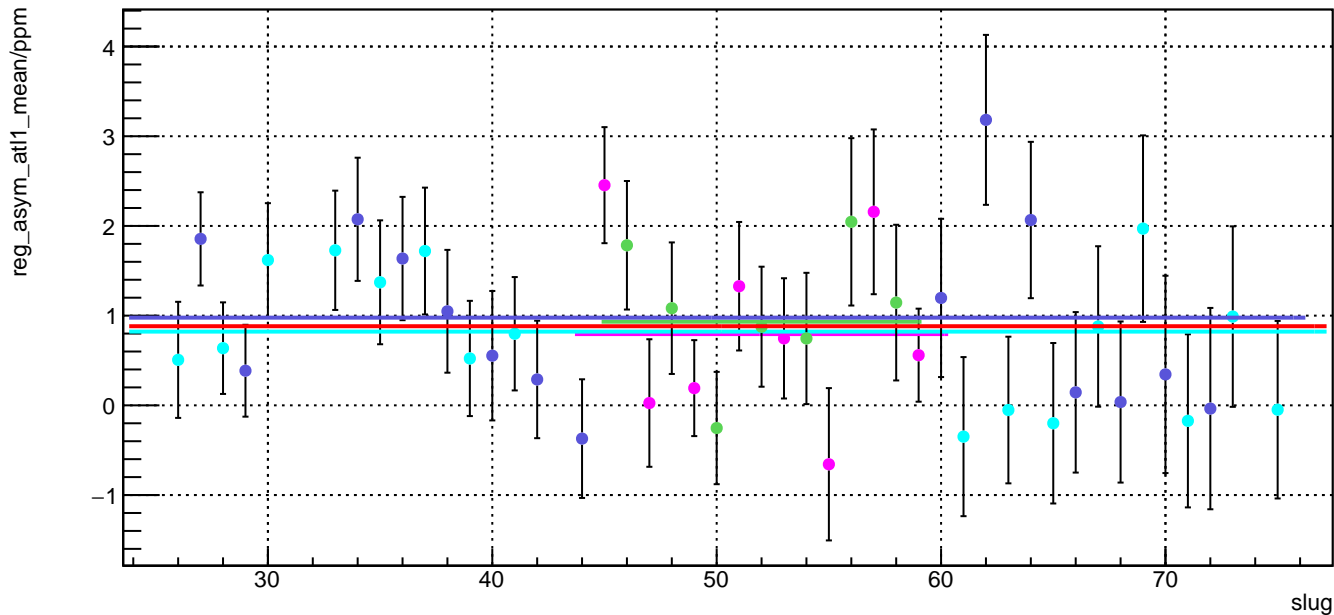


# reg\_asym\_atl1\_mean/ppm



Right IN:  $0.794 \pm 0.234$   $\chi^2$ /NDF: 14.9/7

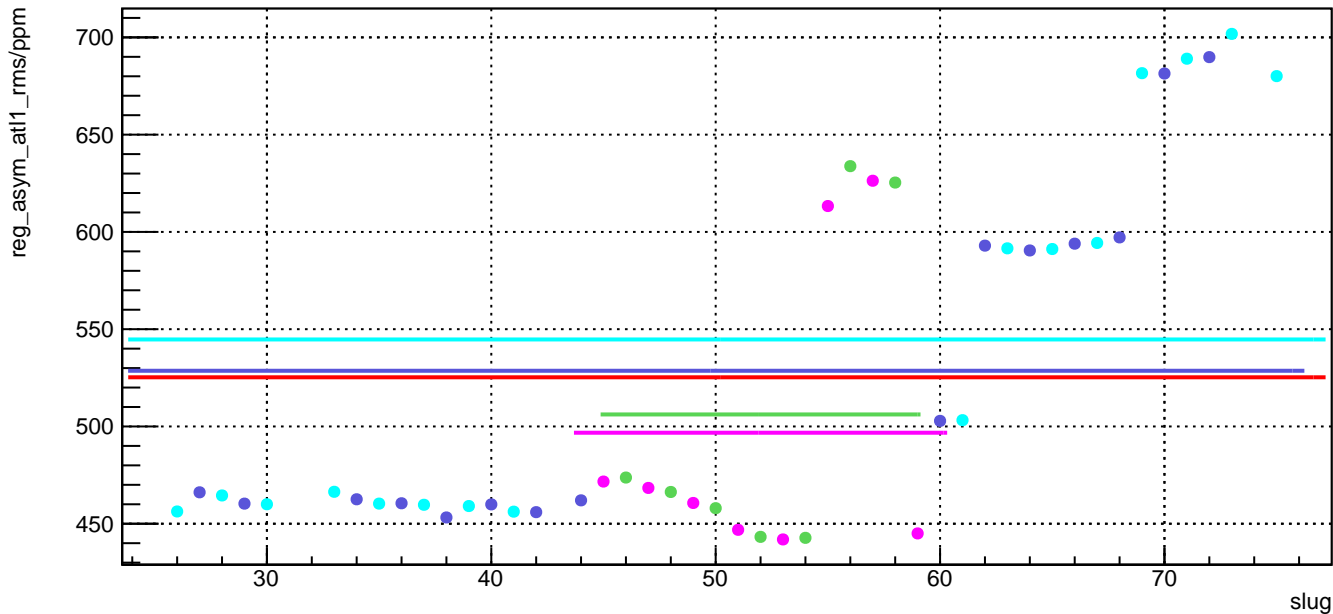
Left OUT:  $0.822 \pm 0.185$   $\chi^2$ /NDF: 13.6/15

Right OUT:  $0.933 \pm 0.278$   $\chi^2$ /NDF: 6.6/6

Left IN:  $0.978 \pm 0.188$   $\chi^2$ /NDF: 23.4/14

Grand:  $0.882 \pm 0.106$   $\chi^2$ : 59.0/45

# reg\_asym\_atl1\_rms/ppm



Right IN:  $496.774 \pm 27.148$   $\chi^2$ /NDF: 41273.4/7

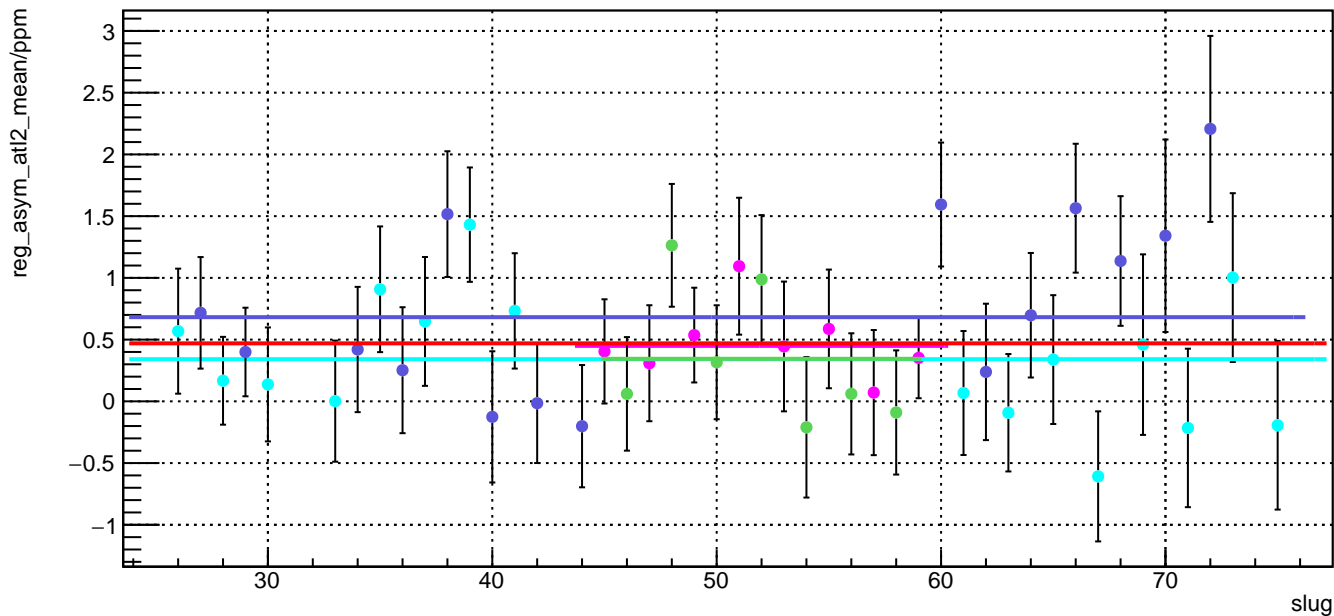
Left OUT:  $544.720 \pm 24.846$   $\chi^2$ /NDF: 148159.1/15

Right OUT:  $506.177 \pm 32.161$   $\chi^2$ /NDF: 43442.9/6

Left IN:  $528.628 \pm 22.321$   $\chi^2$ /NDF: 104624.0/14

Grand:  $525.269 \pm 13.054$   $\chi^2$ : 352769.2/45

## reg\_asym\_atl2\_mean/ppm



Right IN:  $0.449 \pm 0.155$   $\chi^2$ /NDF: 2.2/7

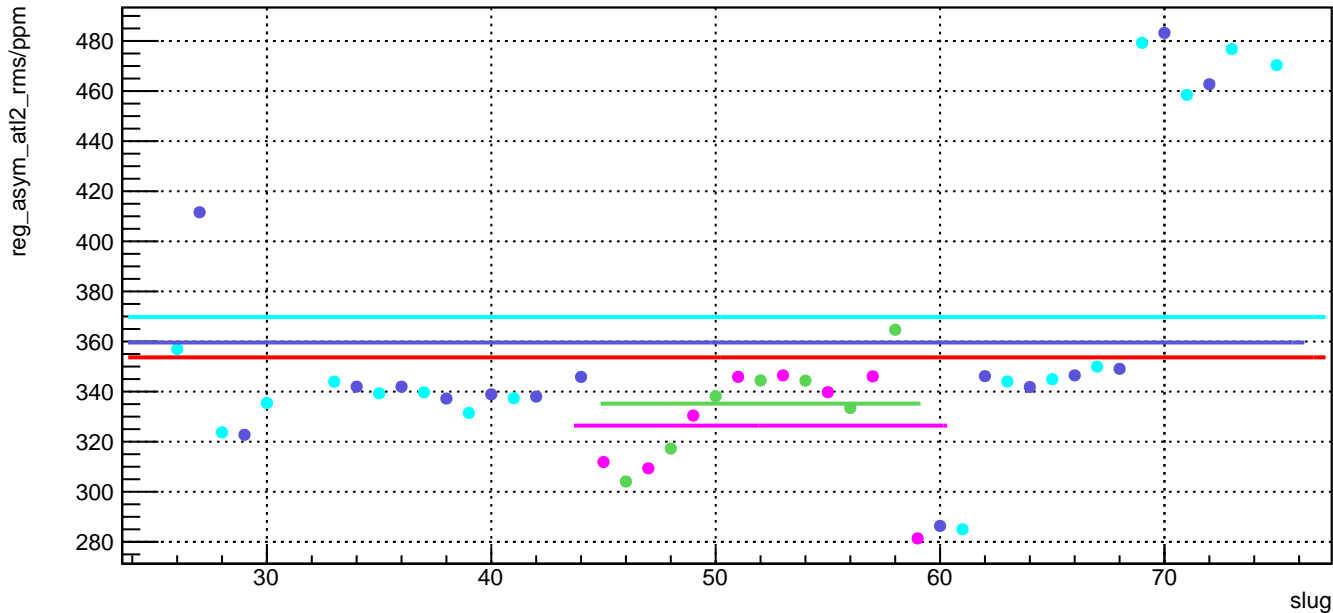
Left OUT:  $0.342 \pm 0.127$   $\chi^2$ /NDF: 15.6/15

