



University
of Regina

Cross Section Checks - t shift -

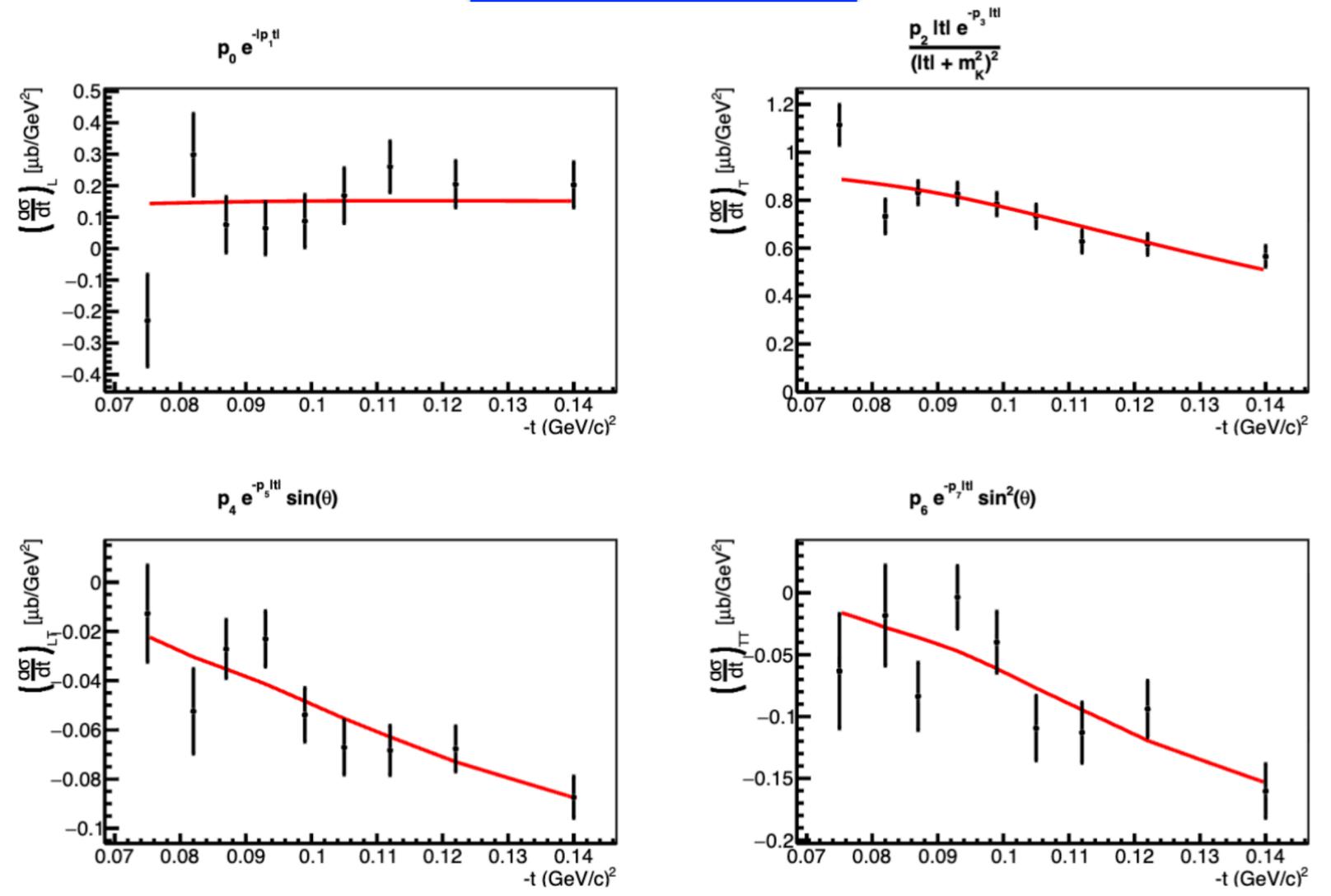
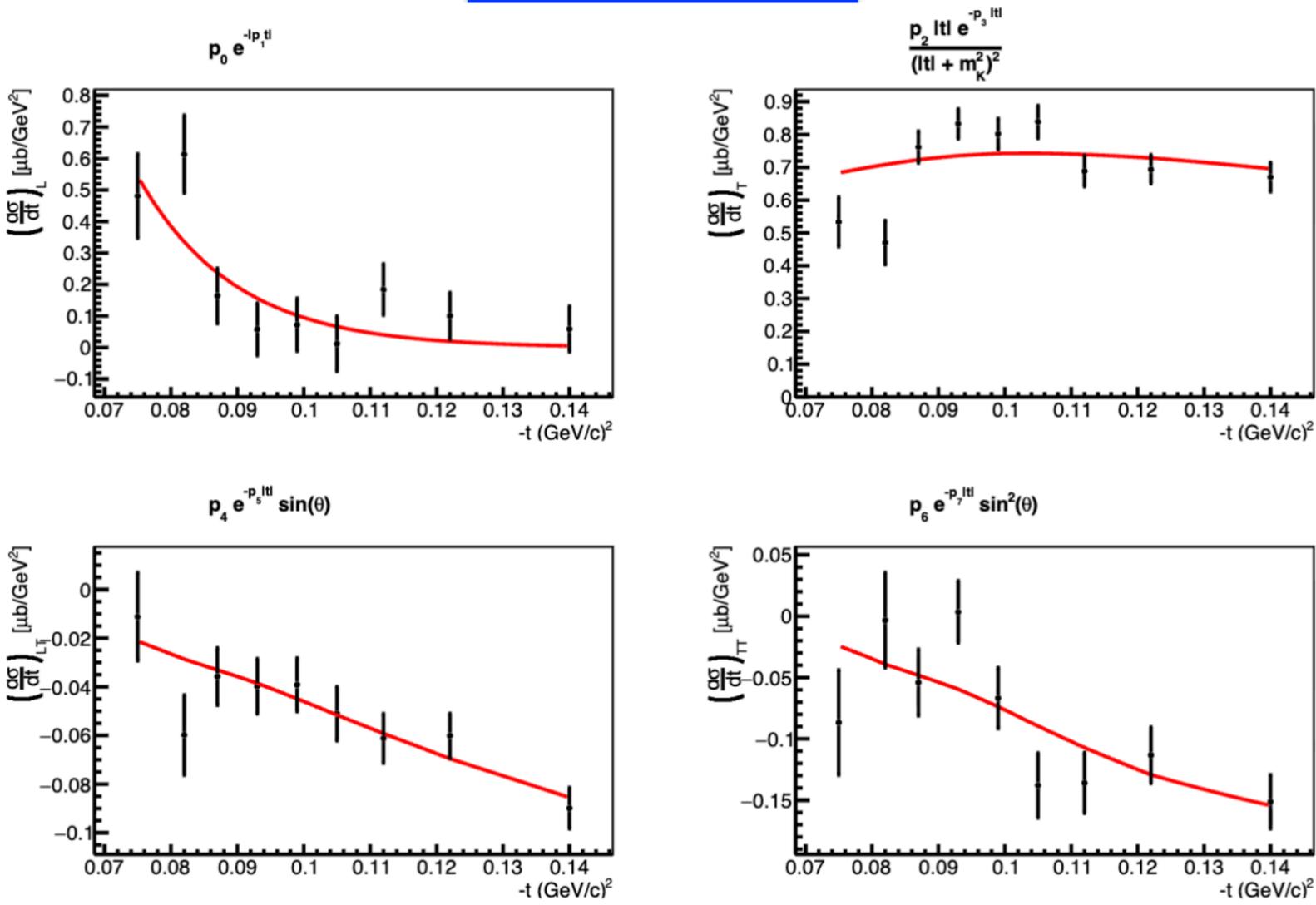
Abdennacer Hamdi

