

Web-Based CSC Display

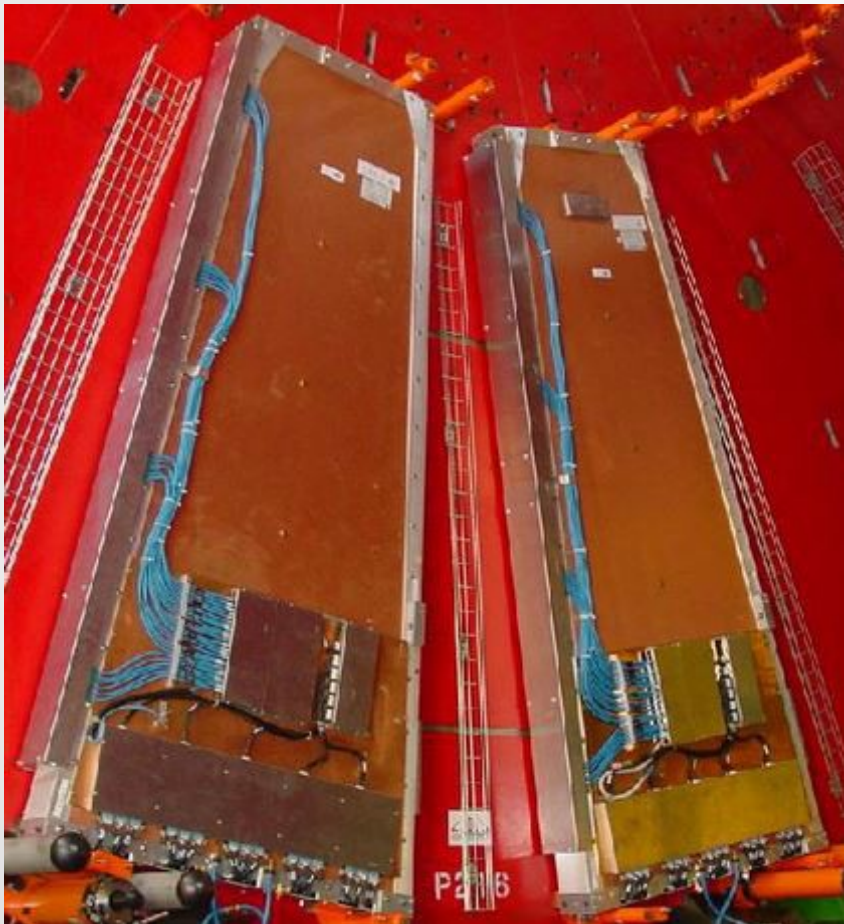
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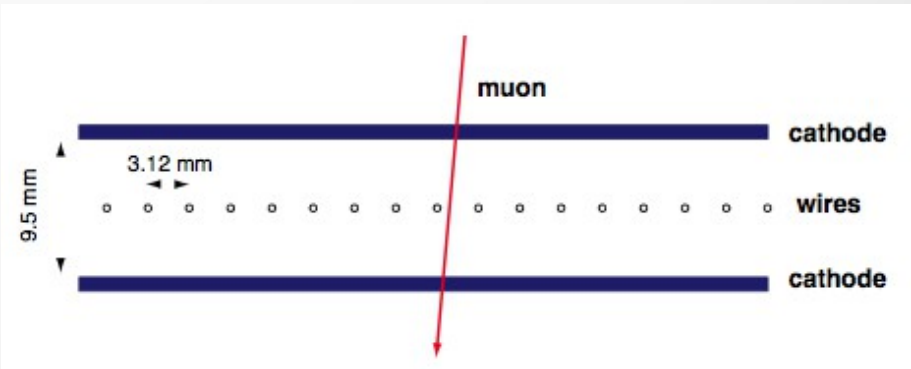
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Cathode Strip Chamber (CSC)

