

# **L3 Muon**

## ***Looking at real data***

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# Outline

- Problems:
  - run configuration
  - RCP
  - D0Scan
  - SAM
  - reconstruction
  
- Results

# Run configuration

```
run_config_mgr  
run_config_mgr_data  
run_config_mgr_mc  
rdc_run_config_mgr
```

- Many different RCP files:
- All uses database, except `rdc_run_config_mgr`
- Runs not being entered in the database since mid-May **meaning we do not know the run config!**
- `rdc_run_config_mgr` supposed to look at RDC to build run config, still lots of missing crates, modules, other errors- *no feedback on this yet*
- Set one of the other RCPs to “build from RDC” and you’ll crash- *Charles Leggett investigating*

# RCP

- Different behaviour on d0tvs than on d0mino, in picking up RCPs from local or release area, when using exe from release:

```
d0mino:~/nik2/t52trig>  
/d0dist/dist/releases/t01.52.00/bin/IRIX6-  
KCC_3_4/D0Scan_data_x  
-rcp D0Scan_data/rcp/D0ScanRaw.rcp
```

```
d0tvs:~/nik2/t52trig >totalview  
/d0dist/dist/releases/t01.52.00/bin/IRIX6-  
KCC_3_4/D0Scan_data_x core -a  
-rcp D0Scan_data/rcp/D0ScanRaw.rcp
```



**NOT OK**

# D0Scan

- To use on NT, type “setup mesa” before running program (or buy Exceed3D)
  - makes it slow, but it works, and it is easy to get it to run
- Crashes if you “play” too much
  - Probably missed X-packages
  - Per the expert: Too much strain can cause crashes... :-)

# SAM

- Enstore down all through yesterday
  - the system actually delivering files
  - downtime I find a serious problem
- DataSetEditor
  - the webpage where you have to build your datasets from all files available in SAM
  - can take >10 minutes to return a query
  - easily confused and poor error messages  
(an AND or an OR only takes two arguments-  
work with loads of brackets to get to that)

# Reconstruction

- Muon reconstruction problems
  - see next slides for some examples, Andriy Zatserklyaniy working on this
- Crash in RawDataChunk/L3TSmtUnpacking
  - probably corrupt data, but that's no excuse
  - Gordon Watts/Robert Illingworth investigating

# Results

- Fresh L3 triggerlist
  - passes events if they have a muon track with more than one segment
  - should give us  $\sim 60\%$  real muons
- Rejection factors:
  - zero bias: 100
  - on global\_L1CalMuon-1.# file: 6
  - events passing L1 Muon: 4

(L1Muon triggers on scint roads right now)