

First tests with JAS3/Wired4

- Initial tests using JAS3 and Wired4 (plugin only now)
- Feedback on experience posted on Freehep forum for Wired4/JAS3
 - ▶ <http://forum.freehep.org/>
- Quite positive, easy to get started
- Some small corrections/features required, in next release (soon...)
- Could be useful as event display/debugging tool for DESY testbeam
- Easy to install, functional
 - ▶ Integrates LCIO browser with simple wire-frame event display, geometry generated directly by Mokka (Heprep2)
 - ▶ Reads raw LCIO files via plugin (internally converts to Heprep format)
 - ▶ Can run AIDA compliant analysis (e.g Java), should consider as one option for early running

JAS3: plugins

The screenshot displays the JAS3 application window. The main content area shows a "Welcome to JAS3!" message with version information (v0.7.7, build 2284 on August 6 2004) and several links for documentation and user feedback. A "Plugin Manager" dialog box is open in the foreground, showing a tree view of installed plugins (28) and available plugins (8). The "Installed Plugins" list includes built-in, system, and user categories. The "Plugin Info" section is empty, and the "Plugin Activation" section has a checkbox for "Start when application loads" which is currently unchecked. Buttons for "Start", "Stop", "Remove selected plugins", "Update installed plugins", and "Close" are visible.

For a quick start with

overall functionality of more modules are

Define detector geometry

Welcome to JAS3!

JAS3 v0.7.7 (build 2284 on August 6 2004)

Welcome to this release of JAS3 -- an [AIDA](#) compliant data analysis system. See the [release notes](#) for recent changes. For a quick start with scripting

For more

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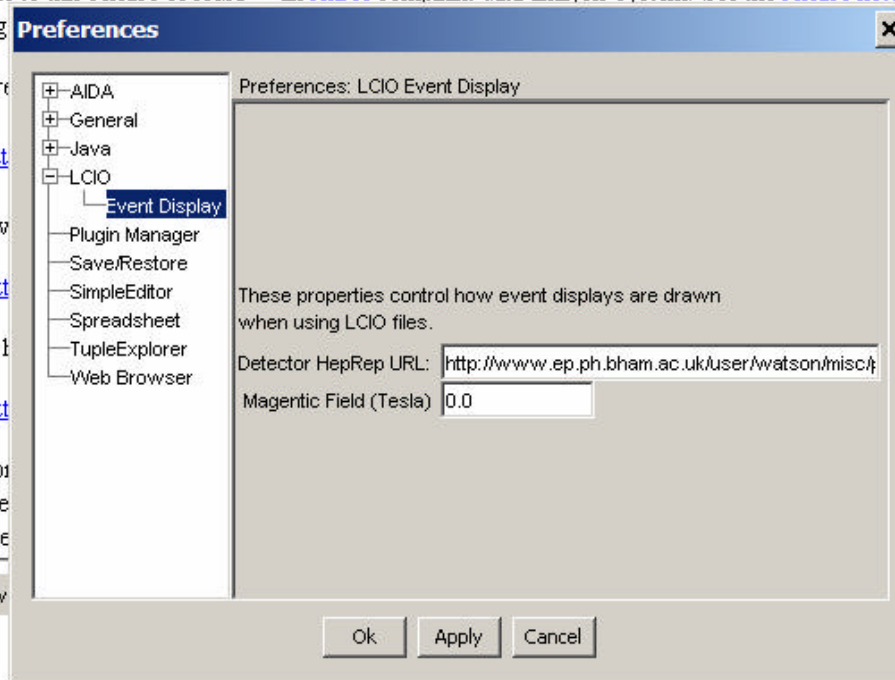
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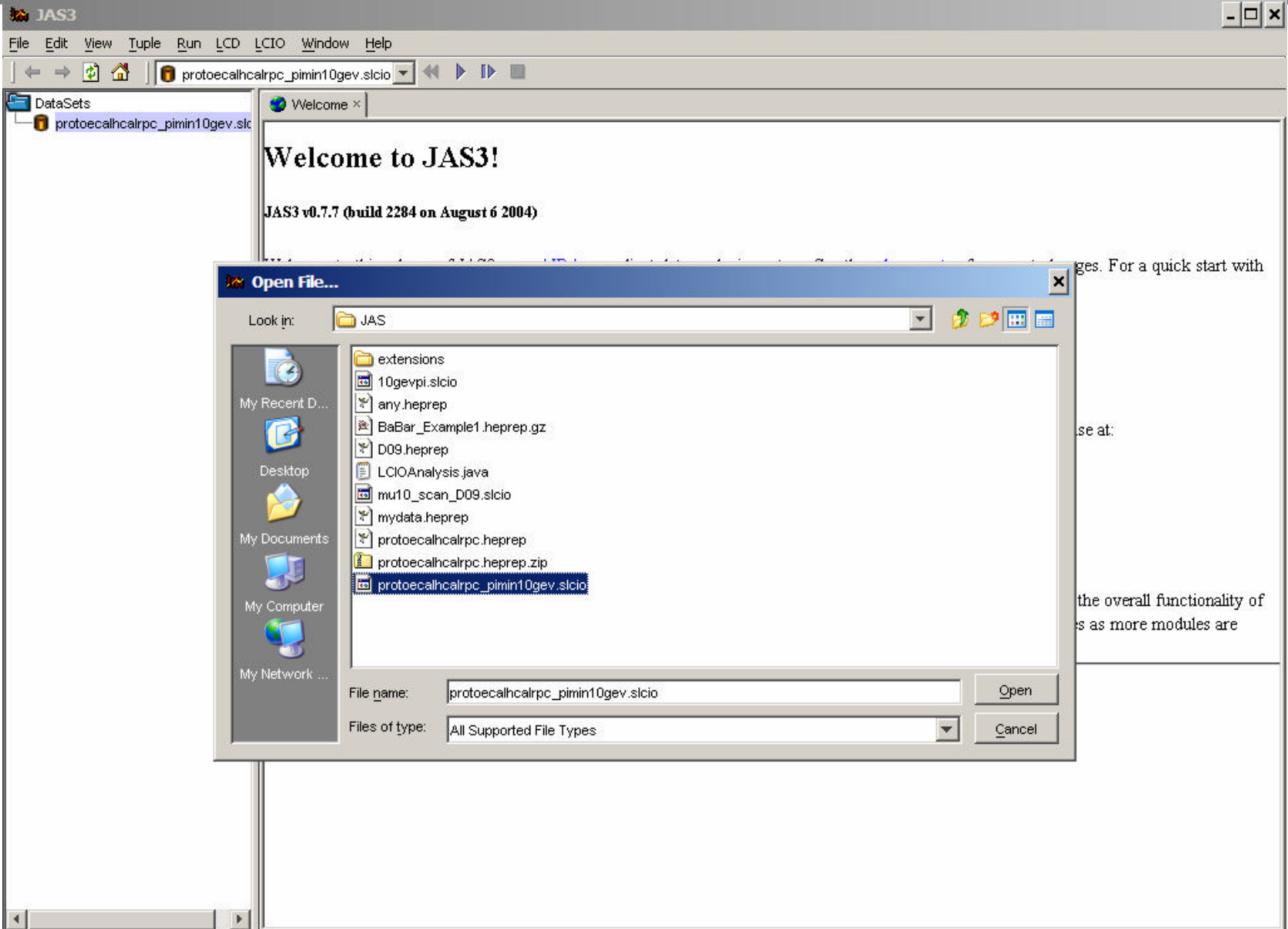
Show



