Track Fitting in DC'06

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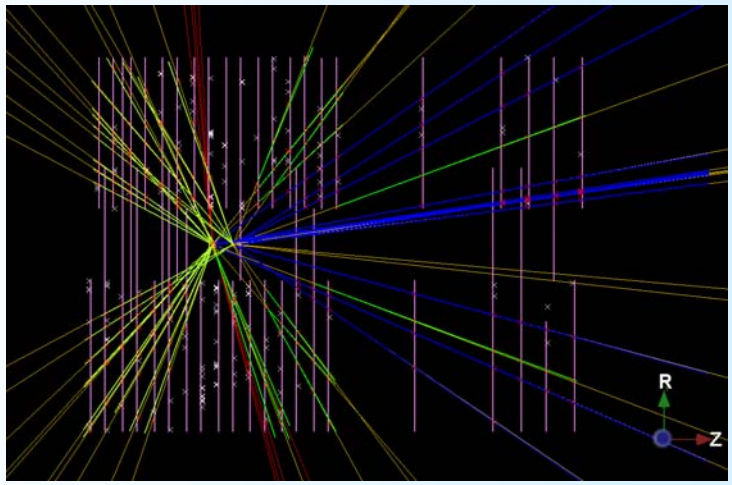


A collection of plots

Status of Software for DC'06

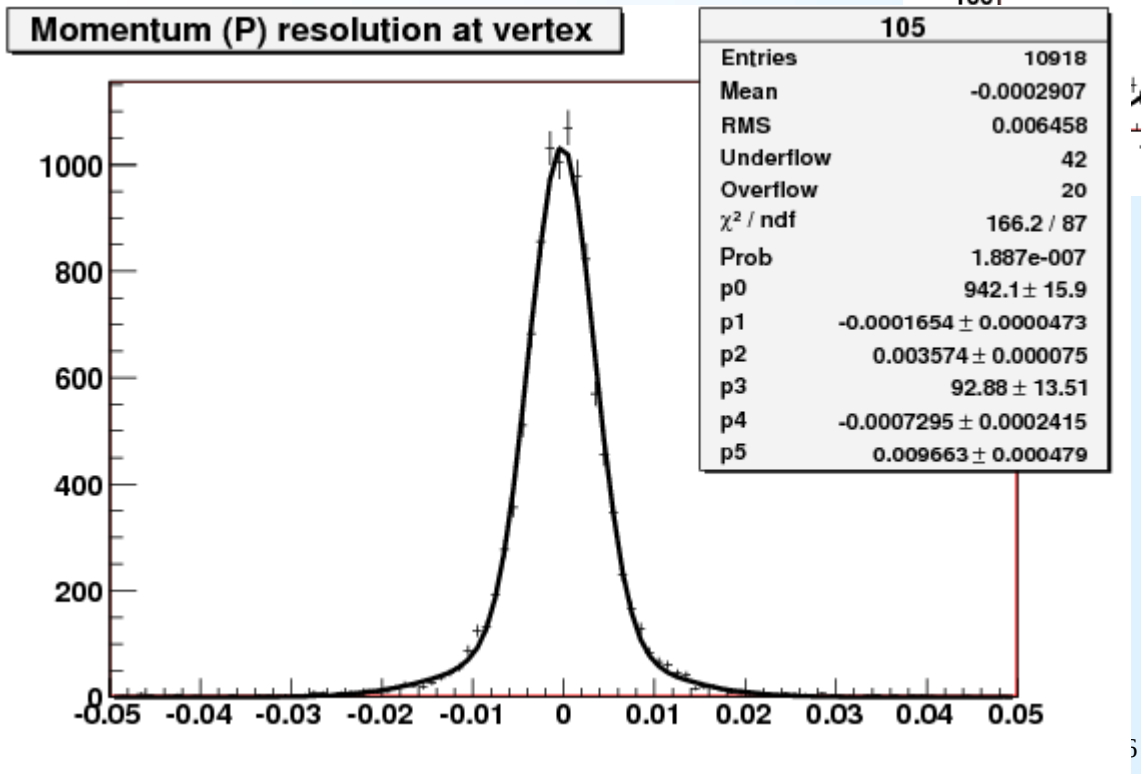
Random comments

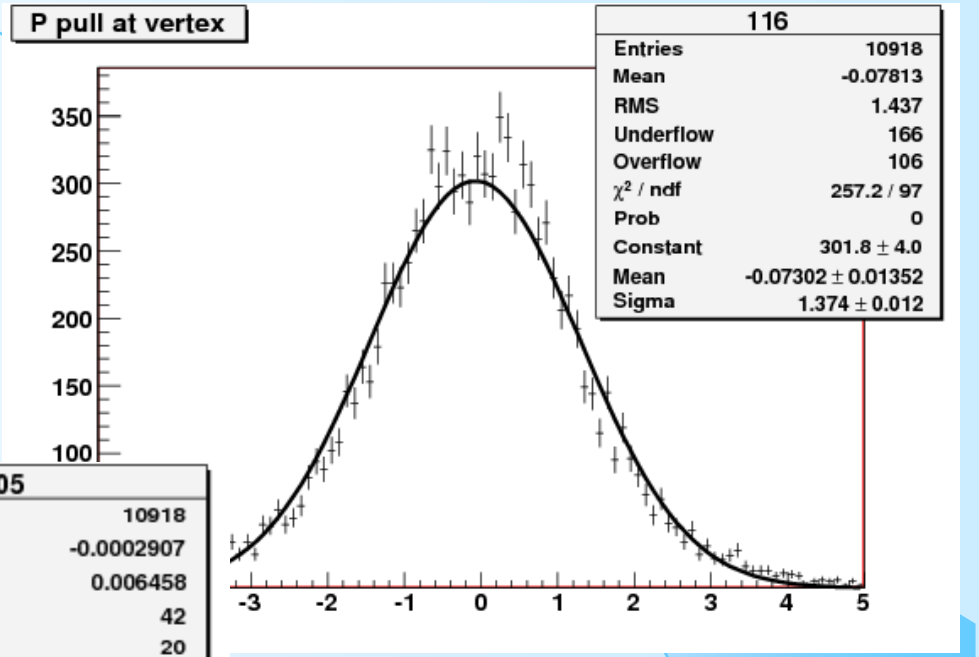
- Many and regular reports at T-Rec meetings
- A lot of detail in there