KaonLT Meeting
2026/03/26

$$p(e, e'K^+)\Lambda$$

Before t-shift

After t-shift

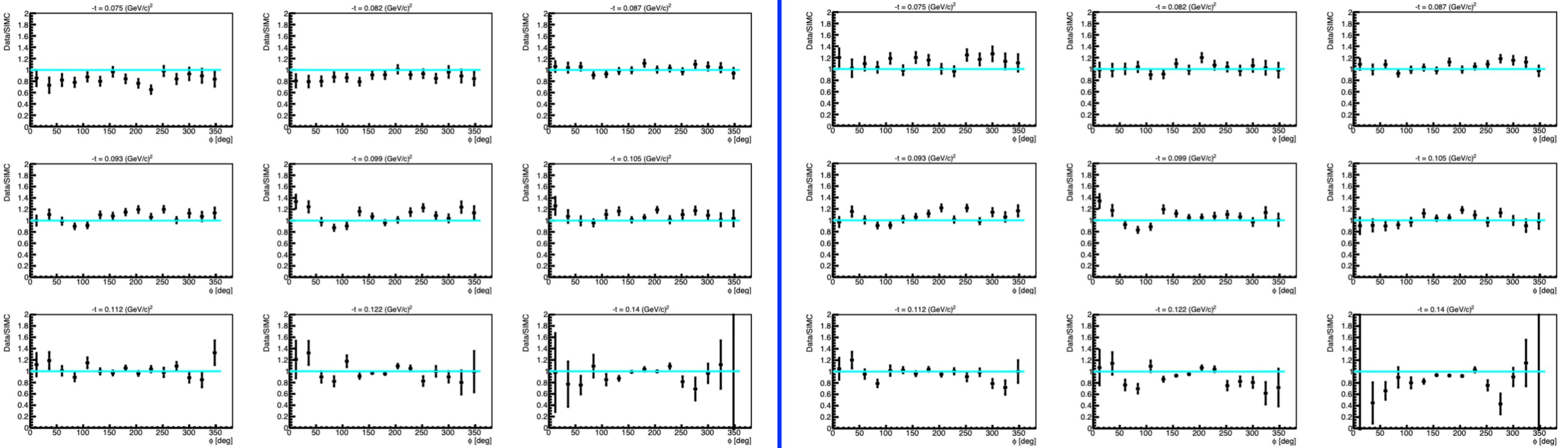


| --- iteration 01 parameters --- | | | ----- iteration 02 parameters ----- | | |
|---------------------------------|----------|---|-------------------------------------|----------|---|
| 3359.768 | 6740.649 | 1 | 3359.742 | 6740.301 | 1 |
| -73.994 | 24.387 | 2 | -73.994 | 24.386 | 2 |
| 30.954 | 3.982 | 3 | 30.954 | 3.982 | 3 |
| 3.825 | 1.197 | 4 | 3.825 | 1.197 | 4 |
| -7.762 | 3.580 | 5 | -7.762 | 3.580 | 5 |
| -0.258 | 3.773 | 6 | -0.258 | 3.773 | 6 |
| -265.990 | 156.560 | 7 | -265.989 | 156.555 | 7 |
| 9.632 | 4.764 | 8 | 9.632 | 4.764 | 8 |

| --- iteration 01 parameters --- | | | ----- iteration 02 parameters ----- | | |
|---------------------------------|----------|---|-------------------------------------|---------|---|
| 3359.768 | 6740.649 | 1 | 3.574 | 0.695 | 1 |
| -73.994 | 24.387 | 2 | 0.000 | 0.007 | 2 |
| 30.954 | 3.982 | 3 | 81.521 | 11.859 | 3 |
| 3.825 | 1.197 | 4 | 13.311 | 1.424 | 4 |
| -7.762 | 3.580 | 5 | -8.722 | 3.575 | 5 |
| -0.258 | 3.773 | 6 | 0.043 | 3.346 | 6 |
| -265.990 | 156.560 | 7 | -160.906 | 119.682 | 7 |
| 9.632 | 4.764 | 8 | 6.618 | 5.934 | 8 |

