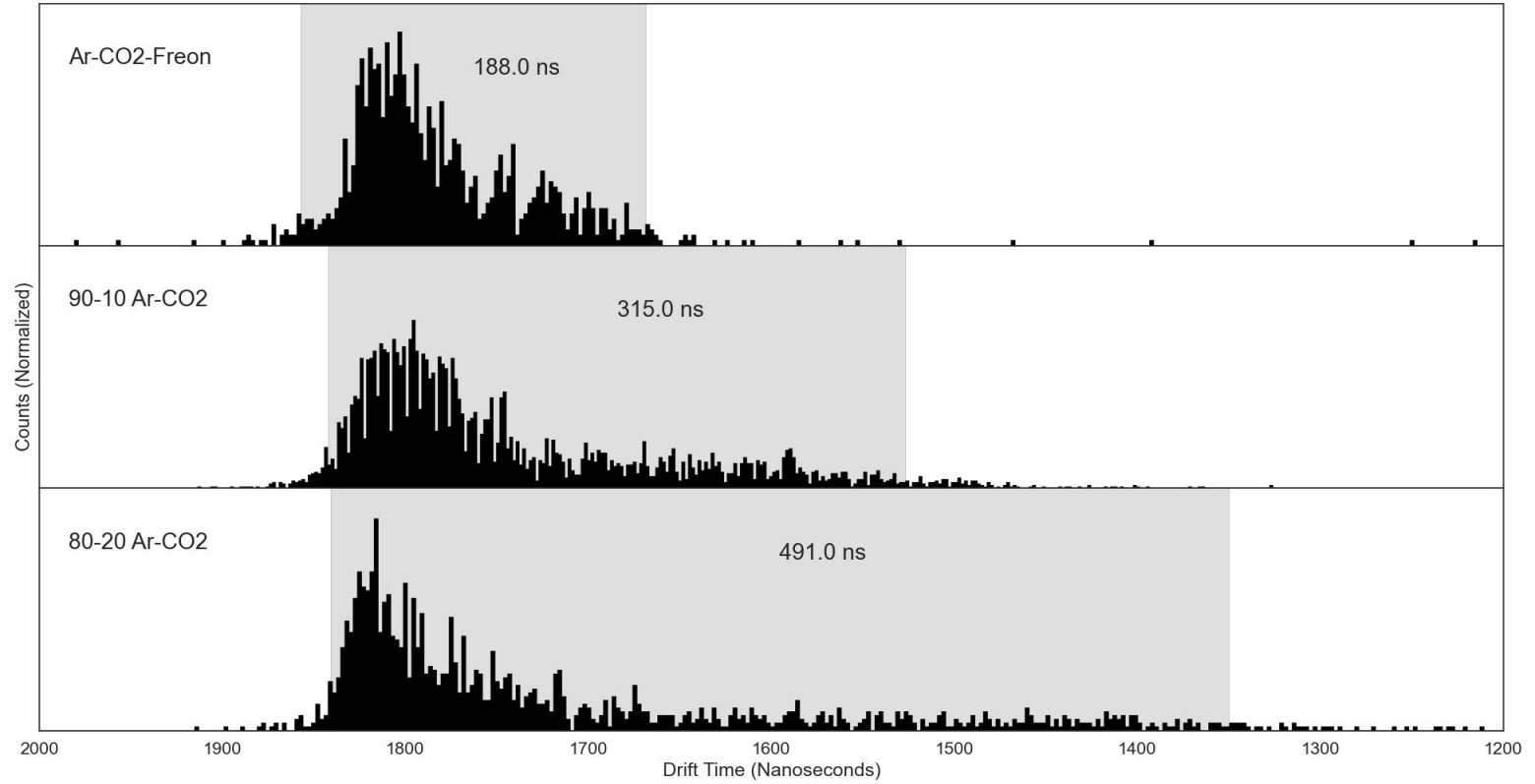
Analyzing the signal from all wires

# Gas Study Results



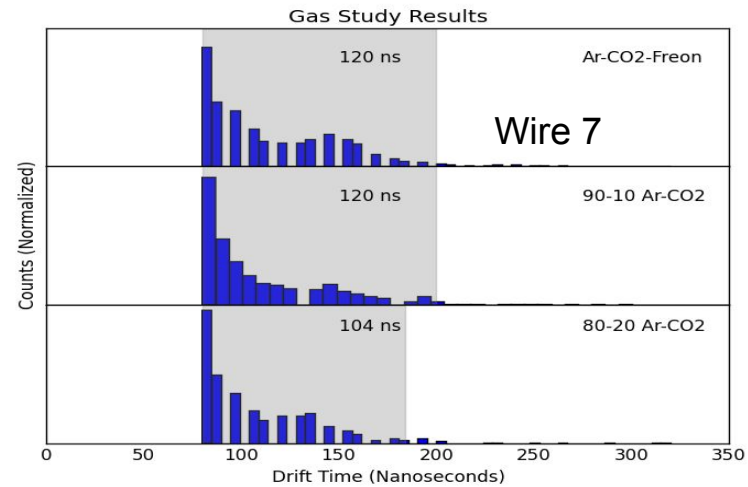
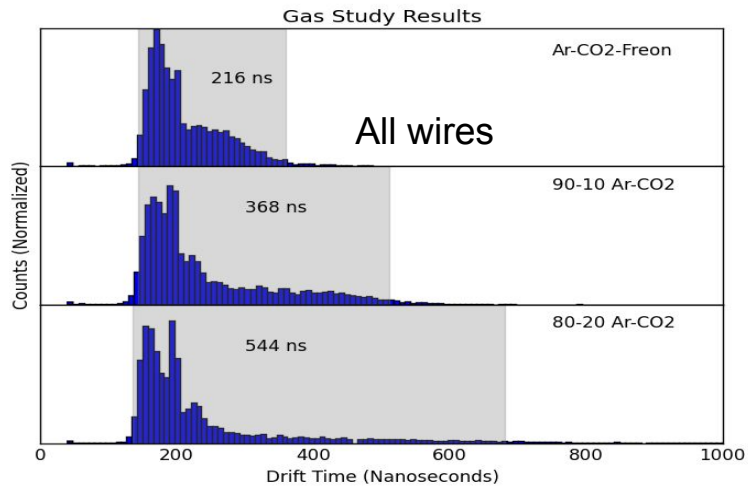
Just analyzing one wire (the 7th in, directly under the PMT)

# Gas Study Results



Drift time studies from last summer utilizing ScopeOut





Gas Study Results