- Focus here on some performance plots not really shown previously
- Performance for ideal pattern recognition
- And reconstructed long tracks

Status

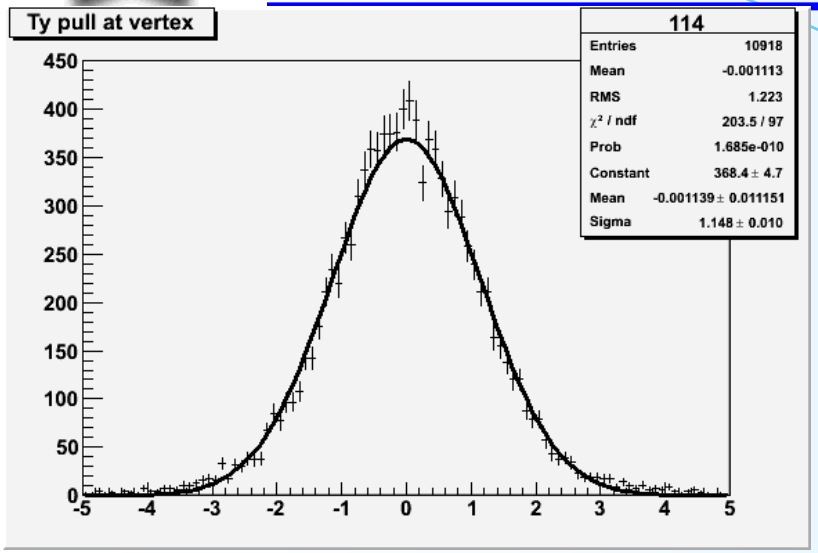
- DC'06 fitting does a bi-directional fit
- All fitting options are defined in the Tr/TrackSys package
- Code / performance is now rather stable
- Does not mean there is no room for improvement!