Right OUT:  $0.345 \pm 0.188$   $\chi^2$ /NDF: 7.4/6

Left IN:  $0.682 \pm 0.131$   $\chi^2$ /NDF: 24.2/14

Grand:  $0.470 \pm 0.073$   $\chi^2$ : 53.5/45

# reg\_asym\_atl2\_rms/ppm



Right IN:  $326.409 \pm 8.338$   $\chi^2$ /NDF: 3893.2/7

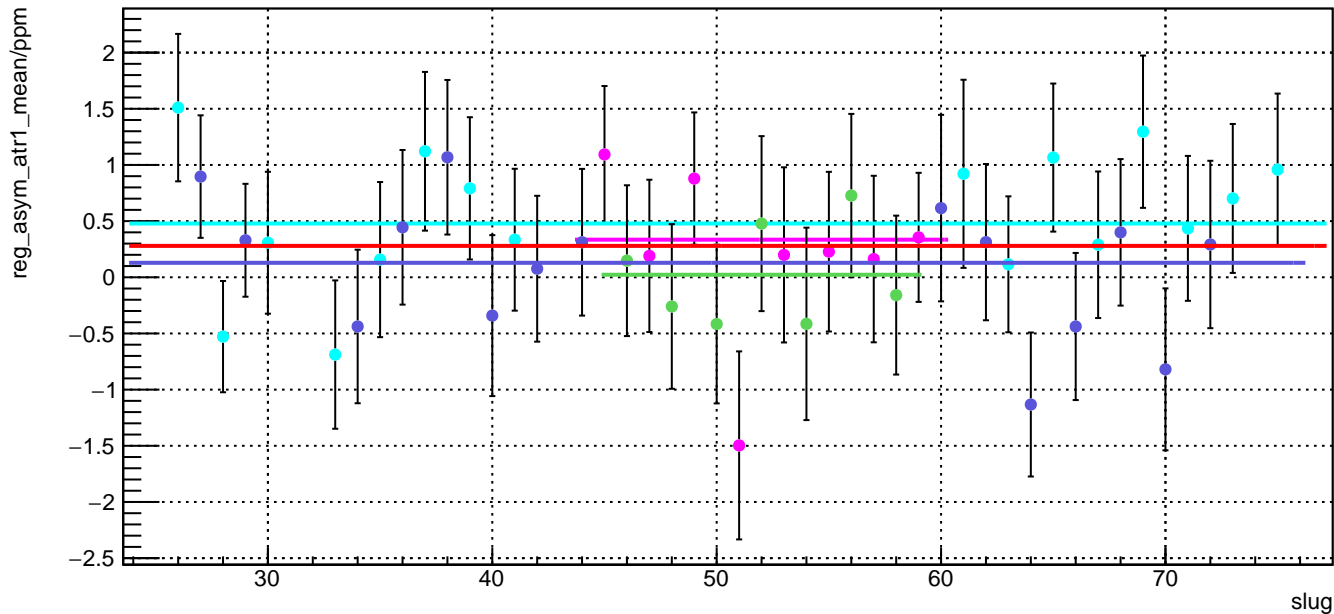
Left OUT:  $369.799 \pm 15.645$   $\chi^2$ /NDF: 58746.1/15

Right OUT:  $335.209 \pm 7.464$   $\chi^2$ /NDF: 2339.6/6

Left IN:  $359.610 \pm 13.510$   $\chi^2$ /NDF: 38329.5/14

Grand:  $353.667 \pm 7.497$   $\chi^2$ : 116331.1/45

# reg\_asym\_atr1\_mean/ppm



Right IN:  $0.335 \pm 0.238$   $\chi^2$ /NDF: 7.3/7

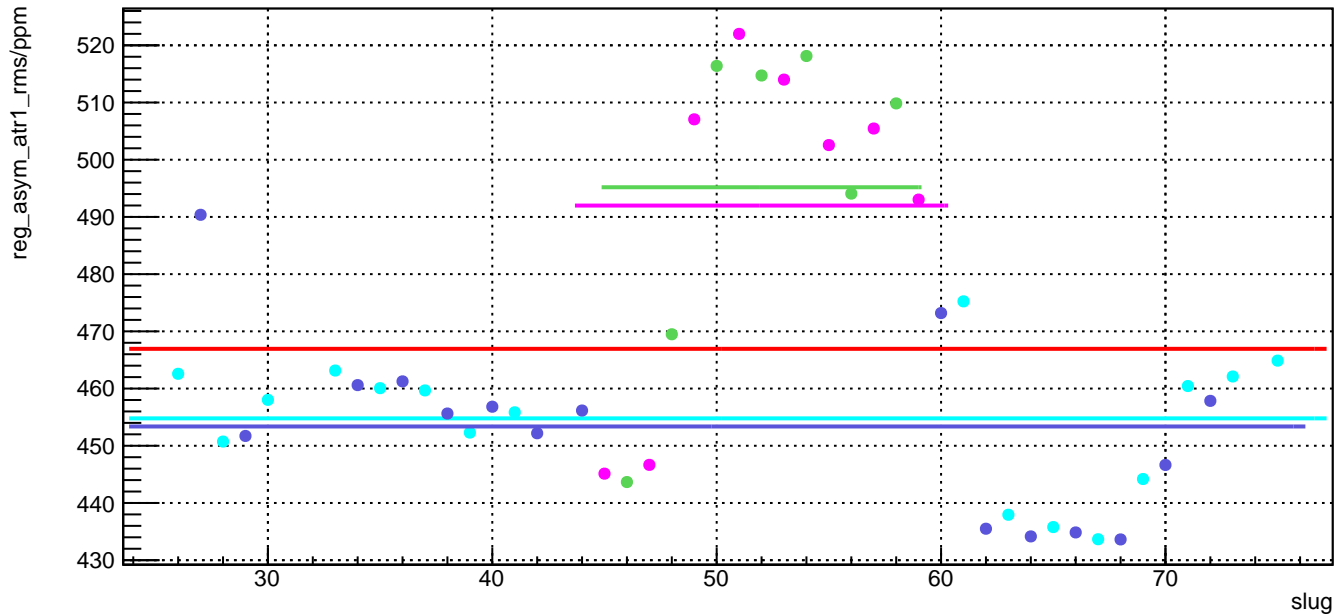
Left OUT:  $0.479 \pm 0.162$   $\chi^2$ /NDF: 14.7/15

Right OUT:  $0.022 \pm 0.277$   $\chi^2$ /NDF: 2.2/6

Left IN:  $0.129 \pm 0.170$   $\chi^2$ /NDF: 12.4/14

Grand:  $0.280 \pm 0.098$   $\chi^2$ : 39.9/45

# reg\_asym\_atr1\_rms/ppm



Right IN:  $491.987 \pm 10.485$   $\chi^2$ /NDF: 6156.9/7

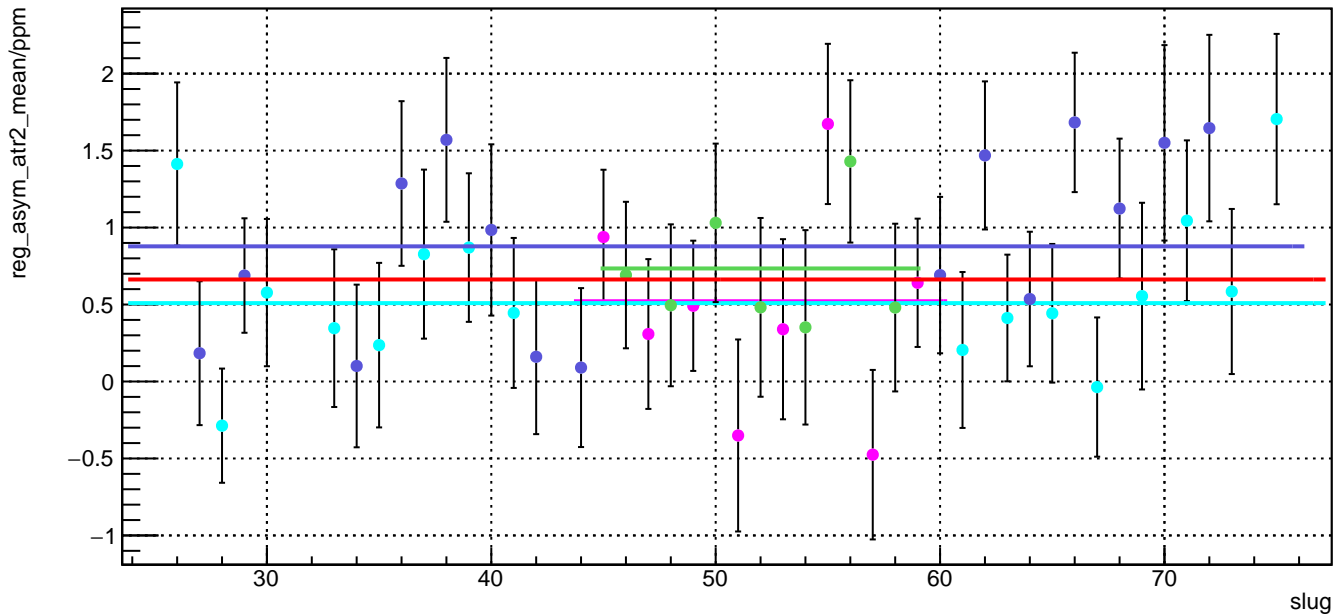
Left OUT:  $454.791 \pm 2.905$   $\chi^2$ /NDF: 2026.0/15

Right OUT:  $495.188 \pm 10.790$   $\chi^2$ /NDF: 4889.4/6

Left IN:  $453.372 \pm 4.019$   $\chi^2$ /NDF: 3392.2/14

Grand:  $466.945 \pm 3.944$   $\chi^2$ : 32192.0/45

# reg\_asym\_atr2\_mean/ppm



Right IN:  $0.521 \pm 0.173$   $\chi^2/\text{NDF}$ : 11.4/7

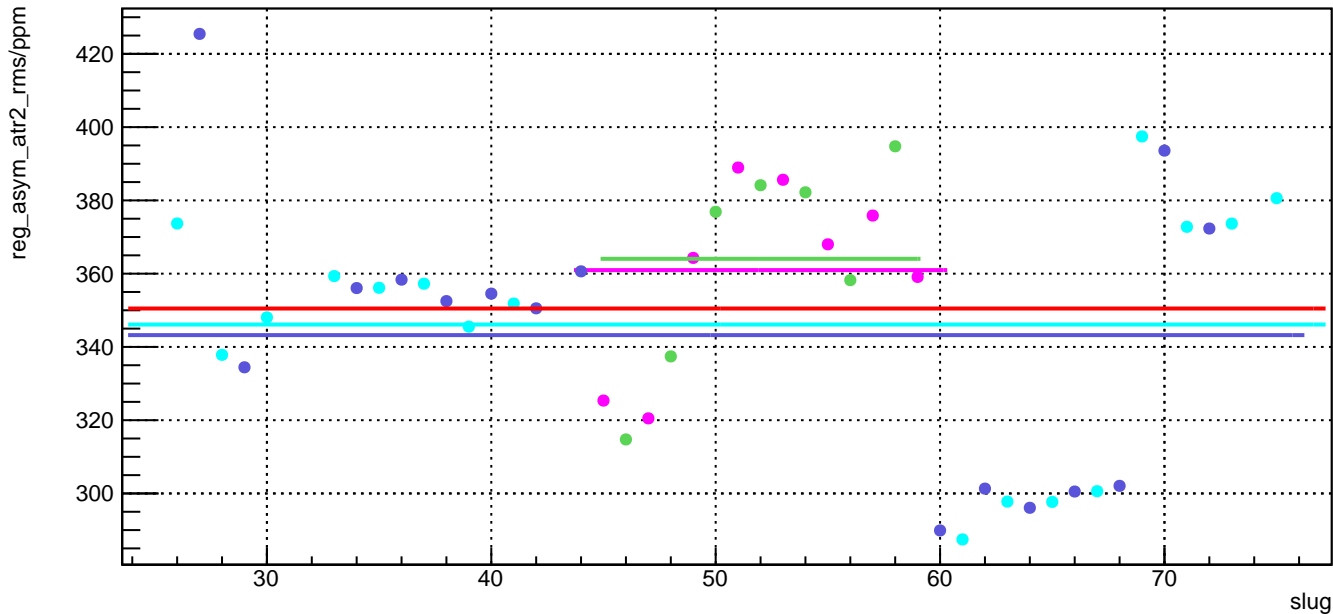
Left OUT:  $0.509 \pm 0.122$   $\chi^2/\text{NDF}$ : 16.4/15

