# Report

22 February 2023, 08:57

Data folder `C:\Users\marco\Desktop\wheellyj\data\kpis\`

Report folder `C:\Users\marco\Desktop\wheellyj\reports\Explorer\analog-imit-2023-02-22-08-57\`

# Rewards

| KPI | |
|---|---|
| Steps | 429284 |
| Mean | 0.0448 |
| Sigma | 0.292 |
| RMS | 0.295 |
| Min | -1 |
| Median | 0 |
| Max | 1 |
| Trend | Linear |
| From | 0.0709 |
| To | 0.0187 |

| -0.909 | -0.727 | -0.545 | -0.364 | -0.182 | 0 | 0.182 | 0.364 | 0.545 | 0.727 | 0.909 |
|---|---|---|---|---|---|---|---|---|---|---|
| 17100 | 0 | 0 | 0 | 0 | 335018 | 20926 | 21314 | 8238 | 26582 | 106 |

## Rewards notes

[Notes]

# Rewards chart



Rewards

# Rewards histogram
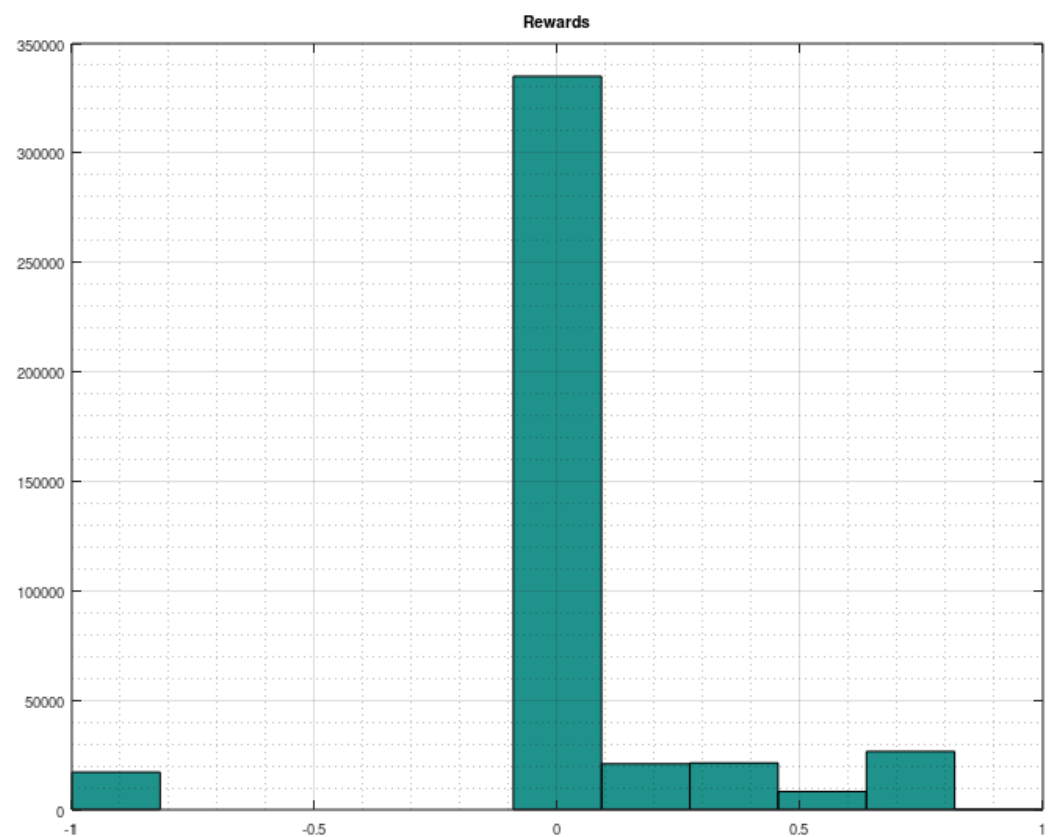


# Delta

| KPI | |
| --- | --- |
| Steps | 429284 |
| Mean | 5.54e-05 |
| Sigma | 0.276 |
| RMS | 0.276 |
| Min | -1.43 |
| Median | -0.00533 |
| Max | 1.29 |
| Trend | Linear |
| From | 0.000139 |
| To | -2.86e-05 |

| -1.31 | -1.06 | -0.813 | -0.566 | -0.318 | -0.0711 | 0.176 | 0.424 | 0.671 | 0.918 | 1.17 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 994 | 10554 | 3284 | 2166 | 11928 | 303140 | 55928 | 20428 | 19710 | 944 | 208 |

# Delta notes

[Notes]

