

Optics Status Update

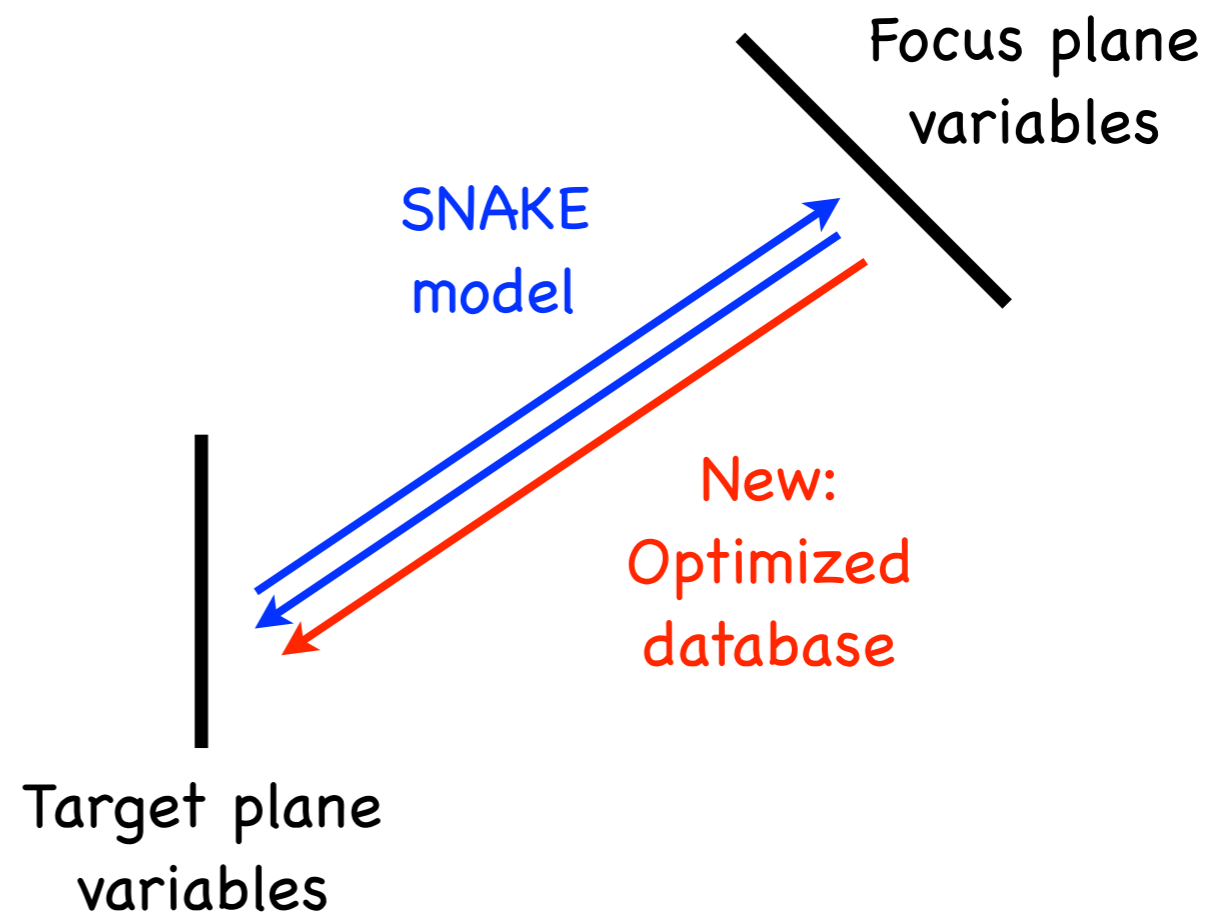
Chao Gu

Optics Status

- Simulation:
 - Add a new function to use analyzer database to do reconstruction