Right OUT:  $0.734 \pm 0.203$   $\chi^2/\text{NDF}$ : 3.1/6

Left IN:  $0.878 \pm 0.127$   $\chi^2/\text{NDF}$ : 19.7/14

Grand:  $0.663 \pm 0.073$   $\chi^2$ : 55.9/45

# reg\_asym\_atr2\_rms/ppm



Right IN:  $360.968 \pm 9.048$   $\chi^2$ /NDF: 4584.6/7

Left OUT:  $346.111 \pm 8.355$   $\chi^2$ /NDF: 16754.4/15

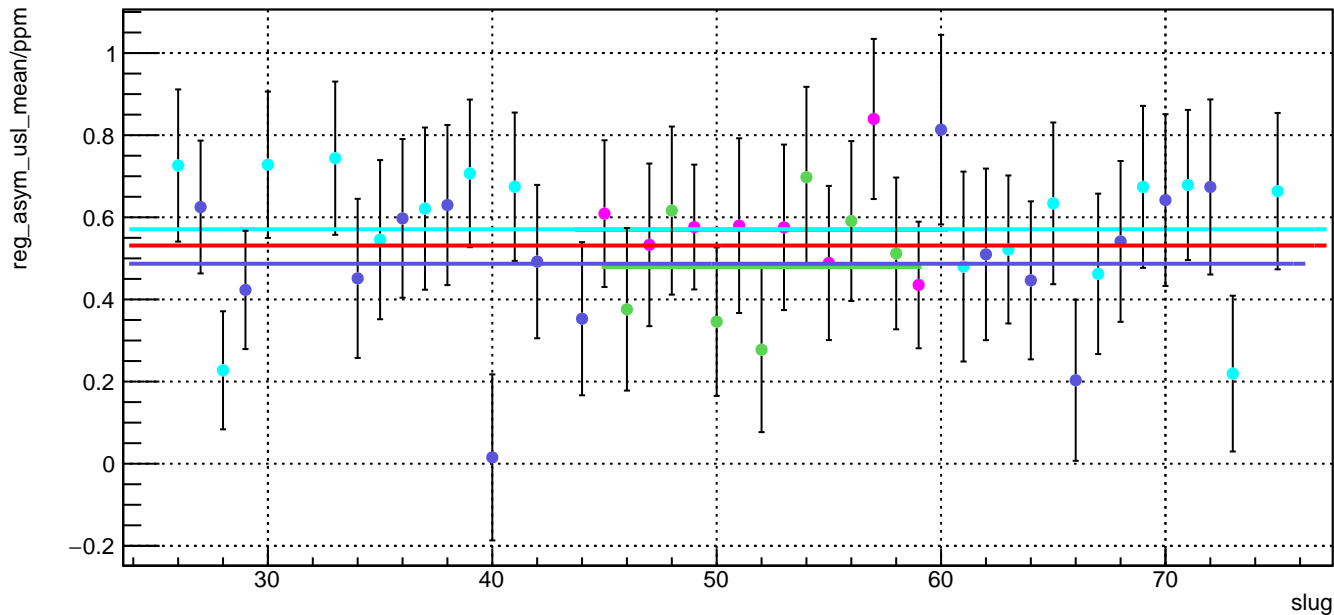
Right OUT:  $364.057 \pm 10.928$   $\chi^2$ /NDF: 5015.8/6

Left IN:  $343.224 \pm 10.124$   $\chi^2$ /NDF: 21525.0/14

Grand:  $350.484 \pm 4.971$   $\chi^2$ : 51145.4/45



# reg\_asym\_usl\_mean/ppm



Right IN:  $0.570 \pm 0.064$   $\chi^2/\text{NDF}$ : 2.9/7

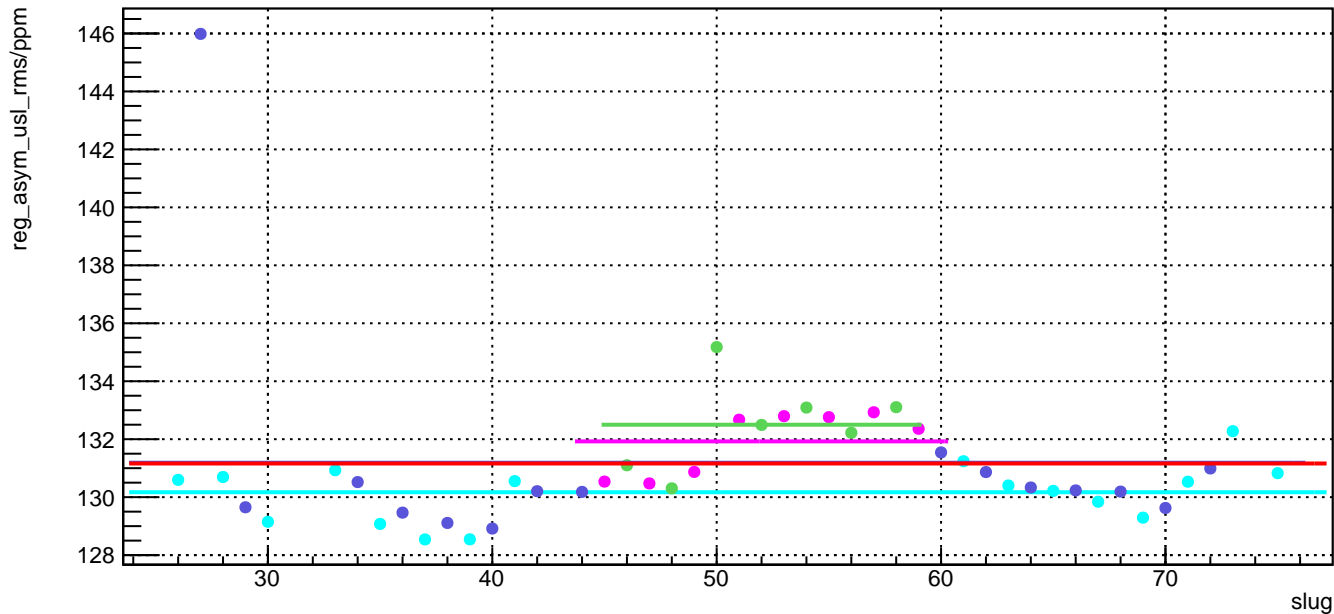
Left OUT:  $0.571 \pm 0.046$   $\chi^2/\text{NDF}$ : 14.0/15

Right OUT:  $0.479 \pm 0.074$   $\chi^2/\text{NDF}$ : 3.6/6

Left IN:  $0.487 \pm 0.049$   $\chi^2/\text{NDF}$ : 13.3/14

Grand:  $0.531 \pm 0.028$   $\chi^2$ : 36.3/45

# reg\_asym\_usl\_rms/ppm



Right IN:  $131.925 \pm 0.386$   $\chi^2/\text{NDF}$ : 8.4/7

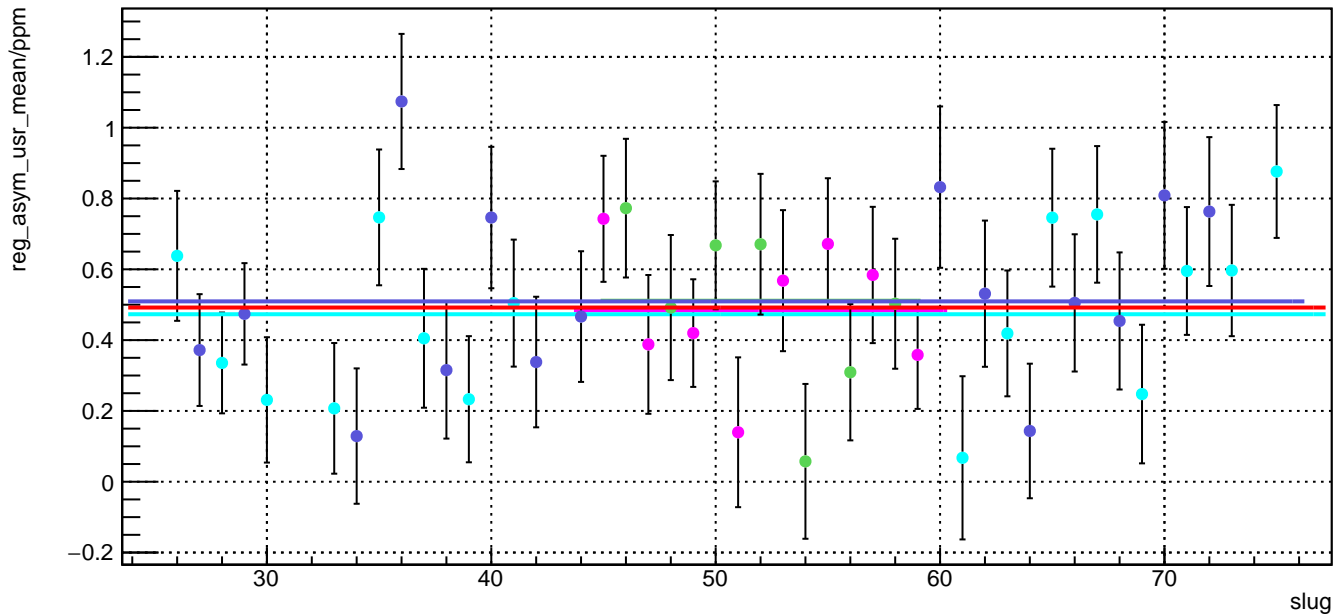
Left OUT:  $130.170 \pm 0.257$   $\chi^2/\text{NDF}$ : 15.8/15

Right OUT:  $132.499 \pm 0.593$   $\chi^2/\text{NDF}$ : 14.8/6

Left IN:  $131.188 \pm 1.072$   $\chi^2/\text{NDF}$ : 241.5/14

Grand:  $131.162 \pm 0.389$   $\chi^2$ : 313.4/45

# reg\_asym\_usr\_mean/ppm



Right IN:  $0.484 \pm 0.064$   $\chi^2/\text{NDF}$ : 7.3/7

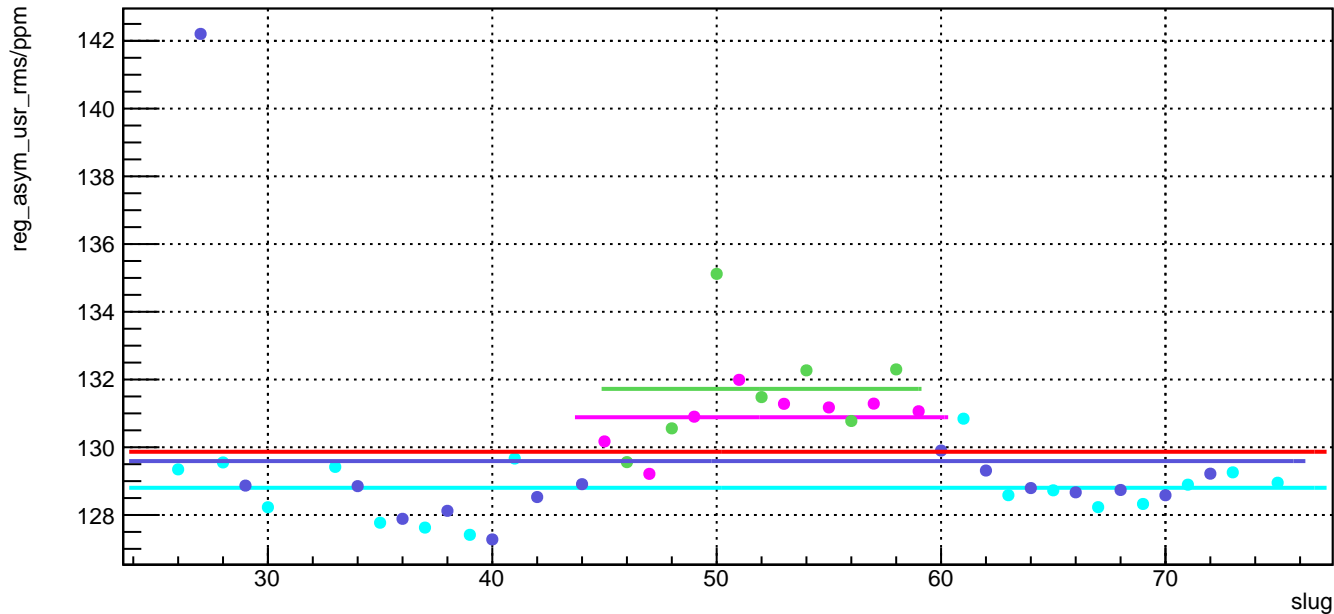
Left OUT:  $0.473 \pm 0.046$   $\chi^2/\text{NDF}$ : 23.8/15

