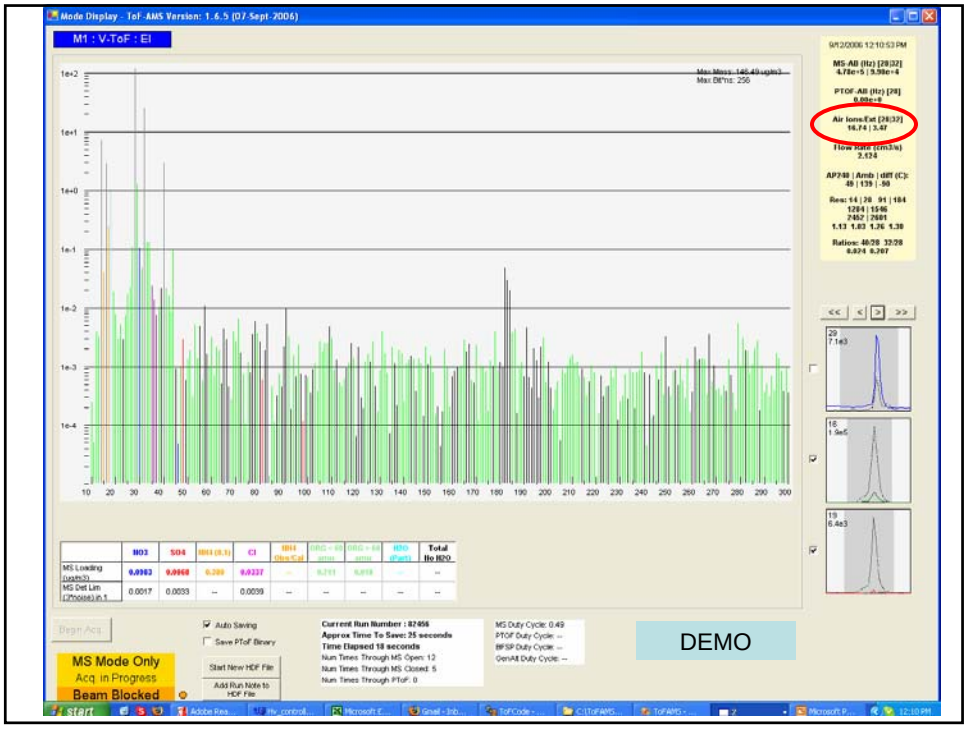

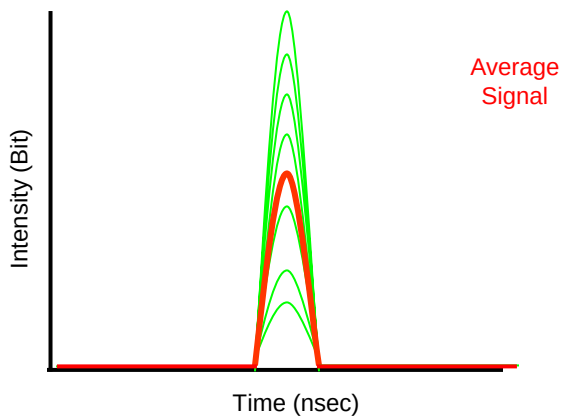

Average = 25 ions / extraction

$$\sigma = \sqrt{25}$$

$$I_{extraction} = 25 \pm 3\sigma = 25 \pm 15$$

For analog ion counting, must convolve pulse distribution

$$\sigma = \sqrt{25} * 1.2$$

$$I_{extraction} = 25 \pm 3\sigma = 25 \pm 18$$