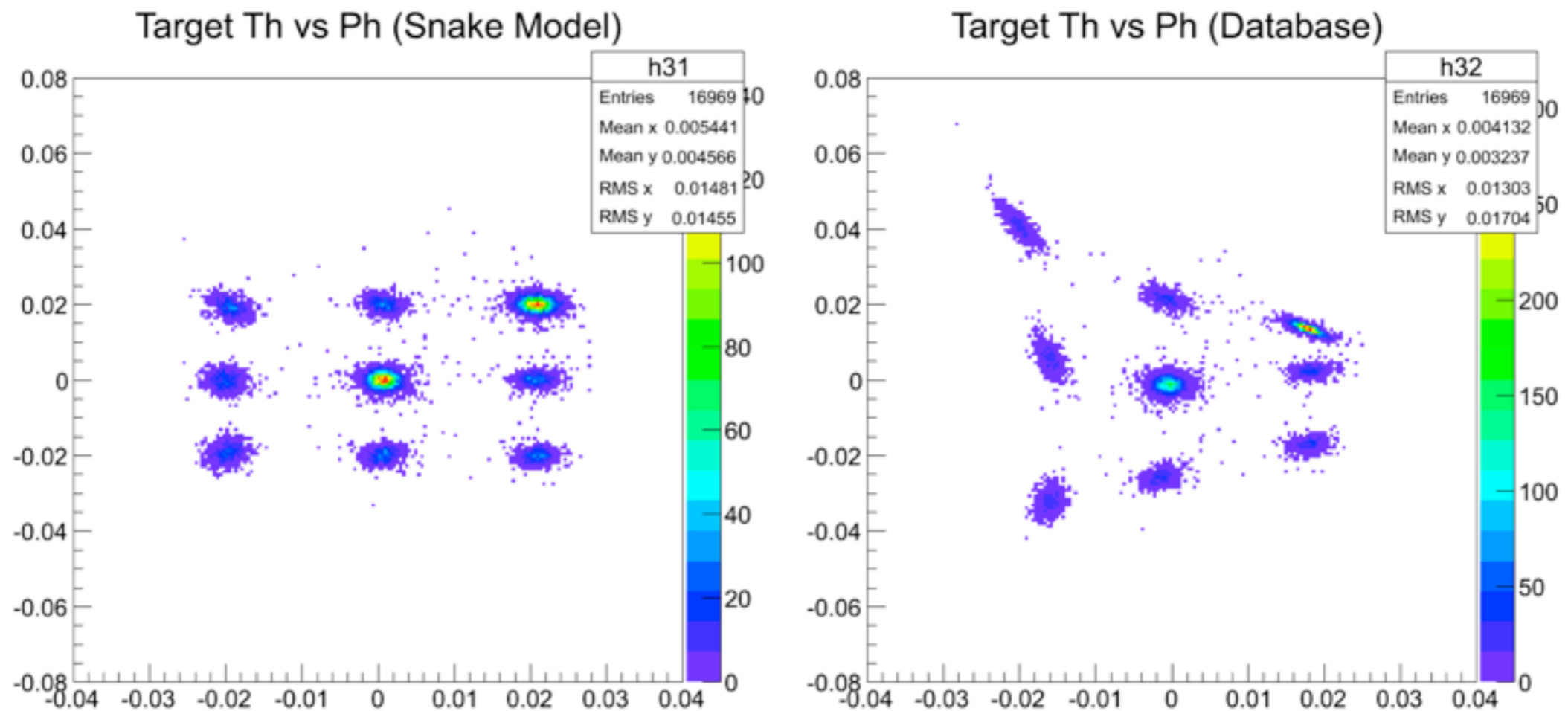
Simulation

- Before we are using SNAKE model to do both forward and backward transport
- Add a new function to use analyzer database to do backward reconstruction
- Data base is optimized with real optics data
- Compare it with the reconstruction result of SNAKE model will help us to improve simulation



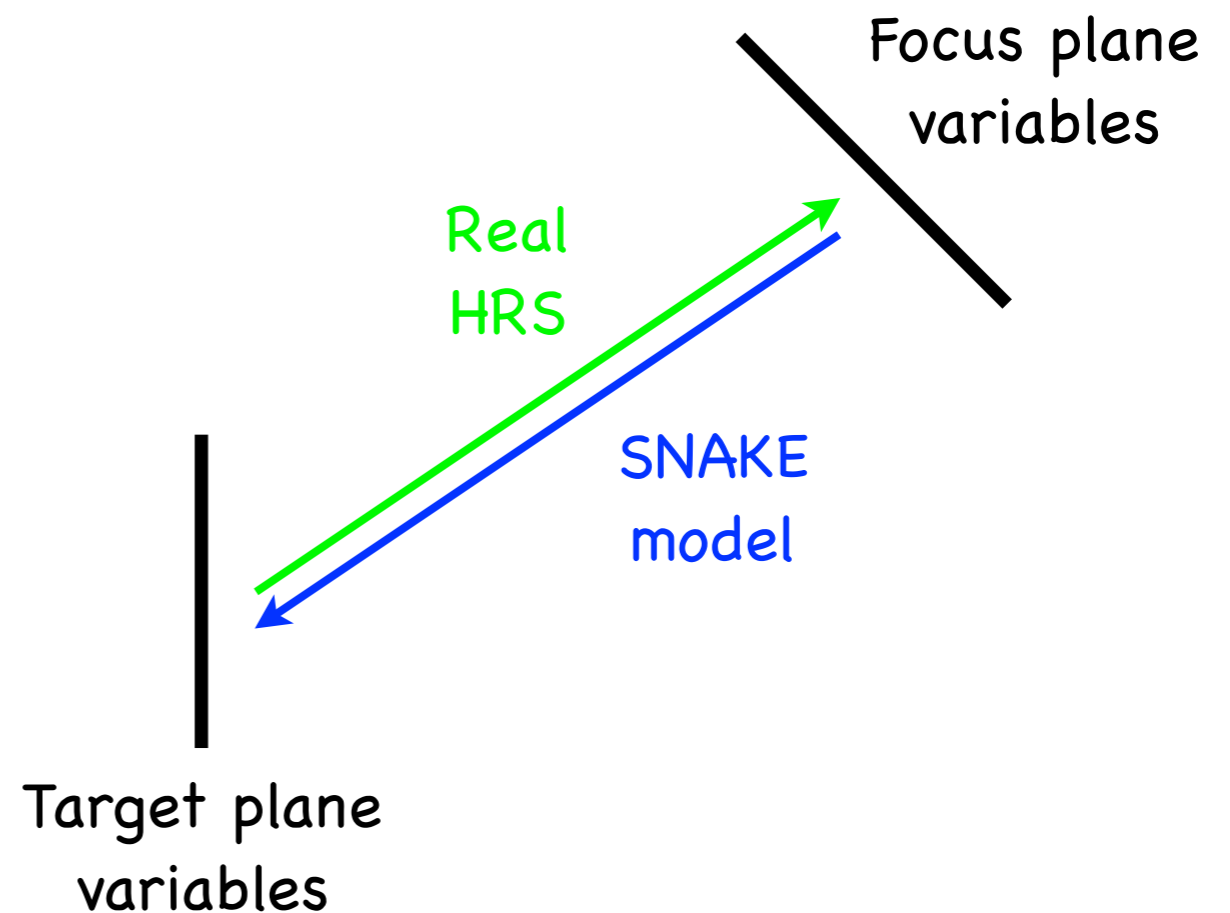
Simulation

- Just finished the code
- A first try to compare straight through optics result and SNAKE model
- Will continue with this test



Simulation

- TODO: based on Vince's suggestion we will also generate a function to read focus plane variable of real optics data and use SNAKE model to do reconstruction of it
- This will give us another way to check simulation