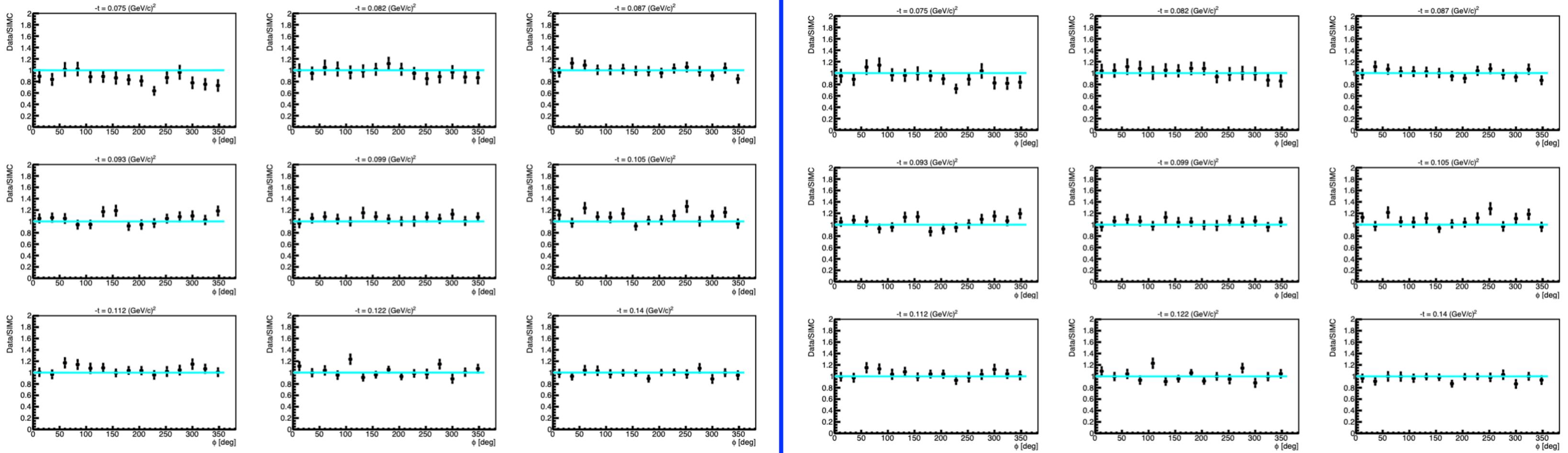
Before t-shift

After t-shift



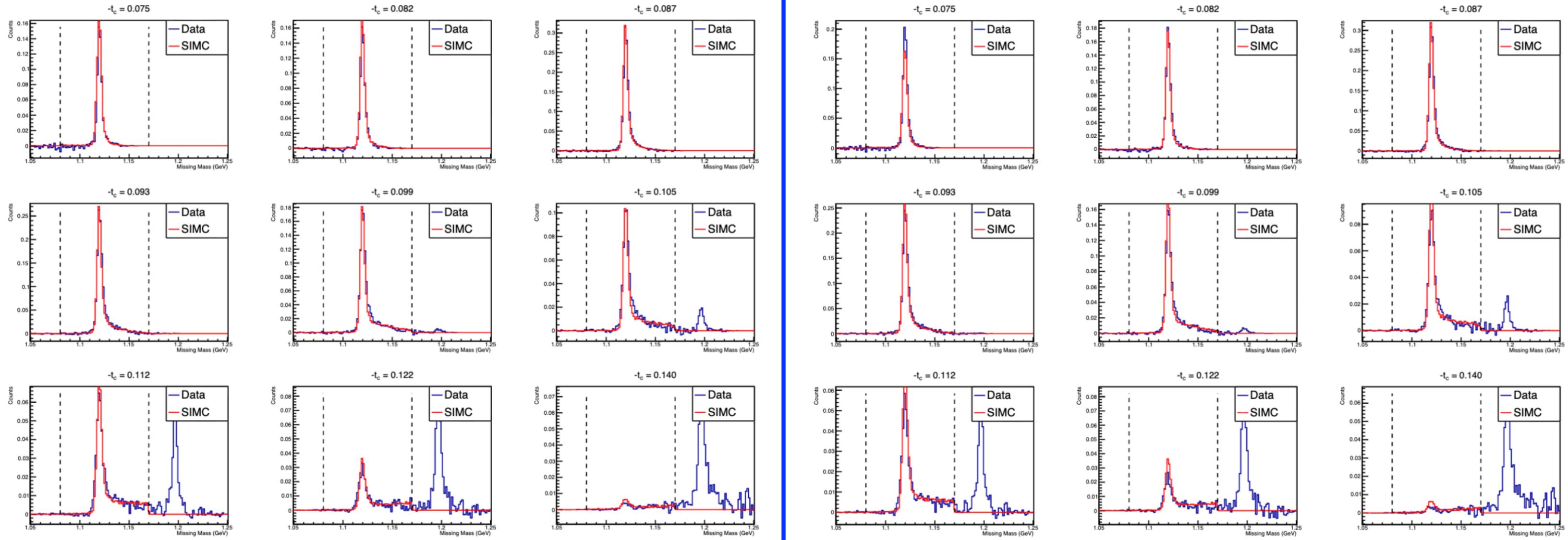
