

One ton prototype

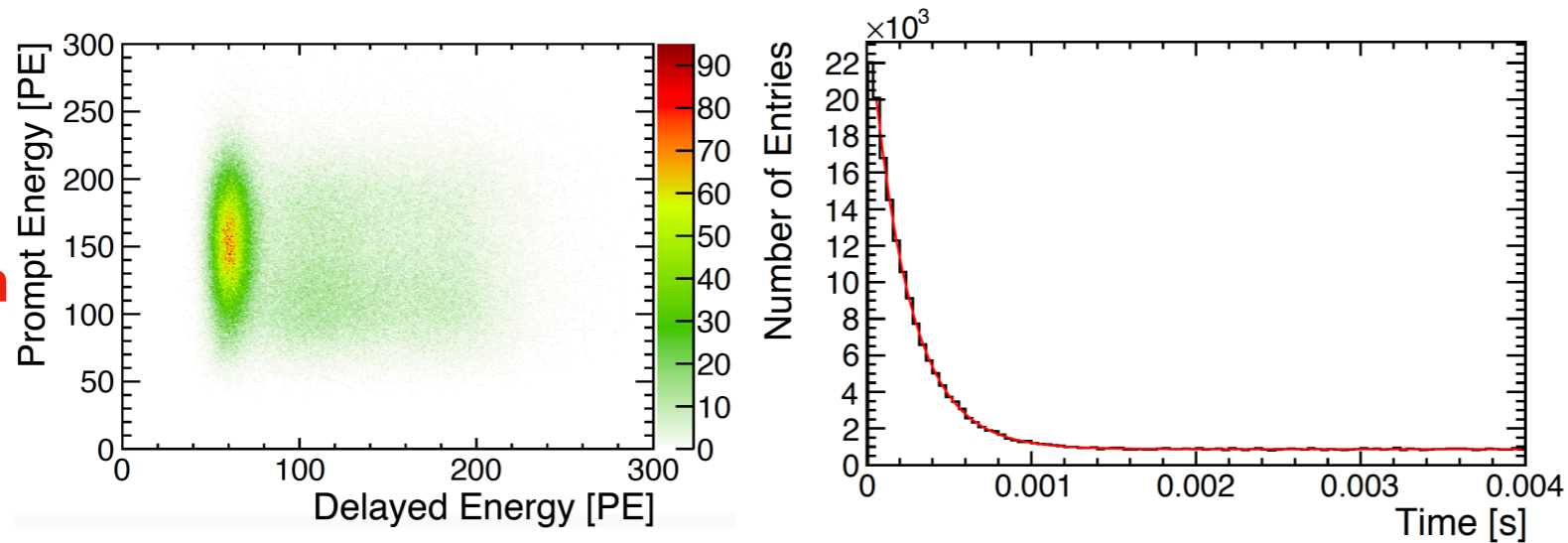
Since May 10, 2017, Started with pure water. Now taking data with a type of liquid scintillator.



Detection of Bi214-Po214-Pb210 cascade decay

1. Prompt-delayed distance cut
2. Prompt and delayed energy cut

Event Selection

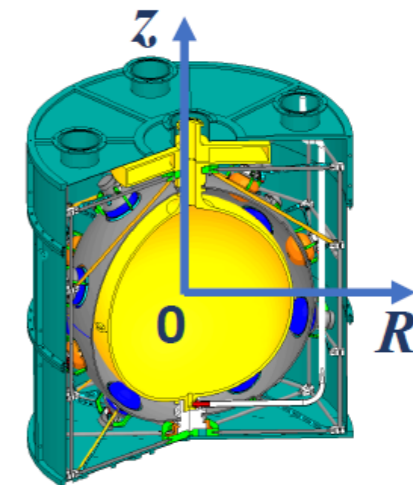
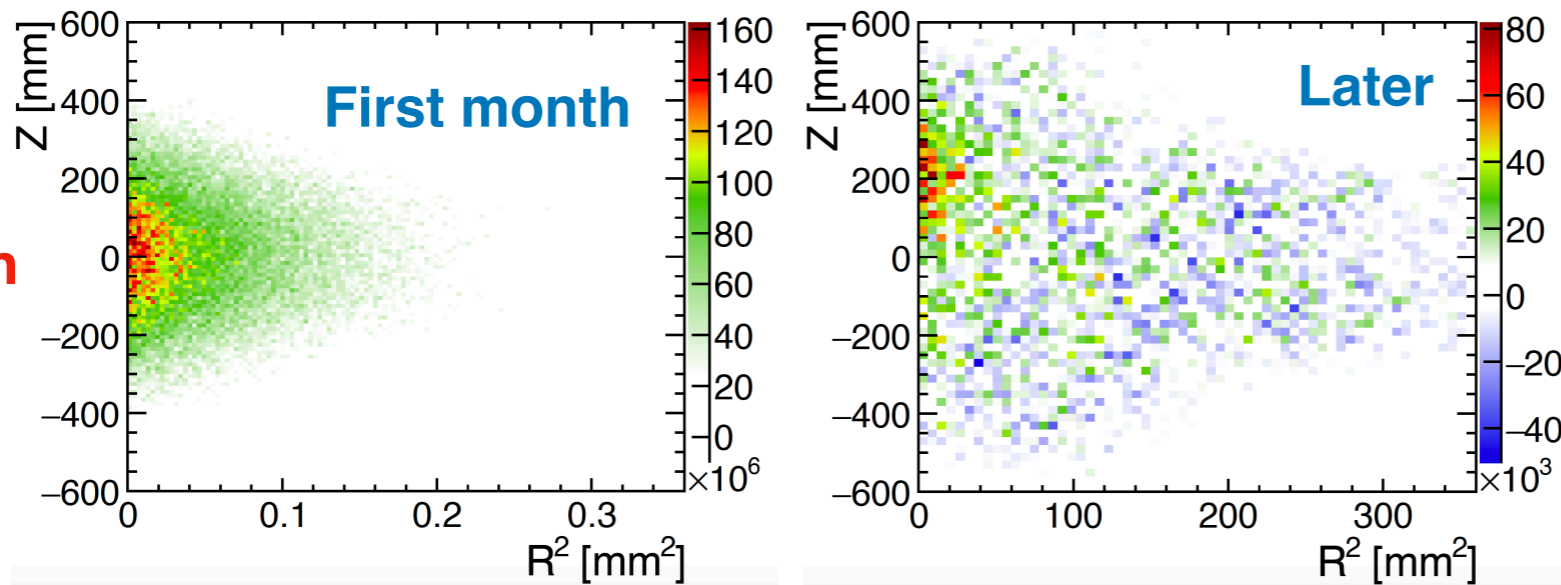