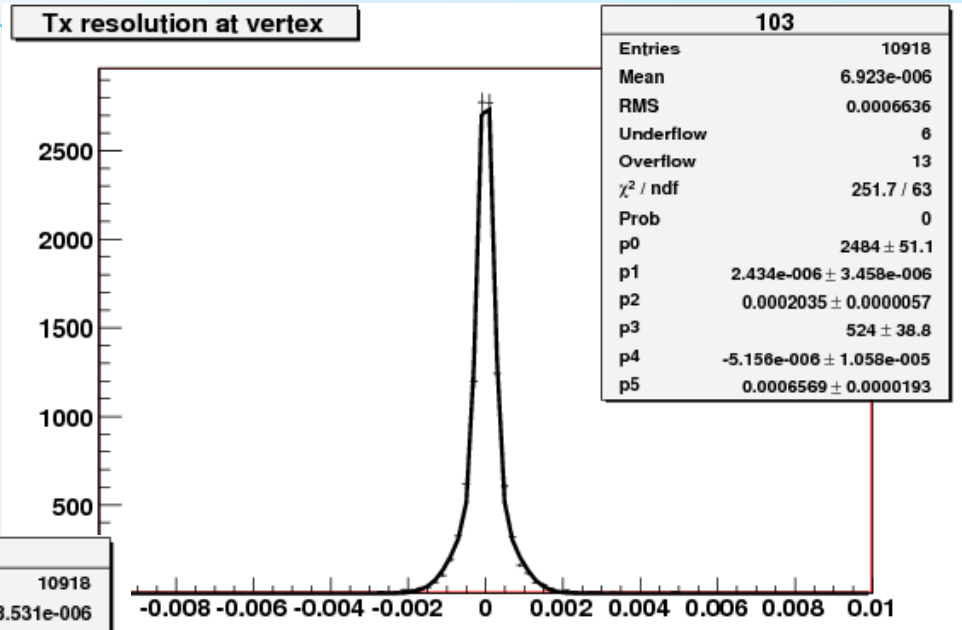
Performance – Ideal Long Tracks (1/3)