Before t-shift

After t-shift

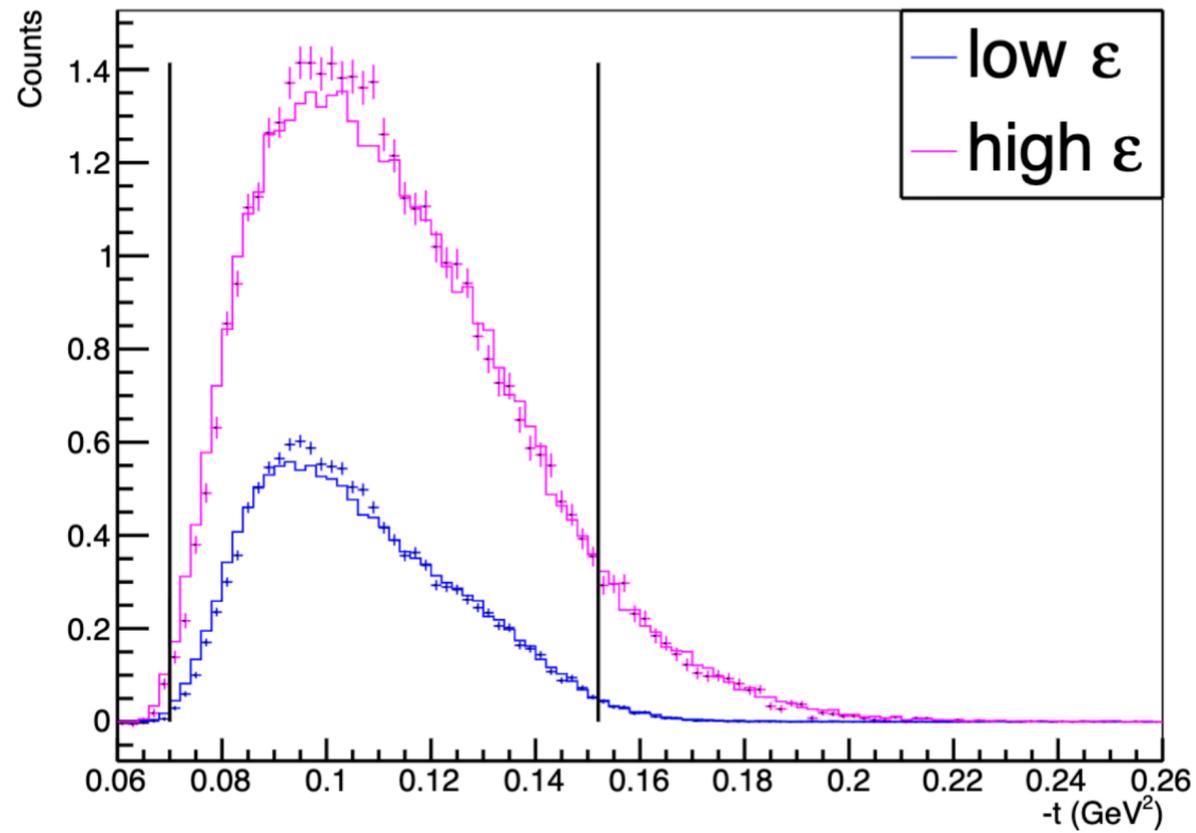