Right OUT:  $0.511 \pm 0.074$   $\chi^2/\text{NDF}$ : 8.6/6

Left IN:  $0.509 \pm 0.049$   $\chi^2/\text{NDF}$ : 26.2/14

Grand:  $0.492 \pm 0.027$   $\chi^2$ : 66.3/45

# reg\_asym\_usr\_rms/ppm



Right IN:  $130.886 \pm 0.298$   $\chi^2/\text{NDF}$ : 5.0/7

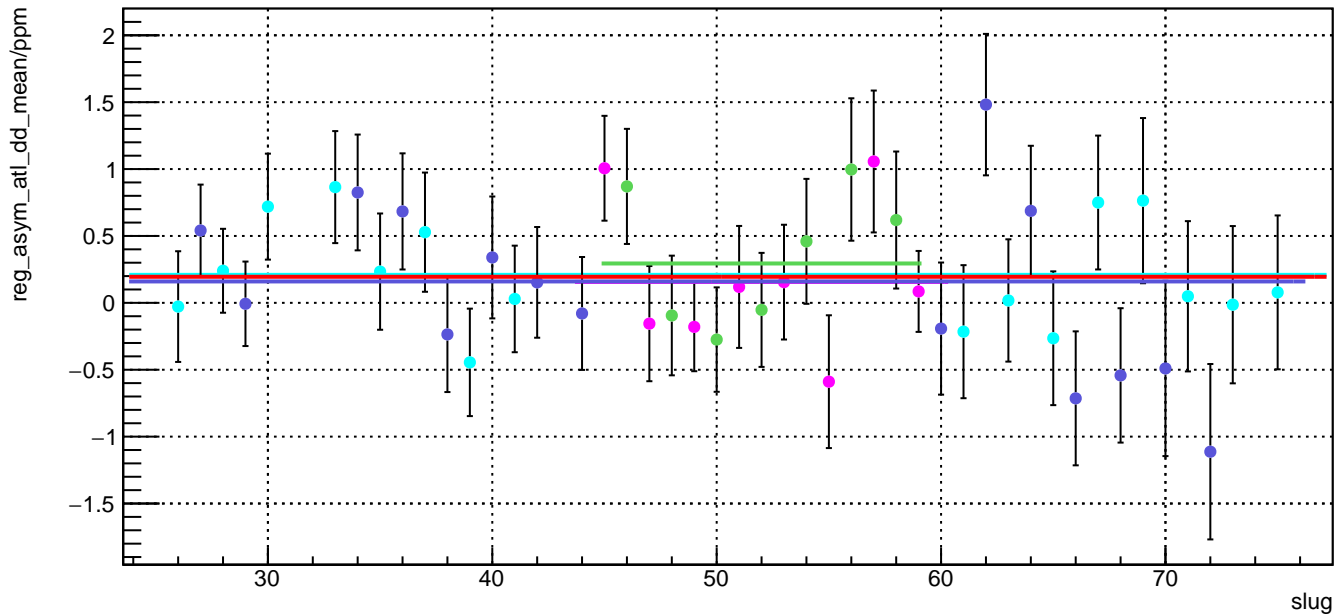
Left OUT:  $128.803 \pm 0.221$   $\chi^2/\text{NDF}$ : 11.7/15

Right OUT:  $131.724 \pm 0.675$   $\chi^2/\text{NDF}$ : 19.2/6

Left IN:  $129.592 \pm 0.915$   $\chi^2/\text{NDF}$ : 175.7/14

Grand:  $129.867 \pm 0.357$   $\chi^2$ : 263.2/45

# reg\_asym\_atl\_dd\_mean/ppm



Right IN:  $0.156 \pm 0.142$   $\chi^2/\text{NDF}$ : 11.5/7

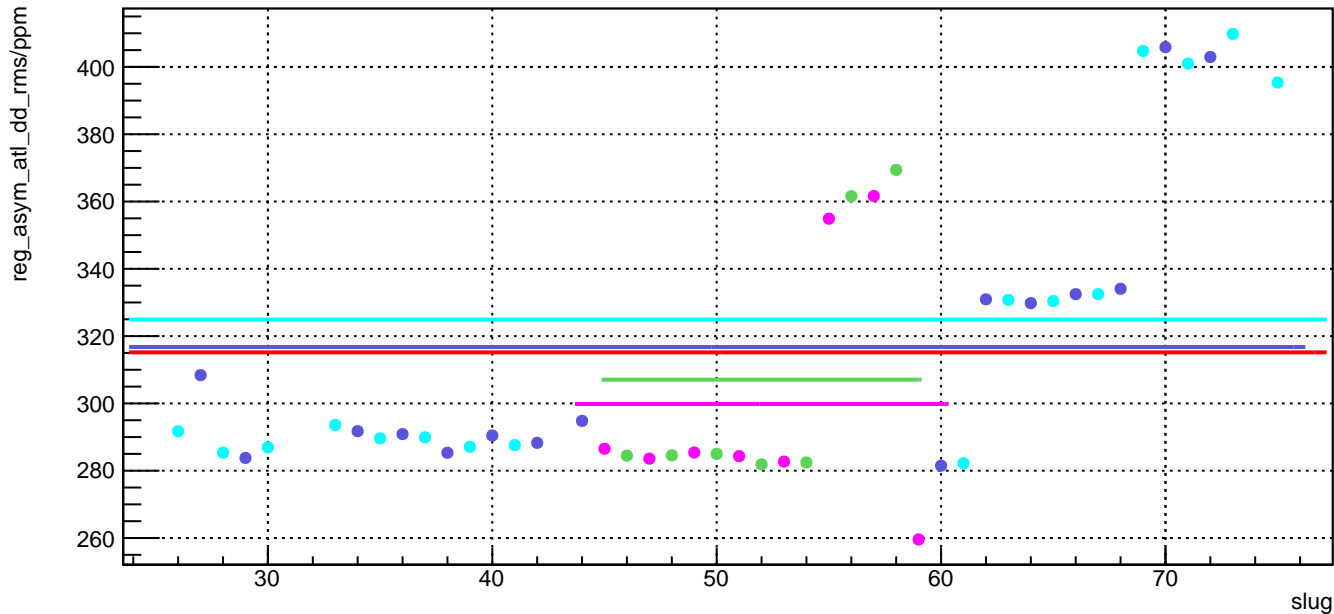
Left OUT:  $0.209 \pm 0.112$   $\chi^2/\text{NDF}$ : 11.9/15

Right OUT:  $0.294 \pm 0.170$   $\chi^2/\text{NDF}$ : 7.6/6

Left IN:  $0.160 \pm 0.115$   $\chi^2/\text{NDF}$ : 24.3/14

Grand:  $0.195 \pm 0.065$   $\chi^2$ : 55.8/45

# reg\_asym\_atl\_dd\_rms/ppm



Right IN:  $299.836 \pm 13.130$   $\chi^2/\text{NDF}$ : 9654.1/7

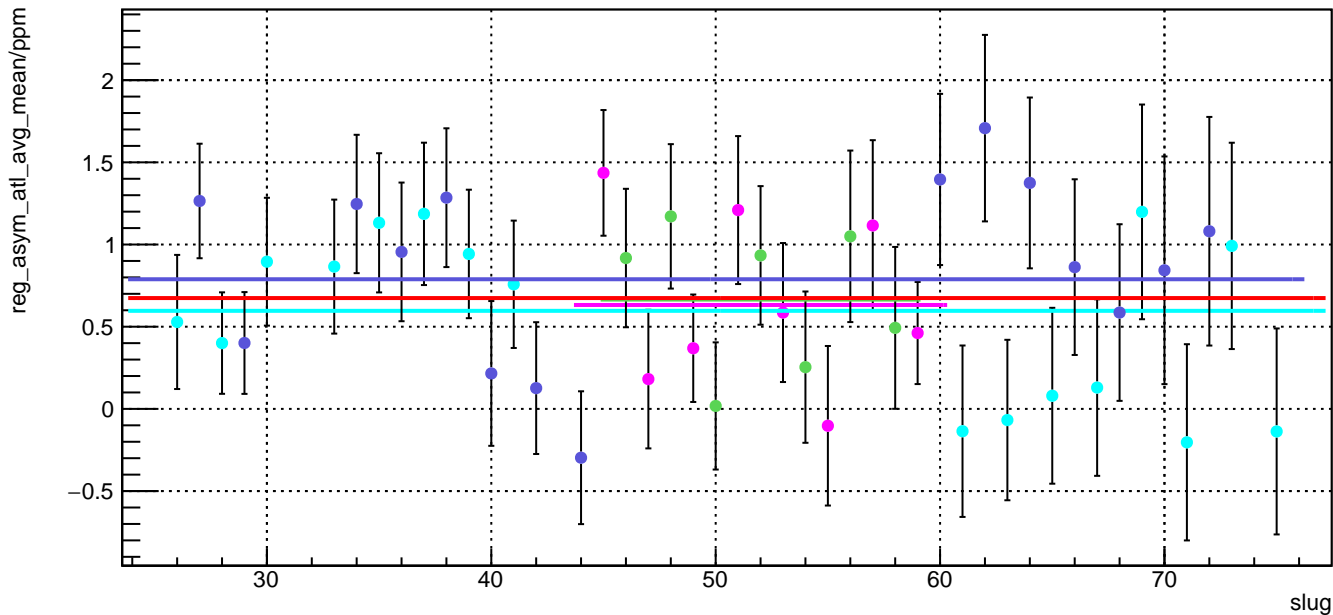
Left OUT:  $324.918 \pm 12.359$   $\chi^2/\text{NDF}$ : 36659.2/15

Right OUT:  $307.058 \pm 15.119$   $\chi^2/\text{NDF}$ : 9600.3/6

Left IN:  $316.755 \pm 10.455$   $\chi^2/\text{NDF}$ : 22955.1/14

Grand:  $315.176 \pm 6.323$   $\chi^2$ : 82768.6/45

## reg\_asym\_atl\_avg\_mean/ppm



Right IN:  $0.632 \pm 0.140$   $\chi^2/\text{NDF}$ : 11.3/7

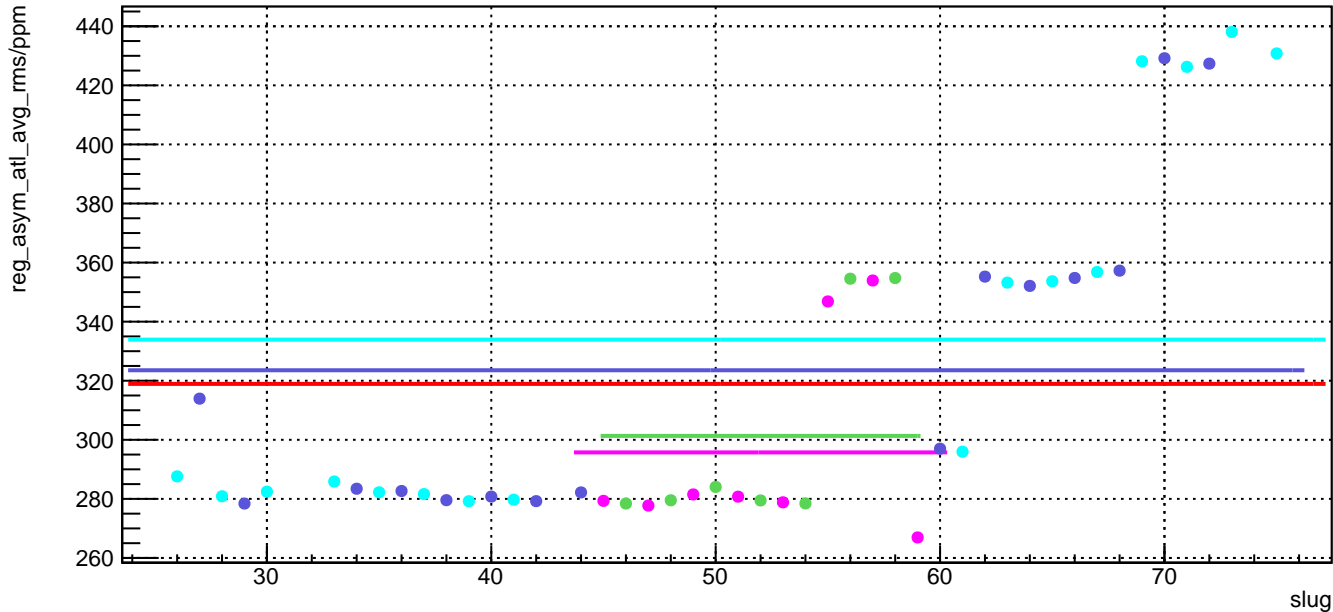
Left OUT:  $0.597 \pm 0.113$   $\chi^2/\text{NDF}$ : 15.8/15

