Angular resolution
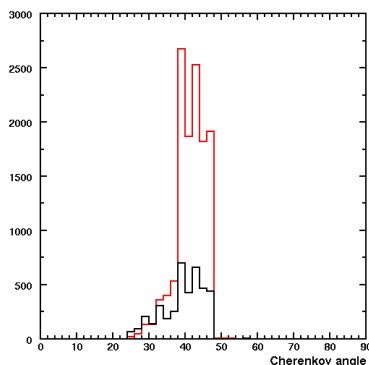
Name of the game:
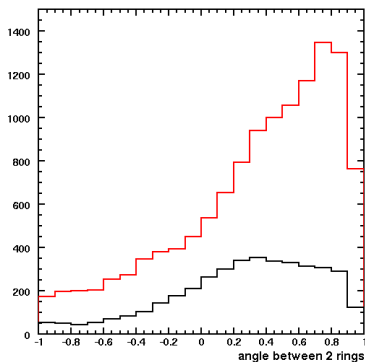
In events that pass precuts, let's try to select event which are QE & have a visible proton(VP)

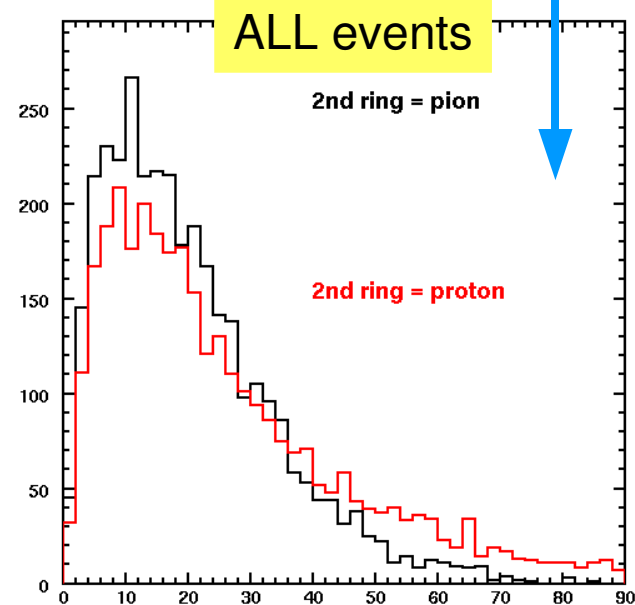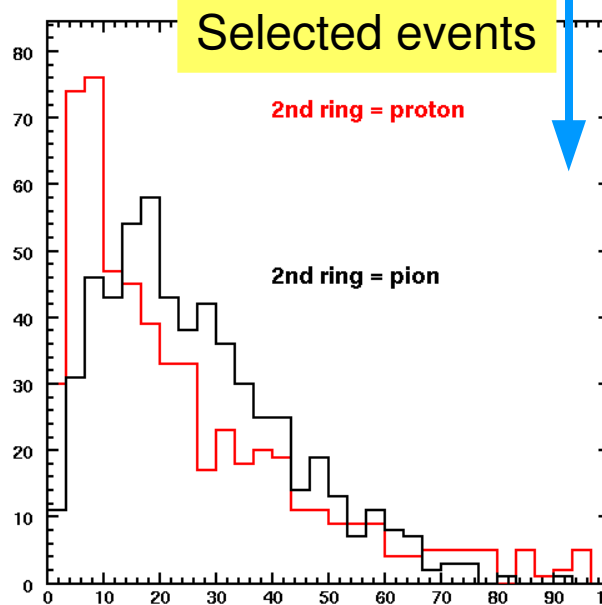| 20 yrs of MC	Rec signal	Rec bckg	Total
MC signal	98	53	151
MC bckg	473	2753	3226
Total	571	2806	3377

Selection cuts:

Cherenkov angle of least energetic ring <38

Cos(Angle between 2 rings) < 0.5

Selected events

ALL events

Angle between true and reconstructed zenith

So with 2 very simple cuts I can make the angular resolution slightly better by identifying the proton.

Note: the energy resolution is still too bad

Reminder:

precuts= FCFV,2rings,most

energetic ring=mulike

Signal= QE+VP

BG= non-QE or no VP