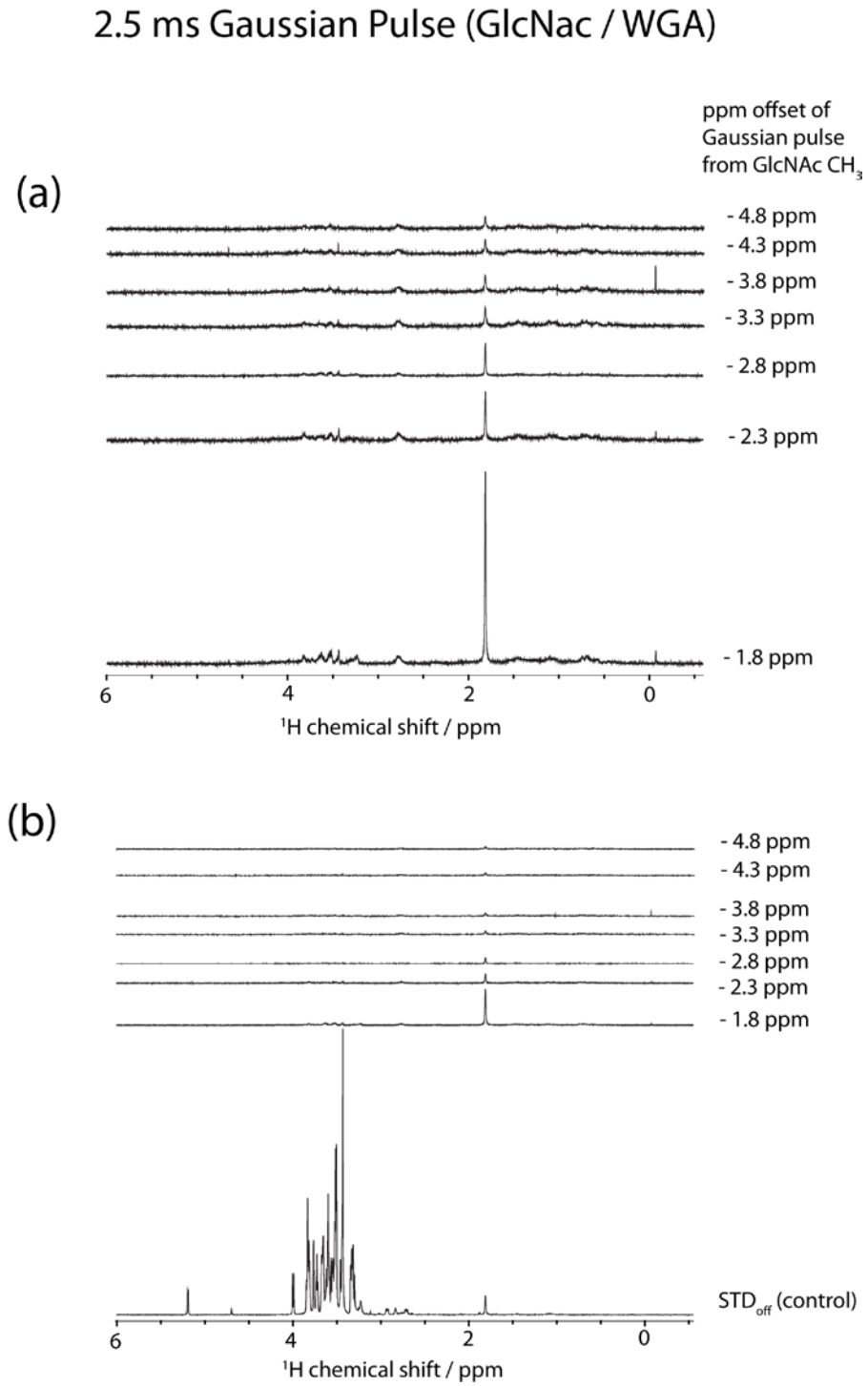
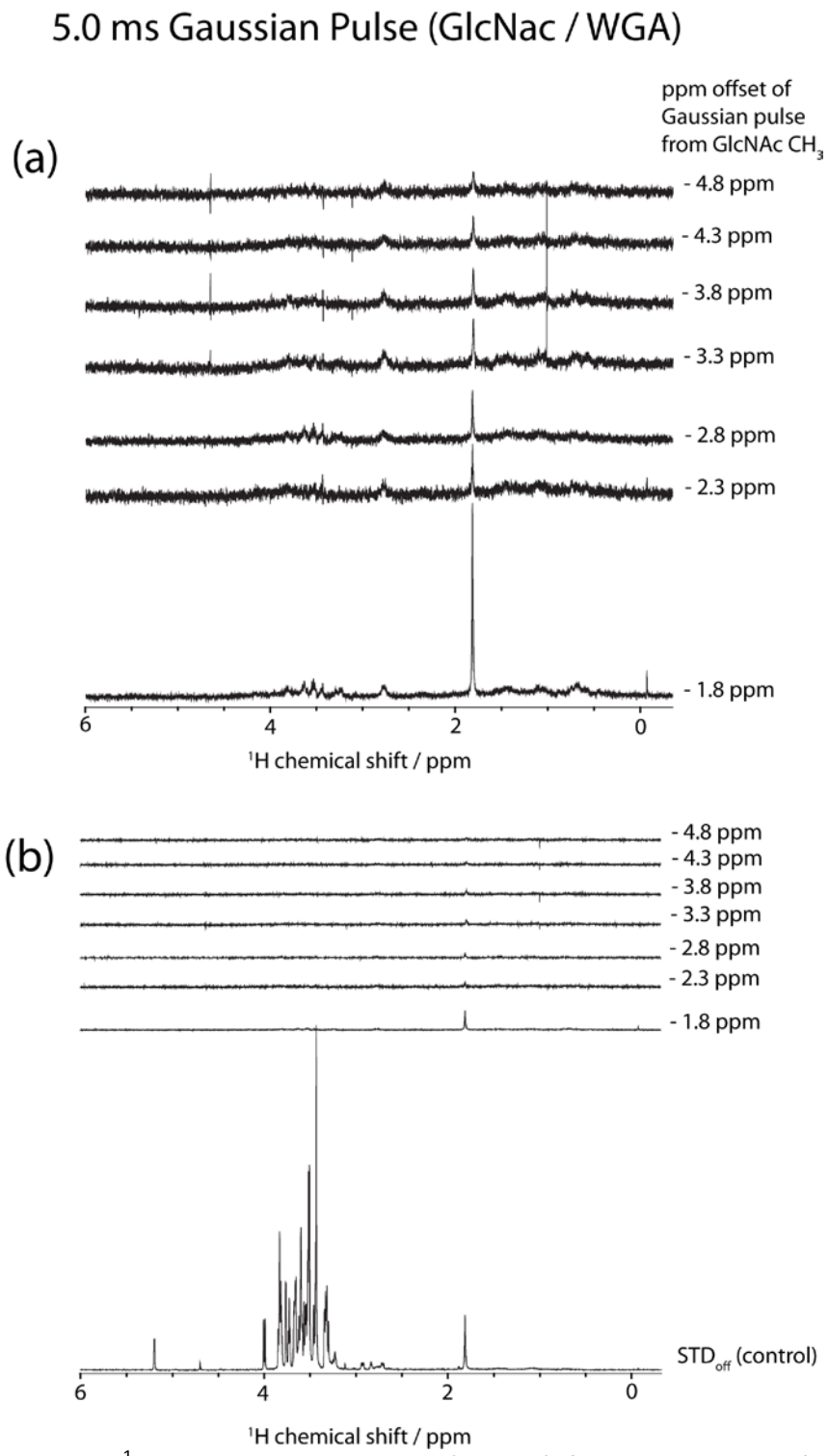
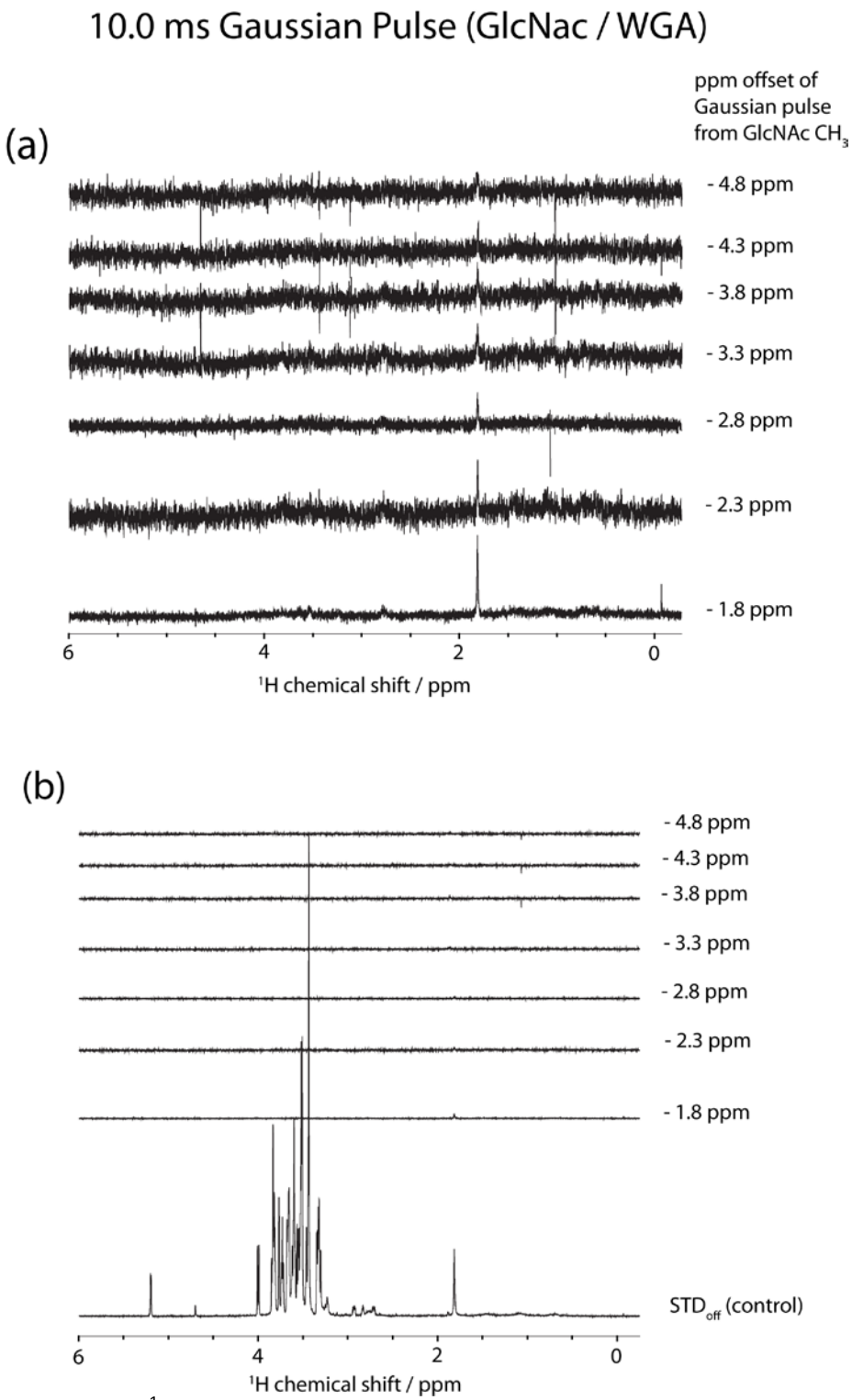
