

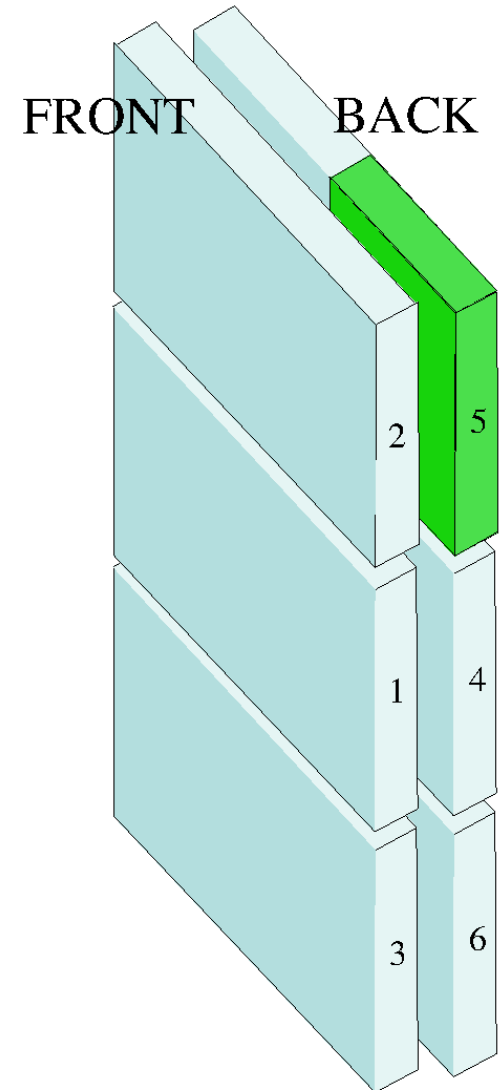
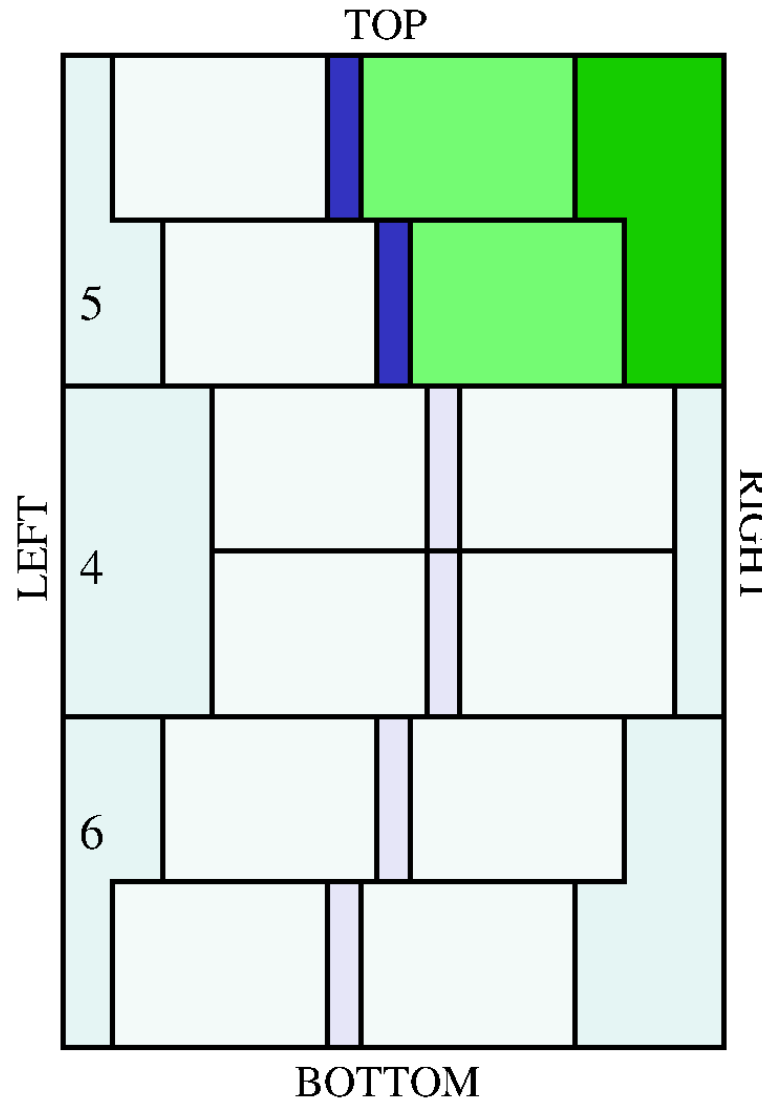
Coordinate Detector Status Update