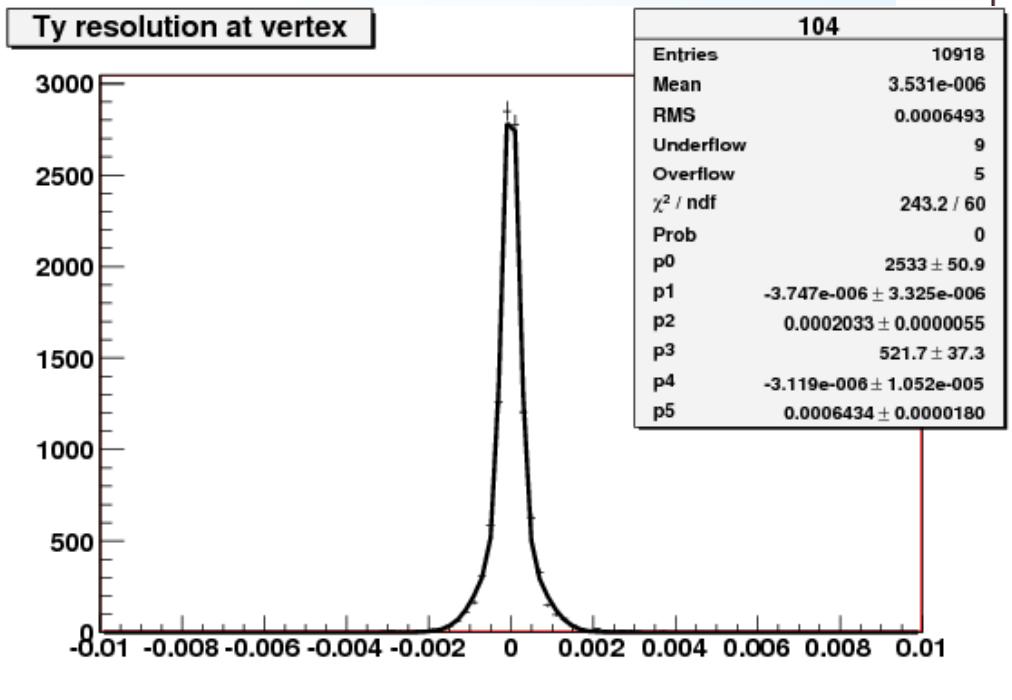


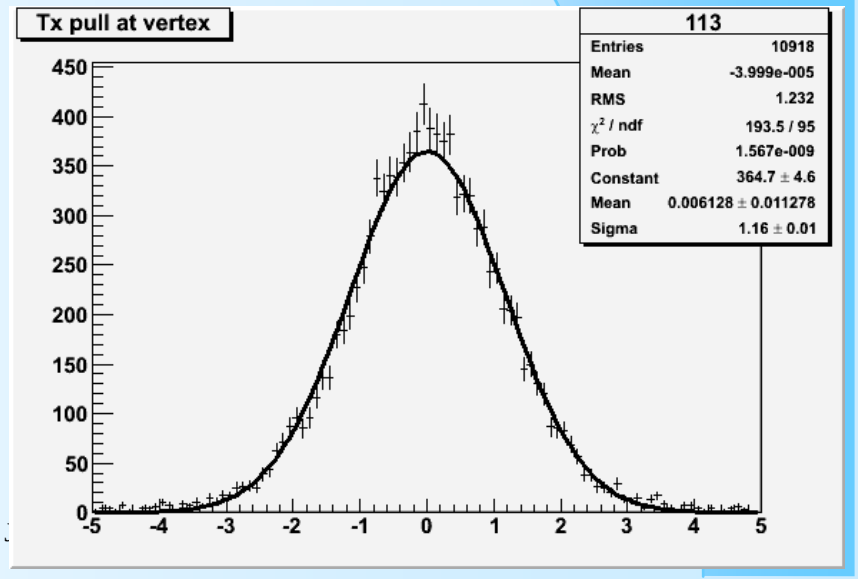


Performance – Ideal Long Tracks (2/3)