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Open LCIO file

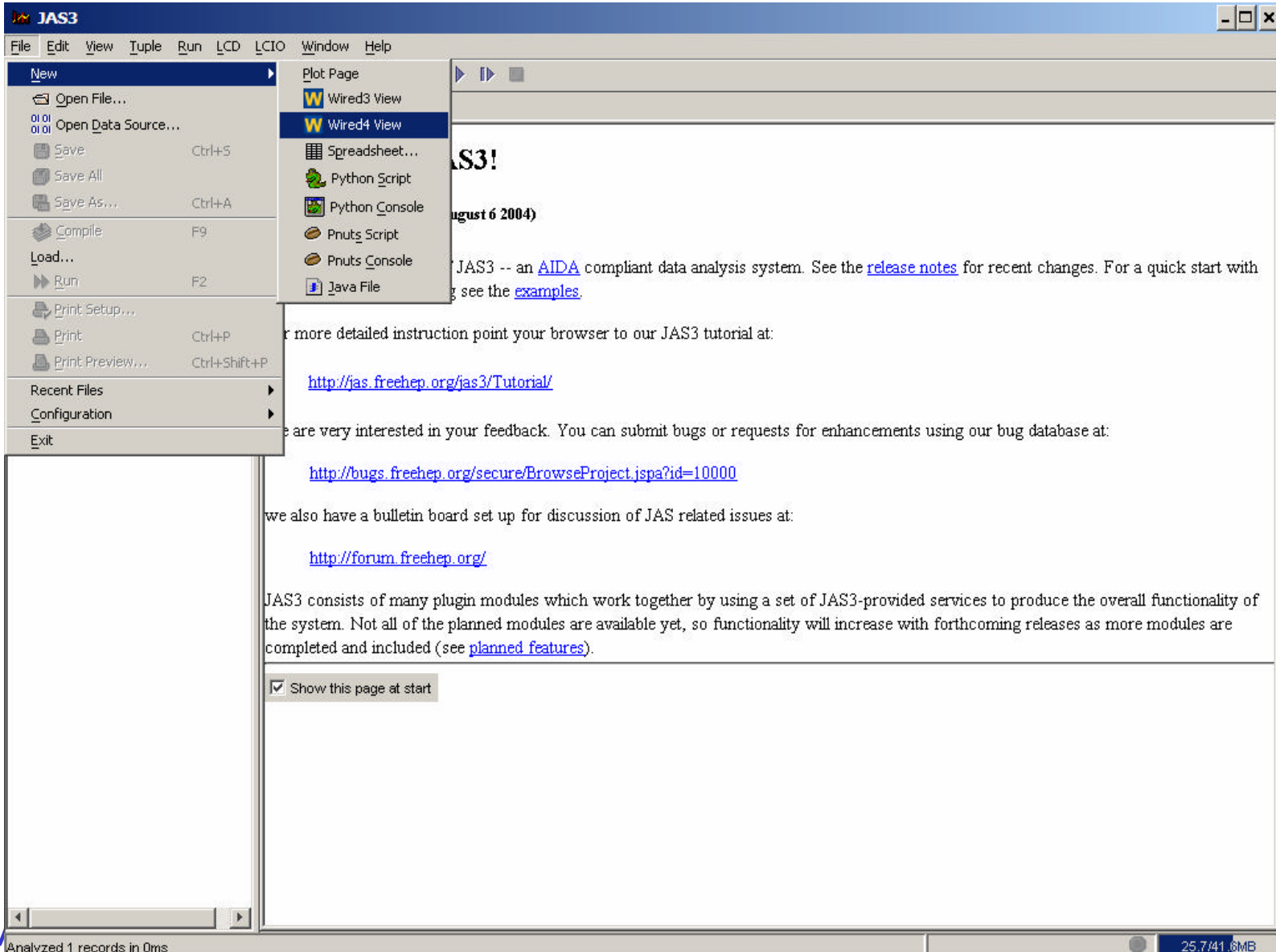


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New Wired4 display



The screenshot shows the JAS3 application window. The 'New' menu is open, and 'Wired4 View' is highlighted. The main window displays a welcome message for JAS3, dated August 6, 2004. The text describes JAS3 as an AIDA compliant data analysis system and provides links to the release notes, examples, tutorial, and bug database. A checkbox labeled 'Show this page at start' is checked.

JAS3!
(August 6 2004)

JAS3 -- an [AIDA](#) compliant data analysis system. See the [release notes](#) for recent changes. For a quick start with JAS3 see the [examples](#).

For more detailed instruction point your browser to our JAS3 tutorial at:
<http://jas.freehep.org/jas3/Tutorial/>

We are very interested in your feedback. You can submit bugs or requests for enhancements using our bug database at:
<http://bugs.freehep.org/secure/BrowseProject.jsps?id=10000>