Peter Monaghan
Taylor Edwards & Kara Ferner
Christopher Newport University

SBS Weekly Meeting
12th October 2020

Coordinate Detector Configuration

- Left/Right split by mirror.
- Acceptance matched for G_E^p .
- Paddles angular spread $\pm 17^\circ$



Module Commissioning Progress

		Light-tightness	Charge normalised	Threshold	Efficiency & HV	Complete
Module 1	RIGHT	✓	✓	✓	✓	✓
	LEFT	✓	✓	✓	✓	✓
Module 2	RIGHT	✓	✓	✓	✓	✓
	LEFT	✓	✓	✓	✓	✓
Module 3	RIGHT	✓	✓	✓	✓	✓
	LEFT	✓	x	x	x	x
Module 5	RIGHT	✓	✓	✓	✓	✓
	LEFT	✓	x	x	x	x

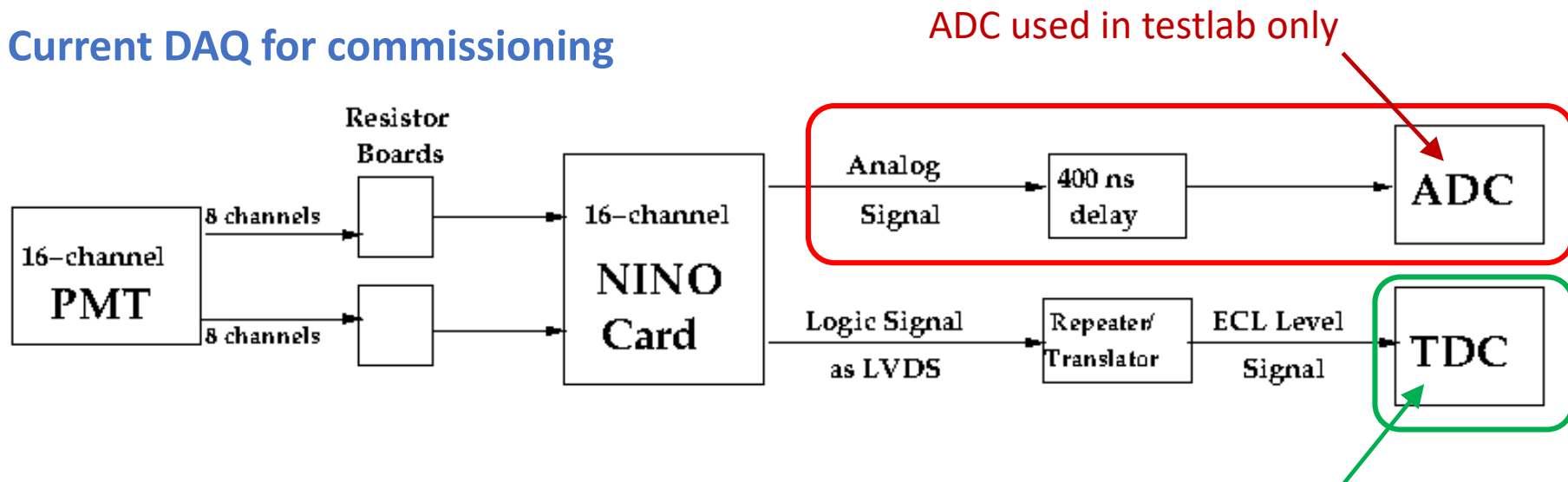
Cosmics Data-Taking

- Due to shutdown/MedCon-5 restrictions, no data taken from March until end September.
- I am now allowed to work in the test lab!
- Undergraduate students not allowed on site!
- Restarted cosmic data-taking
 - All channels same output/performance as in March at time of shutdown!
- Working on re-optimizing resistors for a few individual channels.
- Next, start collecting data for threshold and efficiency analyses.



