

ONMON

- Most detectors are in and working
- Histograms getting logged to files at end of subrun
- Still running development version online – need expert to update when critical changes occur

Onmon ToDo list....

- TPC not in (*Messier/Paley??*)
- TOF still needs work (*Wu?*)
- Need to “stabilize” with database access (*who?*)
- Need to “stabilize” with DAQ

- How are other detectors?

- Features needed to make shift workers jobs easier

Database

- Need list of data which should go into database for each detector system w/ frequency and size. Detector experts please make lists!
- Need to clarify what goes into database and what goes into the event stream. Some overlap of roles starting to occur.
 - 1st order:
 - all slow control and environmental stuff goes to DB
 - all detector crate backplanes goes to the event stream

Requires a database that works reliably!

Need more people besides David L. working with the DB to give David feedback about what is required, find bugs. (*Matt A. Andrew N.??*)

I think we need to simplify our use of the database to minimize the time spent maintaining it. I'd like to encourage David, Matt, and Andrew to talk about how to do this.

Documentation

User's manual is actually be in a useful state now

<http://enrico1.physics.indiana.edu/mipp/OfflineUsersManual>

Contains overview of software system and basics of how to get at the data

- Well attended tutorial session on 10th. Slides posted at

<http://enrico1.physics.indiana.edu/messier/post/mipp-tutorial.pdf>

Shows basics of how to get connected to the MIPP software

Still to do: Need better documentation and debugging of site installation for “site librarians”. Especially for FNAL site...

Raw2Root

- raw2root *ought* to work

Currently fails to run for a few reasons...

- fails to load database tables (see DB discussion...)
- changing state of raw data file format
- ???

Need: Someone to try to raw2root all existing files and mark files that fail (tpc run is one of these!!) and try to catalog failures

Need: Someone to set up a script to run raw2root in “real” time. This will help catch failures early

MippIo/onmon/RawData/raw2root should be considered together. Please try to make at least simple checks when changes are made to any of these packages!

EventDataModel

Recent changes made to EventDataModel to squash memory leak. Requires regeneration of root format data done before ~1st of June.

As part of update, implemented Exceptions when attempting to extract data. Use this:

```
JobCResult MyModule::Reco(EDMEventHandle& evt)
{
    std::vector<const RICHDigit*> richPMTs;
    try {
        evt.Raw().Get("./rich", richPMTs);
    }
    catch (EDMException e) {
        // Data not found – how bad is this error???
    }
    // Data OK -- proceed...
}
```

Recent change to raw format: 1st 2 events in files are now environment data. Will add change to IoModule to deal with this...

Reconstruction

- Need reasonable set of MC files.

Nick Graf is working on making 40 GeV p-Cu vectors using FLUKA package.

- A couple of packages started:

TPC track finder - originally adapted by Andre L. Jon P. has started porting this to the new system

RICH CircFit - Mark M.'s RICH ring finder and fitter. Works w/o tracking information

RICH Reco - Sharon S's RICH ring fitter. Requires tracking and some changes to incorporate into anamipp

DC Reco - Pierrick's DCXings (talk?)

Hartouni Reco - LaTeX and Excel drift chamber tracker...

Reconstruction

“Common” interface to basic reconstruction objects should be defined in the “[RecoBase](#)” package

Things like, tracks, track points, vertices,...