Right OUT:  $0.665 \pm 0.167$   $\chi^2/\text{NDF}$ : 6.4/6

Left IN:  $0.789 \pm 0.116$   $\chi^2/\text{NDF}$ : 23.4/14

Grand:  $0.674 \pm 0.065$   $\chi^2$ : 58.4/45

# reg\_asym\_atl\_avg\_rms/ppm



Right IN:  $295.735 \pm 12.052$   $\chi^2/\text{NDF}$ : 8134.1/7

Left OUT:  $333.913 \pm 16.025$   $\chi^2/\text{NDF}$ : 61628.3/15

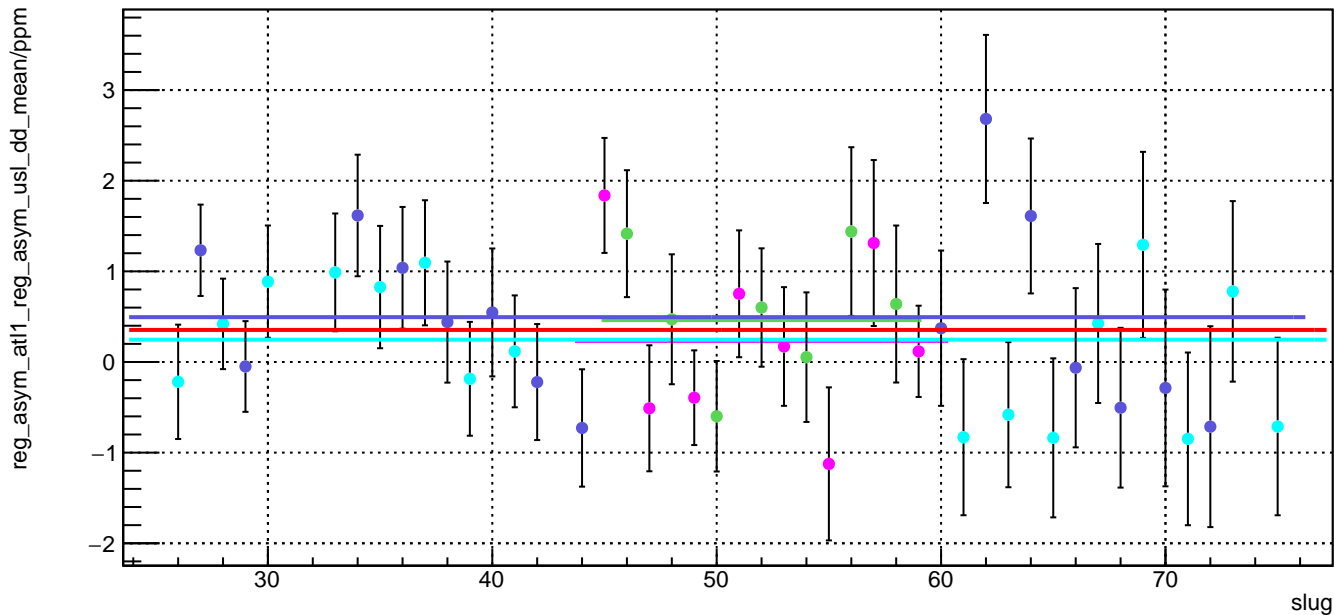
Right OUT:  $301.322 \pm 13.788$   $\chi^2/\text{NDF}$ : 7985.1/6

Left IN:  $323.542 \pm 13.701$   $\chi^2/\text{NDF}$ : 39420.6/14

Grand:  $318.932 \pm 7.850$   $\chi^2$ : 127553.1/45



# reg\_asym\_atl1\_reg\_asym\_usl\_dd\_mean/ppm



Right IN:  $0.233 \pm 0.229$   $\chi^2$ /NDF: 13.6/7

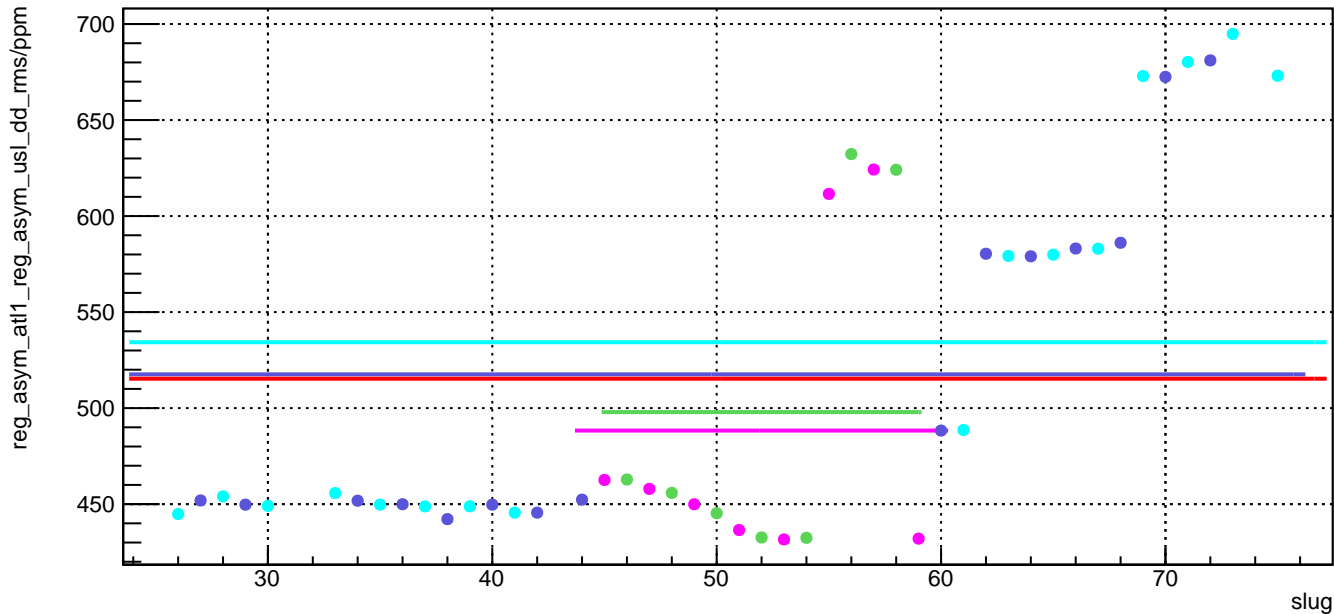
Left OUT:  $0.246 \pm 0.181$   $\chi^2$ /NDF: 13.6/15

Right OUT:  $0.462 \pm 0.272$   $\chi^2$ /NDF: 6.4/6

Left IN:  $0.495 \pm 0.184$   $\chi^2$ /NDF: 22.3/14

Grand:  $0.354 \pm 0.104$   $\chi^2$ : 57.3/45

# reg\_asym\_atl1\_reg\_asym\_usl\_dd\_rms/ppm



Right IN:  $488.302 \pm 28.593$   $\chi^2$ /NDF: 45783.6/7

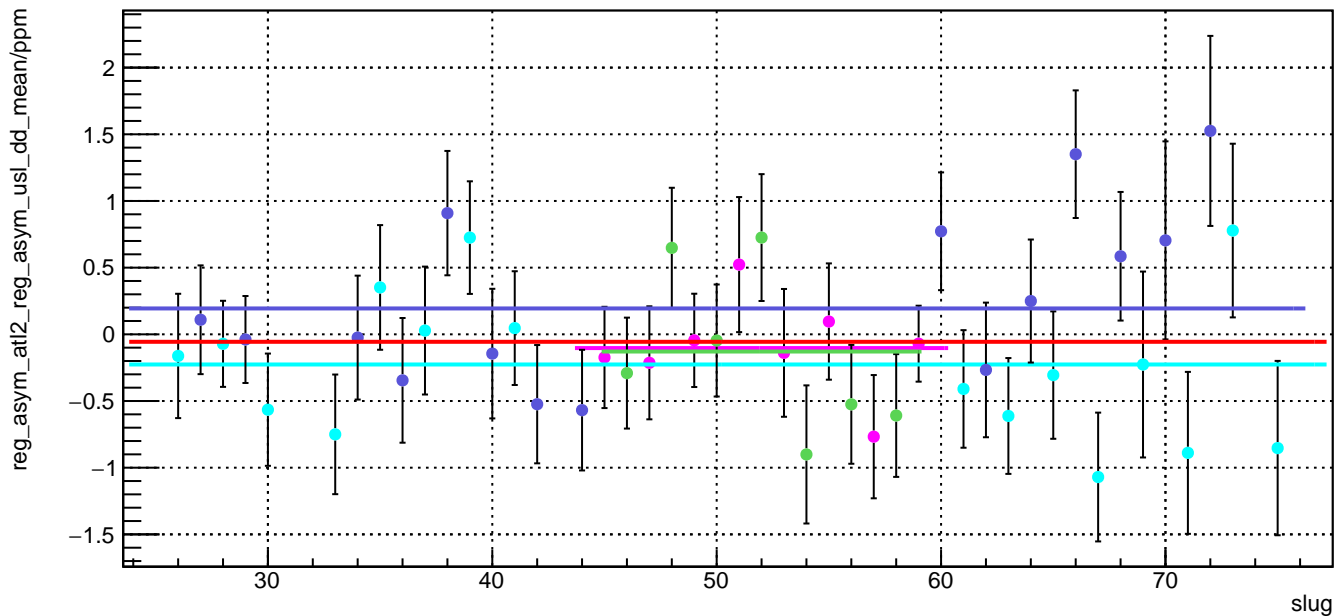
Left OUT:  $534.288 \pm 25.134$   $\chi^2$ /NDF: 151607.6/15

Right OUT:  $497.917 \pm 33.911$   $\chi^2$ /NDF: 48299.5/6

Left IN:  $517.575 \pm 22.449$   $\chi^2$ /NDF: 105830.5/14

Grand:  $515.306 \pm 13.285$   $\chi^2$ : 365314.1/45

# reg\_asym\_atl2\_reg\_asym\_usl\_dd\_mean/ppm



Right IN:  $-0.103 \pm 0.140$   $\chi^2/\text{NDF}$ : 4.0/7

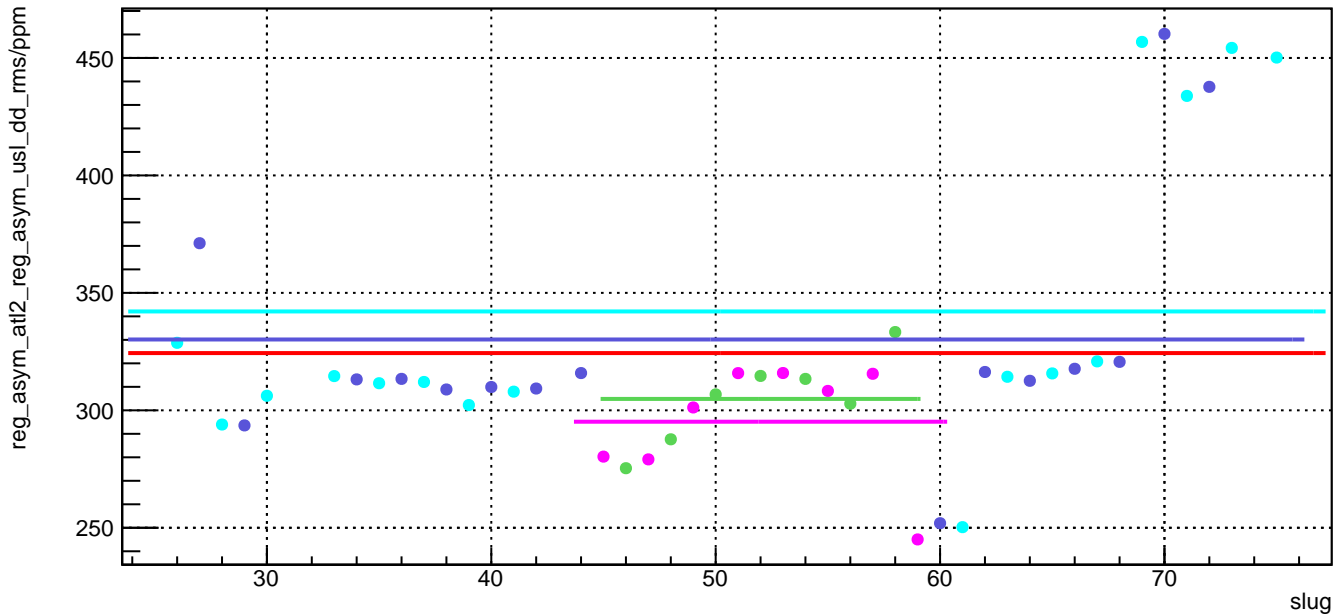
Left OUT:  $-0.226 \pm 0.117$   $\chi^2/\text{NDF}$ : 18.1/15