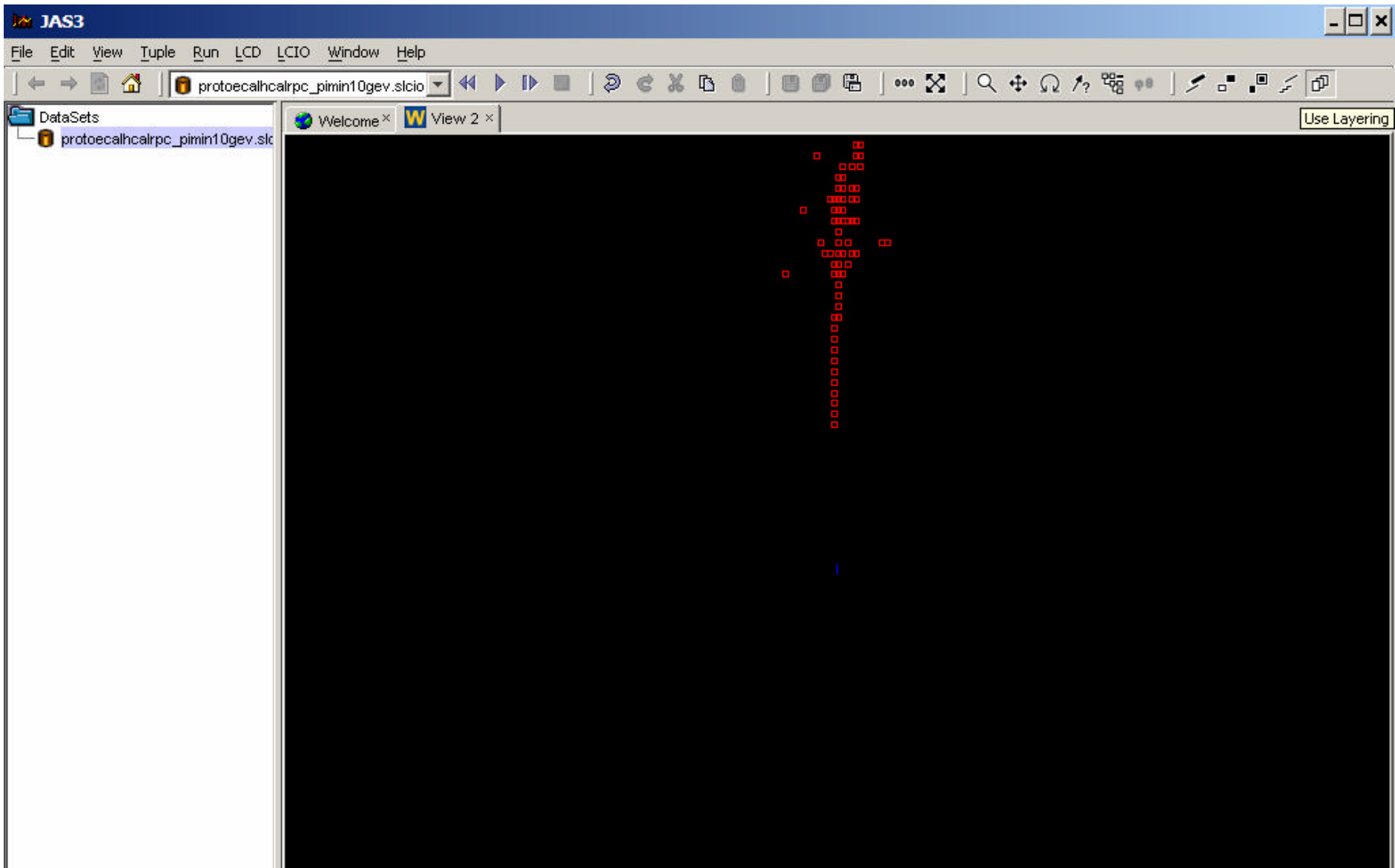
We also have a bulletin board set up for discussion of JAS related issues at:
<http://forum.freehep.org/>

JAS3 consists of many plugin modules which work together by using a set of JAS3-provided services to produce the overall functionality of the system. Not all of the planned modules are available yet, so functionality will increase with forthcoming releases as more modules are completed and included (see [planned features](#)).

