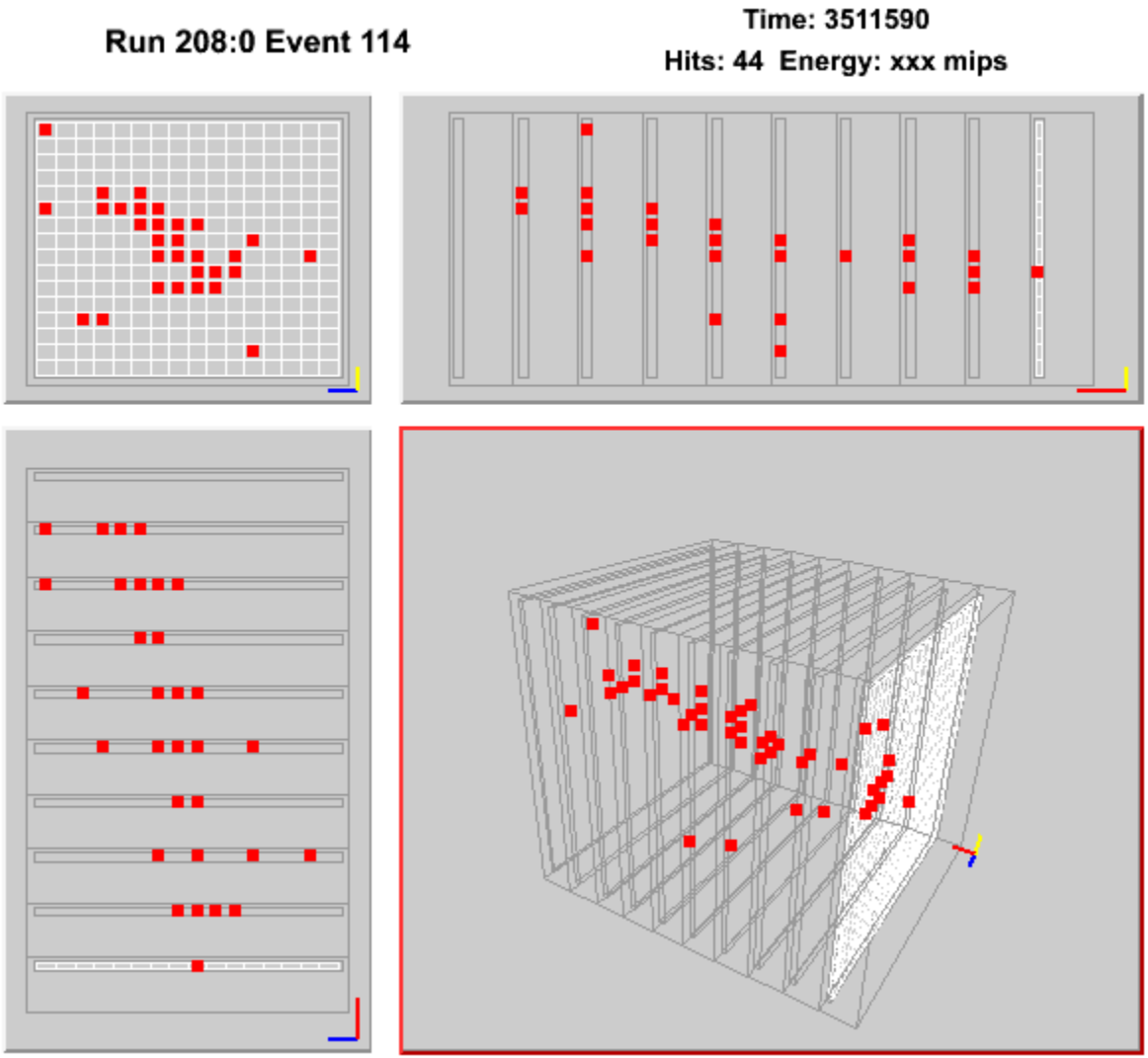
# RPC+ Meeting

Argonne, December 7, 2007

| | | |
|---|---|---|
| RPC construction (glass, channels) | | Guarino, Repond |
| Gas system | | Northacker |
| HV systems | | Norbeck |
| Pad- & FE-board design | | Drake |
| Data concentrator design | | Drake |
| Data analysis: | error modes | Xia |
| | muon data | Bilki, Repond |
| | electron data | Mavromanolakis, Xia |
| DAQ software developments | | Kreps, May |
| Interface to CALICE DAQ | | Schlereth |
| Schedule and plans | | All |

# Most beautiful pion event



December 6, 2007

# Quotation

Ken Wood
Mechanical Engineering Assistant
Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439
USA

Tel: (630) 252-3971
Fax: (630) 252-1184

Quote Number: 062331RO
RFQ Number: Email
Terms: Net 30 Days
FOB: South Elgin, IL
Delivery: 3 Weeks ARO
Quote Valid: 30 Days

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| | | Quantity | Unit Price |
|---|---|---|---|
| Part Number: | 37.79 x 12.598 x 1.25MM SL | 300 | $12.95 |
| Blue Print: | No | 10 | $23.40 |
| Samples: | No | | |
| Tooling Charge: | No | | |

Crate Fee: $50 per release

Dimensions: 37.790” x 12.598” (+/-.030”)
Material: 1.25MM Soda Lime (.043/.053”) – Currently running 0.46/.048”
Edgework: Cut / Seam
Sandblast: No
Temper: No
Surface Quality: ASTM 1036 Q3
Max. Edge Chip: .040”
Package: Paper Interleave / Crate

*Special Instructions:*
*Shipment quantities will be +/-10% of order quantity.*
*Lead time is dependant upon material availability.*

Cat i Glass is prepared to be very responsive to your needs. Please note that quoted lead time is an estimate as of this date. Specific delivery dates will be provided at the time of order, contingent upon facility loading.

Ordered 10 pieces

Sincerely,

Ryan O'Connell
New Product / Marketing Analyst
ryan@catiglass.com

# Measurements with Cosmic Ray Test Stand

a) Install and test new DCON firmware (chamber 7) 3

- Test with CRs
- If successful install on all DCON

b) Measure noise with Lecroy power supply 1

c) Change grounding and study error modes 4

d) Study inefficiencies of layers 3, 4, 5

- Test with inverted high voltage
- Take off chambers + run charge injection

e) Measure pad multiplicity with extra Mylar (1 – 10 sheets)

f) Measure noise with DCOL and self-trigger 2

- Measure with Droege and Lecroy

g) Gang 3 chambers gas I/O and measure performance

h) Operate stack with 2 DCOLs

i) Investigate exotic chamber

j) DAQ rate studies

k) Study of charge injection parameters

l) Long term studies (x-y map)

# Schedule and plans

Next meeting January 4, 2007

| | | |
|---|---|---|
| Large RPCs | Get glass quote, test urethane, silicon paste, look at PVC samples | |
| Gas system | Test ganging | |
| HV | Test with LeCroy | |
| Pad- & FE board | Fabricate and begin test | |
| Data concentrator | Initiate design | |
| Error modes | Further understanding<br>Explore different grounding<br>Implement new firmware | |
| Data analysis | Reconstruct data<br>Create SW ‘killer’<br>Continue muon analysis<br>Continue positron analysis<br>Repeat noise measurement with Bertan and Lecroy | |
| DAQ | Meet with Boston<br>Refine strategies<br>Further discussions on overall architecture | |