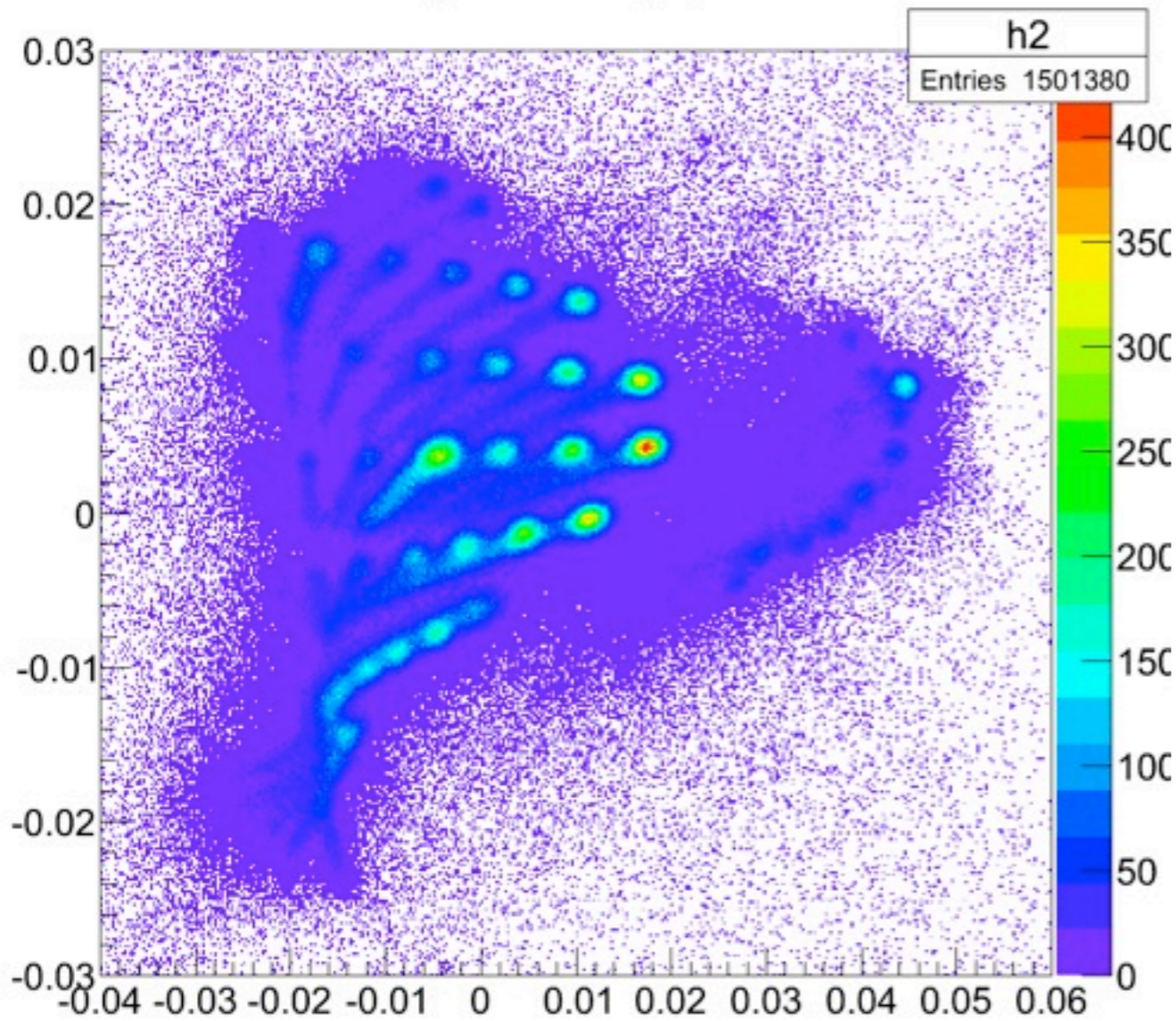


Optics Status

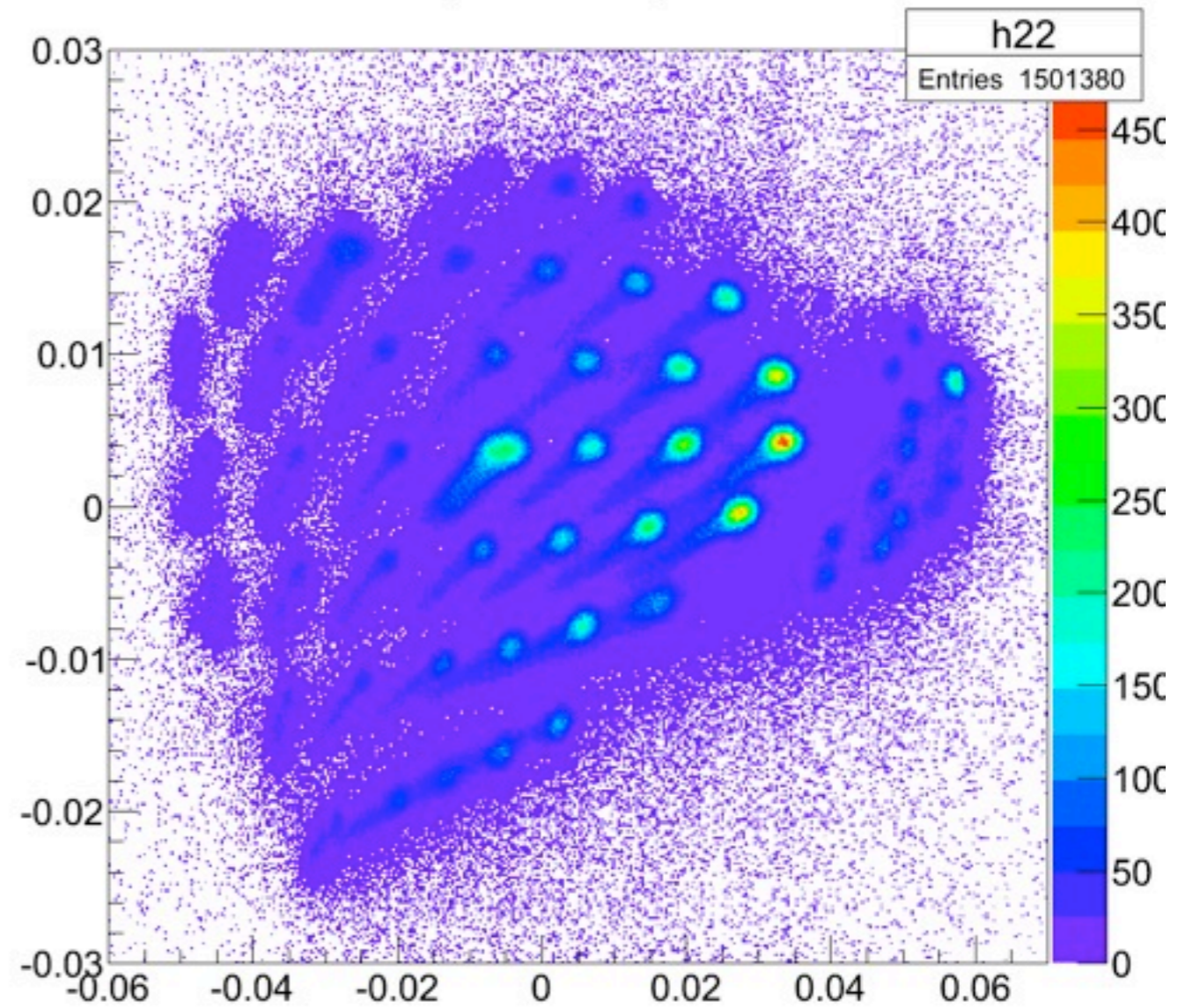
- Longitudinal Optics: check focus plane variables