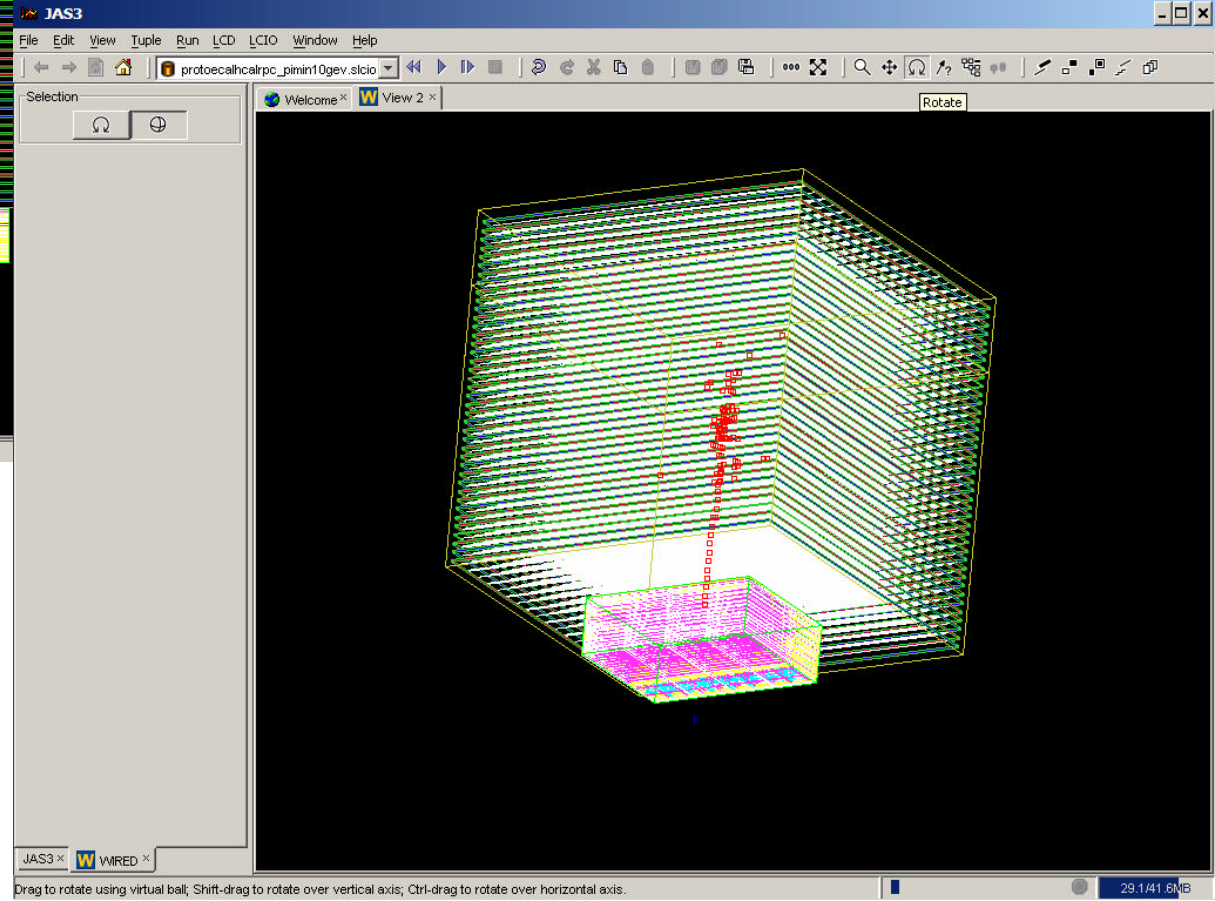
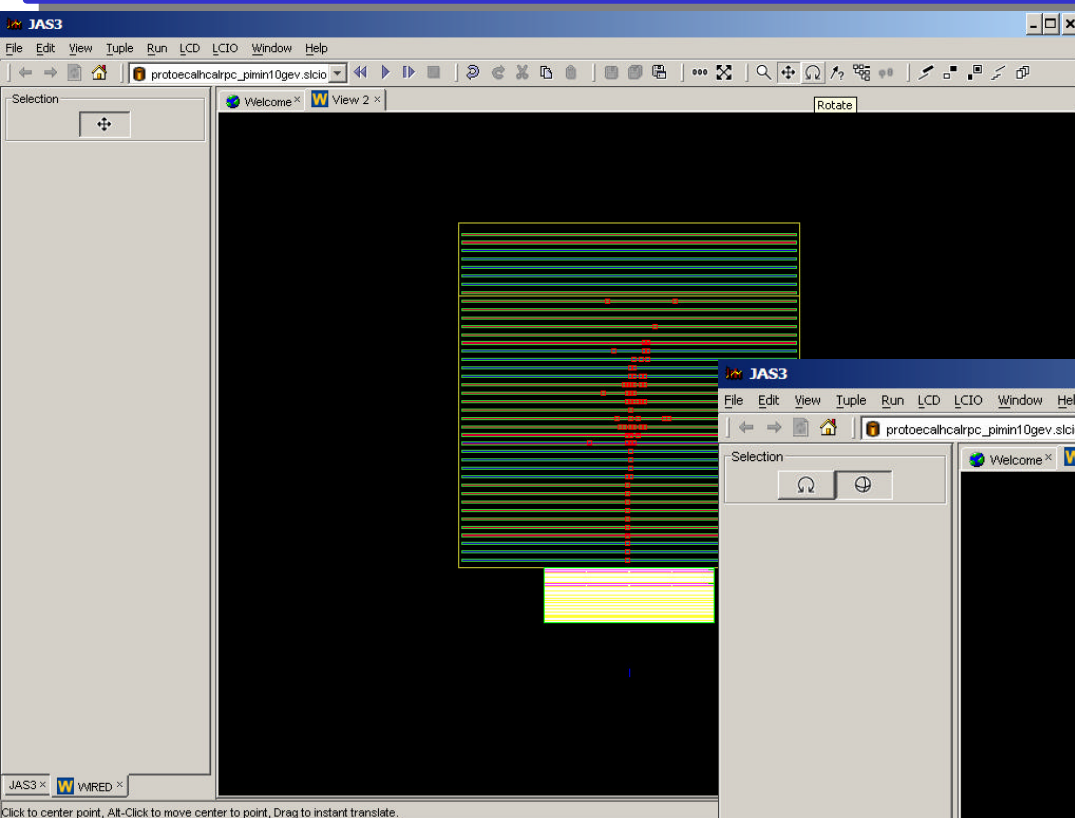
Show this page at start

