

can we trust it already?

SVD **TIME** INFORMATION

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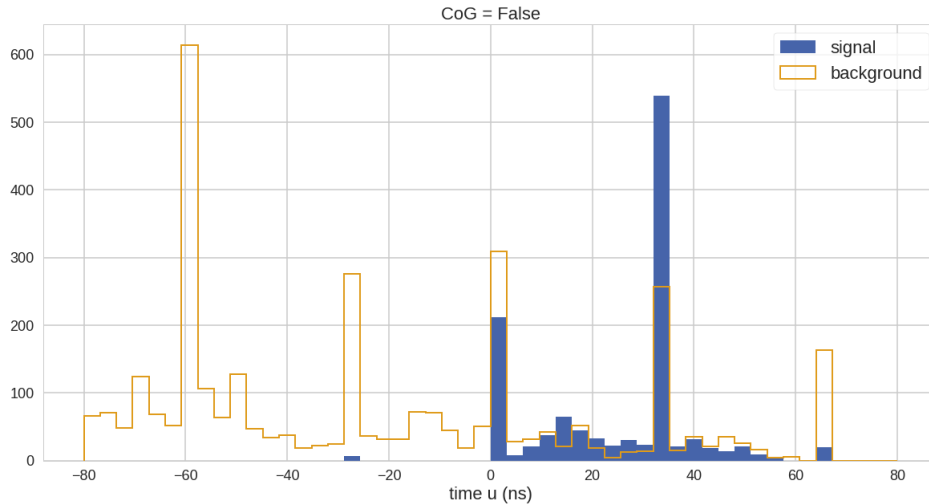
CURRENT SETUP

- SVD timing was introduced into tracking with [BII-2619](#) and is now used in the sector map (correct?).
- There are currently three possibilities for SVD time extraction:
 - default (called TB-equivalent)
 - center of gravity
 - neural networks (I could not make it working on my machine...)
- Currently, only [time differences](#) are used in the sector map.
- The fake rate drops by a large amount, hit and finding efficiency stay the same or increase.

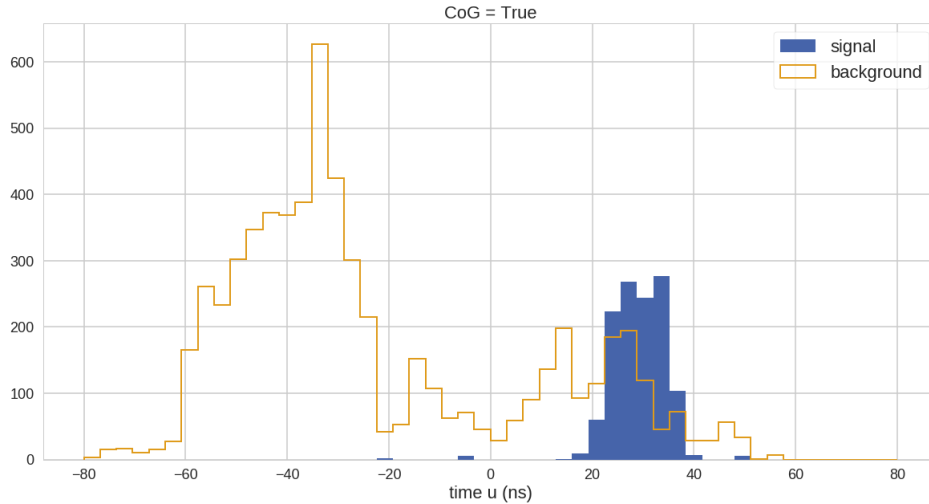
CAN WE TRUST IT?

- Using 10 $\Upsilon(4S)$ events simulated with abac821f14629b98ee9442c61843464b1bce91ac (yesterday)
- Using background of campaign 15 (because 16: "phase3: should be same with 15th")
- Creating SpacePoints and plotting timeU information (timeV looks comparable)
- Background and signal are compared using the fact, if a space point is related to an SVD cluster, which is in turn related to a MC particle (not quite correct, but fine for my study)

DEFAULT SETUP



WITH CENTER OF GRAVITY



QUESTIONS FROM MY SIDE

- Are those strange peaks in the default setup understood?
- Which information was used on training the sector map? Do we have to use the same method when using the sector map?
- Why does the CoG only start at 20 ns? Why does the default end above 60 ns (would be 18 m with $v = c$)?