Focus Plane

Fp th vs. Fp ph

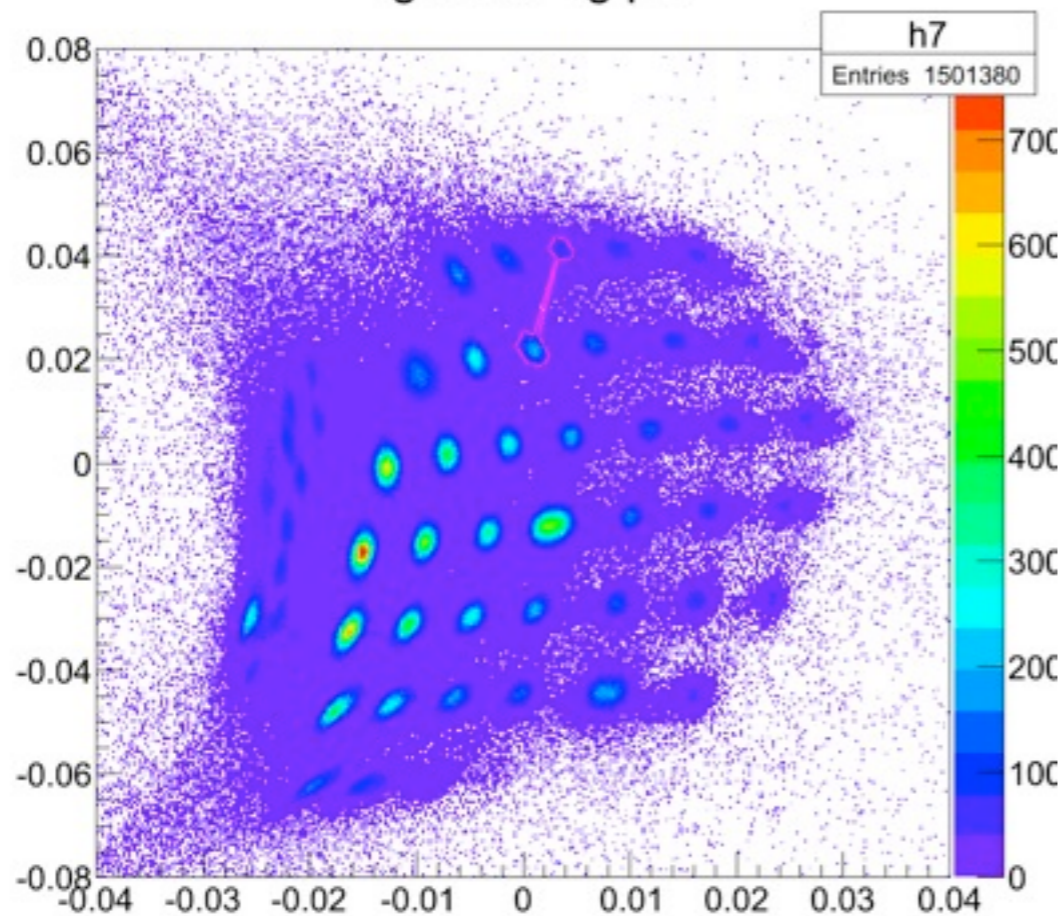


Fp th vs. Fp Y

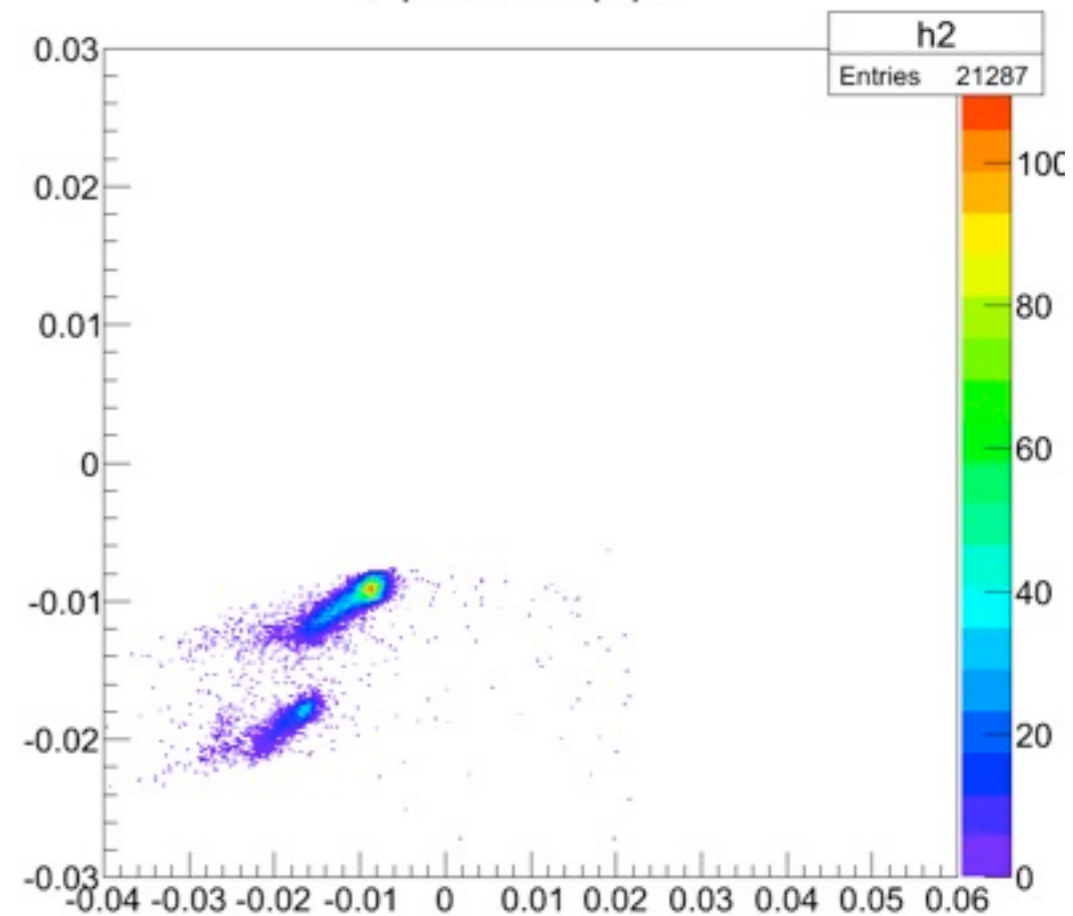


No cuts