Analyzed 1 records in 0ms 25.7/41.6MB

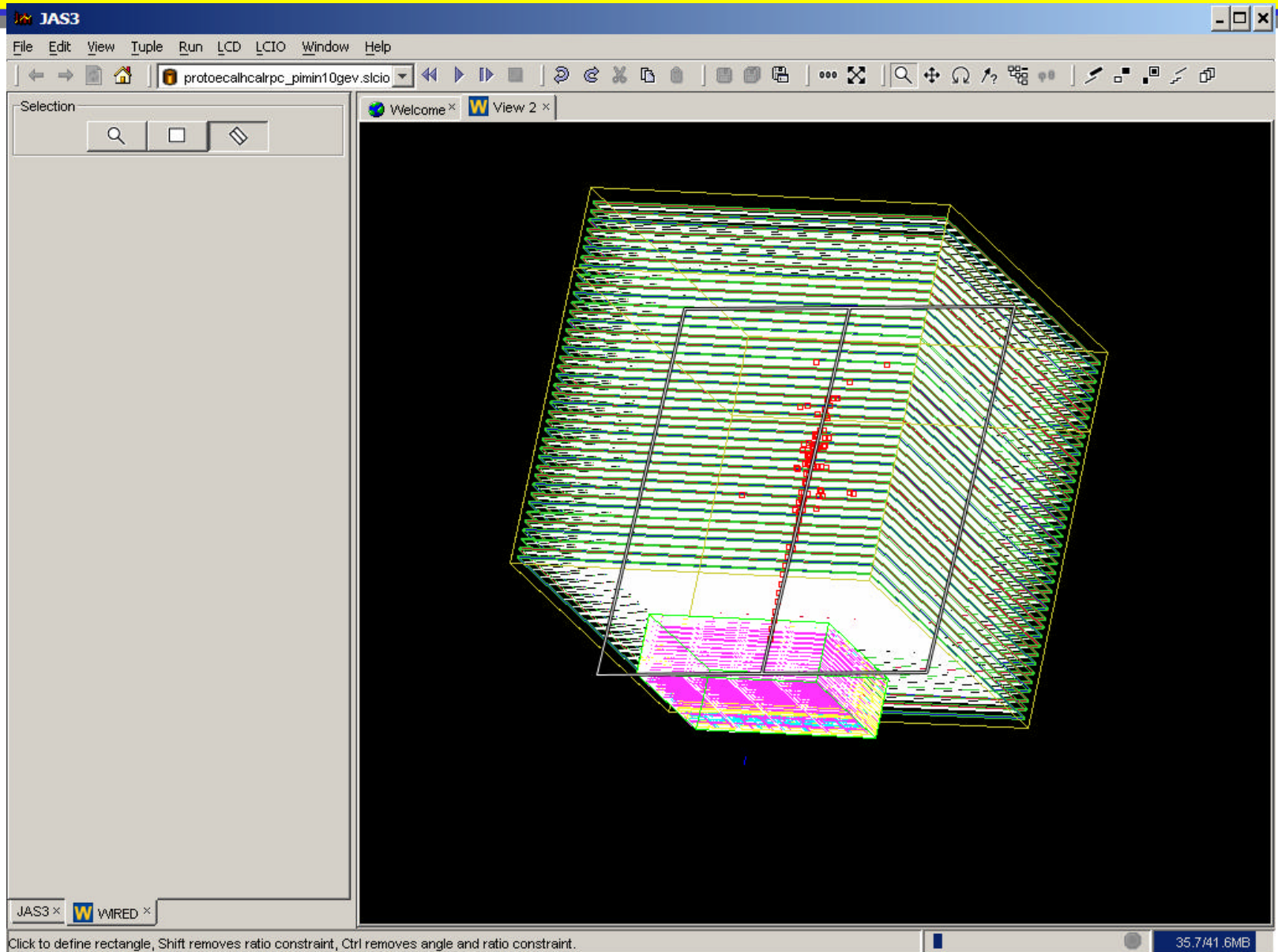
Layering: off



Translate/Rotate



Hit centred zoom





JAS3

File Edit View Tuple Run LCD LCIO Window Help

protoecalhcalrpc_pimin10gev.slcio

Welcome x View 2 x

Selection

JAS3 x VMRED x

Click to define first point of angled rectangle.

33.6/41.6MB

Pick individual hit attributes

The screenshot shows the JAS3 software interface. The main window displays a 3D visualization of particle detector hits, represented as a grid of colored lines (red, green, blue) forming a rectangular prism. A pink rectangular region is highlighted on the left side of the prism. A mouse cursor is hovering over a specific hit, which is circled in red. The interface includes a menu bar (File, Edit, View, Tuple, Run, LCD, LCIO, Window, Help), a toolbar with various icons, and a left-hand panel with the following sections:

- Selection:** Contains a search icon and a checkbox.
- Actions:** Contains a "Zoom into region" button.
- Picked objects (1):** Contains an "Options..." button and a table with the following data:

Type	Points	Code
SinglehcalFeRPC1_Hcal...	1	18332918
- Attributes of picked object (3):** Contains an "Options..." button and a table with the following data:

Name	Value	Unit	Node
color			<input type="checkbox"/>
drawAs	Point		<input type="checkbox"/>
layer	Hits		<input type="checkbox"/>

LCIO event browser

The screenshot shows the JAS3 LCIO event browser interface. The window title is "JAS3" and the menu bar includes "File", "Edit", "View", "Tuple", "Run", "LCD", "LCIO", "Window", and "Help". The address bar shows the file path "protoecalhcalrpc_pimin10gev.slcio".

