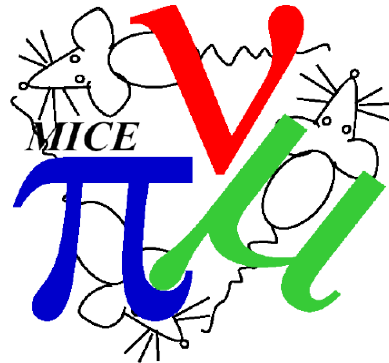




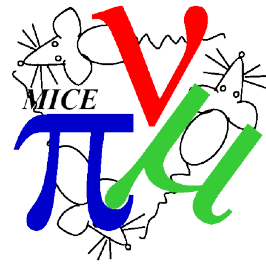
MOM Report



C. Rogers, Y. Karadzhov, D. Adey, H. Nebrensky, C.
MacWaters, P. Hanlet, J. Martyniak, D. Rajaram, R.
Gardener and many more...

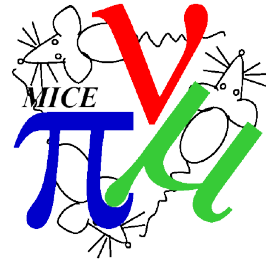


Overview



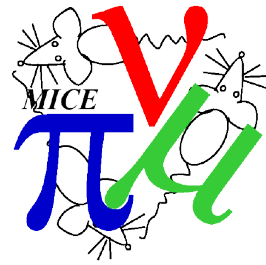
- Shifter training
- Mock data run

Shifter Training



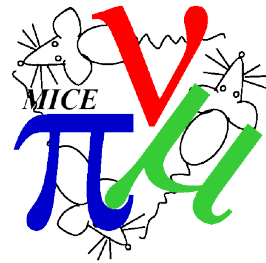
- Shifter training has been organised for 12th, 13th February
 - Trainees who require RAL induction should attend RAL course on 9th February
- Trainees and trainers have all now been notified
- Detailed schedule will be closed out next week

Mock Data Run



- Aim to test as much of the MICE systems as possible without beam
 - Detector readout
 - DAQ
 - Controls
 - Online monitoring
 - Online+offline reconstruction
 - Operation of beamline
 - PPS
 - Note we ran in muon beam test mode
- Every subsystem found a problem
 - Many were previously unknown

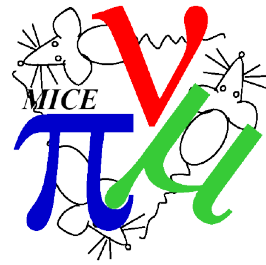
Run plan



- Plan was to run using a variety of settings and triggers

Name	Target Frame	Proton Absorber	Beam Stop	Diffuser	Q1	Q2	Q3	D1	DS	D2	Q4	Q5	Q6	Q7	Q8	Q9	Trigger	Time
		bitmask		bitmask	A	A	A	A	A	A	A	A	A	A	A	A		mins
Test 1	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	New, TOF1	30
Test 2	Lowered	1111	Closed	1111	184.4	101.2	112.6	387.9	200.0	167.7	295.0	395.6	260.9	197.8	298.4	253.52	New, TOF1	30
Test 3	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	New, TOF0	10
Test 4	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	New, TOF1	10
Test 5	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	New, TOF1, internal tracker LED pulsers	10
Test 6	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	New, TOF1, external tracker LED pulsers	30
Test 7	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	Old, TOF0	30
Test 8	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	Old, TOF1	10
Test 9	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	Old, TOF1, internal tracker LED pulsers	10
Test 10	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	Old, TOF1, external tracker LED pulsers	10

Run plan

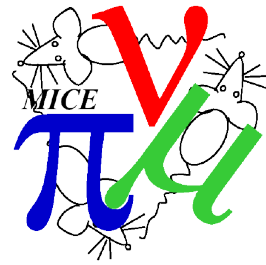


- Plan was to run using a variety of settings and triggers
 - In the end we ran with:

Name	Target Frame	Proton Absorber	Beam Stop	Diffuser	Q1	Q2	Q3	D1	DS	D2	Q4	Q5	Q6	Q7	Q8	Q9	Trigger	Time
		bitmask		bitmask	A	A	A	A	A	A	A	A	A	A	A	A		mins
Test 1	Raised	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	Pulser trigger, no tracker readout	30
Test 2	Raised	1111	Closed	1111	184.4	101.2	112.6	387.9	200.0	167.7	295.0	395.6	260.9	197.8	298.4	253.52		30
Test 3	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	New, TOF0	10
Test 4	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	New, TOF1	10
Test 5	Raised	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	Pulser trigger, tracker readout, no LEDs	
Test 6	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2		New, TOF1, external tracker LED pulsers
Test 7	Lowered	0000	Closed	0000	102.4	127.9	89	323.2	669	94.2	158.1	212	140.6	138.7	209.8	179.2	Old, TOF0	30
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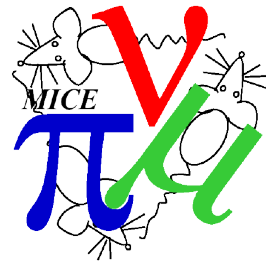
- We didn't take a cosmic trigger
 - Would have been nice to see e.g. cosmic hits
- We didn't fire the tracker LEDs
- We didn't run the target in ISIS

Open Issues



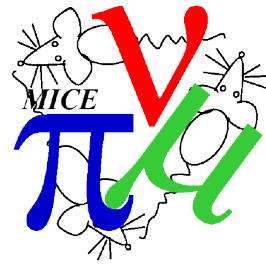
- We were only able to readout noise from the upstream tracker readout
 - SciFi was not connected upstream
 - Problems with downstream power supply
- Some problems/crashes in DATE
- We were not able to communicate between EPICS and DATE
 - No CDB upload...
- We were not able to reconstruct the data
 - Failed at unpacking stage
- We had a few trips on magnet water flow and target issues

Successes



- We were able to operate the beamline more-or-less okay
- The DAQ worked with some stability issues
- We were able to read out some tracker electronics noise
- We were able to unpack the data from online monitoring and look at plots

Looking Forward



- I will write up a summary of the run
- We have made fantastic progress
- But we can not run in this state
- 8th March run deadline is very tight...
- Plan to discuss with relevant people for a Mock Data Run version 2
 - Decide on a realistic time line