Dieter's Cosmic Tracks on the Live Display

7/25/2013

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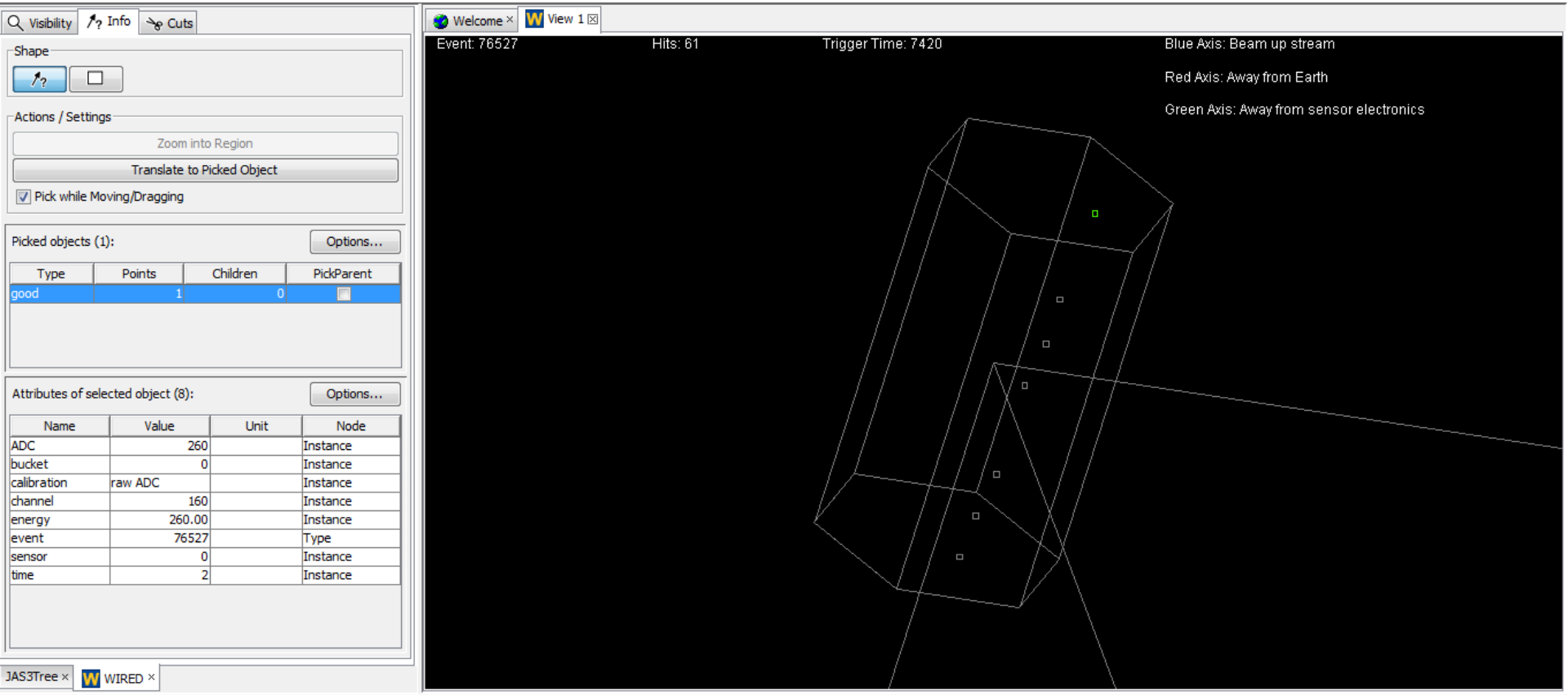
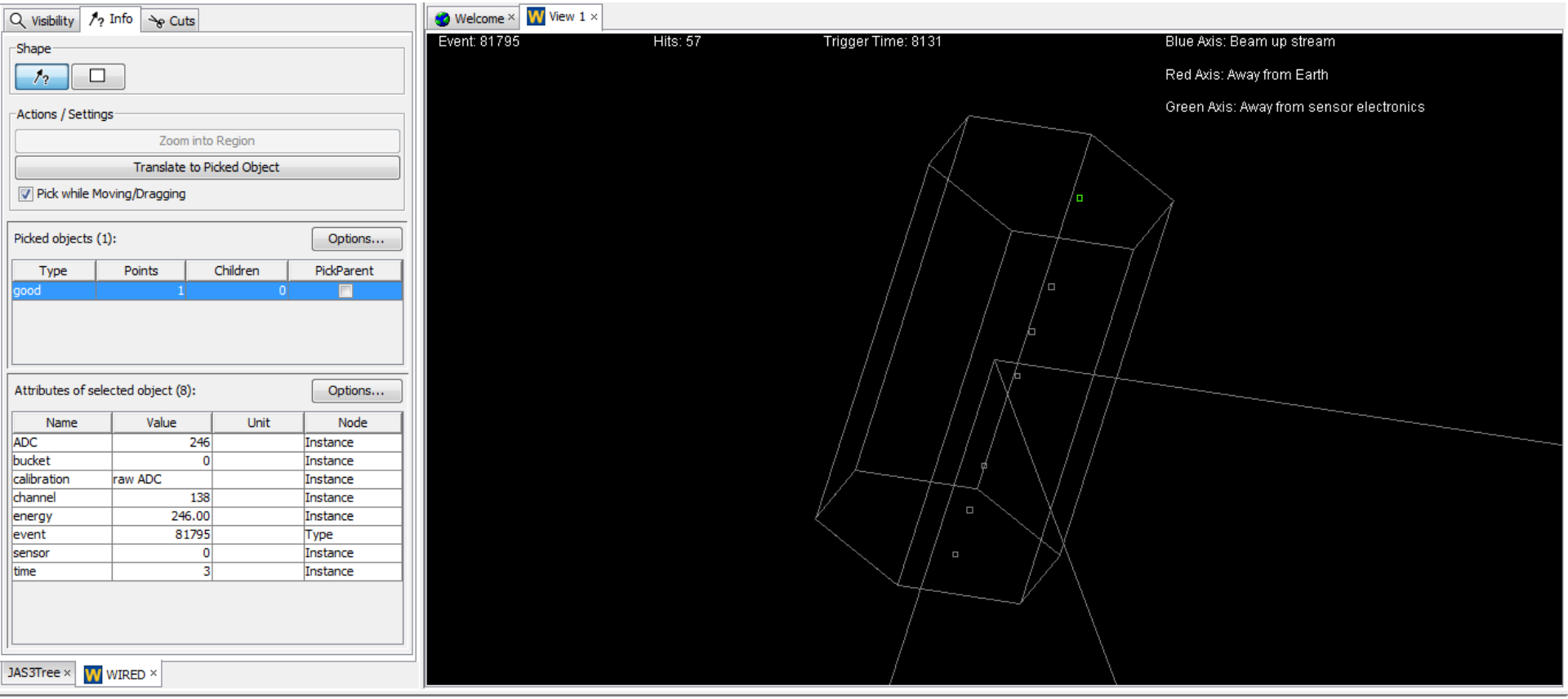
I pulled up each one of the events that Dieter listed from his cosmic runs. I tried to mostly orient the pictures the same way, with the top of the image being the top of his stack. The text labels for the orientation of the axes are from the SLAC Test Beam setup and are NOT applicable here.

