

TAGH update

Nathan Sparks

CUA

Tagger/Beamline Meeting

9-28-2015

Time walk correction

- Use RF time as reference
- Use PS triggers (for reduced accidentals)
- TAGH time(TDC) - time(RF) vs. amplitude(fADC)

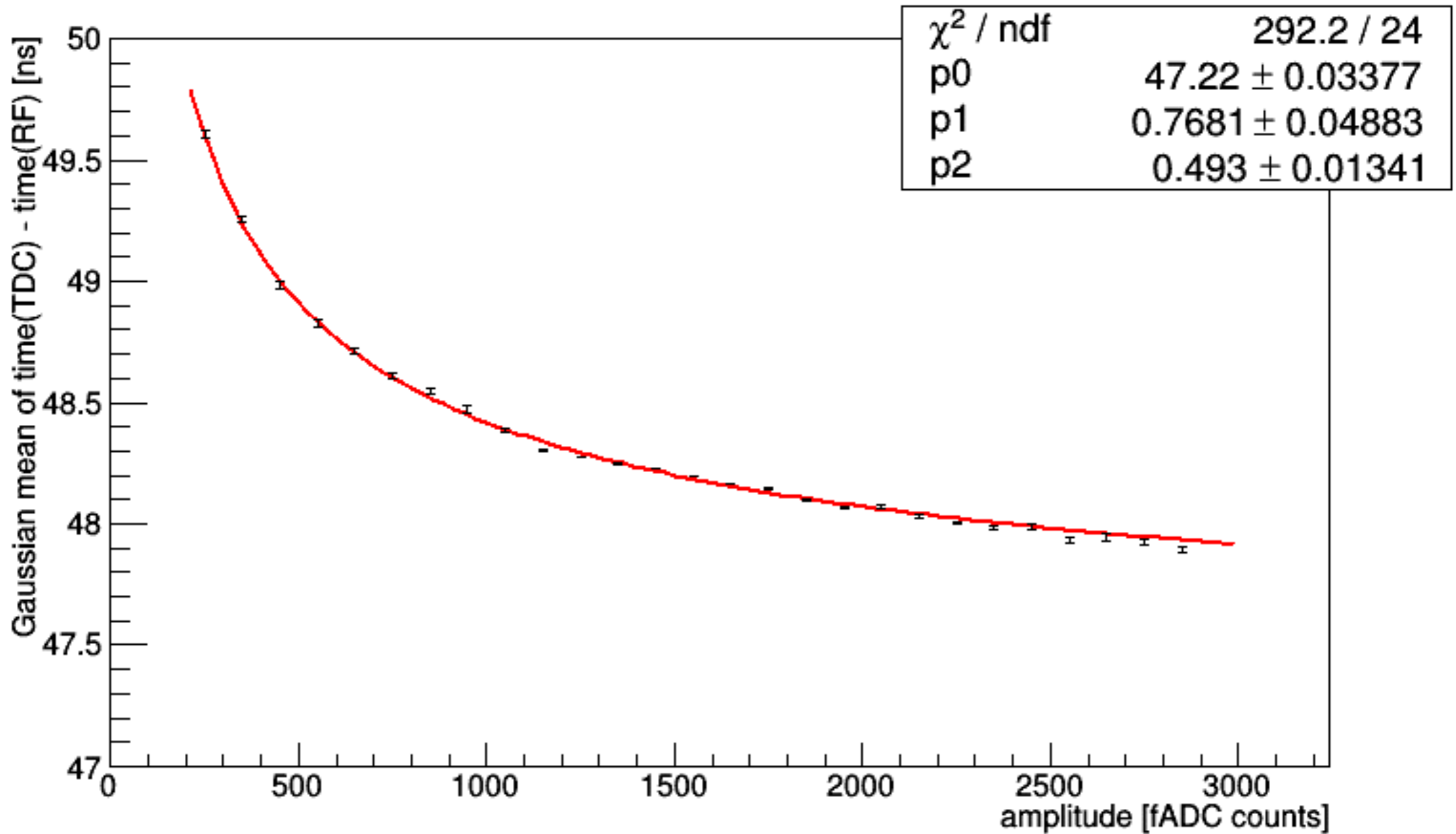
$$f(x) = p_0 \left(1 + \frac{p_1}{x^{p_2}} \right)$$