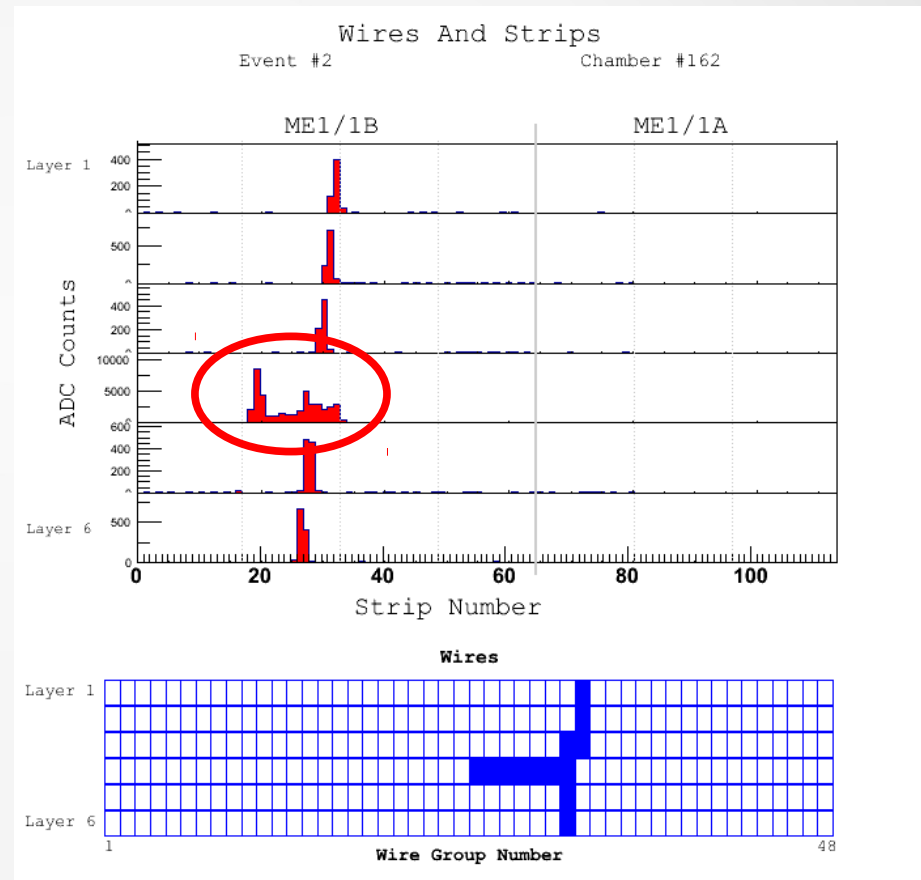


- Gas detector
- Can detect muon's trajectory accurately
- Muon ionizes surrounding gases
- Ionized gases will go to cathodes strips and conduct electric signal
- Electrons will go to anode



CSC Display

- Data acquired by CSC is saved to files
- To analyze the data, we need data visualization
- Specification:
 - Has event controller (to choose which event to be displayed)
 - Has 7 modes of display:
 - Wires & Strips, Wires & Strips (Peak), Ctrig, Atrig, CLCT Time, ALCT Time, CFEB Time Scale



CSC Display – Previous Version

- Desktop application
- Need to login to emume11 computer (which has the application installed) to be able to run the application
- Need X-server on local machine
- Unstable event controller
- Run slowly through the network
- Print feature can make the application crashes

CSC Display – New Version

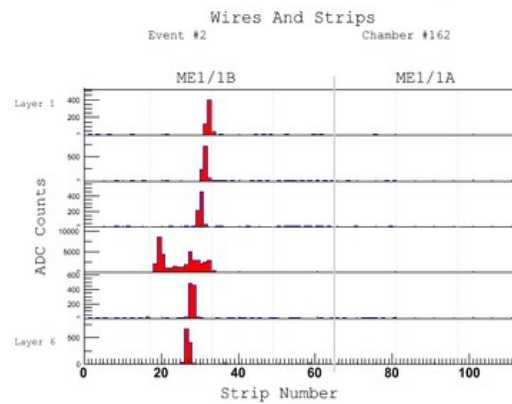
- Web application
- Don't need to login to emume11 computer to run the application
- Run in browser on local machine
- More stable event controller
- Run faster through the network
- Print feature is stable
- File browser is included

New Version Screenshot

emume11.cern.ch:9093/urn:xdaq-application:lid=254/#

Configuration Run Chambers

CSC Event Display
Event #2 / 543 Chamber #162 Configuration Mode: Not available



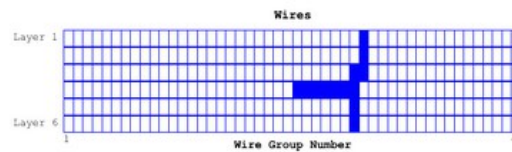
Event:

2

Speed:

File:

/afs/cern.ch/user/j/jhaley/TriDAS/emu/fast_daq/cosmics_2DMBs.raw



Hackmode || Autoscale



Powered by XDAQ release n.cmsos11 - Copyright © 2013 CERN
Designed by M. Bowen L. B. Orsini A. Petrucci

Visit the CMS XDAQ source project at
<http://xdaq.web.cern.ch/>

Conclusion

- A new web version of CSC Data Display software has been developed.
- The application is quite much more stable and faster compared to the previous version.
- Users can use the app from its browser without logging in to a remote computer.



Thank you