Before t-shift

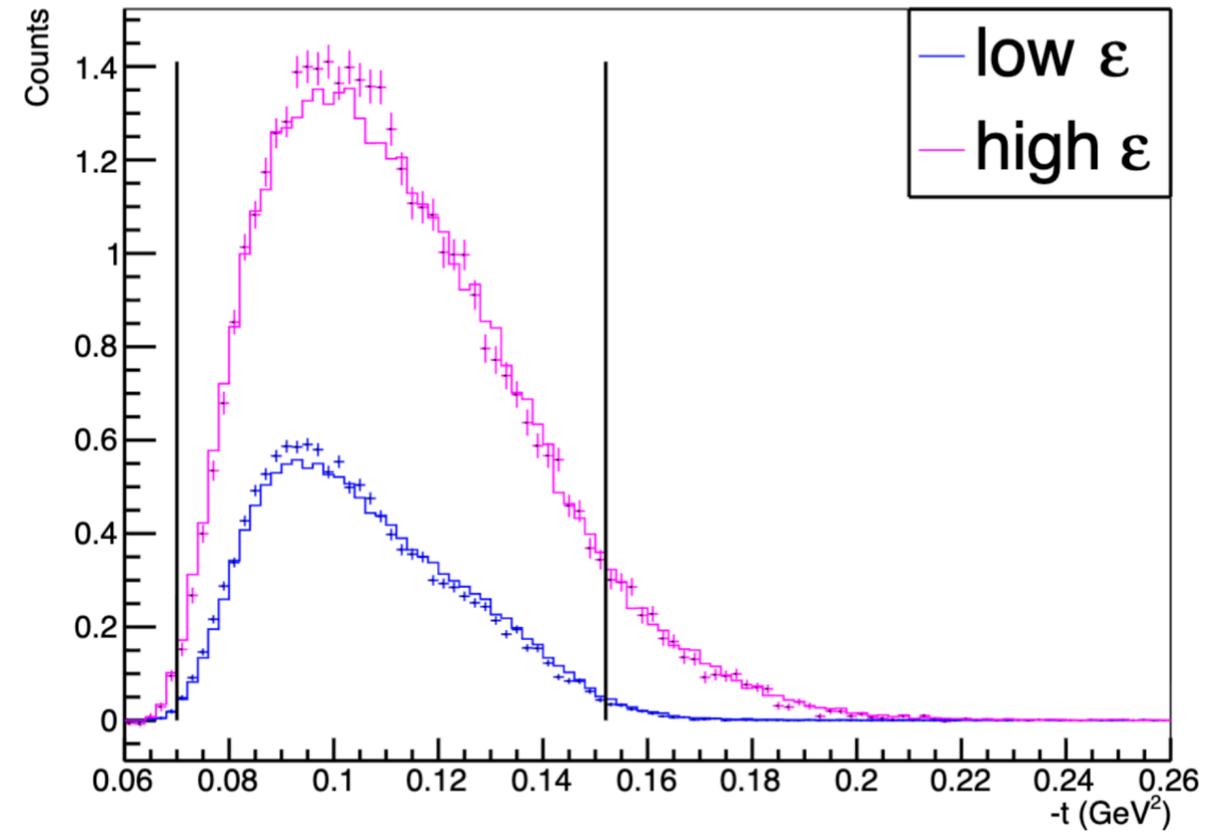
After t-shift



Before t-shift