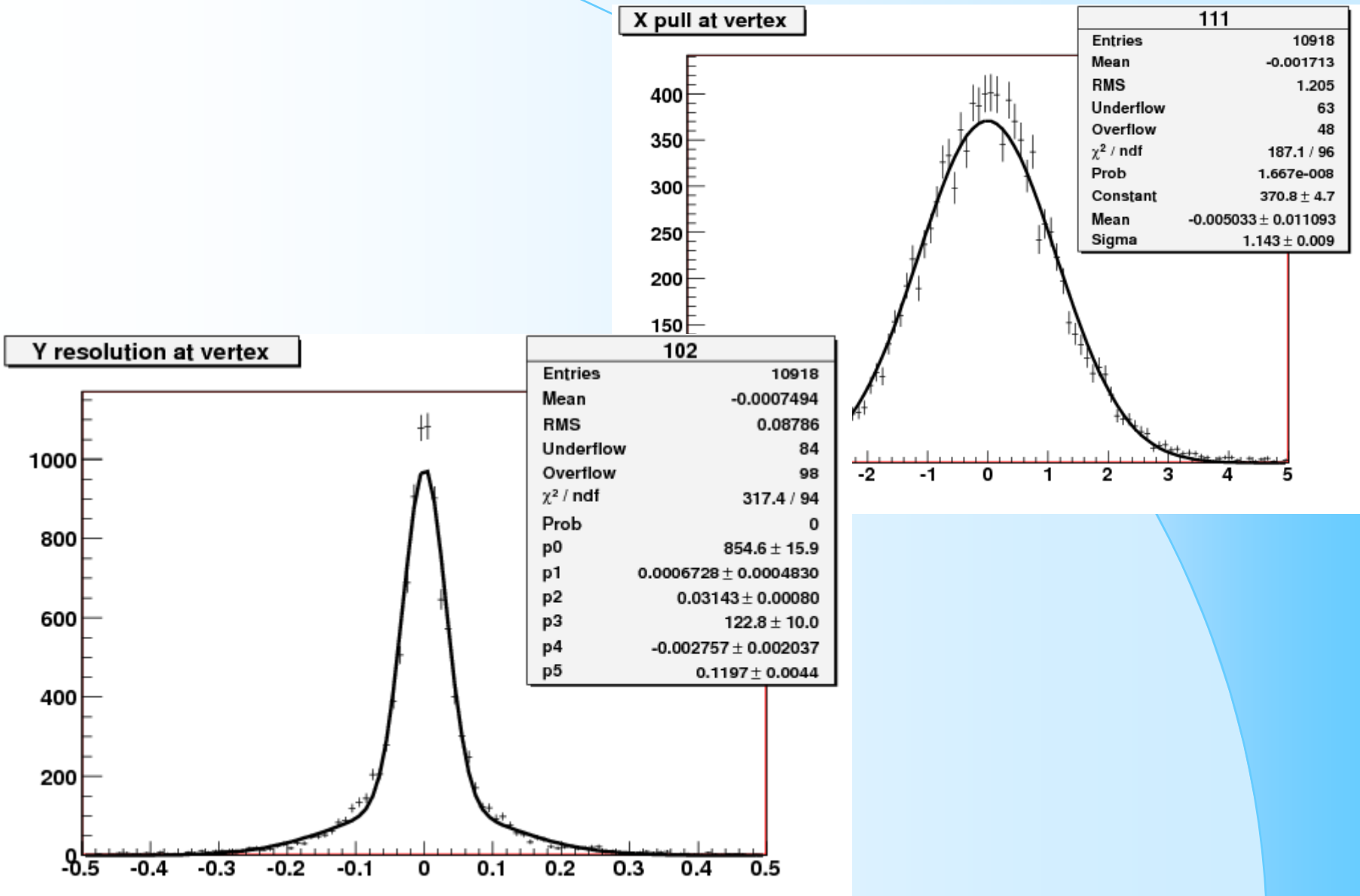




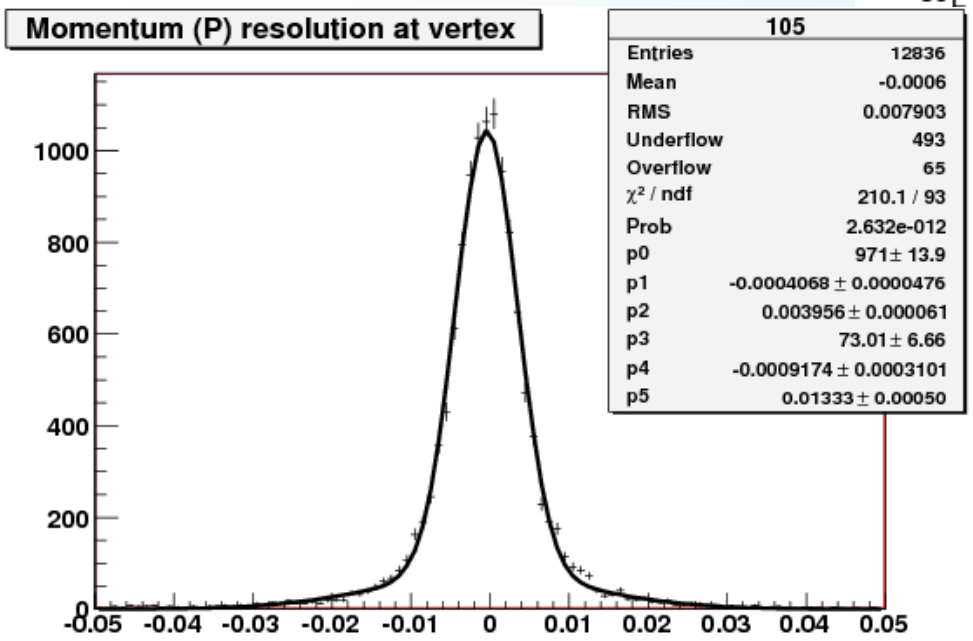


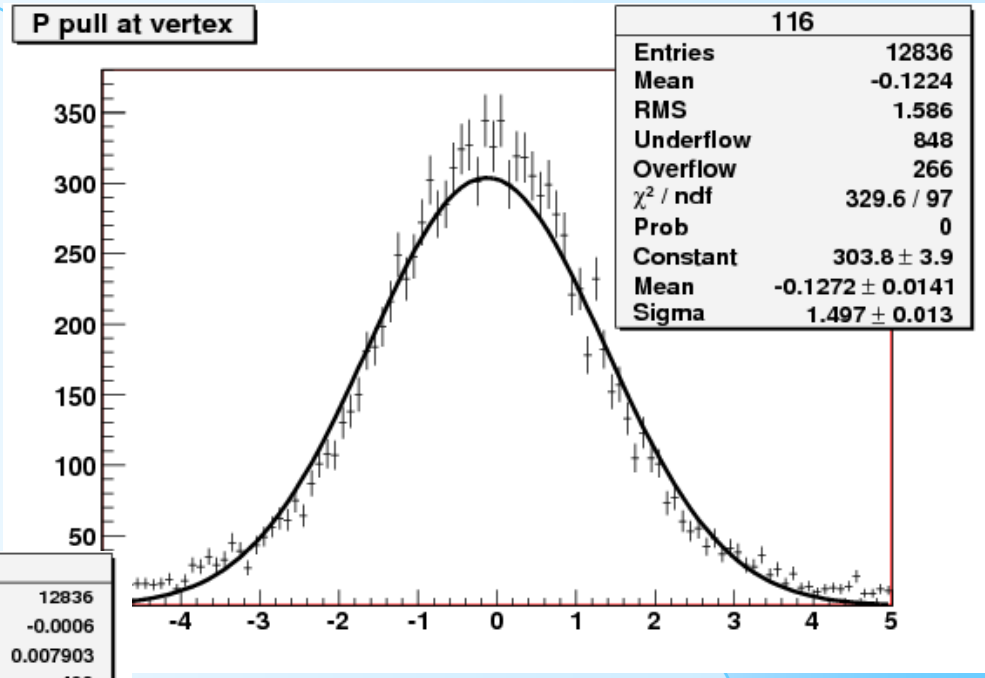