The left pane displays a tree view of data sets under "DataSets":

- protoecalhcalrpc_pimin10gev
 - Programs
 - LCIOAnalysis
 - LCIOAnalysis.aida
 - Etot2
 - myTuple
 - nmc
 - etot
 - nMc
 - LCIOAnalysis.aida-2
 - Etot2
 - myTuple
 - nmc
 - etot
 - x
 - y
 - z
 - t
 - energy
 - cellID0
 - nMc

The middle pane shows the event tree for "Run:0 Event: 1":

- Event
 - MCParticle
 - P66WNominal_ProtoSD
 - SinglehcalFeRPC1_HcalBarrelReg

The right pane displays a table of event data for the collection "P66WNominal_ProtoSD" (type: SimCalorimeterHit, size: 5, flags: 80000000):

cellID0	cellID1	energy	x	y	z	t
190000da	0	5.2087E-4	-27.300	295.76	6.0500	1.5340
180000da	0	2.6023E-4	-24.900	287.01	6.0500	1.5674
1800011a	0	2.3593E-4	-14.900	287.01	6.0500	1.5704
1602811b	0	5.2744E-4	-14.900	273.53	-6.0500	1.6271
1600011a	0	2.4699E-4	-14.900	273.53	6.0500	1.6198

The bottom status bar shows the message "13:13:12 ----- compile successful" and "Analyzed 1 records in 0ms". The system tray at the bottom right shows "67.4/100MB".

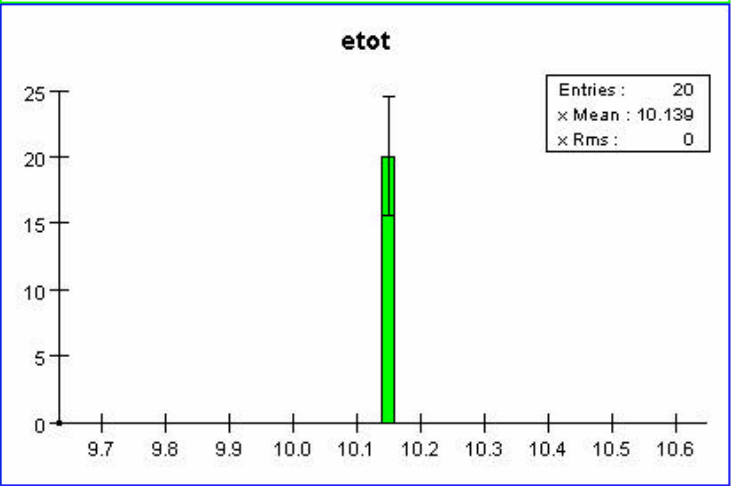
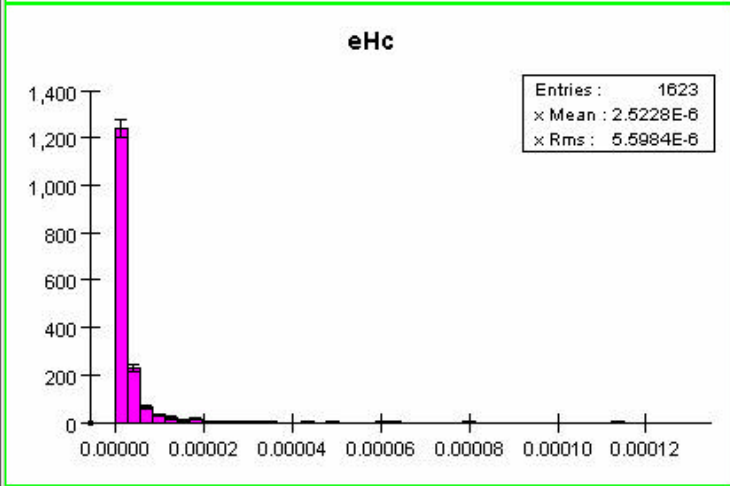
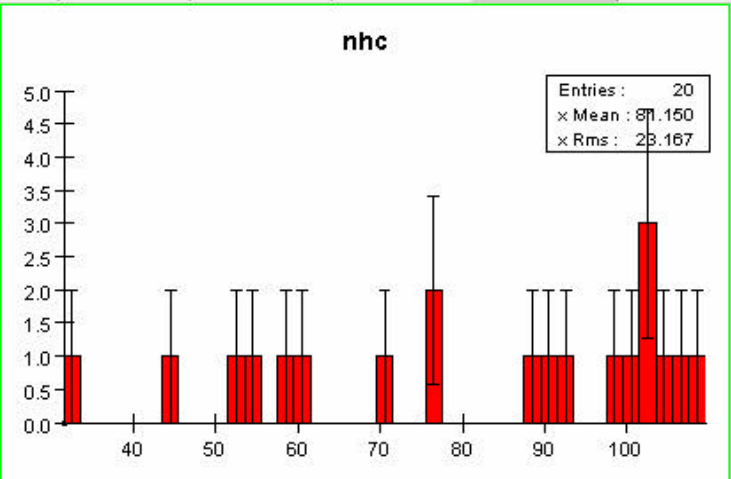
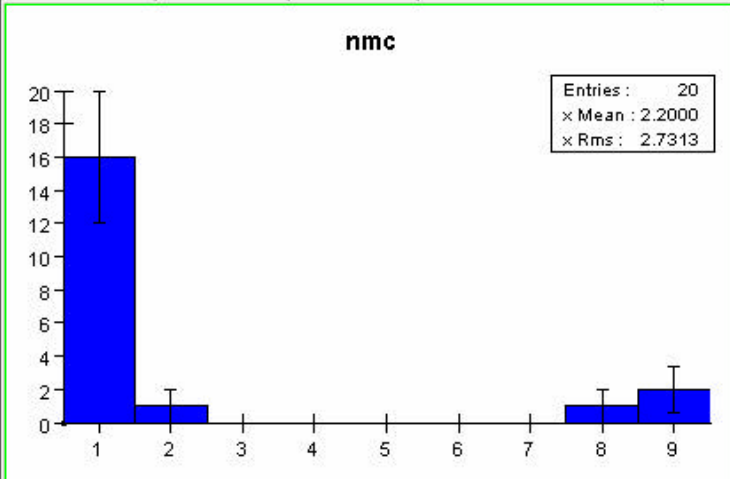
Event analysis in JAS?