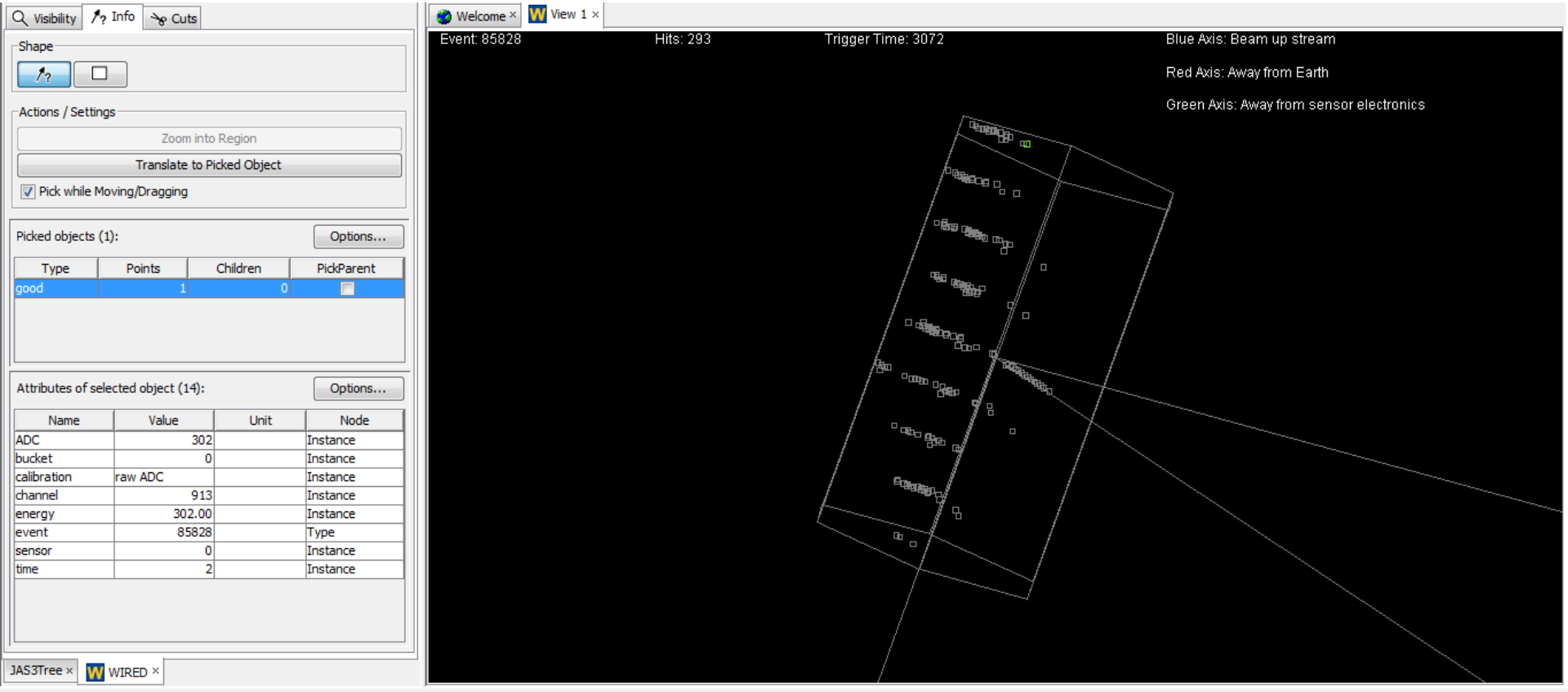
The still pictures are difficult to orient in your mind's eye, but most of the tracks are fairly straight forward. When there is a more interesting geometry I used some extra images, but it is far superior to look at them on the display in real time as they are rotated.

I also saved a few extra images of other events that looked interesting, and I'll append those to the end of the slideshow.

I noticed there are two types of tracks: most of them hit a single pixel on each sensor, but there are several that have wider tracks. Most of them are on the right side of the sensor (the way the images are oriented here). I don't know if there is something about the setup that would sometimes block out cosmics on the other side, or if the sensor itself has some quadrant bias. I think it would be fairly quick with the Test Beam to move the beam around in steps in a complete circle about halfway between the center and the edge to see if there is any difference between the quadrants.