Performance – Ideal Long Tracks (3/3)

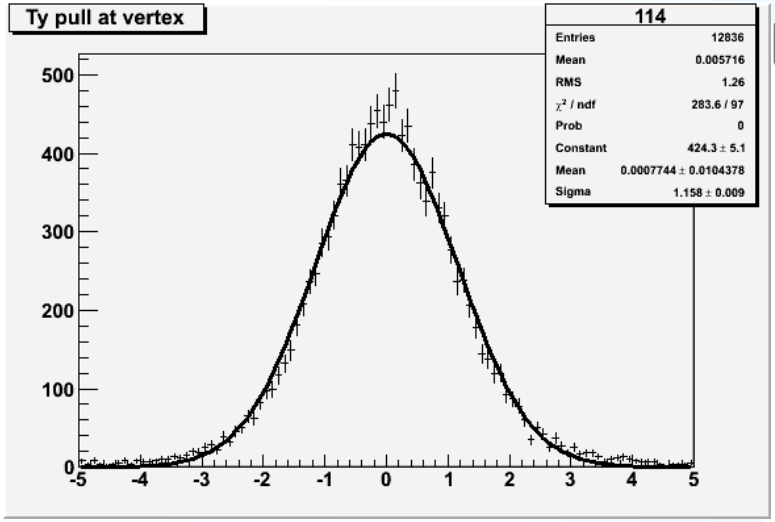


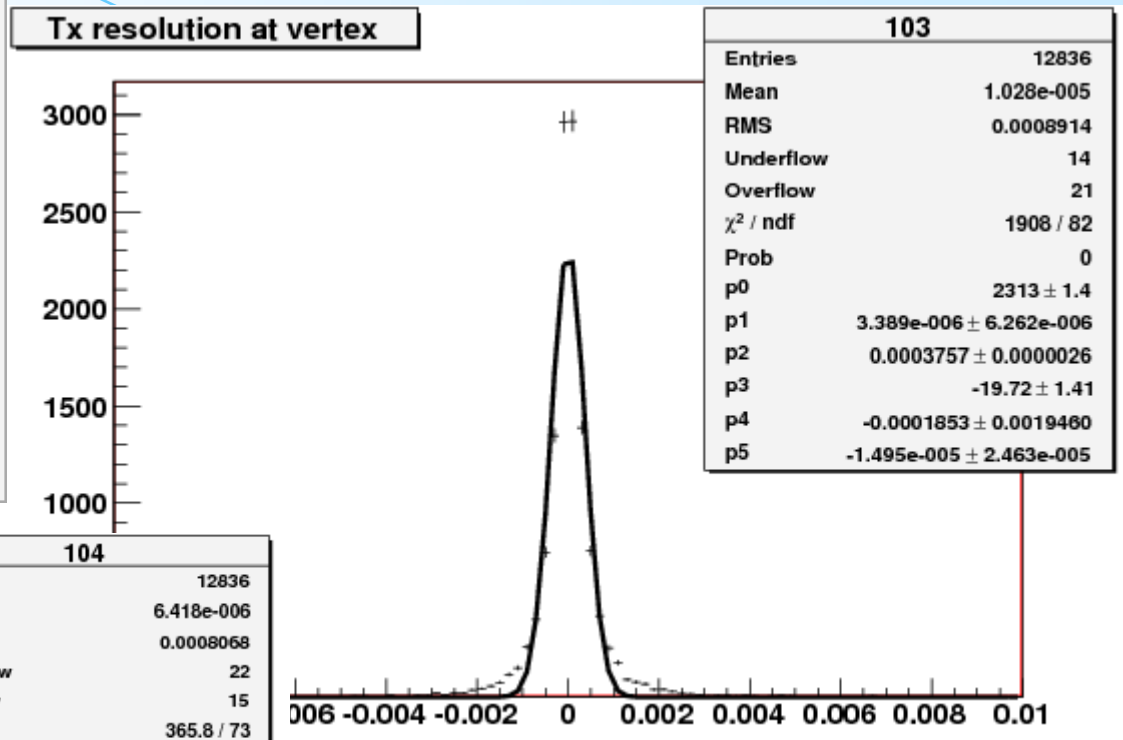
Performance – Forward Tracks (1/3)