After t-shift

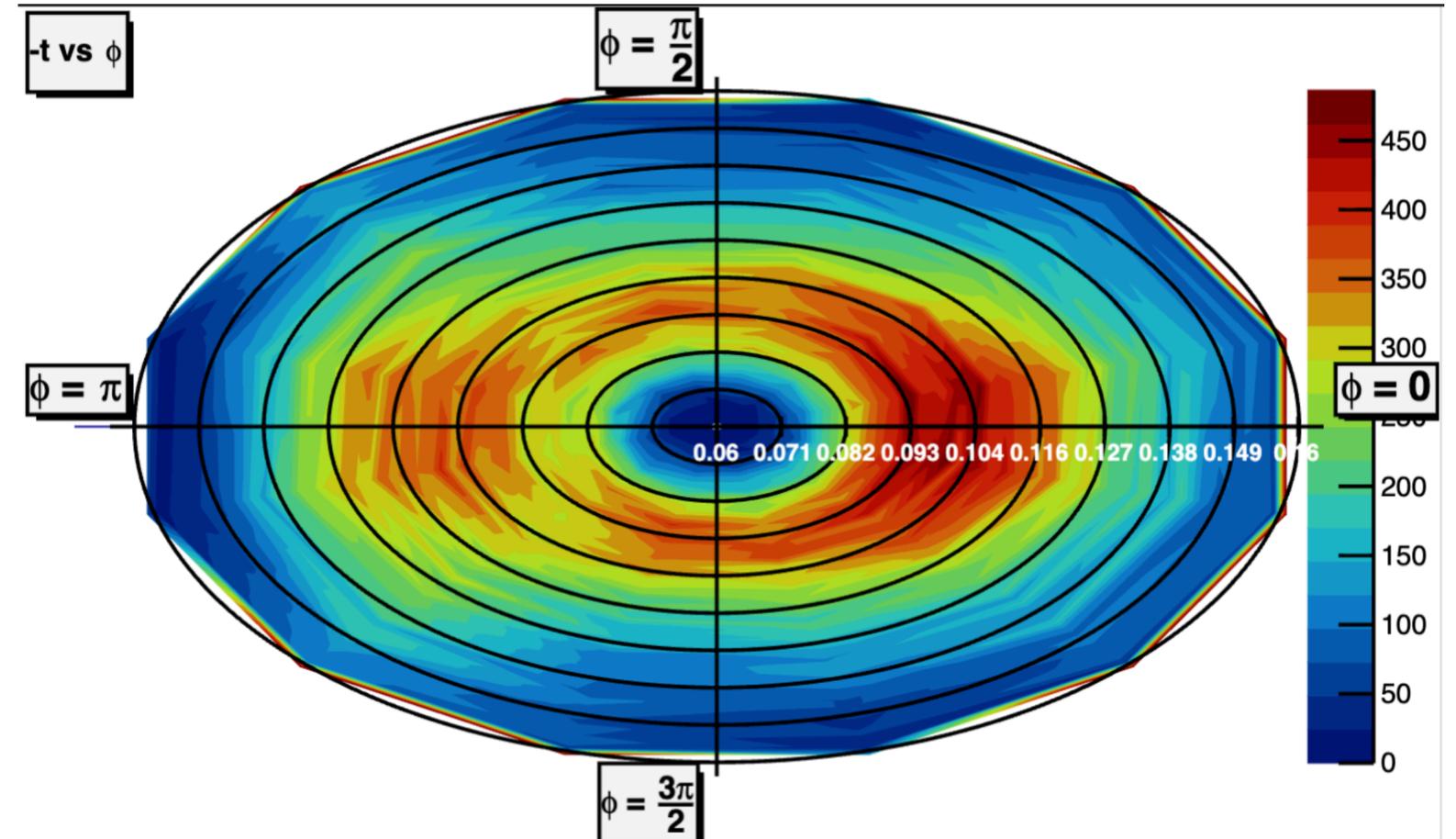
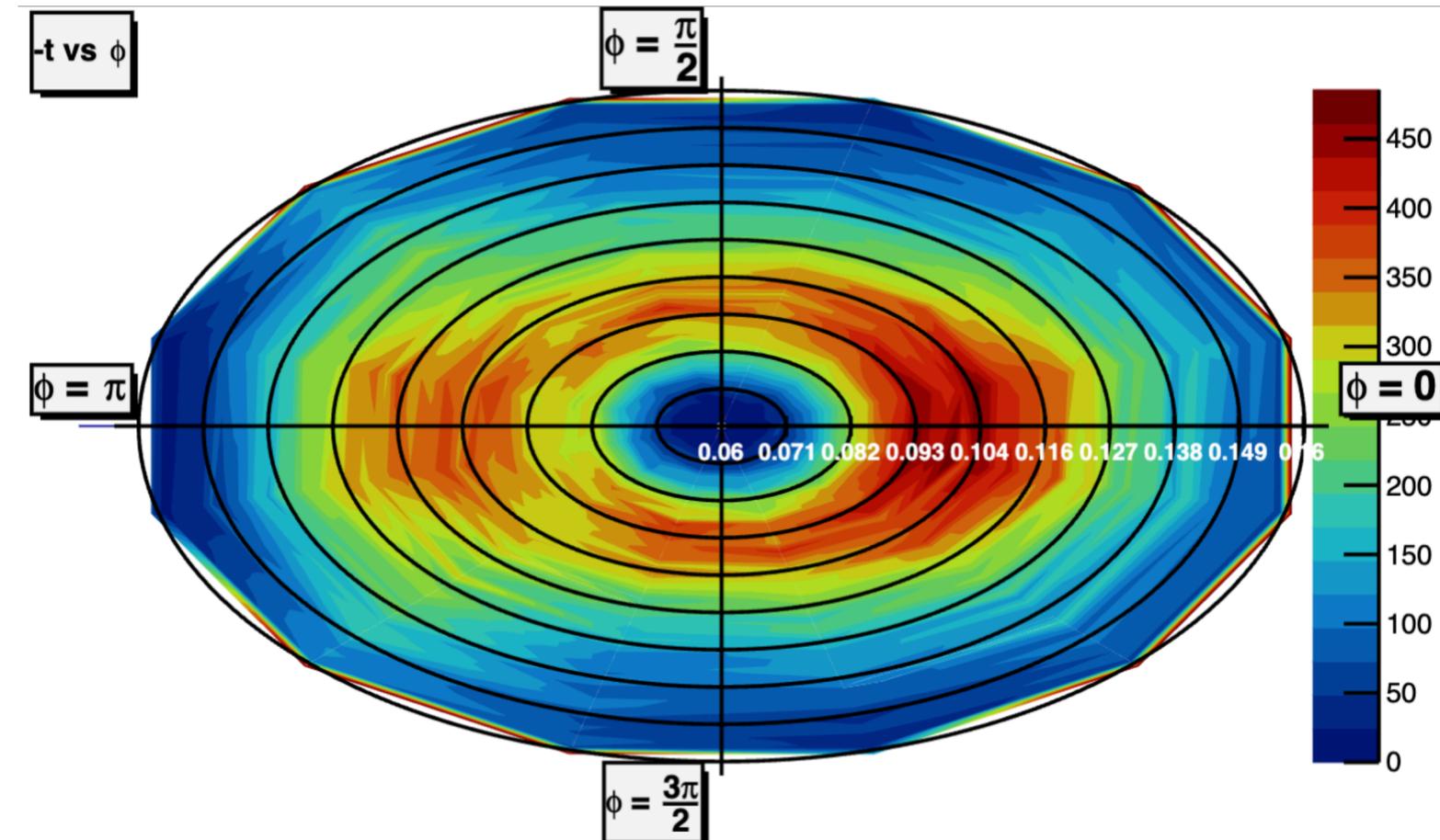