The screenshot displays the JAS3 software interface. On the left is a file explorer showing a project structure with folders like 'DataSets', 'Programs', and 'LCIOAnalysis'. The main area is a code editor showing Java code for event analysis. The code includes comments and logic for collecting hits from an event and filling a tuple. The console at the bottom shows the message '14:32:04 ----- compile successful'.

```
43  etotCloud.fill(etot);
44
45  // Get hit multiplicities from Ecal/Hcal into event tuple
46  // LCCollection collectionEcHits = event.getCollection("P66WNominal_ProtoSD");
47  // int nEcHits = collectionEcHits.getNumberOfElements();
48  LCCollection collectionHcHits = event.getCollection("SinglehcalFeRPC1_HcalBarrelReg");
49  int nHcHits = collectionHcHits.getNumberOfElements();
50
51  // Add no. Ec/Hc hits to event tuple
52  // Fill tuple here
53  tupleMc.fill(0,nMc);
54  tupleMc.fill(1,(float) etot);
55  //tupleMc.fill(2,nEcHits);
56  tupleMc.fill(3,nHcHits);
57  tupleMc.addRow();
58
59  double hcetot = 0.0;
60  for(int i = 0; i < nHcHits; i++)
61  {
62      SimCalorimeterHit hcHit = (SimCalorimeterHit) collectionHcHits.getElementAt(i);
63      float ehcHit=hcHit.getEnergy();
64      float ehcHit=hcHit.getEnergy();
65      float ehcHit=hcHit.getEnergy();
66      float ehcHit=hcHit.getEnergy();
67      tupleHits.fill(0,ehcHit);
68      tupleHits.addRow();
69      //if(mcparticle.getGeneratorStatus() == 1 && mcparticle.getCharge() != 0) etot += mcparticle.getEnergy();
70  }
71
72
73  // End NKW
74  nEvents++;
75  }
76  public void modifyEvent(LCEvent LCEvent)
```

14:32:04 ----- compile successful

- Programs
 - LCIOAnalysis
 - EcalTBAnalysis
- LCIOAnalysis.aida
 - EcalTBAnalysis.aida-1
 - Etot2
 - myTupleHits
 - myTupleMc
 - nMc
 - EcalTBAnalysis.aida-5
 - Etot2
 - myTupleHits
 - myTupleMc
 - nmc
 - etot
 - nec
 - nhc
 - nMc
- LCIOAnalysis.aida-1
 - EcalTBAnalysis.aida-6
 - LCIOAnalysis.aida-2
 - EcalTBAnalysis.aida-7
 - LCIOAnalysis.aida-3
 - EcalTBAnalysis.aida-8
 - Etot2
 - myTupleHits
 - eHc
 - myTupleMc
 - nmc
 - etot
 - nec
 - nhc
 - nMc



14:32:04 ----- compile successful