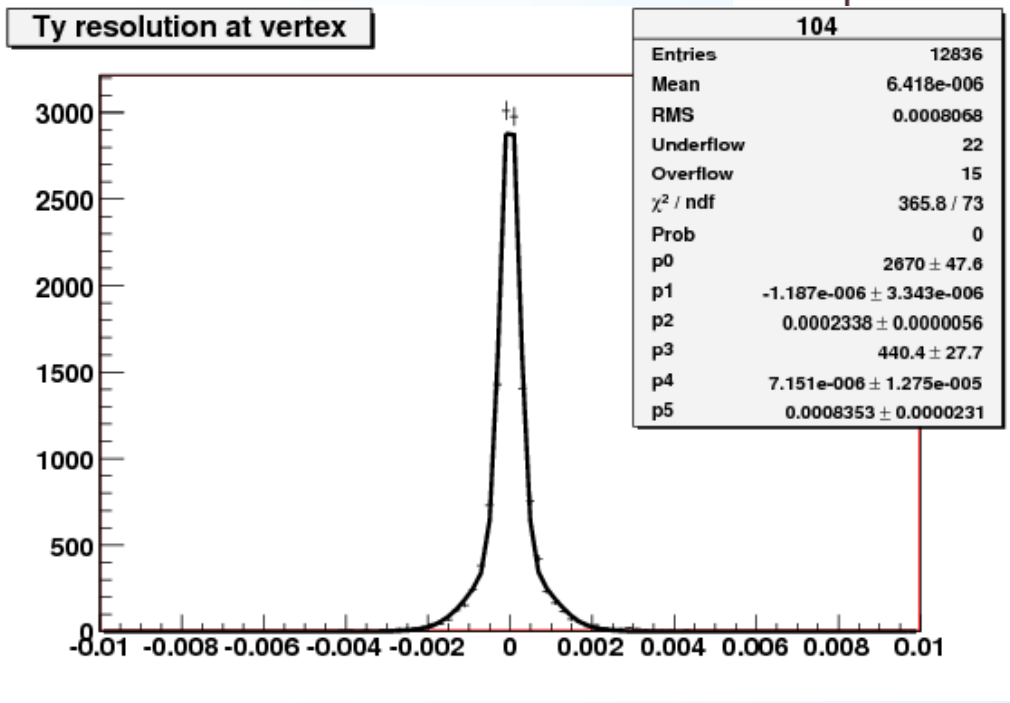




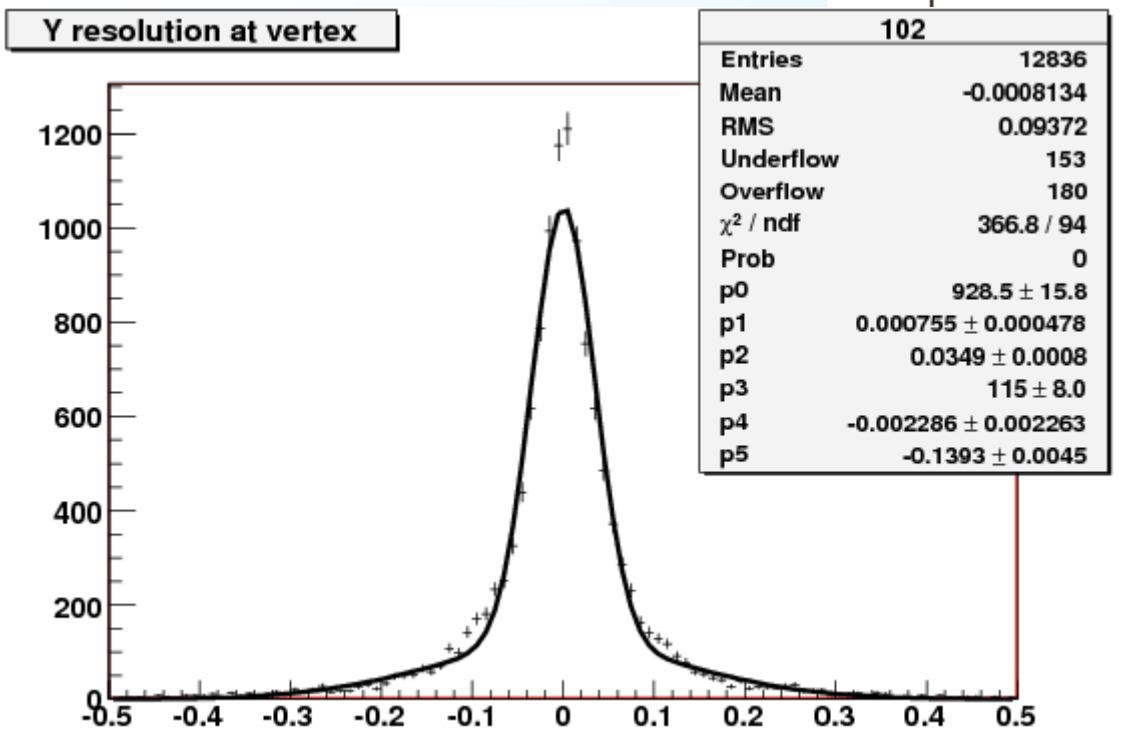
Performance – Forward Tracks (2/3)

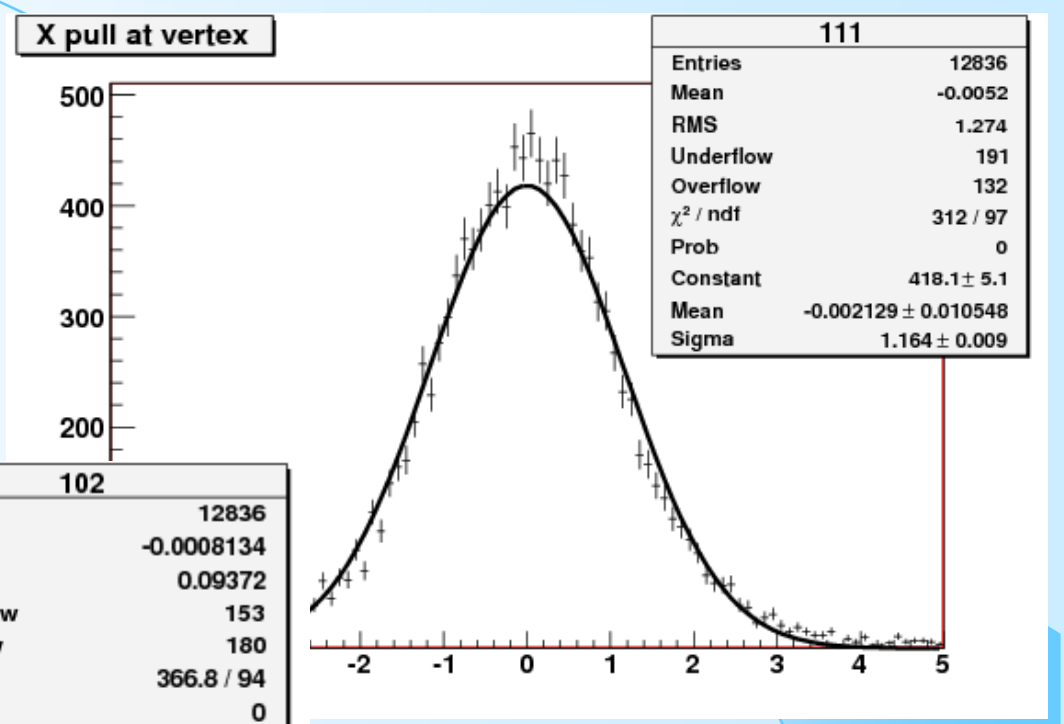






Performance – Forward Tracks (3/3)





In short …

- **Resolutions and pulls:**

  core δp / p ~4.0 per mille, p-pull ~ 1.5

  slopes and positions pulls typically ~ 1.15

- **Still bit worse compared to ideal pattern recongnition**
- **To be fully understood …**
- **Difference most likely due to wrong hits**

- **Many detailed studies have to be done in DC'06 …**

Looking forward to more DC'06 data ...!