**Subject:** SC calibration problem
**From:** Sean Dobbs <sdobbs@fsu.edu>
**Date:** 05/07/2018 10:49 AM
**To:** "Mark M. Ito" <marki@jlab.org>, Justin Stevens <jrsteven@jlab.org>, Simon Taylor <staylor@jlab.org>, Alexander Austregesilo <aaustreg@jlab.org>

Hi all,

So, it looks like due to some sort of miscommunication over the past year, we are using the wrong version of the propagation time corrections in the start counter, which has lead to a strong z-dependence in the SC times from the 2018 data. Attached are a comparison between the data using the current corrections (current_sc_time_pad3-r42216.png) and the ones Mahmoud has derived, which are used in the results that he showed, but not in the reconstruction at the moment (new_sc_time_pad3-r42216.png). The current values could be improved, but at least one doesn't see the strong nose dependence there. I'm currently checking the 2017 data and looking to see if some sort of run-dependence exists.
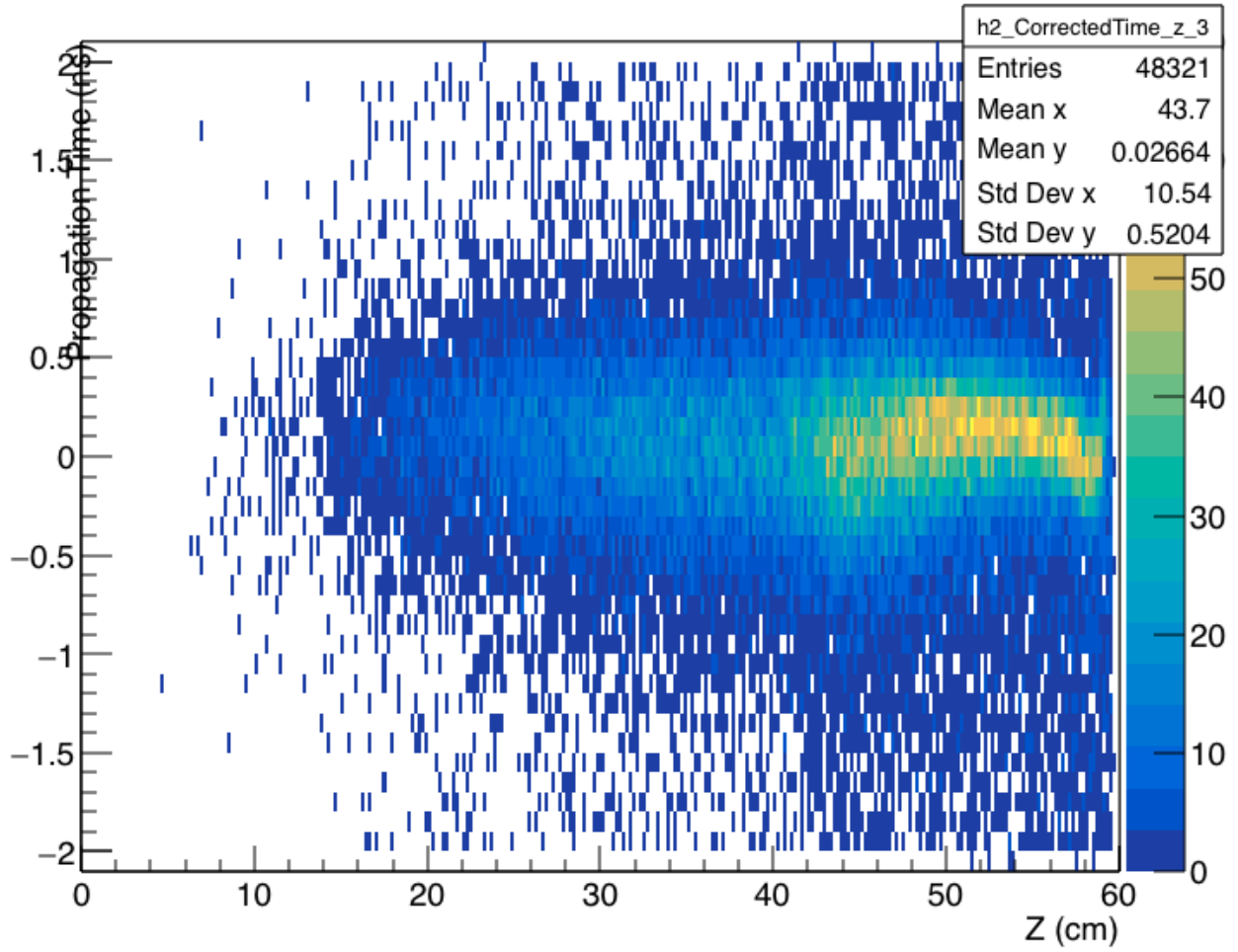
Since the main point of the start counter is to pick out the beam bunches, having this timing off by a few hundred ps isn't a huge problem, but does complicate the calibrations as they currently stand. I don't want to affect preparations for the workfest or any other studies, so I'm going to make the sim-recon change and work on recalibrating the SC times in some private versions until they can be moved over without affecting anything.
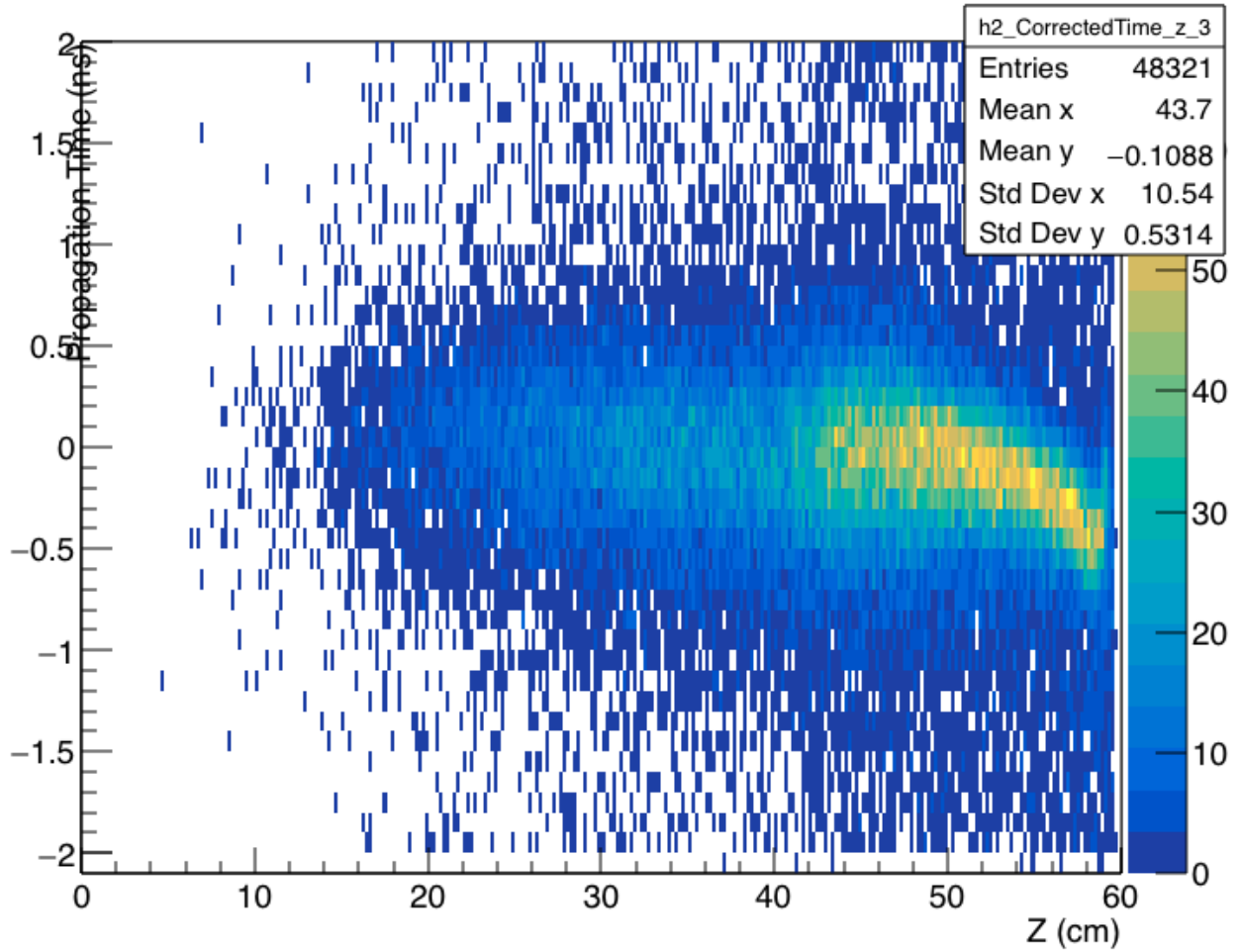
Cheers,
Sean

──new_sc_time_pad3-r42216.png────────────────────────────────────

## Corrected Time vs. Z



current_sc_time_pad3-r42216.png

05/30/2018 01:53 PM

---

Attachments:

| | |
|---|---|
| new_sc_time_pad3-r42216.png | 46.2 KB |
| current_sc_time_pad3-r42216.png | 46.7 KB |