ELECTRONIC SUPPLEMENTARY INFORMATION



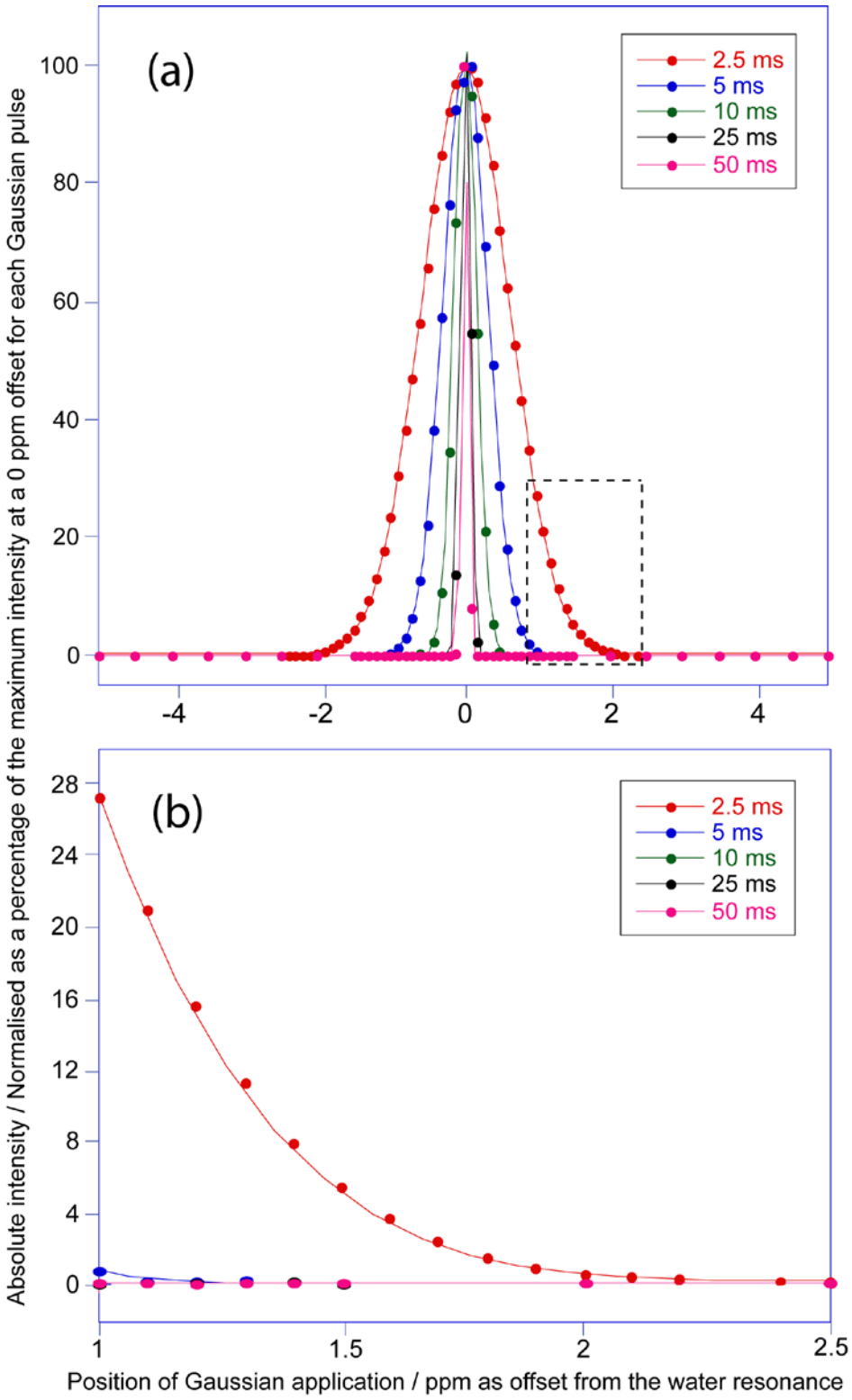
ESI FIGURE 1. ^{1}H STD NMR spectra of WGA/GlcNAc over a variety of 'on' saturation offsets for a 2.5 ms Gaussian Pulse. Expanded STD_{diff} datasets are shown in (a) and relatively scaled datasets including $STD_{control}$ spectrum are shown in (b).