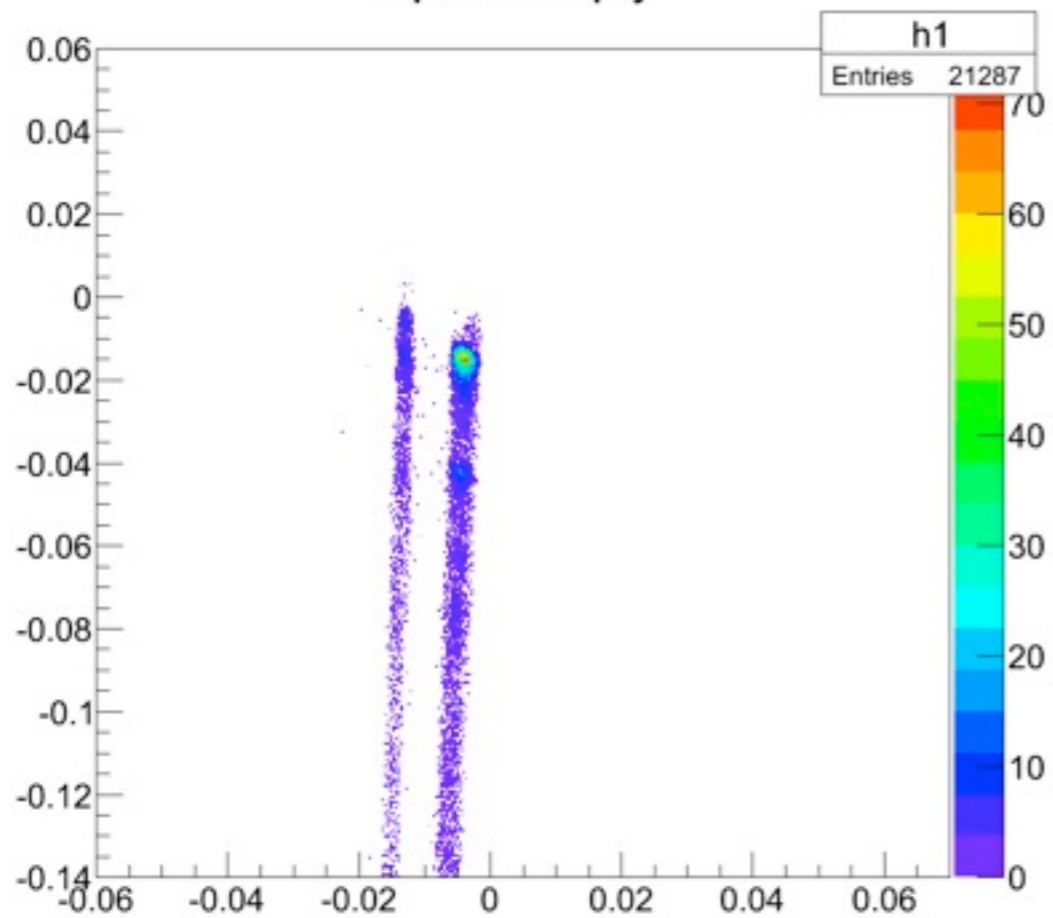
Tg th vs. Tg ph



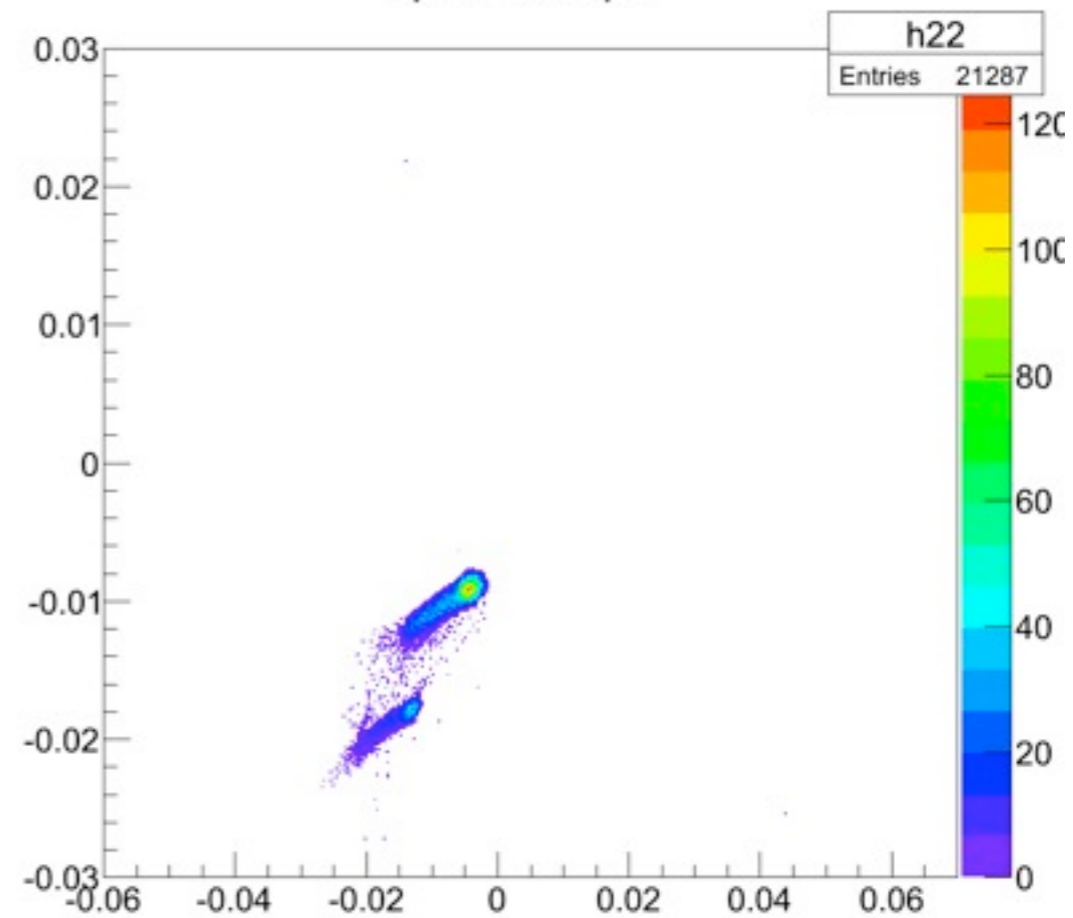
Fp th vs. Fp ph



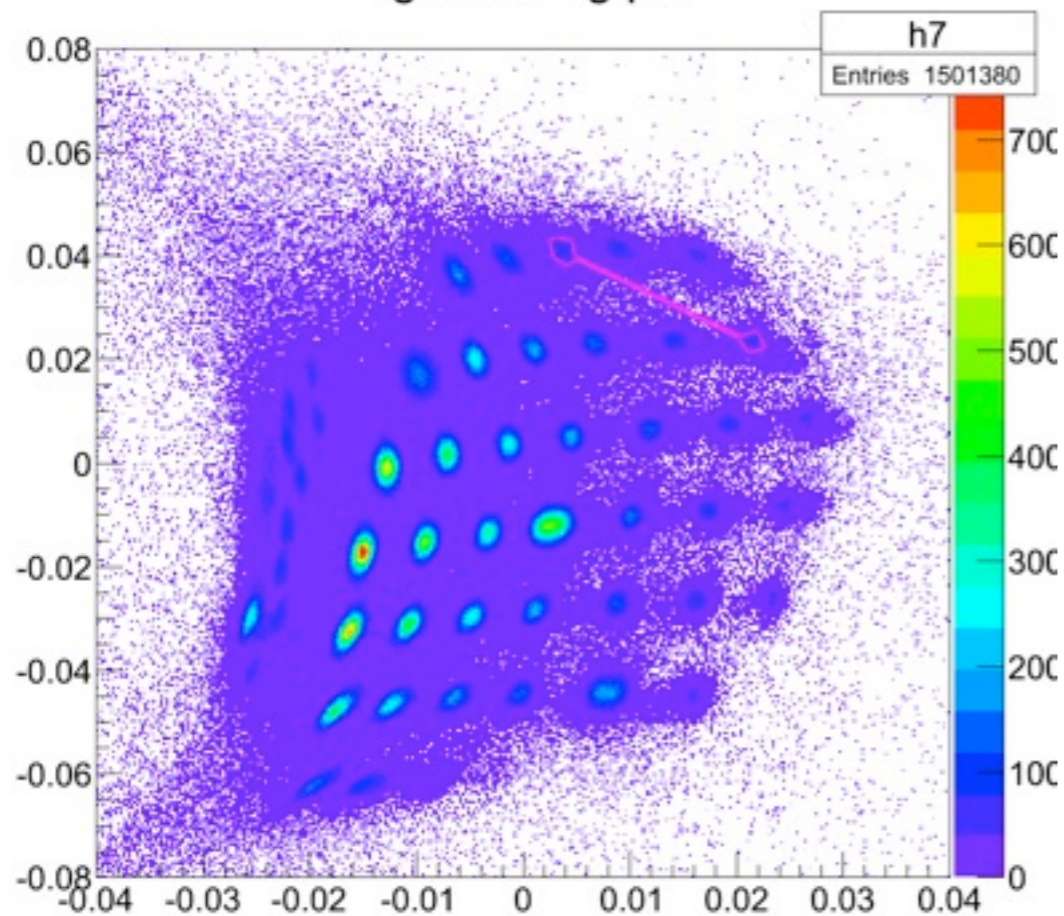