DAQ: Fastbus → VETROC

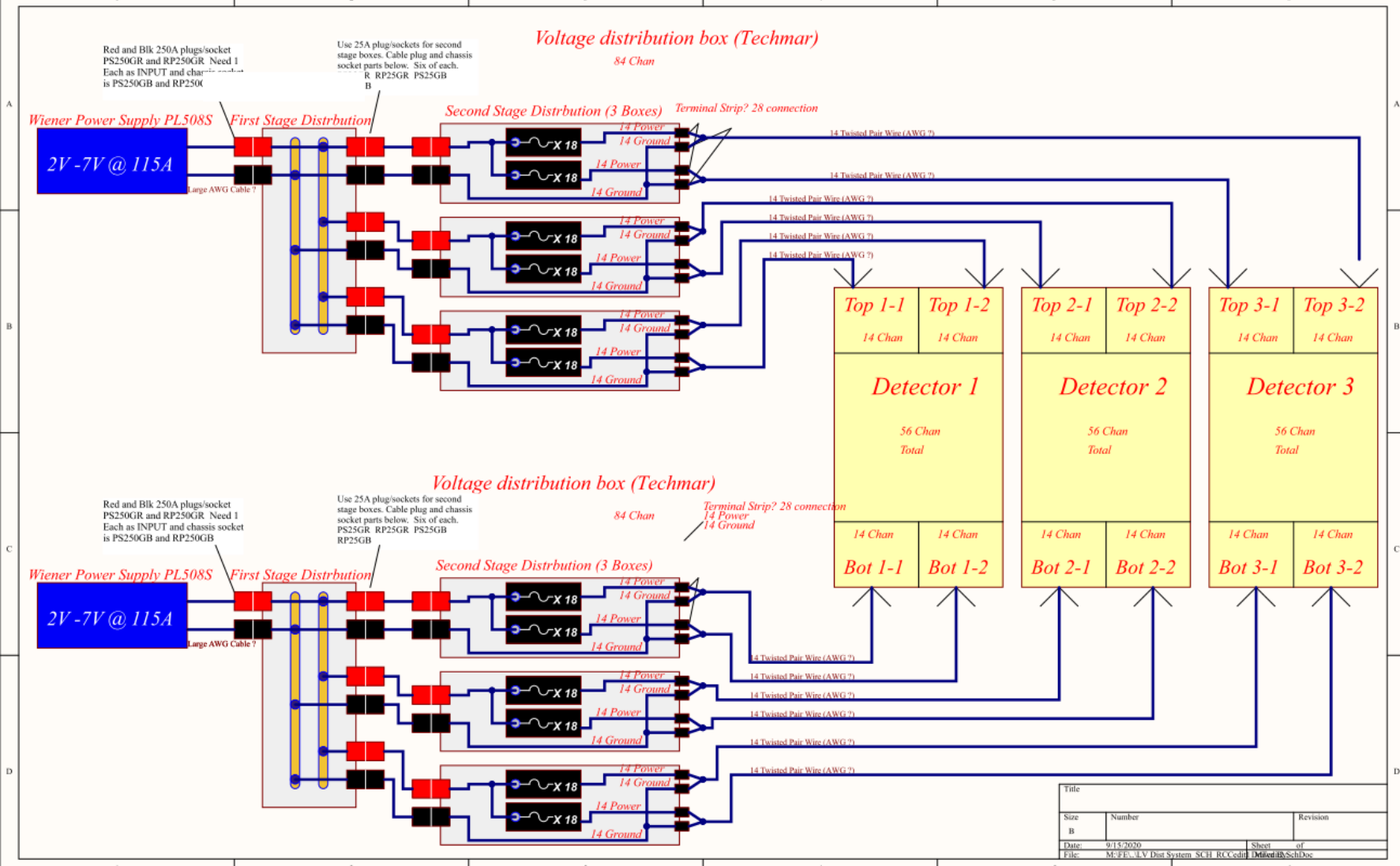
Current DAQ for commissioning



- David Flay leading effort.
- VETROC TDCs capable of higher data rates.
- Fewer modules required for less deadtime.
- 15 modules to be purchased.

Replace Fastbus with
VETROC modules

NINO Card Power Supply



Title		
Size	Number	Revision
B		
Date:	9/15/2020	Sheet of
File:	M:\FE\3LV Dist System SCH RCC.cad	DMed\B\SchDoc

Summary

- Commissioning all modules
 - Hindered due to Covid-19
 - Cosmics data-taking restarted now.
- Development of DAQ using VETROC system
 - In progress; David Flay and CNU students
- NINO power supply system
 - In development with Chris Cuevas (Fast Electronics Group)
 - Purchasing high current connectors, cables and chassis
- Considering installation procedures.