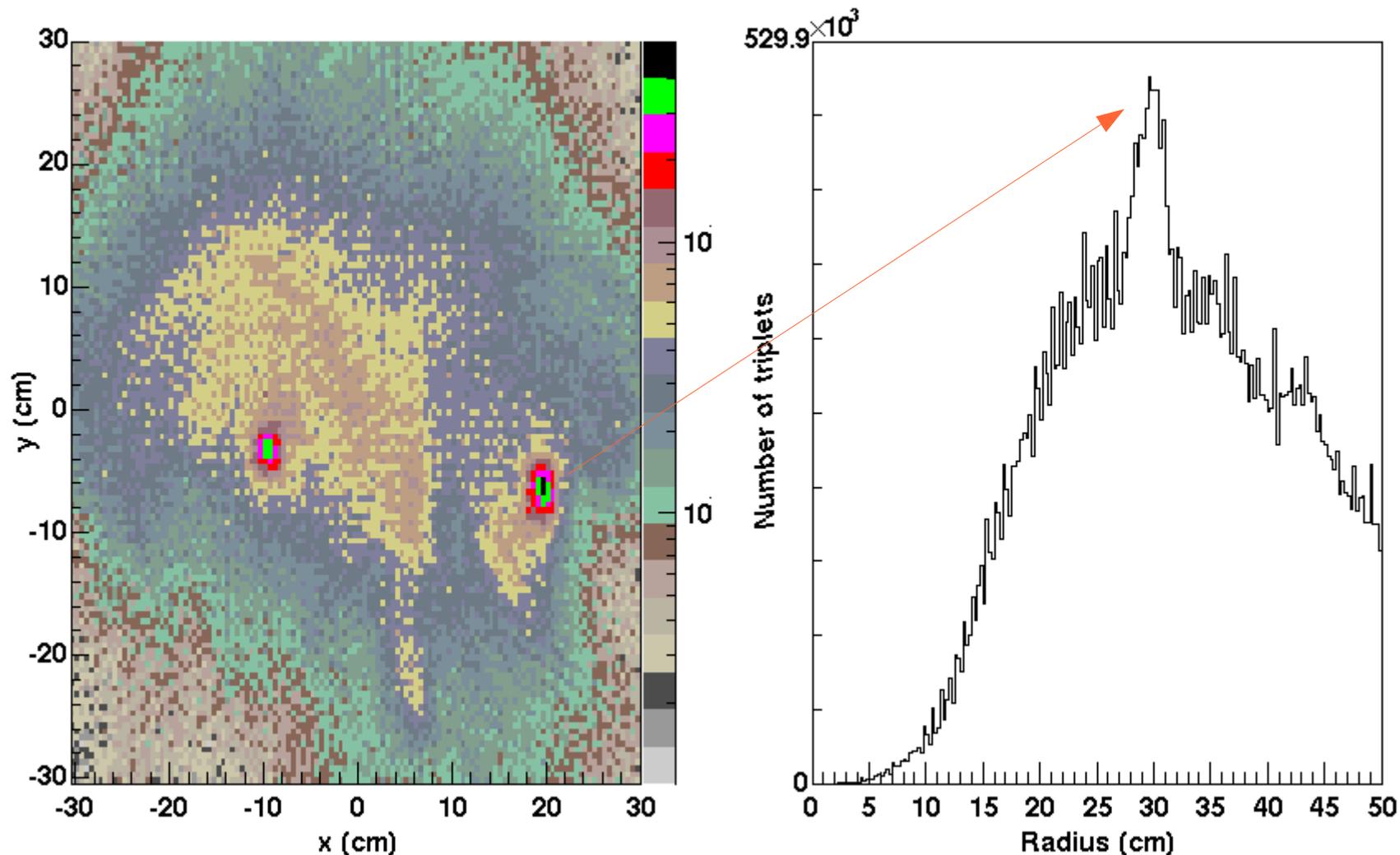
Idea is that it will make it easy to swap track finders, track fitters, and vertex finders modular. Ie. Different reconstruction modules will produce objects in roughly same format.

Package is started but needs people to use it to flesh it out and make it useful.

*RICH*CircFit

Simple reconstruction package for “stand alone” RICH

Uses fact that every 3 PMTs define a circle. For each triplet find the circle center and circle radius and make histograms of center positions and radii. Associate peaks in each histogram with each other to form a ring



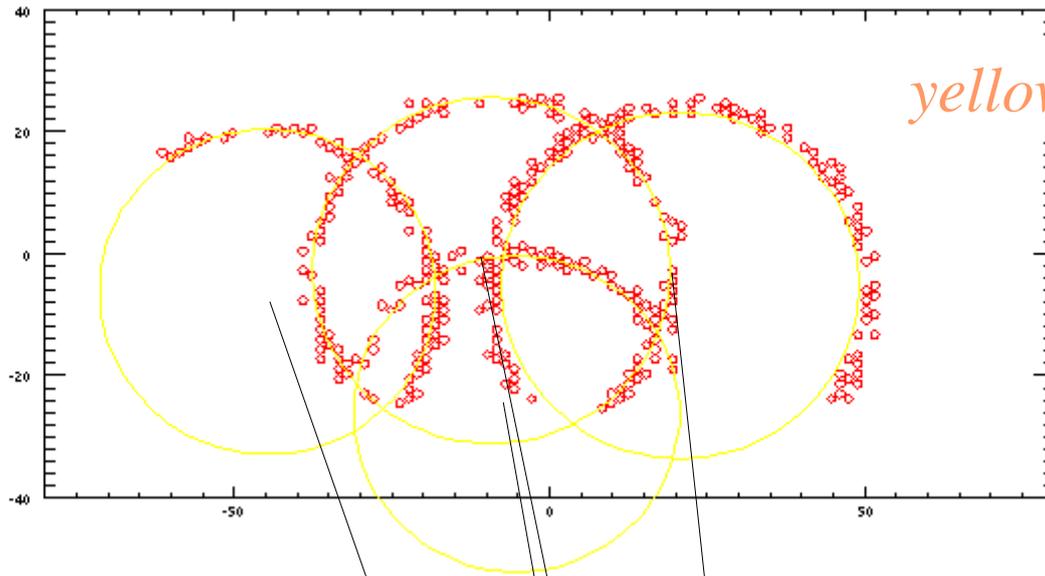
RICHircFit

MIPP (FNAL E907)

Run: 1
SubRun: 0
Event: 1

Tue May 25 2004
21:32:48.796511

Version: 0
Trigger: 0



RICHircFit
can be used as an
example module
for others