Fp x vs. Fp y



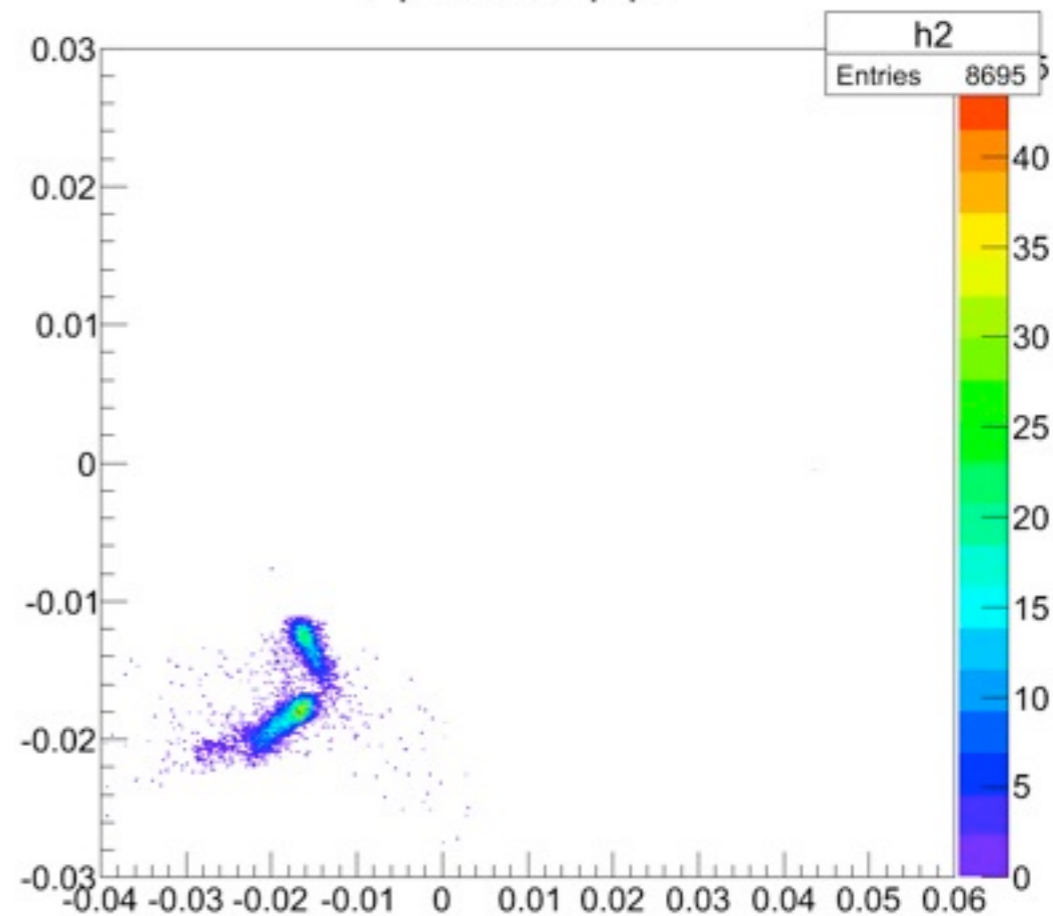
Fp th vs. Fp Y



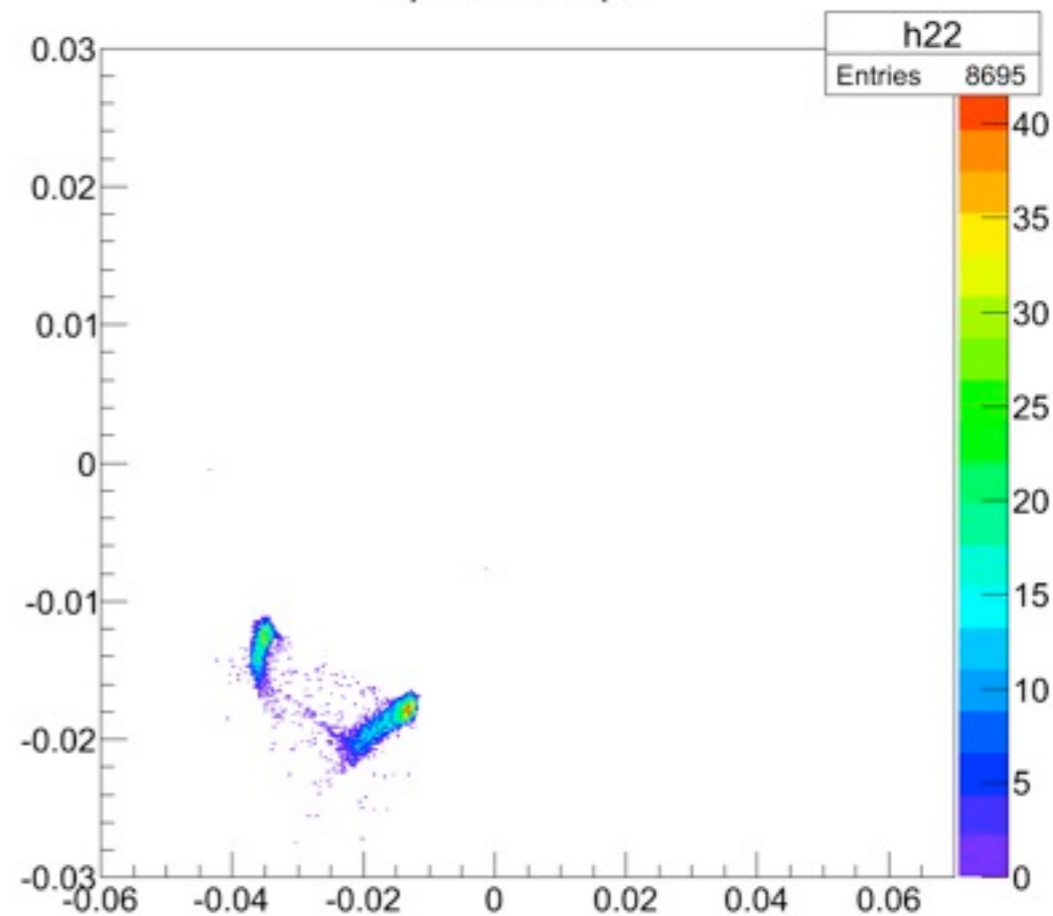
Tg th vs. Tg ph