Right OUT:  $-0.129 \pm 0.171$   $\chi^2/\text{NDF}$ : 10.5/6

Left IN:  $0.194 \pm 0.120$   $\chi^2/\text{NDF}$ : 23.4/14

Grand:  $-0.056 \pm 0.066$   $\chi^2$ : 62.7/45

# reg\_asym\_atl2\_reg\_asym\_usl\_dd\_rms/ppm



Right IN:  $295.152 \pm 8.936$   $\chi^2/\text{NDF}$ : 4471.777

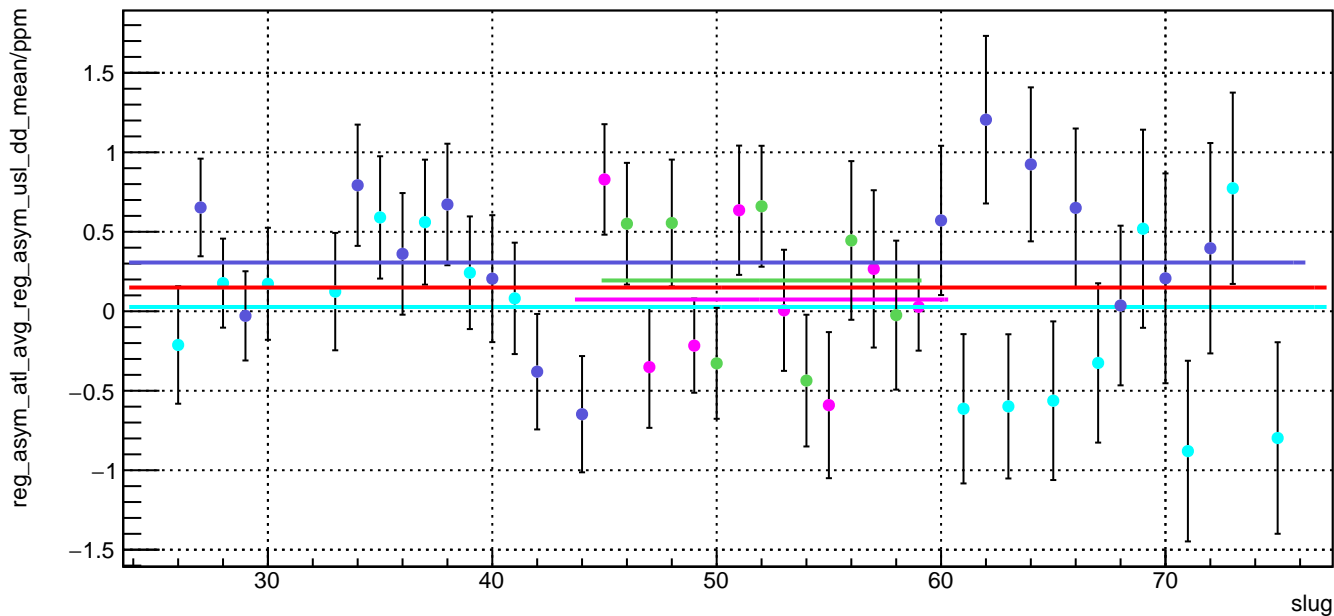
Left OUT:  $342.094 \pm 16.499$   $\chi^2/\text{NDF}$ : 65333.0/15

Right OUT:  $304.855 \pm 7.158$   $\chi^2/\text{NDF}$ : 2152.0/6

Left IN:  $330.156 \pm 13.877$   $\chi^2/\text{NDF}$ : 40442.6/14

Grand:  $324.371 \pm 7.846$   $\chi^2/\text{NDF}$ : 127423.2/45

# reg\_asym\_atl\_avg\_reg\_asym\_usl\_dd\_mean/ppm



Right IN:  $0.074 \pm 0.128$   $\chi^2/\text{NDF}$ : 11.1/7

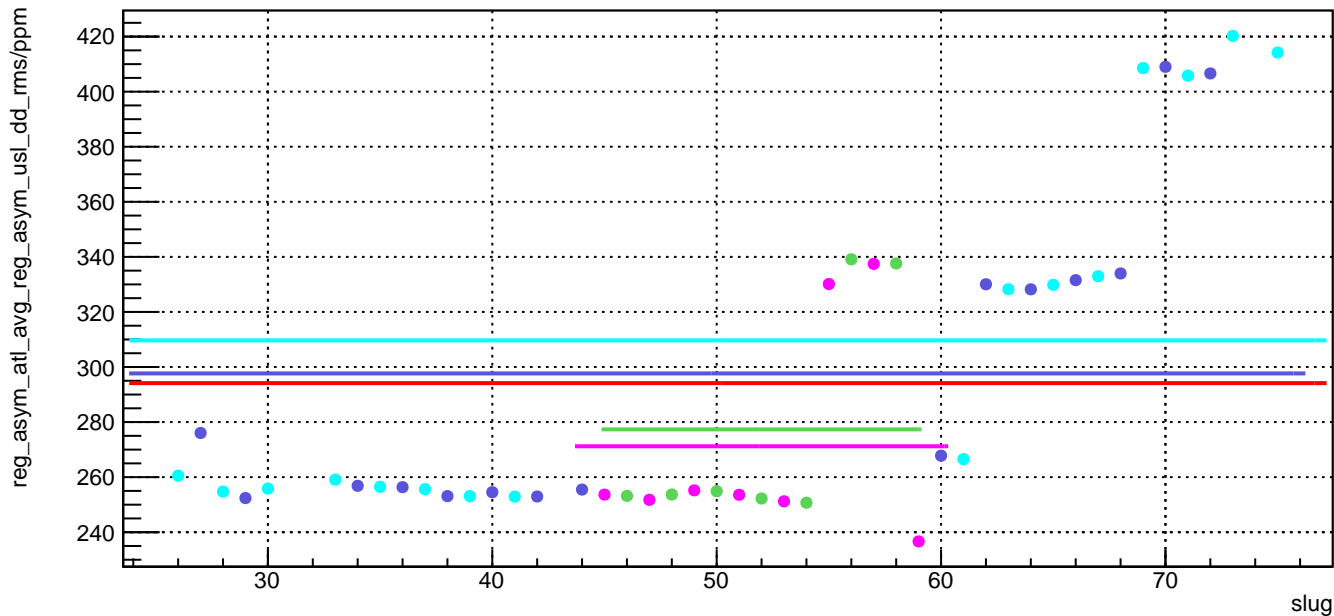
Left OUT:  $0.027 \pm 0.103$   $\chi^2/\text{NDF}$ : 17.6/15

Right OUT:  $0.194 \pm 0.153$   $\chi^2/\text{NDF}$ : 8.2/6

Left IN:  $0.307 \pm 0.105$   $\chi^2/\text{NDF}$ : 21.4/14

Grand:  $0.149 \pm 0.059$   $\chi^2$ : 62.3/45

# reg\_asym\_atl\_avg\_reg\_asym\_usl\_dd\_rms/ppm



Right IN:  $271.211 \pm 13.828$   $\chi^2/\text{NDF}$ : 10708.1/7

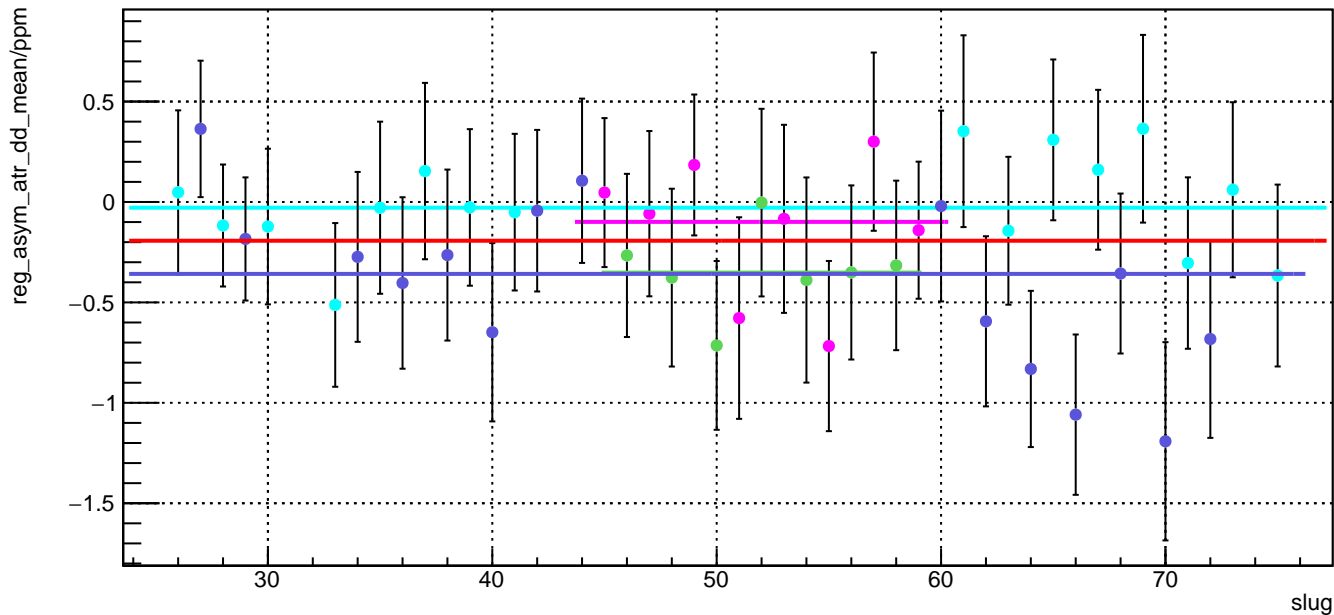
Left OUT:  $309.680 \pm 16.882$   $\chi^2/\text{NDF}$ : 68398.1/15

Right OUT:  $277.351 \pm 15.764$   $\chi^2/\text{NDF}$ : 10436.5/6

Left IN:  $297.666 \pm 14.330$   $\chi^2/\text{NDF}$ : 43121.0/14

Grand:  $294.153 \pm 8.308$   $\chi^2$ : 142893.0/45

## reg\_asym\_atr\_dd\_mean/ppm



Right IN:  $-0.099 \pm 0.143$   $\chi^2/\text{NDF}$ : 4.7/7

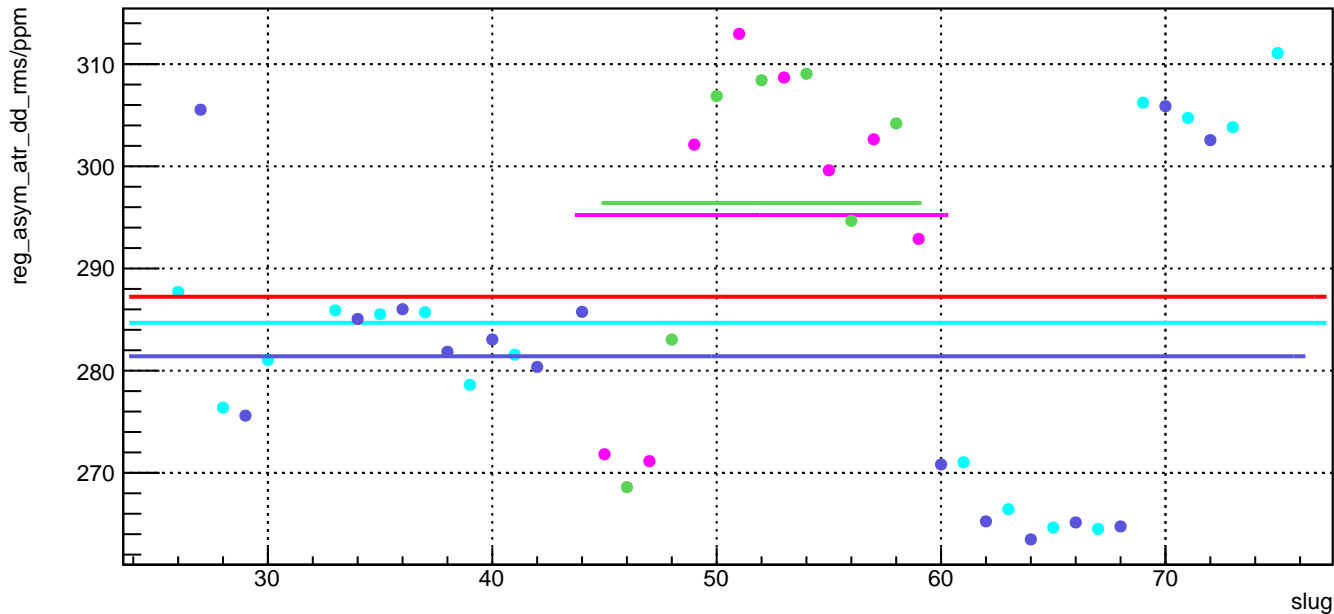
Left OUT:  $-0.028 \pm 0.101$   $\chi^2/\text{NDF}$ : 5.2/15

