Running NuWa Simulation

Notice : **~/path/to** is a sample path

1. **Create the working area (ex: myNuWa):**

$ mkdir cmt

$ cd cmt

$ vi project.cmt

project myNuWa

use dybgaudi

build\_strategy with\_installarea

structure\_strategy without\_version\_directory

setup\_strategy root

$ vi version.cmt

v0

1. **check out packages:**
* Production：

$ svn co <http://dayabay.ihep.ac.cn/svn/dybsvn/people/wangzhe/Production>

* Streamer, Ostw:

$ svn co <http://dayabay.ihep.ac.cn/svn/dybsvn/people/wangzhe/TWin>

1. **Running IBD simulation:**
2. **source ~/nuwa.3.6.0.dbg.csh**
3. $ **~/path/to/**Production
4. commend:

$ **nuwa.py --history off –n 20 –R 100 -o simulation.root -m "FullChain -g generator.IBD\_DYB\_AD1\_GdLS –T SingleLoader " > log**

-R: run number

-g: A generator, for example IBD\_DYB\_AD1\_GdLS is for IBD event in GdLS volume of AD1 of site DYB.

-T: Optional stages are: Kinematic, Detector, Electronic, TrigRead or SingleLoader.

1. **Reconstruction:**

$  **nuwa.py --history off --random off --repack-rpc=off -n -1 @$KUP11AROOT/share/runReco -o ~/path/to/recon.root ~/path/to/simulation.root > reconLog.log**

1. **Process Twin:**

$ source ~/mroot.csh

$ cd **~/path/to/**TWin/Streamer/FastStreamer/

$ make

$ ./**FastStreamer recon.root StreamData.root 1**

1. **Process Ostw:**

$ source ~/mroot.csh

$ cd **~/path/to/**TWin/Ostw

$ make

$ ./**Ostw StreamData.root OstwData.root**

1. **Plot:**

open root file:

root –l OstwData.root

Event->Draw("E[1]:E[0]","Fold==2")