Fp th vs. Fp ph



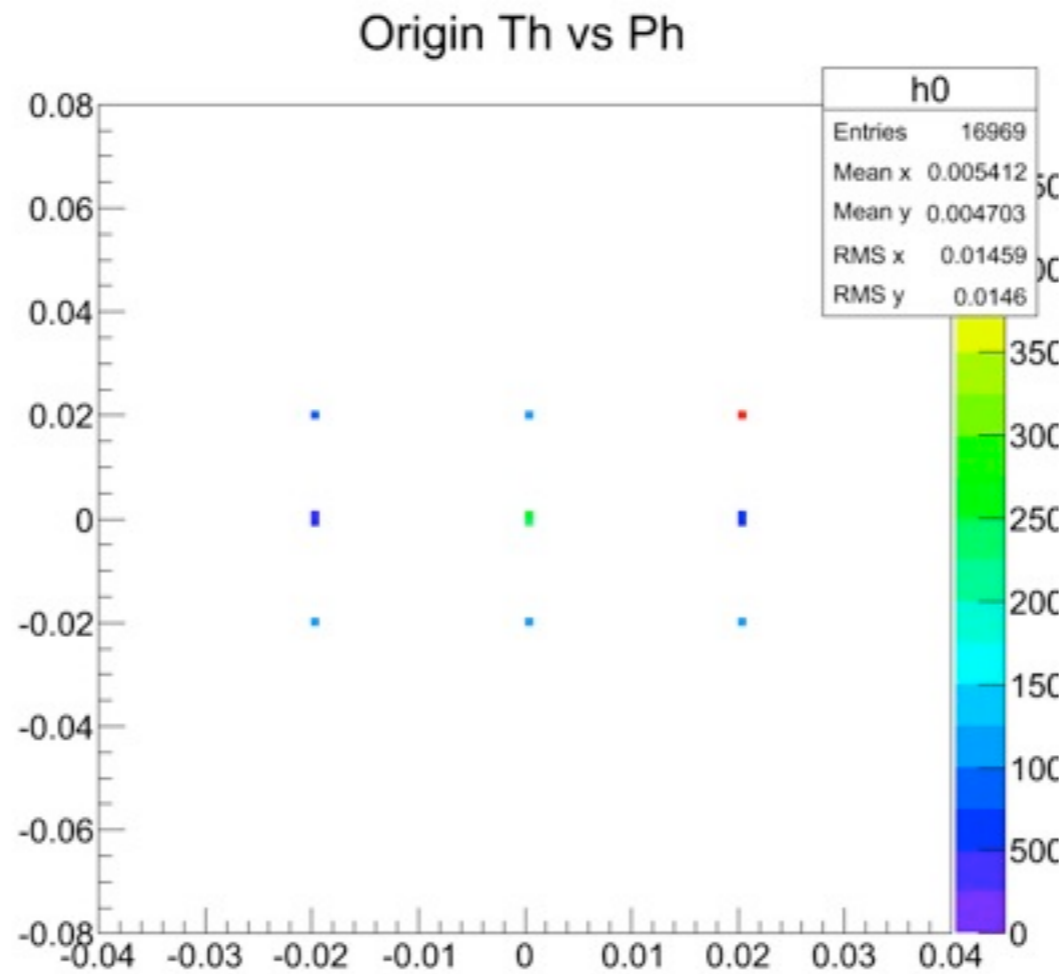
Fp th vs. Fp Y



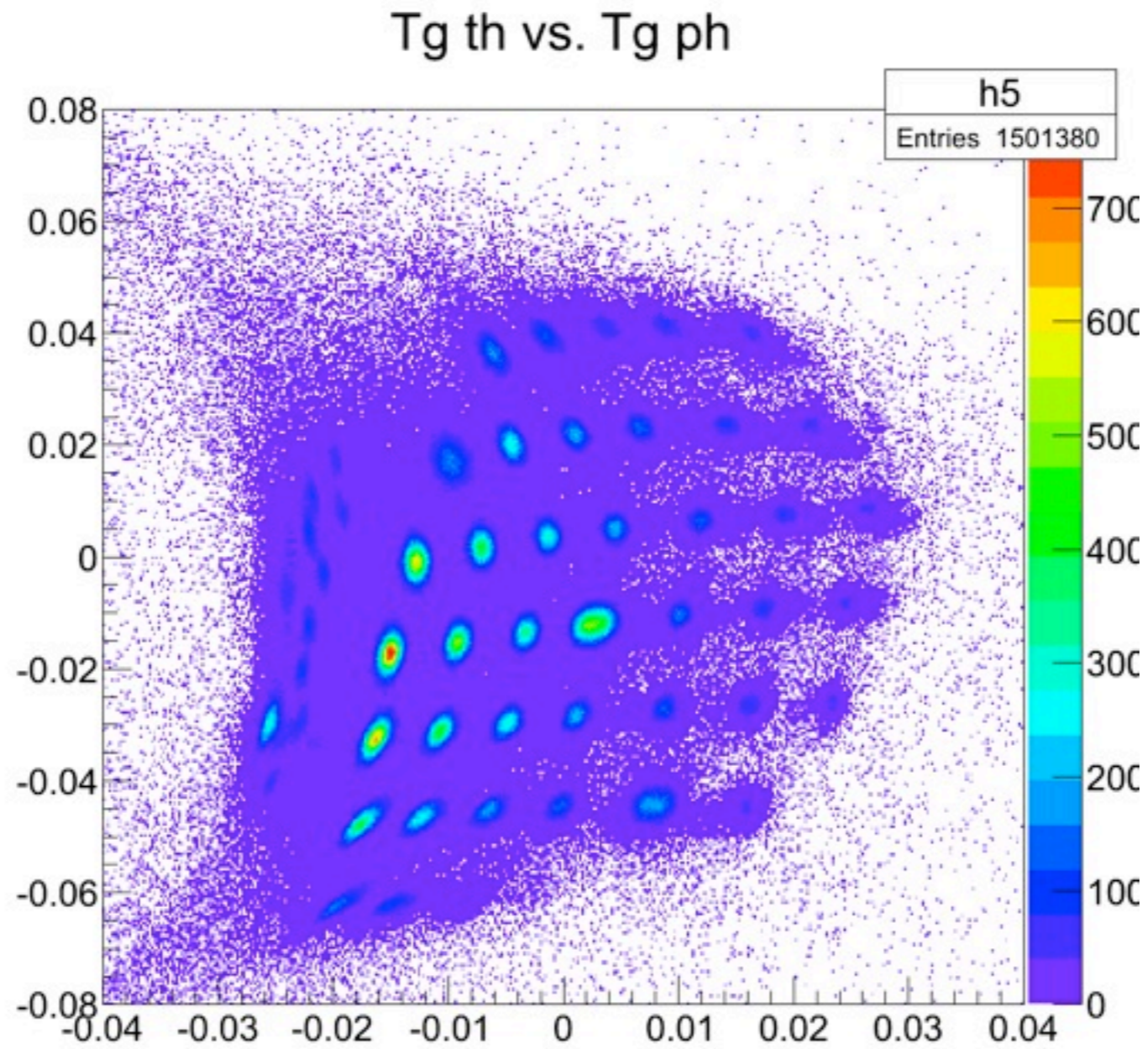
Backup

Simulation

- Just finished the code
- A first try to compare straight through optics result and SNAKE model
- Will continue with this test



Select Cuts



No cuts