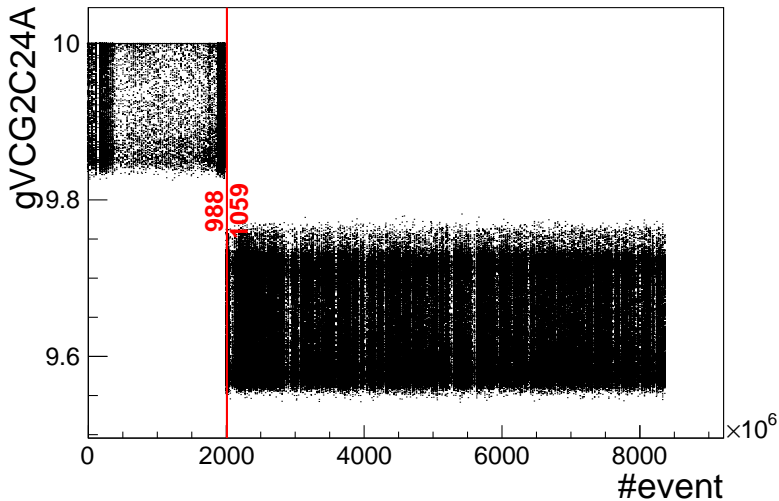


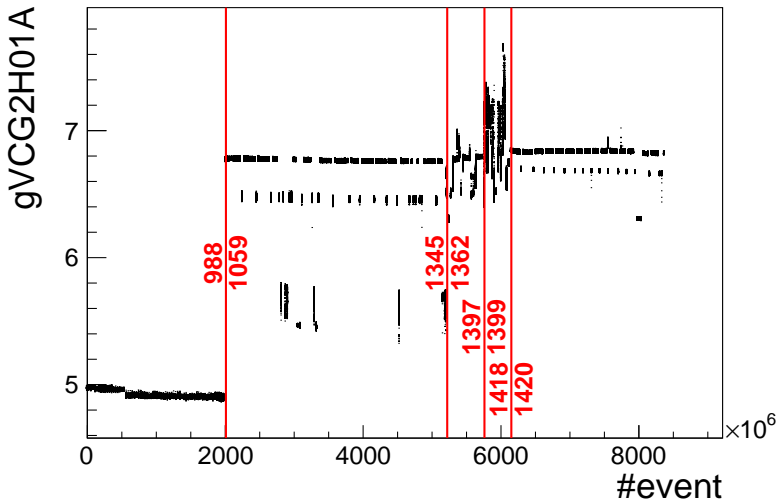
Pressure in Beam Pipes

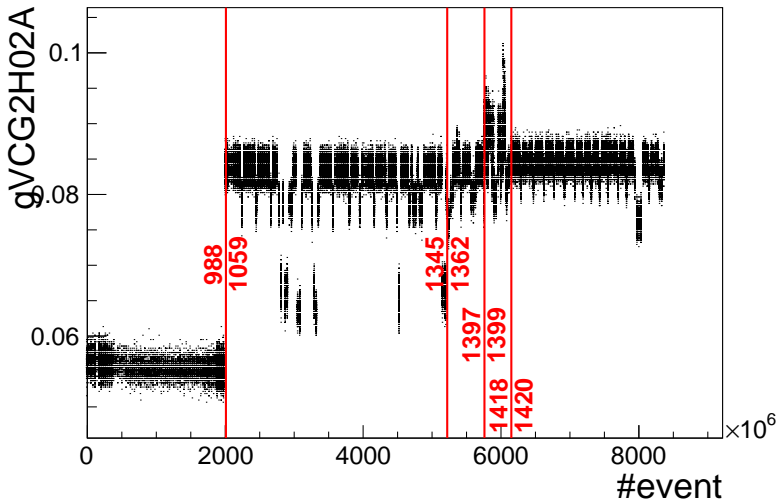
Maxime Levillain

February 17, 2017









- ▶ clusters (1) and (2) with radii R_1 and R_2 , and different distance z_1 and z_2
- ▶ $\Delta z = z_1 - z_2$
- $z_{1,2} = \sqrt{\frac{(E+m) \cdot R_1 \cdot R_2}{2 \cdot m} + \frac{\Delta z^2}{4}} \mp \frac{\Delta z}{2}$
- ▶ Needed for determining HyCal position with shower depth correction.
- ▶ Once the z is fixed, possible study of shower depth correction as a function of energy