Procedure

- Fill timing distributions for bins in TAGH fADC amplitude of 100 counts
- Identify and fit prompt peaks with Gaussians for each amplitude bin
- Outputs: mean, error on mean, and sigma as function of amplitude
- Fit mean(amplitude) for p0, p1, and p2

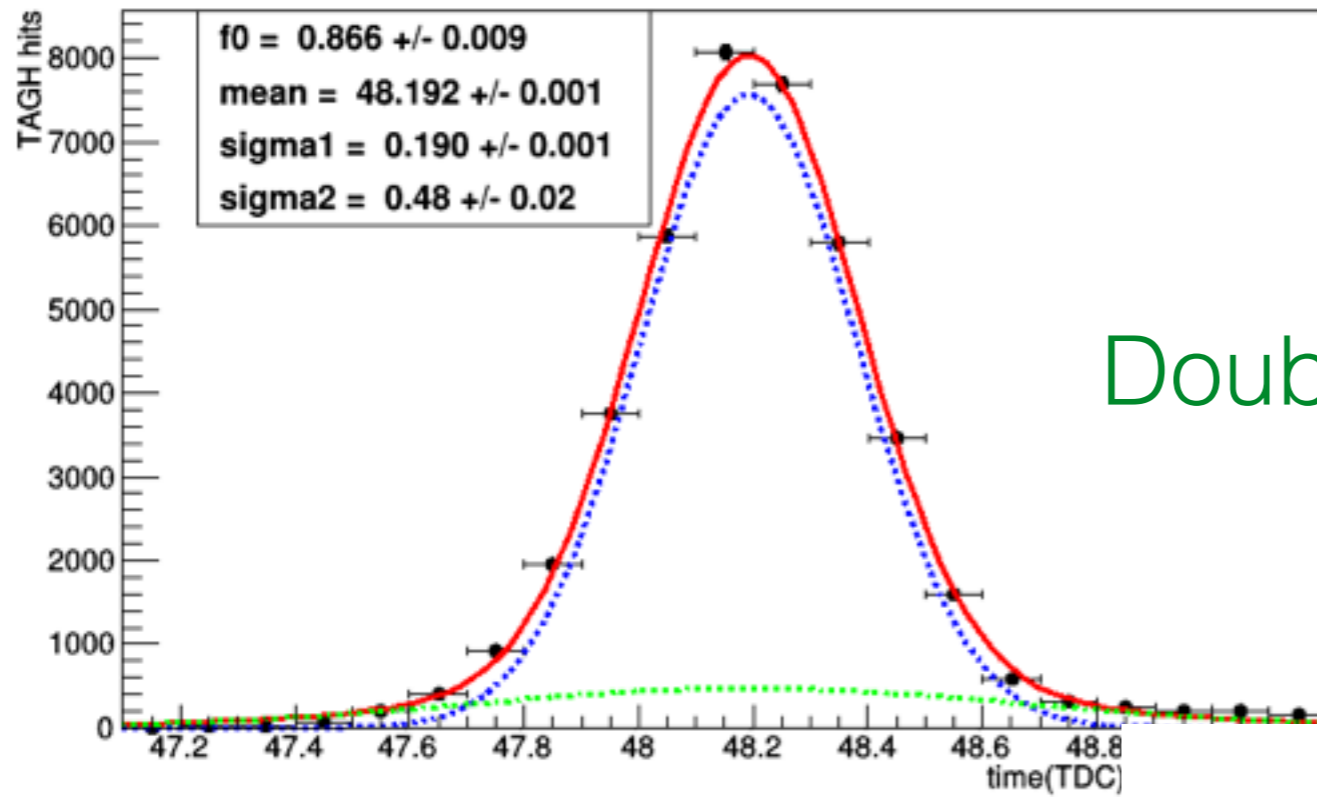
TAGH counter 217, Run 3185

TAGH counter 217



Before correction

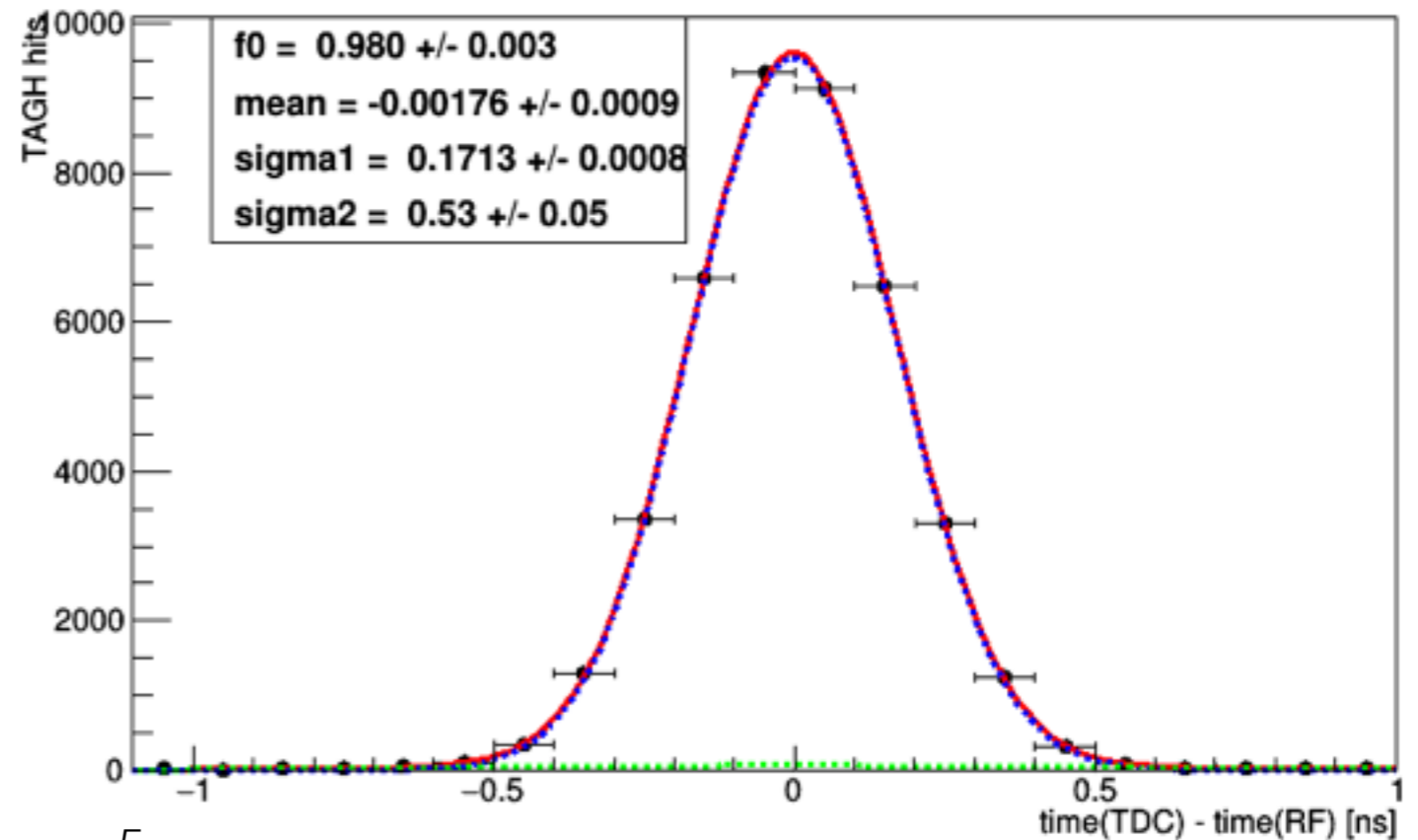
TAGH counter 217



Double gaussian fits

After correction

TAGH counter 217



Sigma vs. amplitude

TAGH counter 217