Right OUT:  $-0.352 \pm 0.166$   $\chi^2/\text{NDF}$ : 1.4/6

Left IN:  $-0.358 \pm 0.105$   $\chi^2/\text{NDF}$ : 15.9/14

Grand:  $-0.193 \pm 0.060$   $\chi^2$ : 33.6/45

# reg\_asym\_atr\_dd\_rms/ppm



Right IN: 295.235±5.591  $\chi^2$ /NDF: 1750.7/7

Left OUT: 284.687±3.763  $\chi^2$ /NDF: 3398.6/15

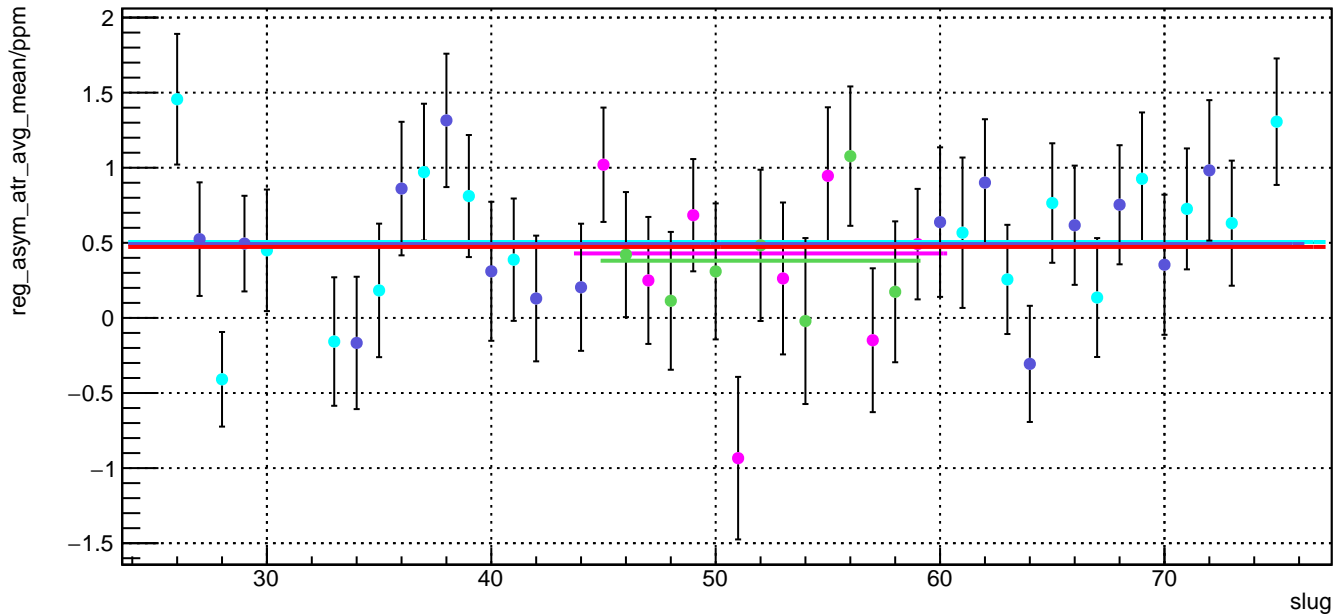
Right OUT: 296.408±5.834  $\chi^2$ /NDF: 1429.3/6

Left IN: 281.411±3.752  $\chi^2$ /NDF: 2956.1/14

Grand: 287.237±2.331  $\chi^2$ : 11248.4/45



# reg\_asym\_atr\_avg\_mean/ppm



Right IN:  $0.429 \pm 0.152$   $\chi^2/\text{NDF}$ : 12.3/7

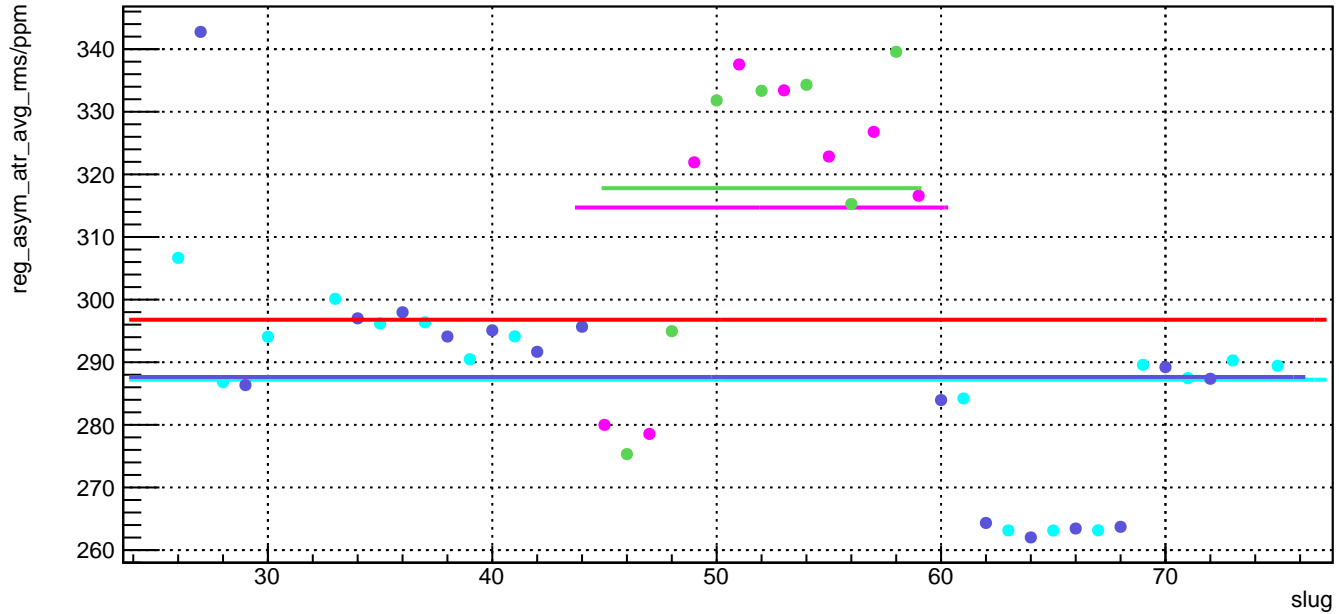
Left OUT:  $0.506 \pm 0.102$   $\chi^2/\text{NDF}$ : 24.5/15

Right OUT:  $0.381 \pm 0.177$   $\chi^2/\text{NDF}$ : 3.4/6

Left IN:  $0.492 \pm 0.108$   $\chi^2/\text{NDF}$ : 14.7/14

Grand:  $0.473 \pm 0.062$   $\chi^2$ : 55.4/45

# reg\_asym\_atr\_avg\_rms/ppm



Right IN:  $314.711 \pm 8.076$   $\chi^2$ /NDF: 3652.4/7

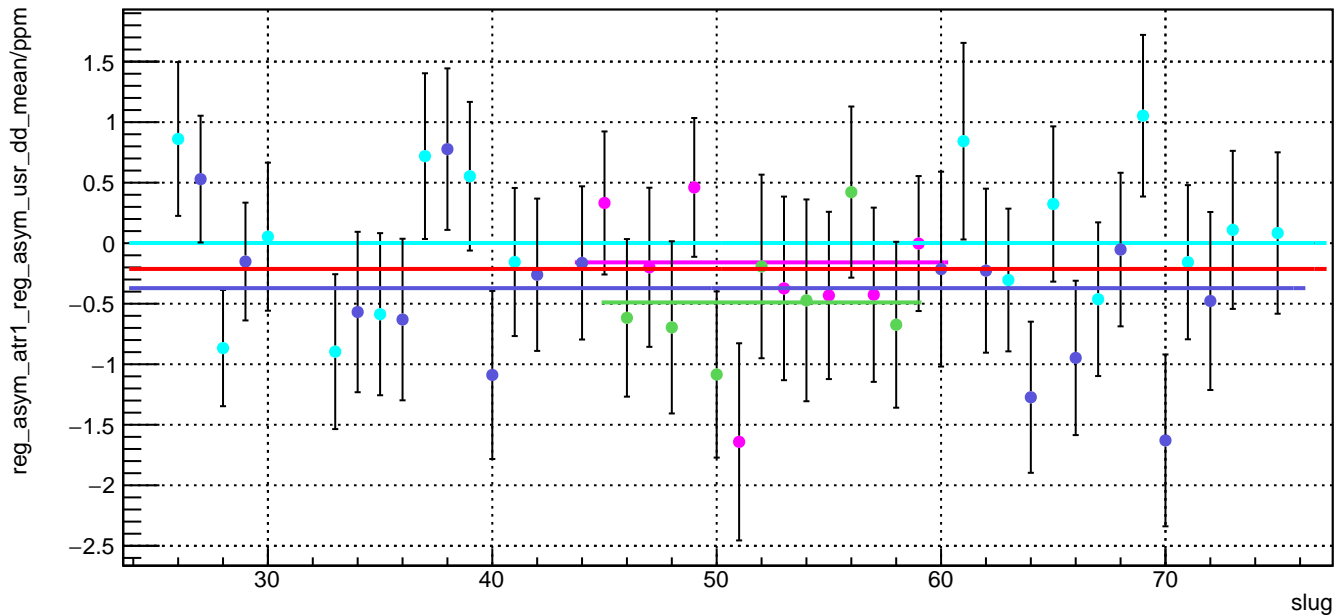
Left OUT:  $287.205 \pm 3.281$   $\chi^2$ /NDF: 2583.2/15

Right OUT:  $317.799 \pm 9.150$   $\chi^2$ /NDF: 3516.2/6

Left IN:  $287.644 \pm 5.249$   $\chi^2$ /NDF: 5785.4/14

Grand:  $296.787 \pm 3.399$   $\chi^2$ : 23920.6/45

# reg\_asym\_atr1\_reg\_asym\_usr\_dd\_mean/ppm



Right IN:  $-0.158 \pm 0.231$   $\chi^2/\text{NDF}$ : 5.6/7

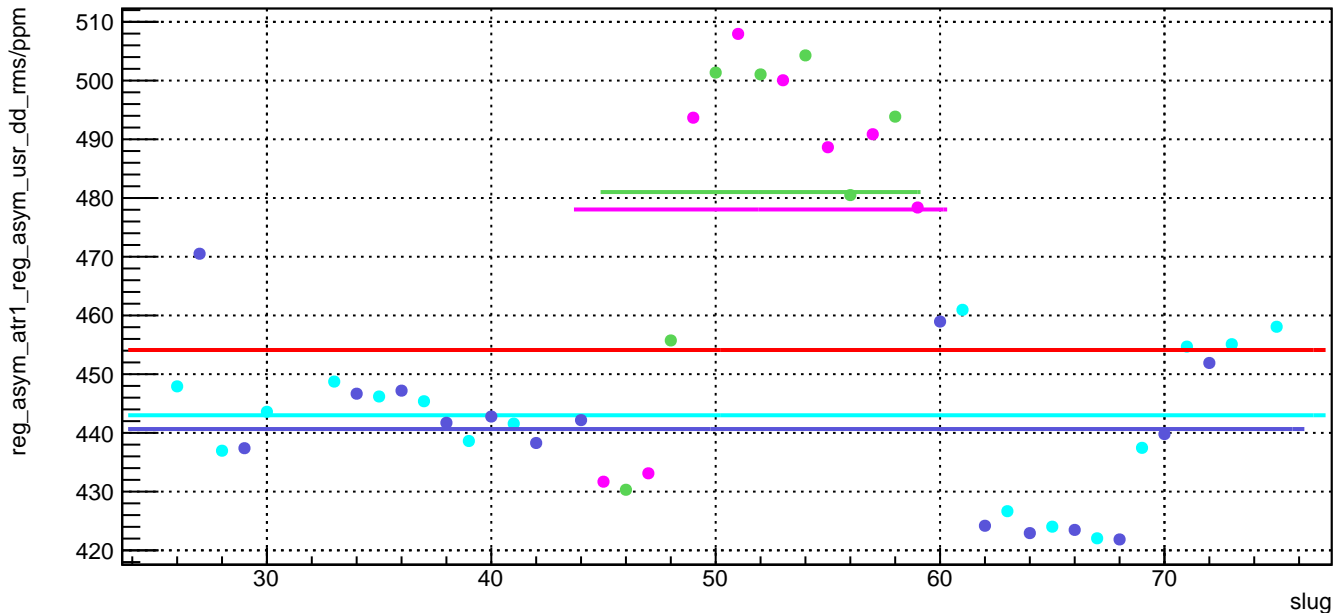
Left OUT:  $0.002 \pm 0.158$   $\chi^2/\text{NDF}$ : 14.5/15