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC
260
Instance
bucket
0
Instance
calibration
raw ADC
Instance
channel
160
Instance
energy
260.00
Instance
event
76527
Type
sensor
0
Instance
time
2
Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 76527
Hits: 61
Trigger Time: 7420
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC 246 Instance
bucket 0 Instance
calibration raw ADC Instance
channel 138 Instance
energy 246.00 Instance
event 81795 Type
sensor 0 Instance
time 3 Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 81795
Hits: 57
Trigger Time: 8131
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
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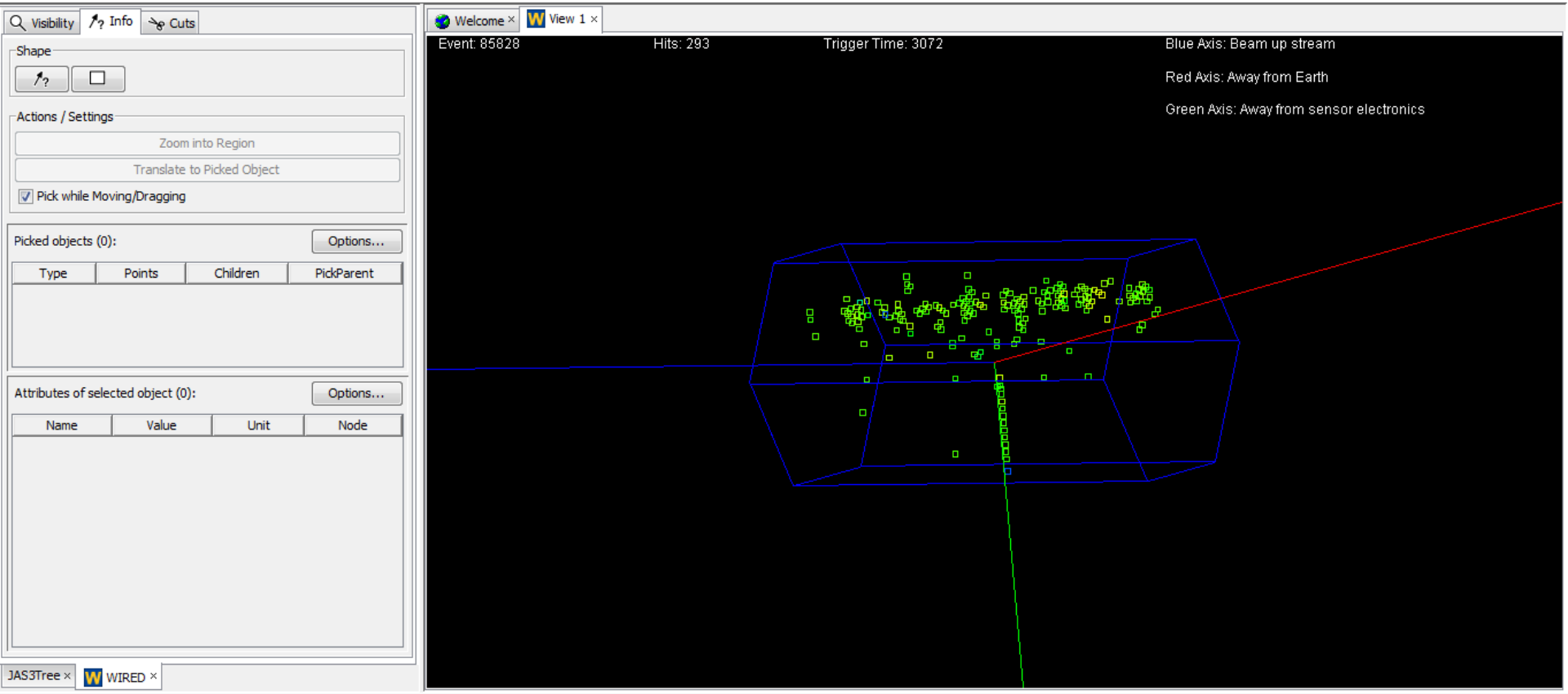
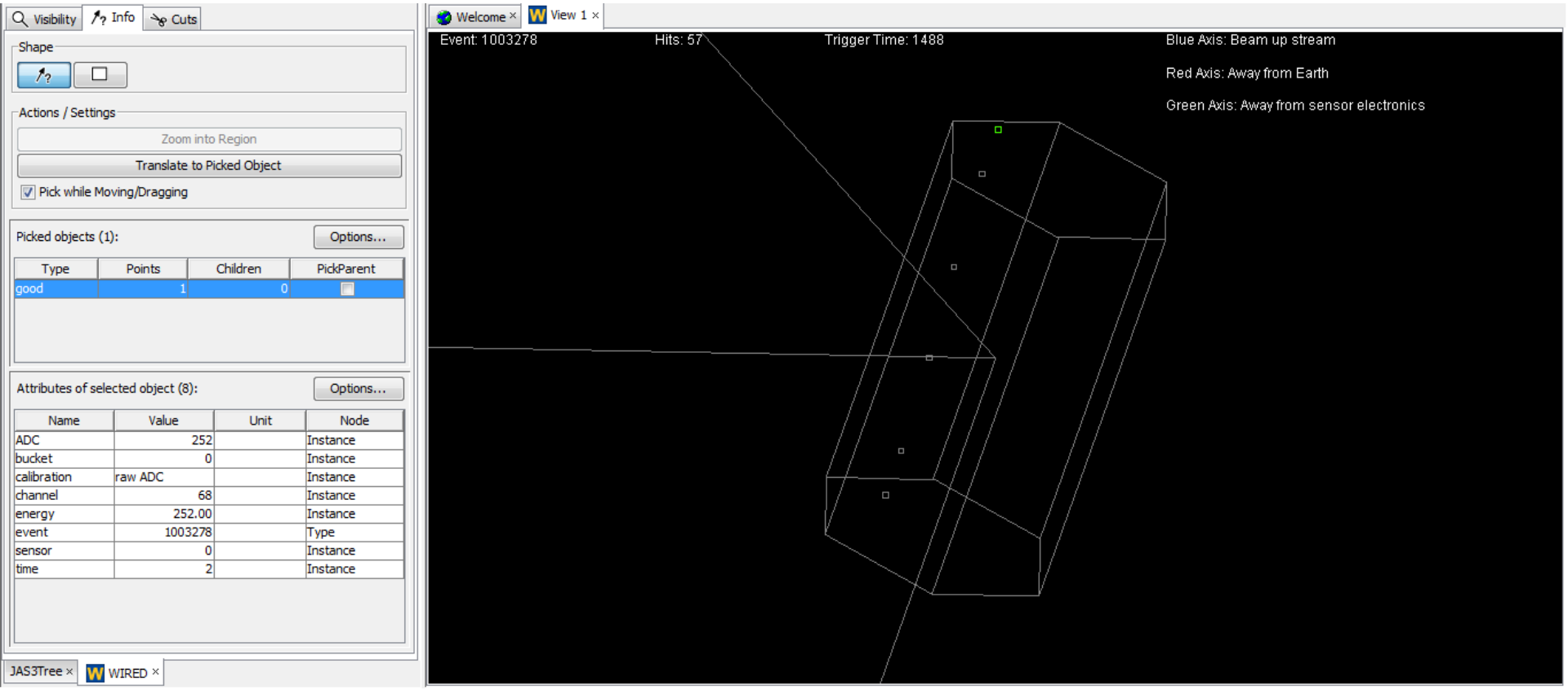
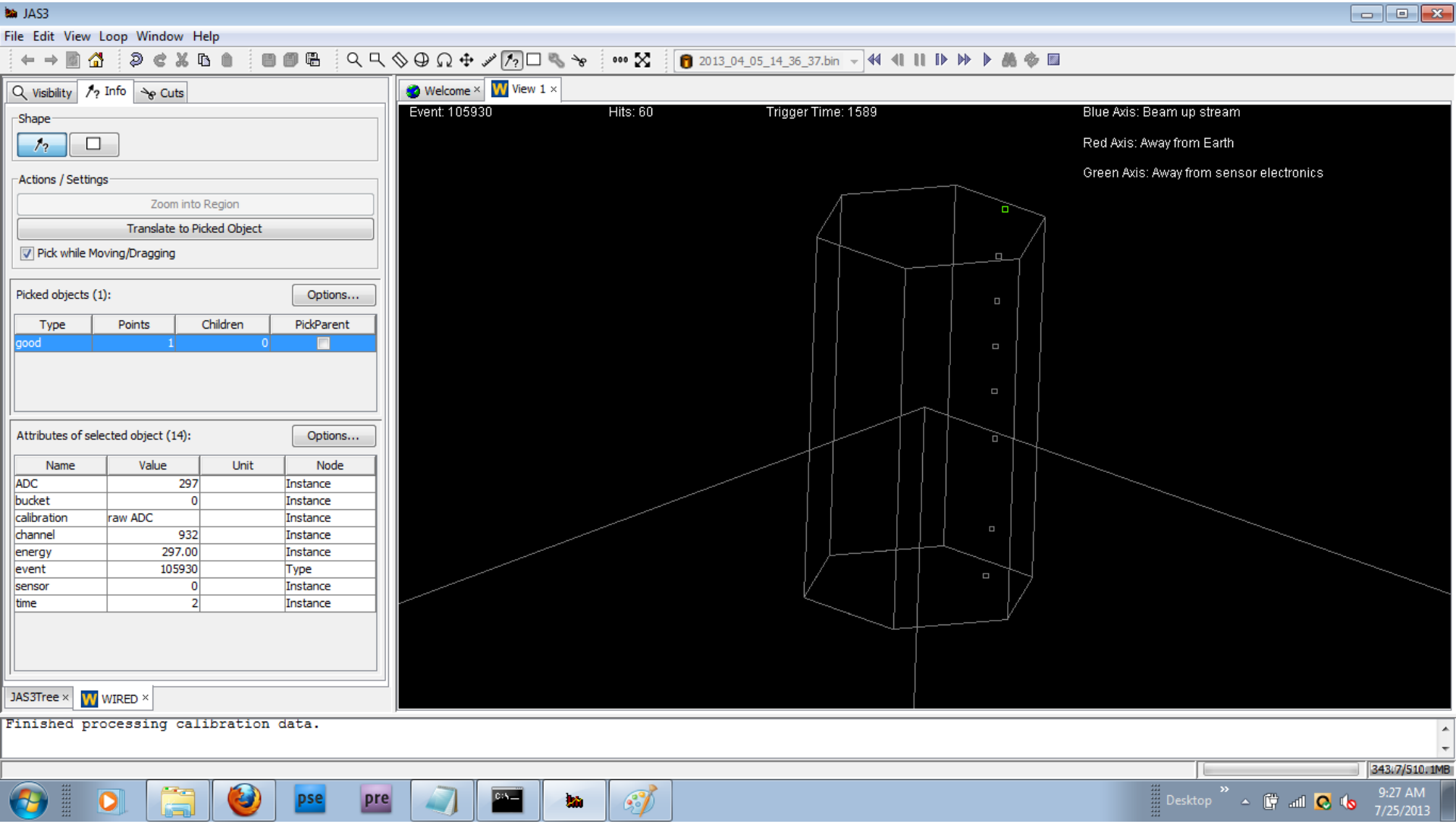
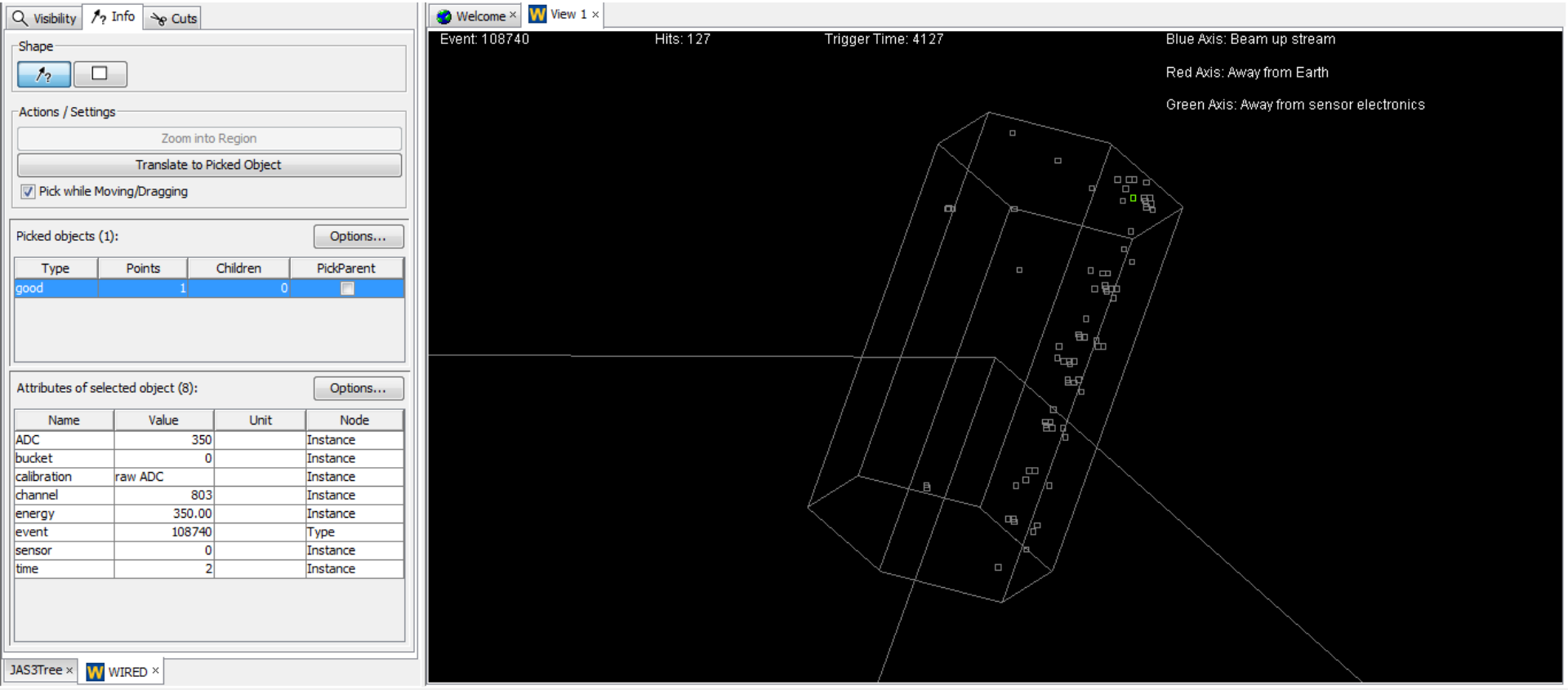
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (14):
Options...
Name
Value
Unit
Node
ADC 302 Instance
bucket 0 Instance
calibration raw ADC Instance
channel 913 Instance
energy 302.00 Instance
event 85828 Type
sensor 0 Instance
time 2 Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 85828
Hits: 293
Trigger Time: 3072
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (0):
Options...
Type
Points
Children
PickParent
Attributes of selected object (0):
Options...
Name
Value
Unit
Node
JAS3Tree
WIRED
Welcome
View 1
Event: 85828
Hits: 293
Trigger Time: 3072
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC
252
Instance
bucket
0
Instance
calibration
raw ADC
Instance
channel
68
Instance
energy
252.00
Instance
event
1003278
Type
sensor
0
Instance
time
2
Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 1003278
Hits: 57
Trigger Time: 1488
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