| t_min | t_max | t_center | Yield(love) | Error(love) | Yield(highe) | Error(highe) |
|-------|-------|----------|-------------|-------------|--------------|--------------|
| 0.07 | 0.08 | 0.075 | 5366.833 | 94.499 | 6213.5 | 99.789 |
| 0.08 | 0.084 | 0.082 | 5289.167 | 88.111 | 5560.0 | 89.303 |
| 0.084 | 0.09 | 0.087 | 11763.5 | 128.532 | 10703.833 | 124.308 |
| 0.09 | 0.096 | 0.093 | 13622.667 | 139.39 | 12239.0 | 134.485 |
| 0.096 | 0.102 | 0.099 | 13319.5 | 140.629 | 12538.5 | 138.018 |
| 0.102 | 0.108 | 0.105 | 12238.167 | 136.812 | 12109.167 | 137.066 |
| 0.108 | 0.116 | 0.112 | 13087.167 | 145.37 | 14430.333 | 152.257 |
| 0.116 | 0.128 | 0.122 | 14537.0 | 155.906 | 17588.333 | 170.715 |
| 0.128 | 0.152 | 0.14 | 14069.667 | 155.151 | 20359.0 | 187.915 |

| t_min | t_max | t_center | Yield(love) | Error(love) | Yield(highe) | Error(highe) |
|-------|-------|----------|-------------|-------------|--------------|--------------|
| 0.07 | 0.08 | 0.075 | 6850.833 | 104.461 | 6725.5 | 103.021 |
| 0.08 | 0.084 | 0.082 | 6061.0 | 93.536 | 5781.0 | 90.86 |
| 0.084 | 0.09 | 0.087 | 12363.0 | 131.916 | 10780.833 | 124.93 |
| 0.09 | 0.096 | 0.093 | 13658.833 | 140.19 | 12240.167 | 134.606 |
| 0.096 | 0.102 | 0.099 | 13148.167 | 140.107 | 12395.0 | 137.623 |
| 0.102 | 0.108 | 0.105 | 11767.167 | 134.821 | 12095.667 | 136.895 |
| 0.108 | 0.116 | 0.112 | 12539.833 | 142.767 | 14247.833 | 151.474 |
| 0.116 | 0.128 | 0.122 | 13870.5 | 152.586 | 17413.333 | 169.935 |
| 0.128 | 0.152 | 0.14 | 13047.333 | 149.651 | 20074.0 | 186.744 |

Before t-shift

After t-shift



| t_min | t_max | t_center | Yield(love) | Error(love) | Yield(highe) | Error(highe) |
|-------|-------|----------|-------------|-------------|--------------|--------------|
| 0.07 | 0.08 | 0.075 | 5366.833 | 94.499 | 6213.5 | 99.789 |
| 0.08 | 0.084 | 0.082 | 5289.167 | 88.111 | 5560.0 | 89.303 |
| 0.084 | 0.09 | 0.087 | 11763.5 | 128.532 | 10703.833 | 124.308 |
| 0.09 | 0.096 | 0.093 | 13622.667 | 139.39 | 12239.0 | 134.485 |
| 0.096 | 0.102 | 0.099 | 13319.5 | 140.629 | 12538.5 | 138.018 |
| 0.102 | 0.108 | 0.105 | 12238.167 | 136.812 | 12109.167 | 137.066 |
| 0.108 | 0.116 | 0.112 | 13087.167 | 145.37 | 14430.333 | 152.257 |
| 0.116 | 0.128 | 0.122 | 14537.0 | 155.906 | 17588.333 | 170.715 |
| 0.128 | 0.152 | 0.14 | 14069.667 | 155.151 | 20359.0 | 187.915 |

| t_min | t_max | t_center | Yield(love) | Error(love) | Yield(highe) | Error(highe) |
|-------|-------|----------|-------------|-------------|--------------|--------------|
| 0.07 | 0.08 | 0.075 | 6850.833 | 104.461 | 6725.5 | 103.021 |
| 0.08 | 0.084 | 0.082 | 6061.0 | 93.536 | 5781.0 | 90.86 |
| 0.084 | 0.09 | 0.087 | 12363.0 | 131.916 | 10780.833 | 124.93 |
| 0.09 | 0.096 | 0.093 | 13658.833 | 140.19 | 12240.167 | 134.606 |
| 0.096 | 0.102 | 0.099 | 13148.167 | 140.107 | 12395.0 | 137.623 |
| 0.102 | 0.108 | 0.105 | 11767.167 | 134.821 | 12095.667 | 136.895 |
| 0.108 | 0.116 | 0.112 | 12539.833 | 142.767 | 14247.833 | 151.474 |
| 0.116 | 0.128 | 0.122 | 13870.5 | 152.586 | 17413.333 | 169.935 |
| 0.128 | 0.152 | 0.14 | 13047.333 | 149.651 | 20074.0 | 186.744 |