Right OUT:  $-0.489 \pm 0.270$   $\chi^2/\text{NDF}$ : 2.8/6

Left IN:  $-0.371 \pm 0.165$   $\chi^2/\text{NDF}$ : 14.0/14

Grand:  $-0.213 \pm 0.096$   $\chi^2$ : 40.8/45

# reg\_asym\_atr1\_reg\_asym\_usr\_dd\_rms/ppm



Right IN:  $478.048 \pm 10.409$   $\chi^2/\text{NDF}$ : 6067.5/7

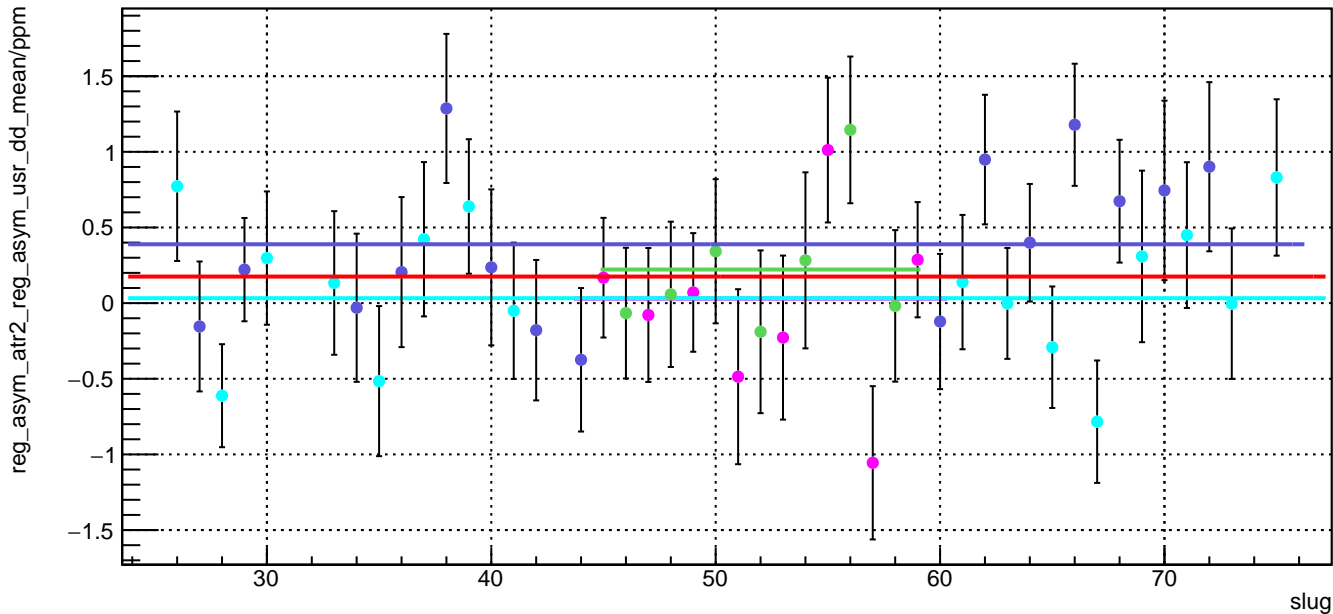
Left OUT:  $443.002 \pm 2.930$   $\chi^2/\text{NDF}$ : 2060.6/15

Right OUT:  $481.016 \pm 10.614$   $\chi^2/\text{NDF}$ : 4731.3/6

Left IN:  $440.657 \pm 3.580$   $\chi^2/\text{NDF}$ : 2690.8/14

Grand:  $454.117 \pm 3.800$   $\chi^2$ : 29890.8/45

# reg\_asym\_atr2\_reg\_asym\_usr\_dd\_mean/ppm



Right IN:  $0.030 \pm 0.159$   $\chi^2/\text{NDF}$ : 10.5/7

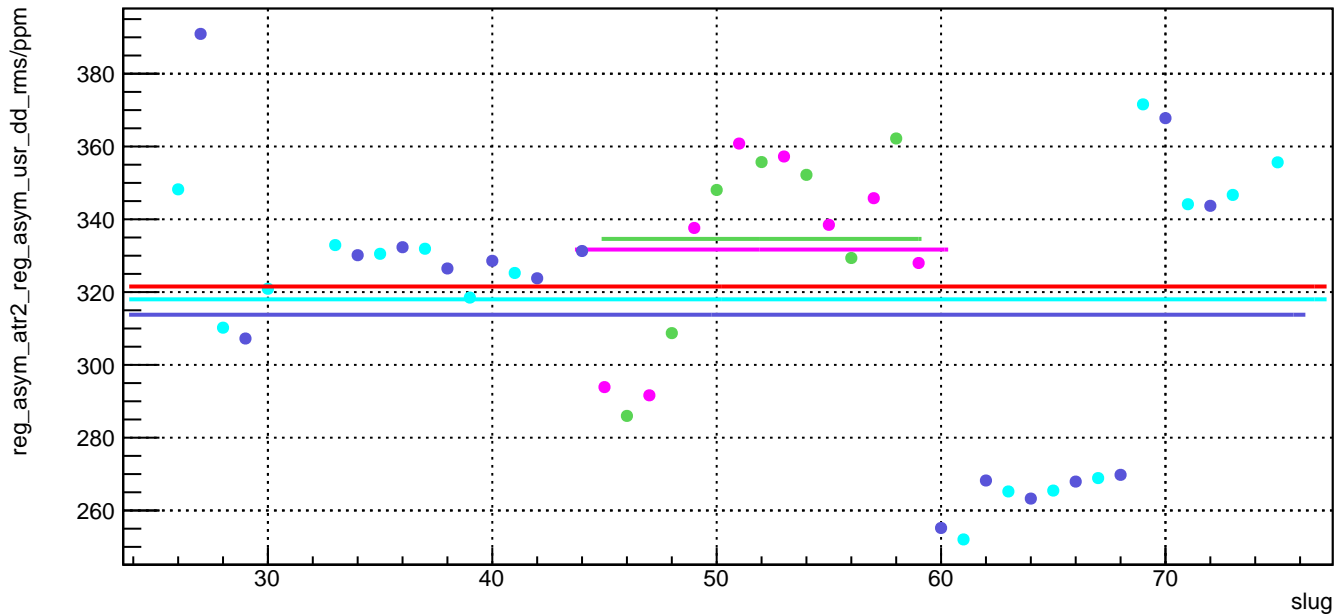
Left OUT:  $0.033 \pm 0.112$   $\chi^2/\text{NDF}$ : 18.1/15

Right OUT:  $0.222 \pm 0.187$   $\chi^2/\text{NDF}$ : 5.1/6

Left IN:  $0.389 \pm 0.116$   $\chi^2/\text{NDF}$ : 18.8/14

Grand:  $0.176 \pm 0.067$   $\chi^2$ : 58.3/45

# reg\_asym\_atr2\_reg\_asym\_usr\_dd\_rms/ppm



Right IN:  $331.689 \pm 9.285$   $\chi^2/\text{NDF}$ : 4828.1/7

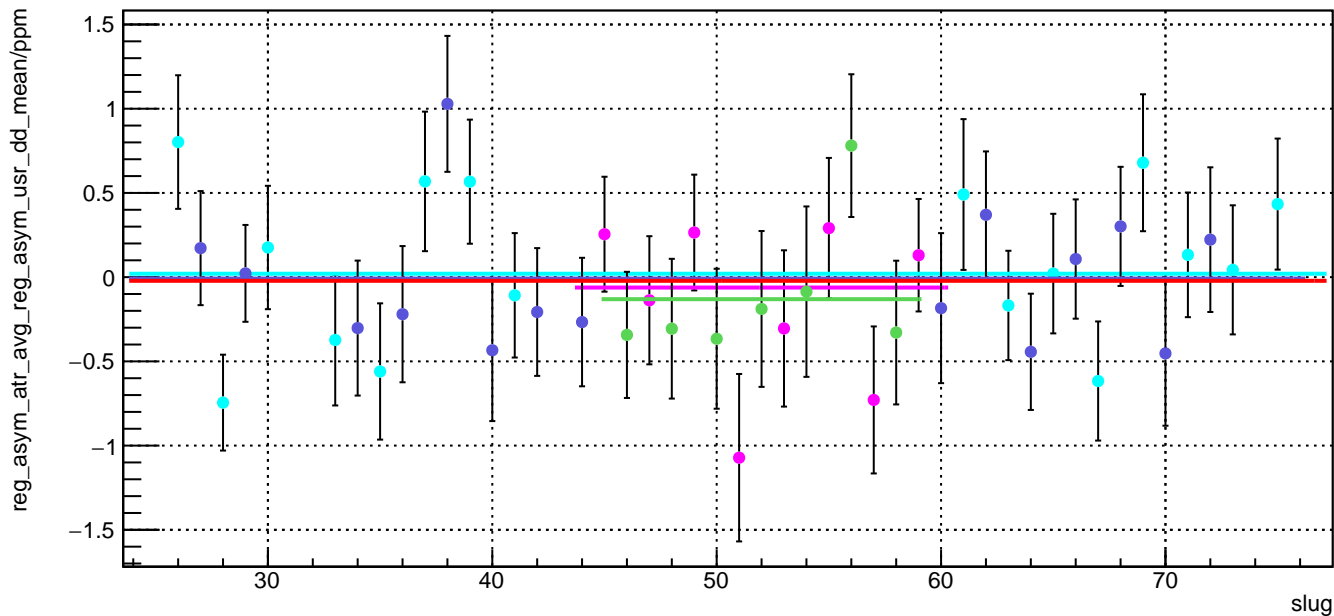
Left OUT:  $318.012 \pm 9.062$   $\chi^2/\text{NDF}$ : 19709.3/15

Right OUT:  $334.613 \pm 10.646$   $\chi^2/\text{NDF}$ : 4759.9/6

Left IN:  $313.783 \pm 10.534$   $\chi^2/\text{NDF}$ : 23303.3/14

Grand:  $321.538 \pm 5.188$   $\chi^2$ : 55722.7/45

reg\_asym\_atr\_avg\_reg\_asym\_usr\_dd\_mean/ppm



Right IN:  $-0.062 \pm 0.138$   $\chi^2/\text{NDF}$ : 9.6/7

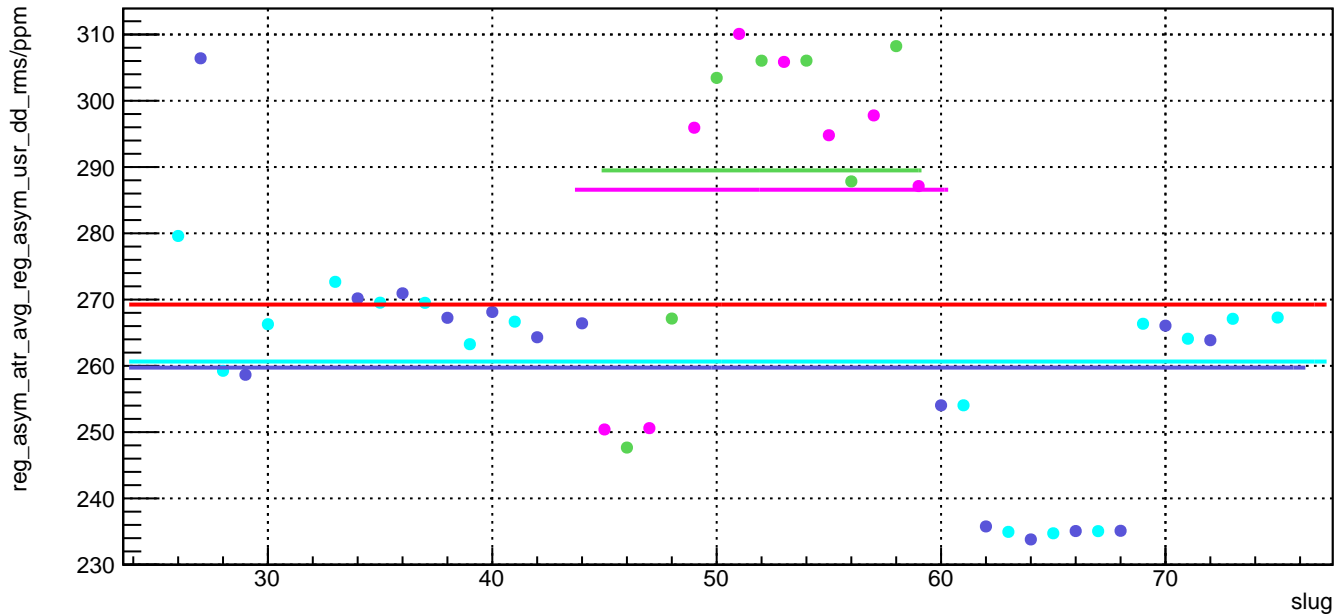
Left OUT:  $0.020 \pm 0.093$   $\chi^2/\text{NDF}$ : 27.0/15

Right OUT:  $-0.131 \pm 0.161$   $\chi^2/\text{NDF}$ : 5.7/6

Left IN:  $-0.008 \pm 0.097$   $\chi^2/\text{NDF}$ : 14.5/14

Grand:  $-0.022 \pm 0.056$   $\chi^2$ : 57.5/45

# reg\_asym\_atr\_avg\_reg\_asym\_usr\_dd\_rms/ppm



Right IN:  $286.577 \pm 8.247$   $\chi^2$ /NDF: 3808.9/7

Left OUT:  $260.652 \pm 3.475$   $\chi^2$ /NDF: 2898.6/15

Right OUT:  $289.493 \pm 8.926$   $\chi^2$ /NDF: 3346.5/6

Left IN:  $259.737 \pm 4.956$   $\chi^2$ /NDF: 5157.6/14

Grand:  $269.251 \pm 3.335$   $\chi^2$ : 23022.2/45