Fitted half-life:

$$(1.628 \pm 0.007) \times 10^{-4} \text{s}$$

Consistent with Po214

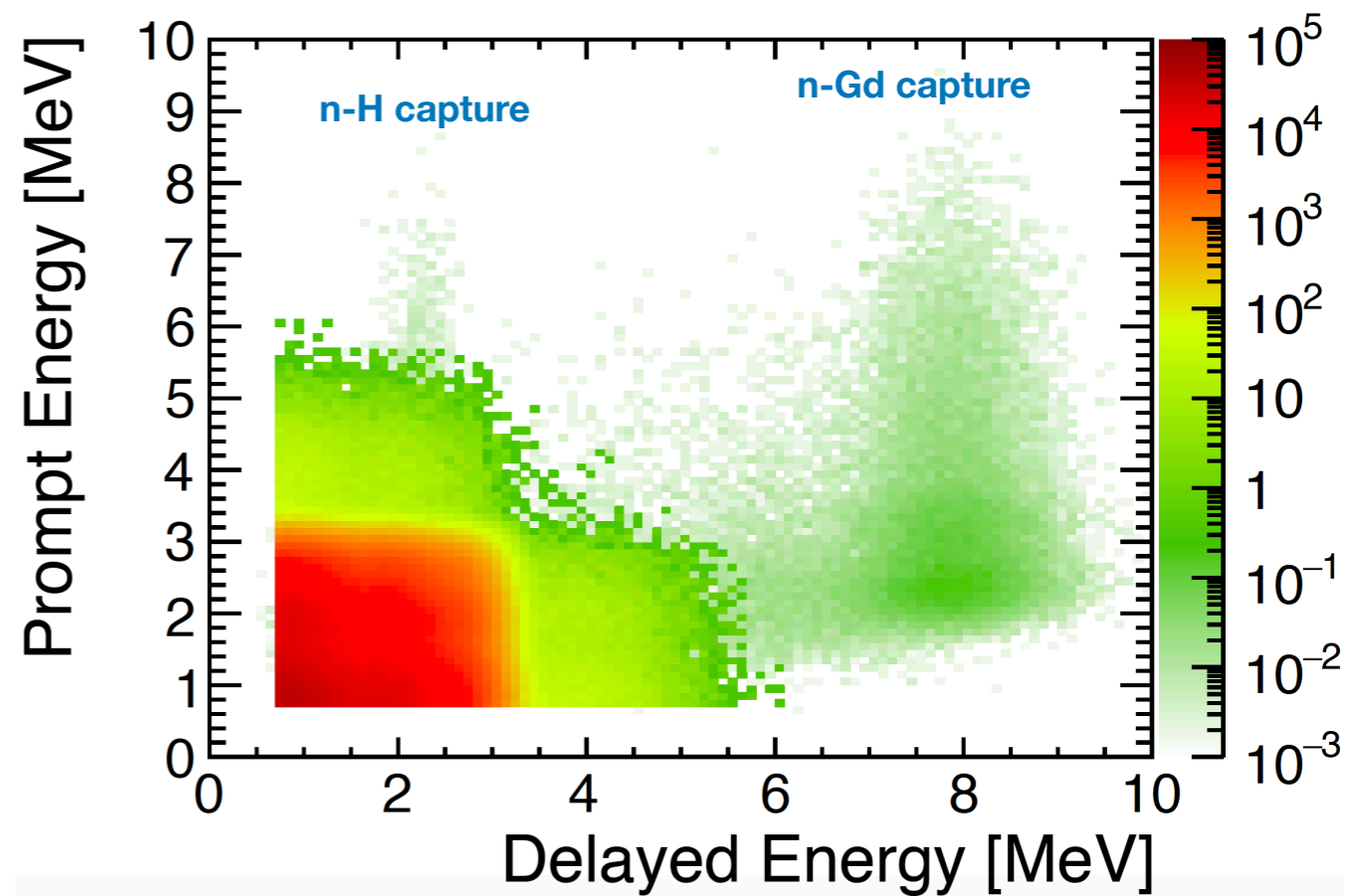
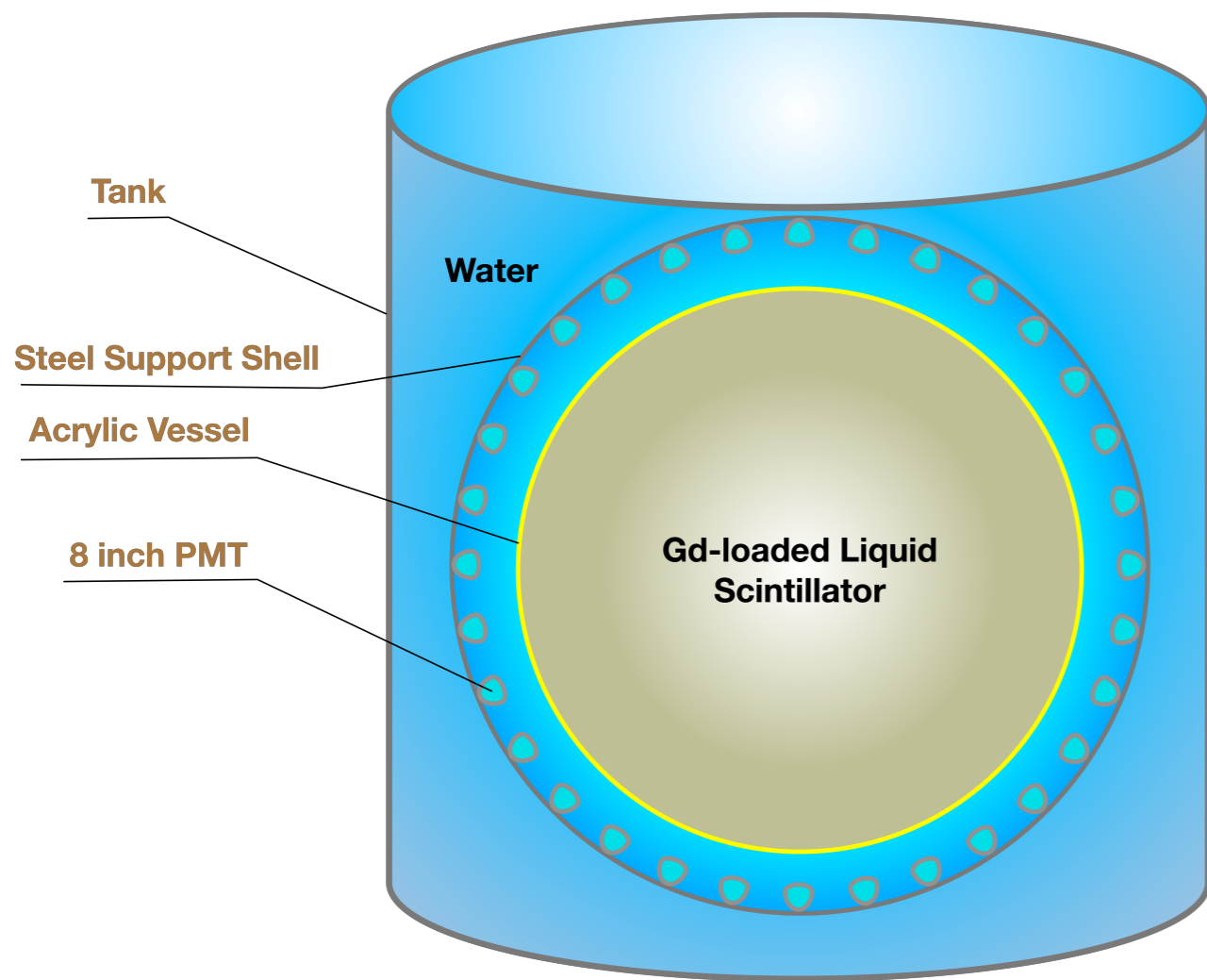
Vertex Location



Air leak from top filling and instrument pipes

200 ton detector for geo-neutrino

Conceptual Detector Design



Backgrounds for geo-neutrino Detection can be highly suppressed.