JAS3
File Edit View Loop Window Help
2013_04_05_14_36_37.bin
Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type Points Children PickParent
good 1 0
Attributes of selected object (14):
Options...
Name Value Unit Node
ADC 297 Instance
bucket 0 Instance
calibration raw ADC Instance
channel 932 Instance
energy 297.00 Instance
event 105930 Type
sensor 0 Instance
time 2 Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 105930
Hits: 60
Trigger Time: 1589
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics
Finished processing calibration data.
343.7/510.1MB
Desktop
9:27 AM
7/25/2013


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
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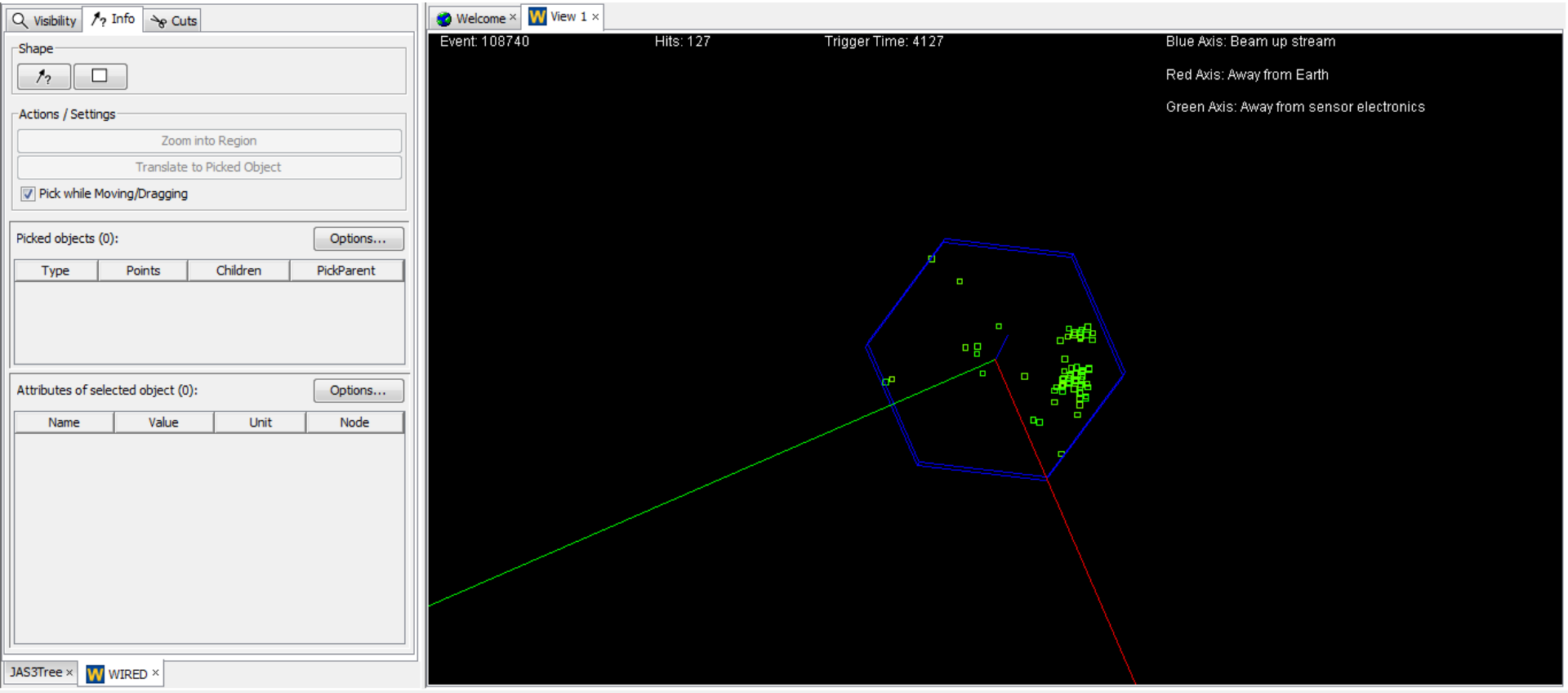
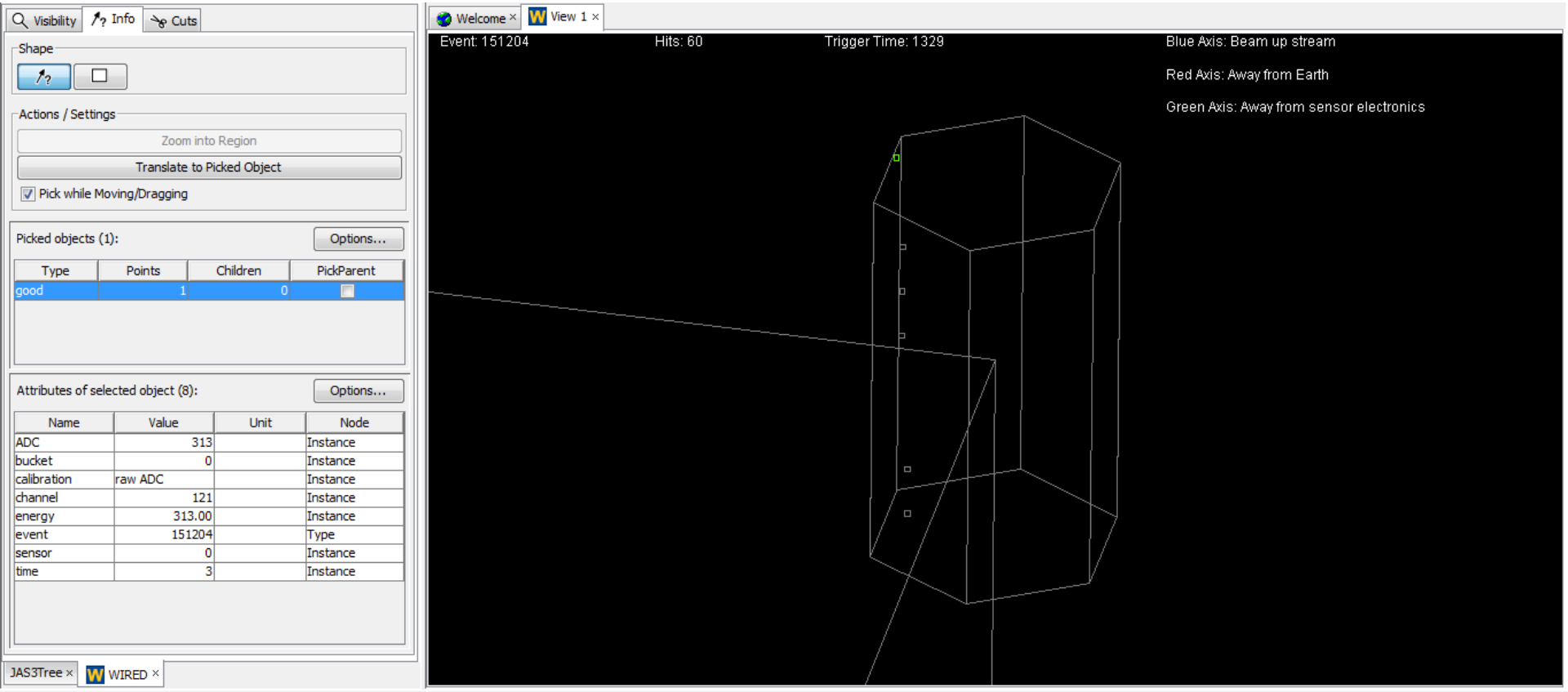
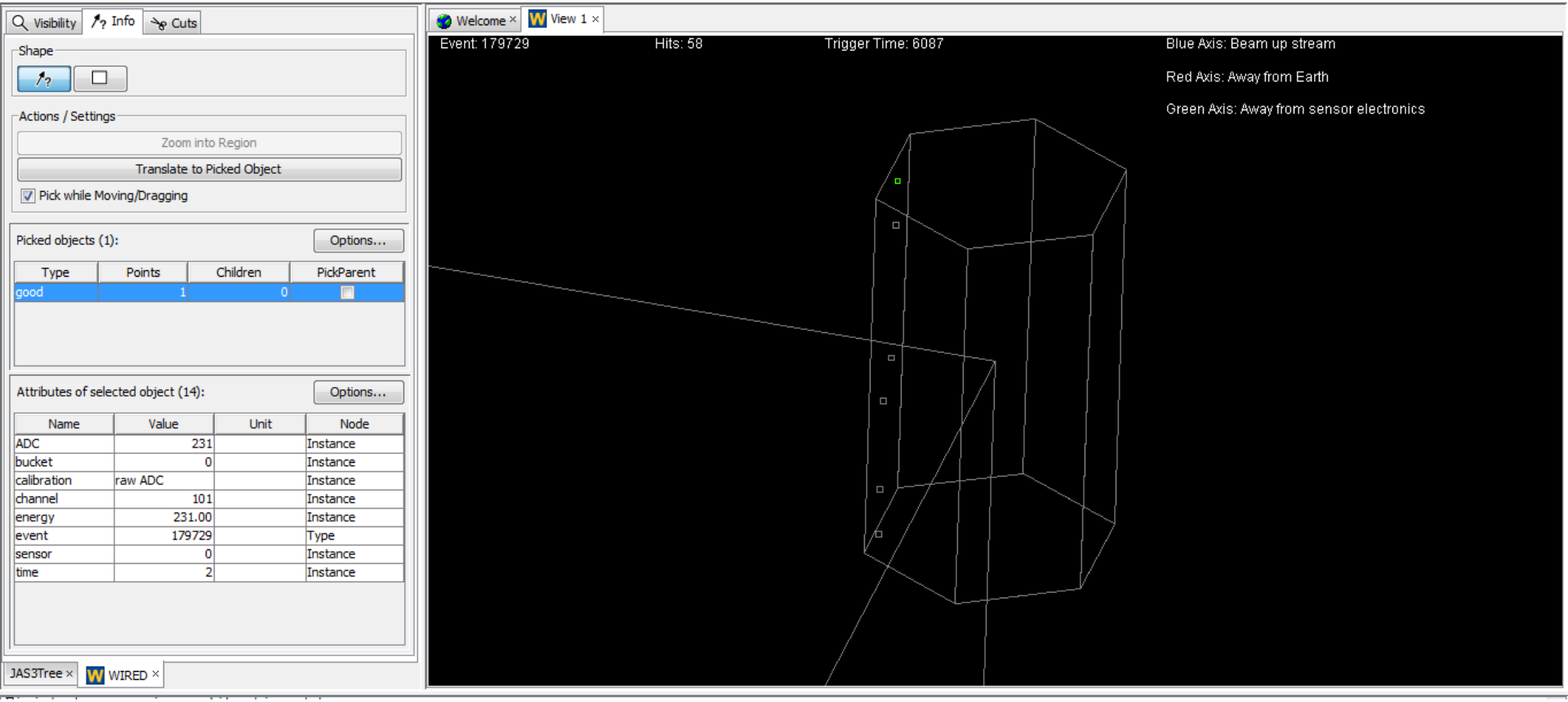
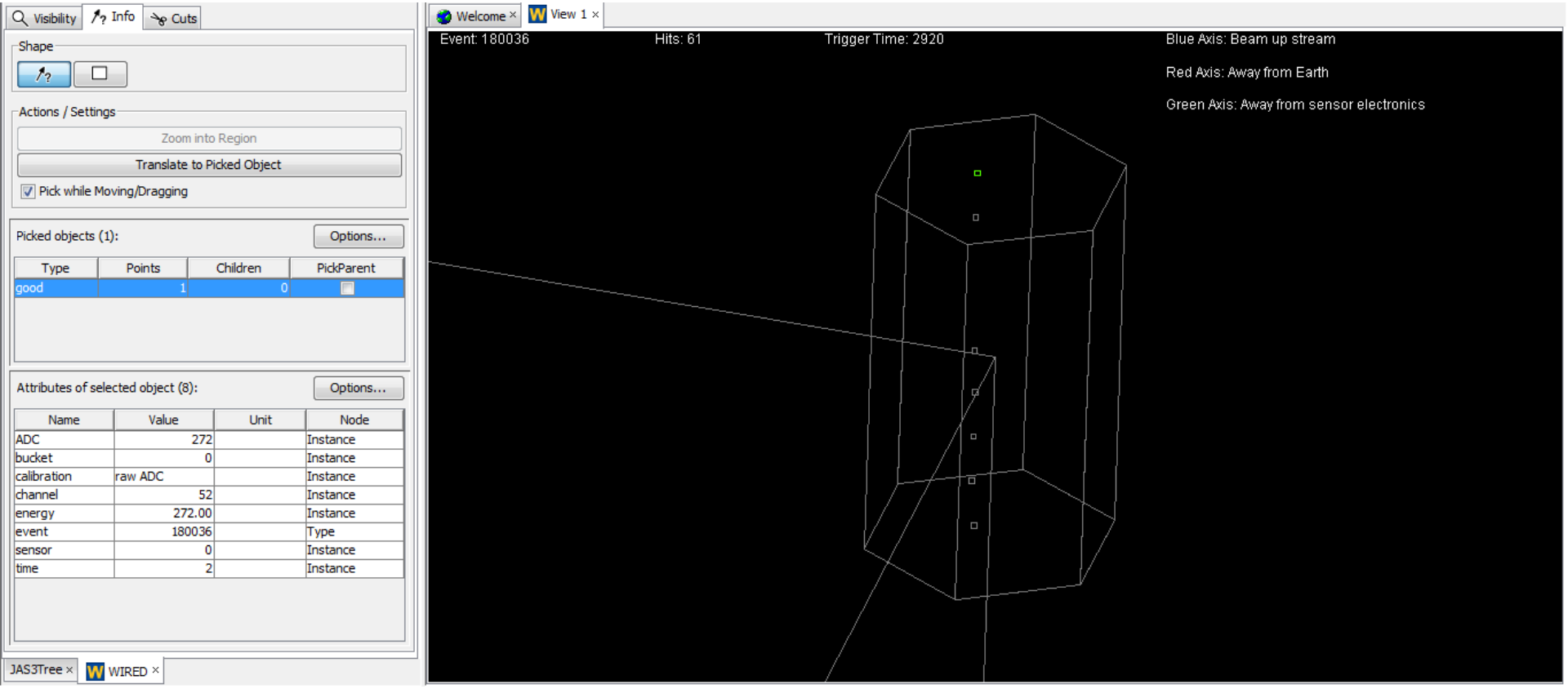
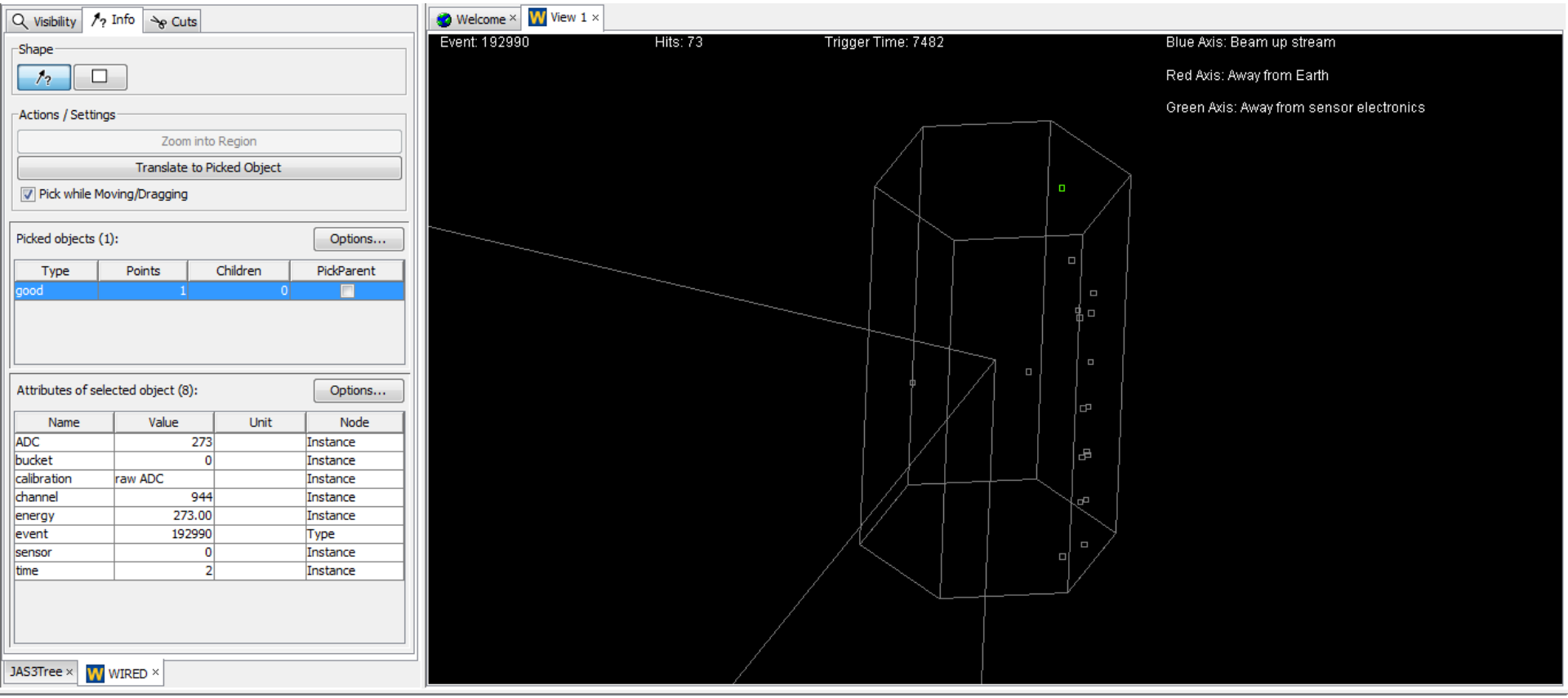
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC
350
Instance
bucket
0
Instance
calibration
raw ADC
Instance
channel
803
Instance
energy
350.00
Instance
event
108740
Type
sensor
0
Instance
time
2
Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 108740
Hits: 127
Trigger Time: 4127
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics

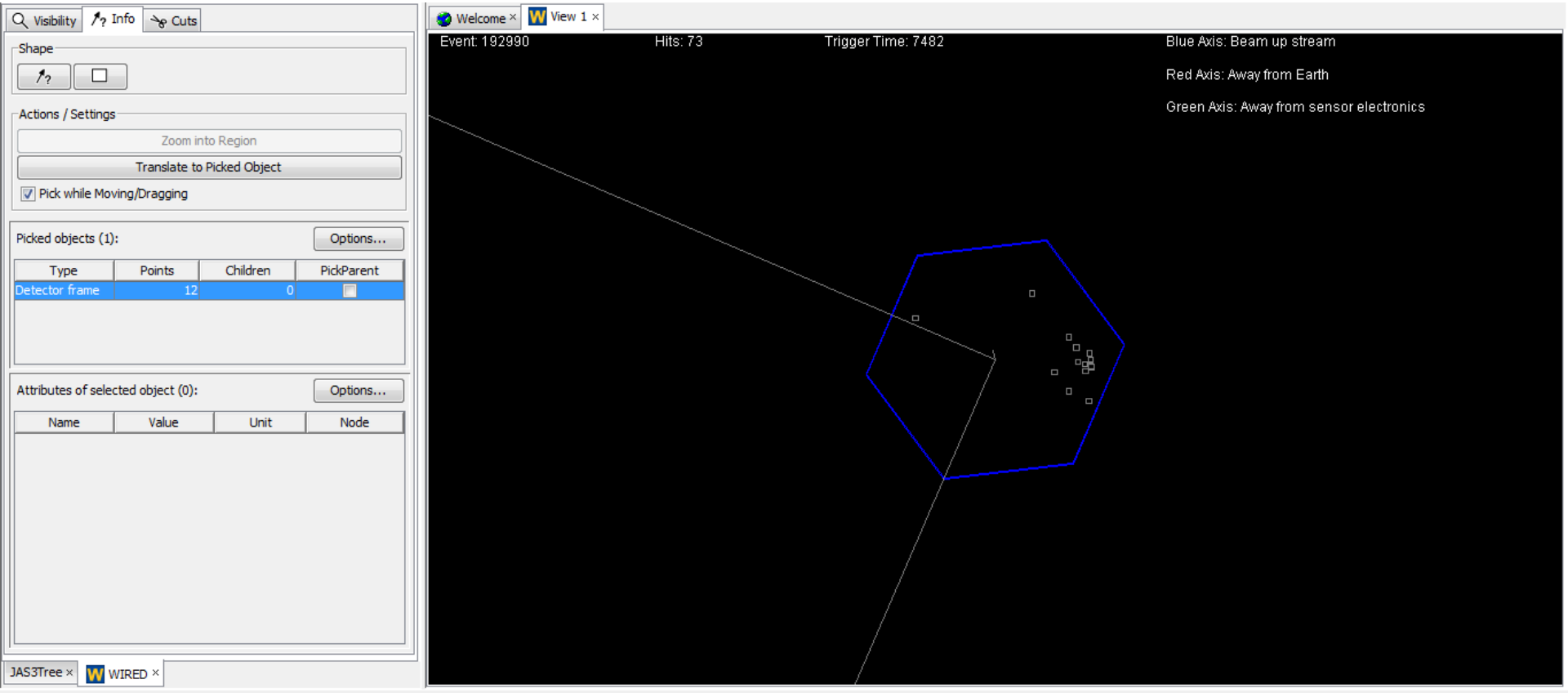

Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (0):
Options...
Type
Points
Children
PickParent
Attributes of selected object (0):
Options...
Name
Value
Unit
Node
JAS3Tree
WIRED
Welcome
View 1
Event: 108740
Hits: 127
Trigger Time: 4127
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics

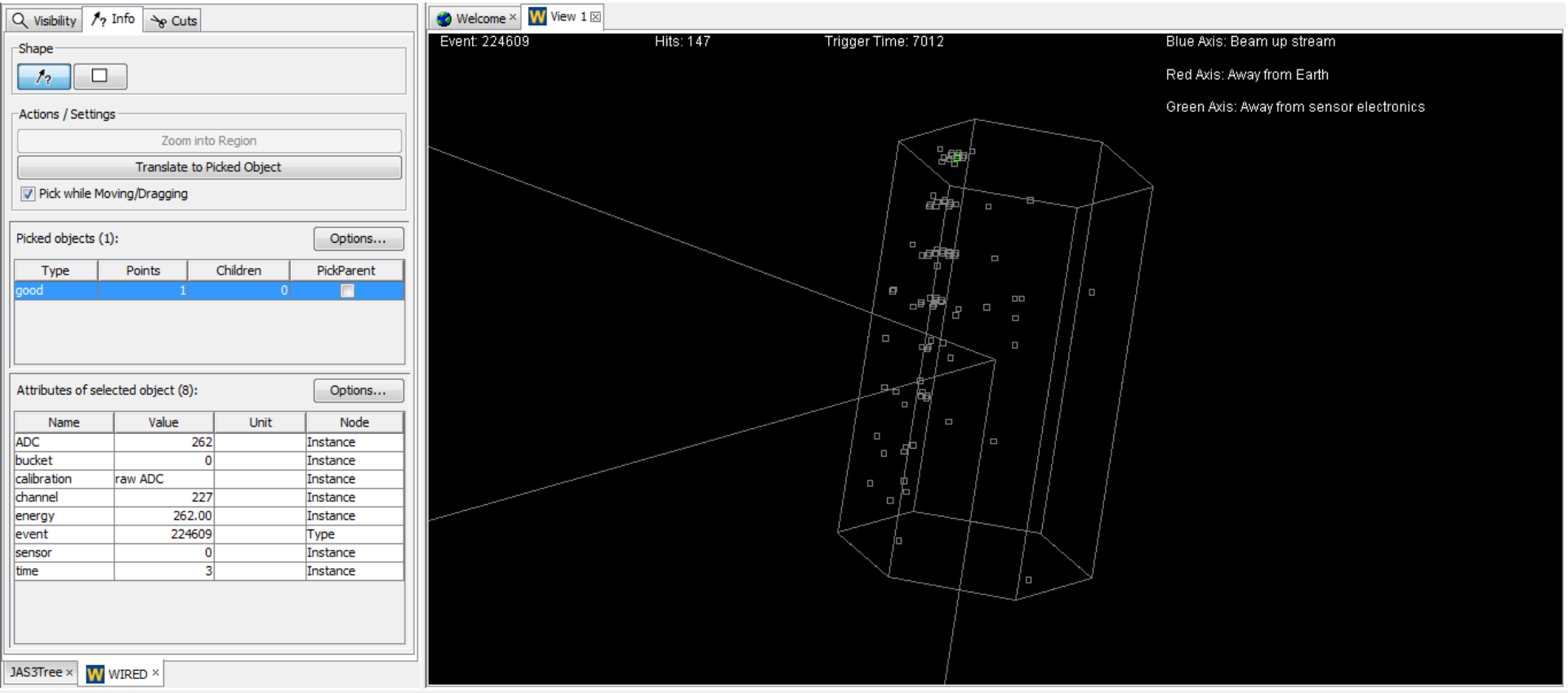

Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC
313
Instance
bucket
0
Instance
calibration
raw ADC
Instance
channel
121
Instance
energy
313.00
Instance
event
151204
Type
sensor
0
Instance
time
3
Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 151204
Hits: 60
Trigger Time: 1329
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics

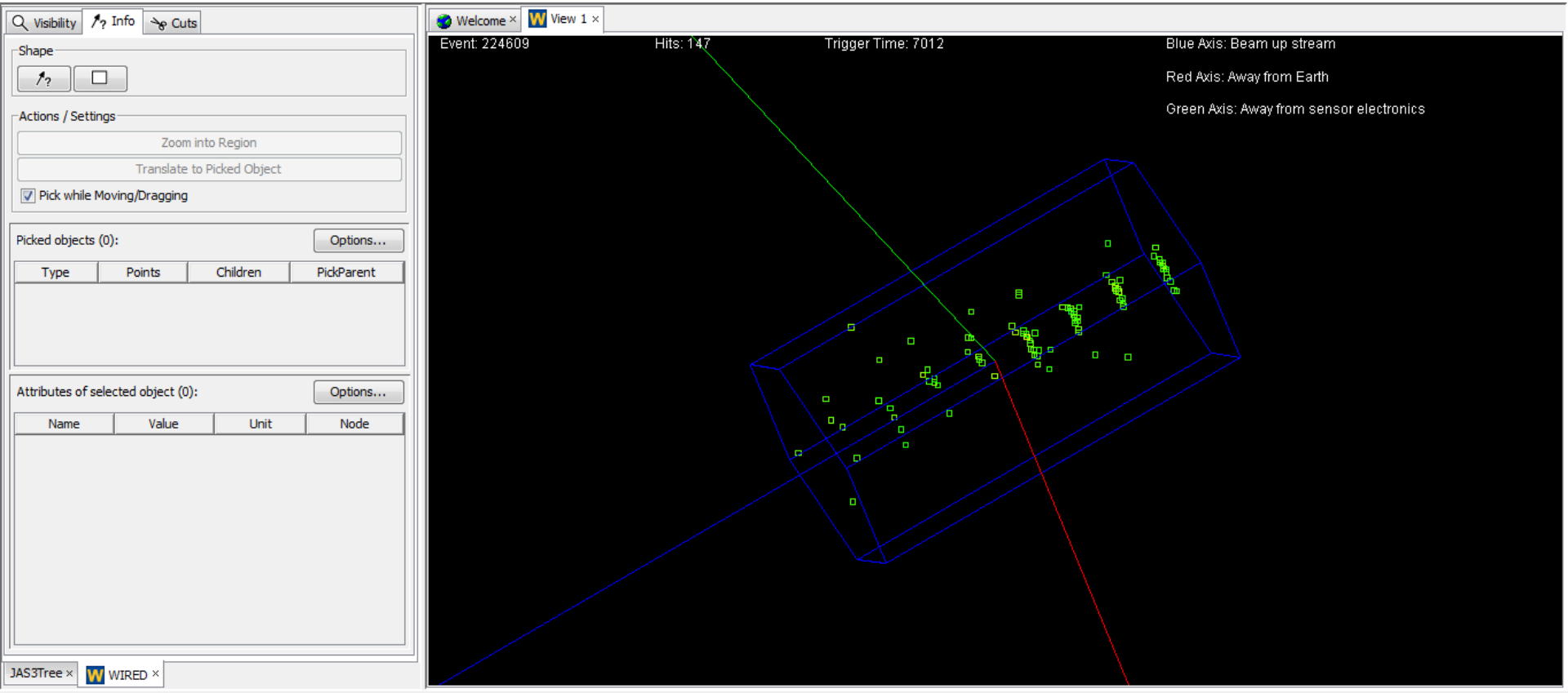

Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (14):
Options...
Name
Value
Unit
Node
ADC 231 Instance
bucket 0 Instance
calibration raw ADC Instance
channel 101 Instance
energy 231.00 Instance
event 179729 Type
sensor 0 Instance
time 2 Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 179729
Hits: 58
Trigger Time: 6087
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics

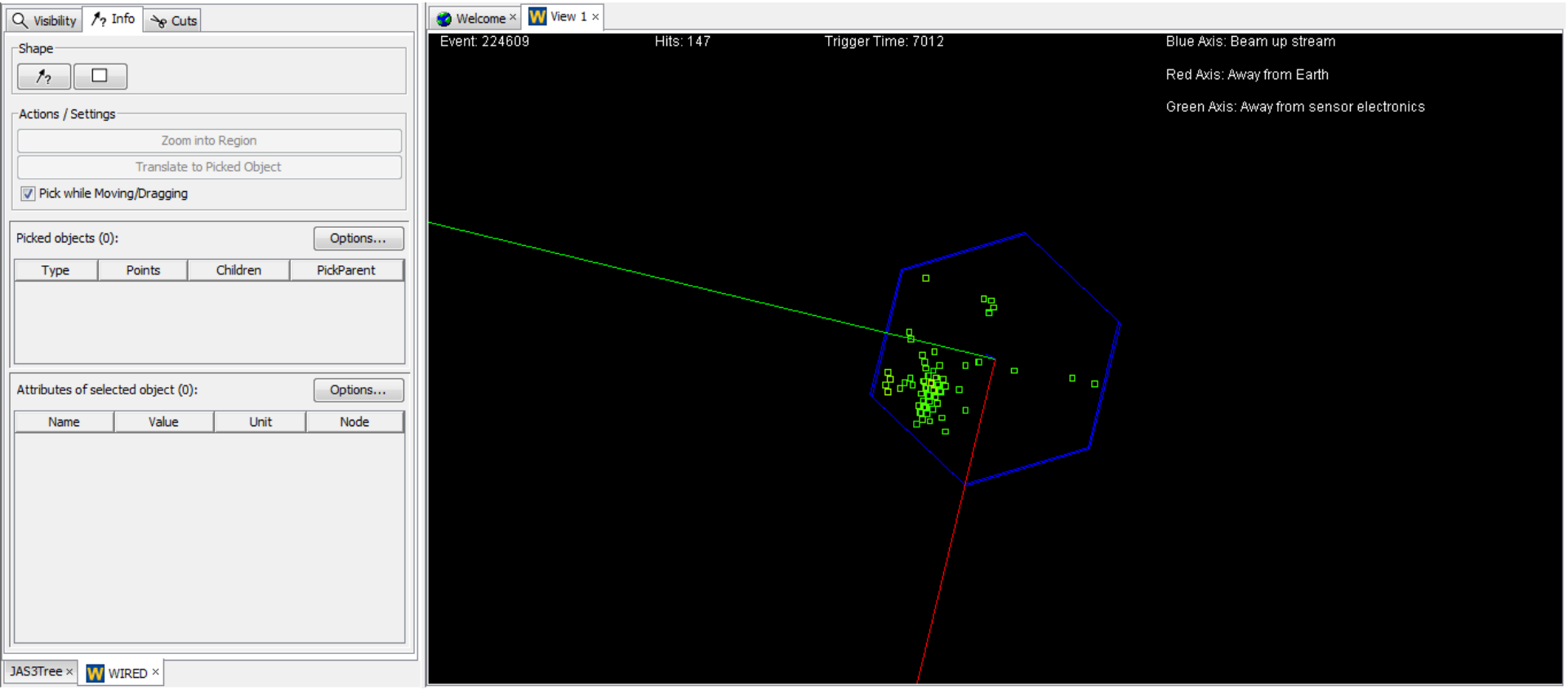

Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC 272 Instance
bucket 0 Instance
calibration raw ADC Instance
channel 52 Instance
energy 272.00 Instance
event 180036 Type
sensor 0 Instance
time 2 Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 180036
Hits: 61
Trigger Time: 2920
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics

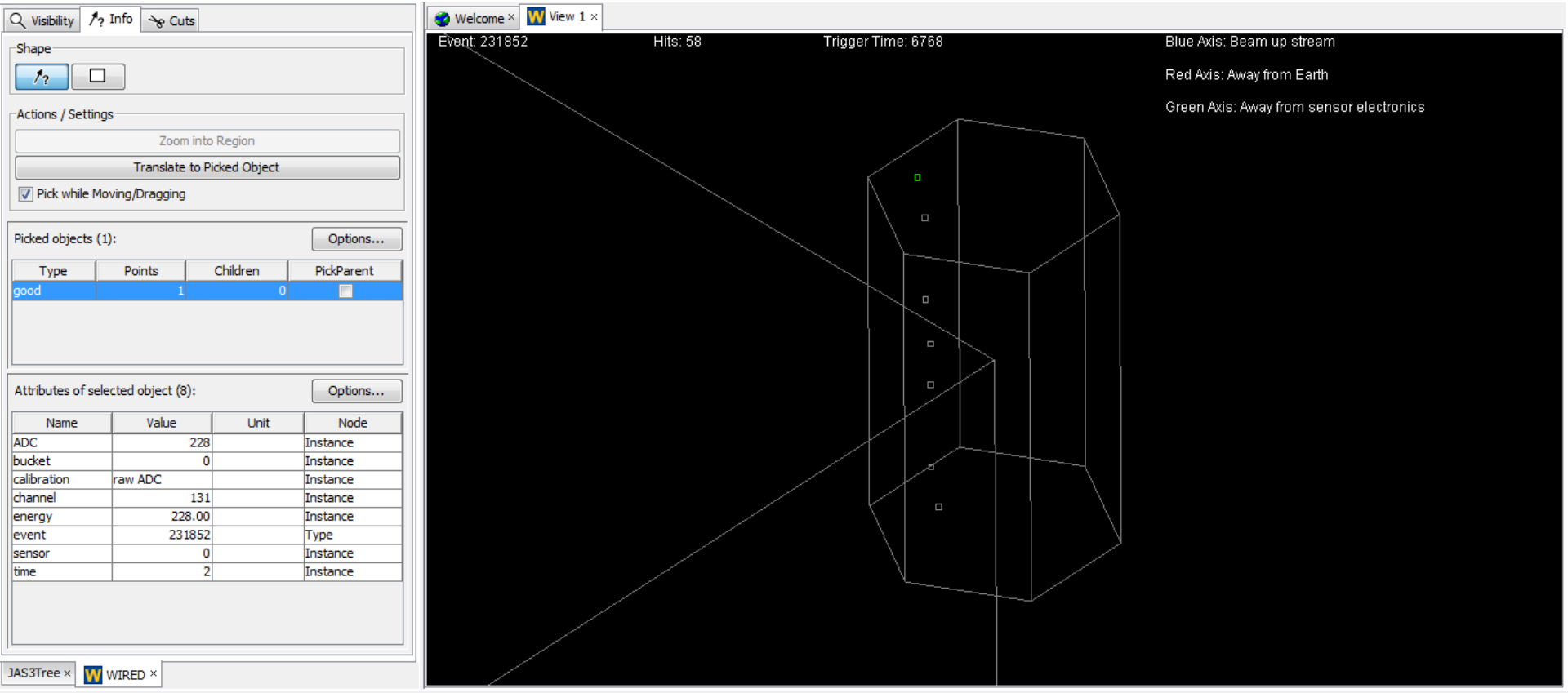

Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC 273 Instance
bucket 0 Instance
calibration raw ADC Instance
channel 944 Instance
energy 273.00 Instance
event 192990 Type
sensor 0 Instance
time 2 Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 192990
Hits: 73
Trigger Time: 7482
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
Detector frame
12
0
Attributes of selected object (0):
Options...
Name
Value
Unit
Node
JAS3Tree
WIRED
Welcome
View 1
Event: 192990
Hits: 73
Trigger Time: 7482
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC
262
Instance
bucket
0
Instance
calibration
raw ADC
Instance
channel
227
Instance
energy
262.00
Instance
event
224609
Type
sensor
0
Instance
time
3
Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 224609
Hits: 147
Trigger Time: 7012
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (0):
Options...
Type
Points
Children
PickParent
Attributes of selected object (0):
Options...
Name
Value
Unit
Node
JAS3Tree
WIRED
Welcome
View 1
Event: 224609
Hits: 147
Trigger Time: 7012
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (0):
Options...
Type
Points
Children
PickParent
Attributes of selected object (0):
Options...
Name
Value
Unit
Node
JAS3Tree
WIRED
Welcome
View 1
Event: 224609
Hits: 147
Trigger Time: 7012
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics


Visibility
Info
Cuts
Shape
Actions / Settings
Zoom into Region
Translate to Picked Object
Pick while Moving/Dragging
Picked objects (1):
Options...
Type
Points
Children
PickParent
good
1
0
Attributes of selected object (8):
Options...
Name
Value
Unit
Node
ADC 228 Instance
bucket 0 Instance
calibration raw ADC Instance
channel 131 Instance
energy 228.00 Instance
event 231852 Type
sensor 0 Instance
time 2 Instance
JAS3Tree
WIRED
Welcome
View 1
Event: 231852
Hits: 58
Trigger Time: 6768
Blue Axis: Beam up stream
Red Axis: Away from Earth
Green Axis: Away from sensor electronics

END