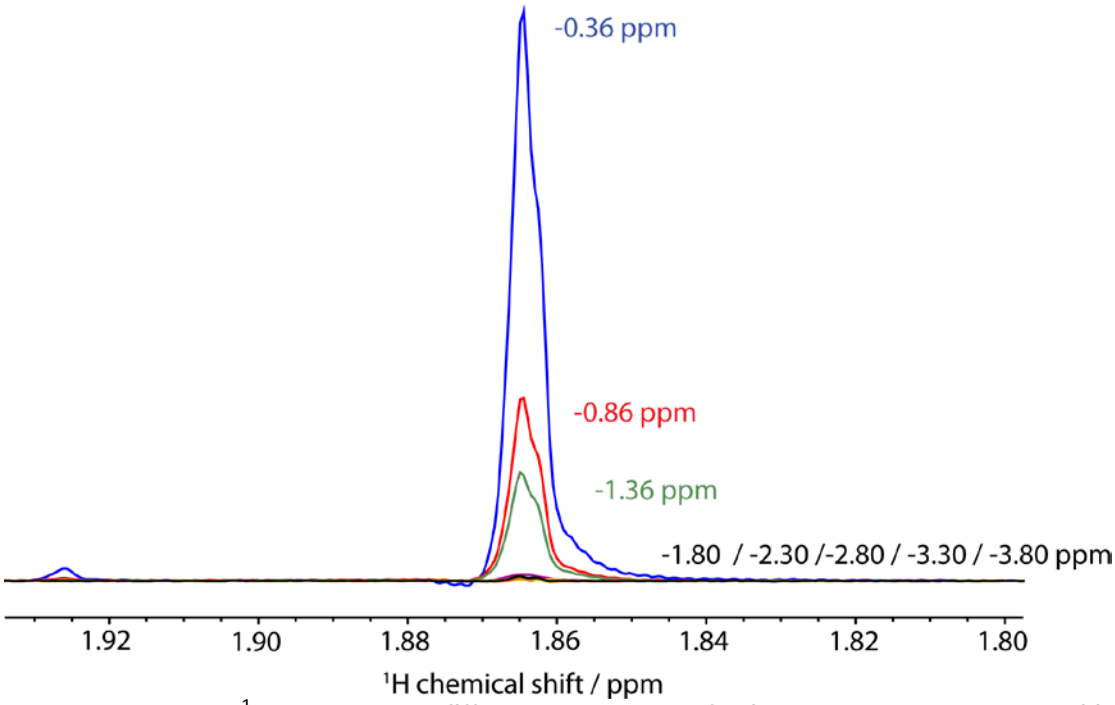
ESI FIGURE 2. ^{1}H STD NMR spectra of WGA/GlcNAc over a variety of 'on' saturation offsets for a 5.0 ms Gaussian Pulse. Expanded STD_{diff} datasets are shown in (a) and relatively scaled datasets including $STD_{control}$ spectrum are shown in (b).



ESI FIGURE 3. ^{1}H STD NMR spectra of WGA/GlcNAc over a variety of 'on' saturation offsets for a 10.0 ms Gaussian Pulse. Expanded STD_{diff} datasets are shown in (a) and relatively scaled datasets including $STD_{control}$ spectrum are shown in (b).



ESI FIGURE 4. Gaussian profiles for a **single** pulse of variable length. The profile was created using the same method for the 2-second train of pulses shown in the manuscript Figure 4 but used a **single** pulse rather than a train of pulses.



ESI FIGURE 5. ^{1}H STD NMR difference spectra of GlcNAc CH_3 resonance with different 'on' saturation offsets for a 2.5 ms Gaussian Pulse to identify perturbation of the ligand resonance. Offset of the on saturation pulse is indicated by the ppm values shown.