# Delta chart
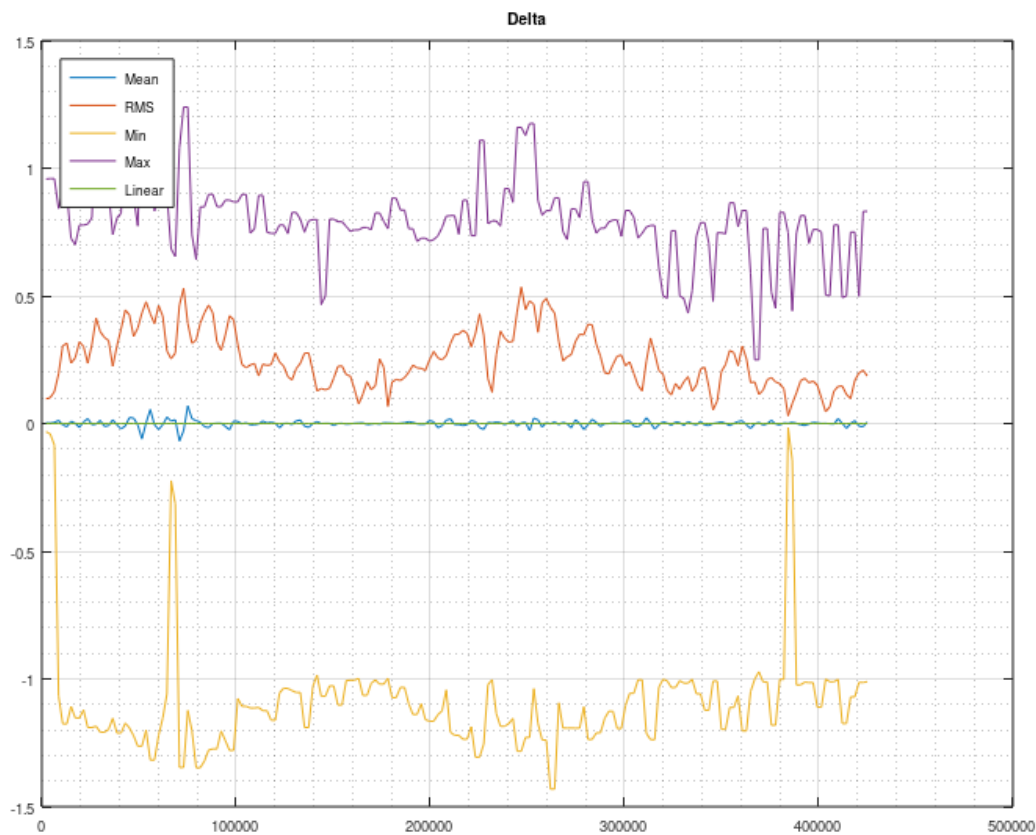
# Delta histogram
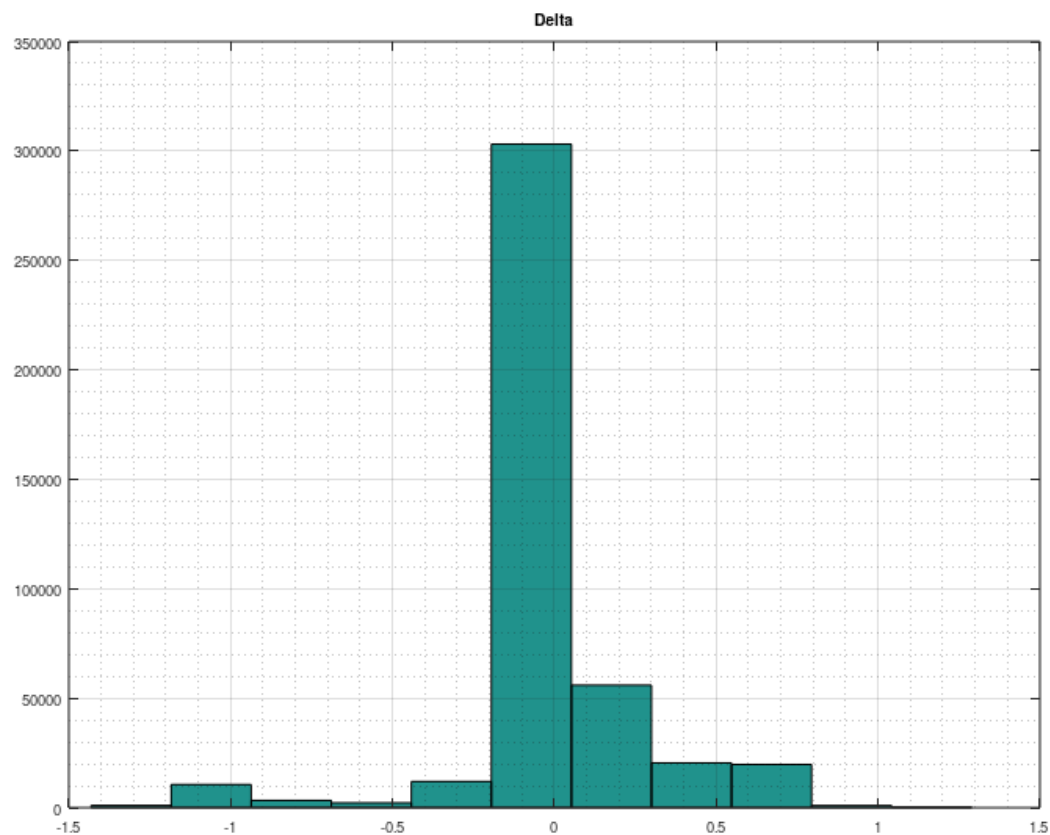


# Discount 0.999 rewards

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 0.0448 |
| Sigma | 0.0755 |
| RMS | 0.0878 |
| Min | -0.453 |
| Median | 0.0353 |
| Max | 0.309 |
| Trend | Linear |
| From | 0.0709 |
| To | 0.0186 |

| -0.418 | -0.349 | -0.28 | -0.21 | -0.141 | -0.0719 | -0.00265 | 0.0666 | 0.136 | 0.205 | 0.274 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1012 | 586 | 817 | 2398 | 4285 | 16655 | 180998 | 132547 | 69358 | 17695 | 2933 |

# Discount 0.999 rewards notes

[Notes]

# Discount 0.999 rewards chart



Discount 0.999 rewards
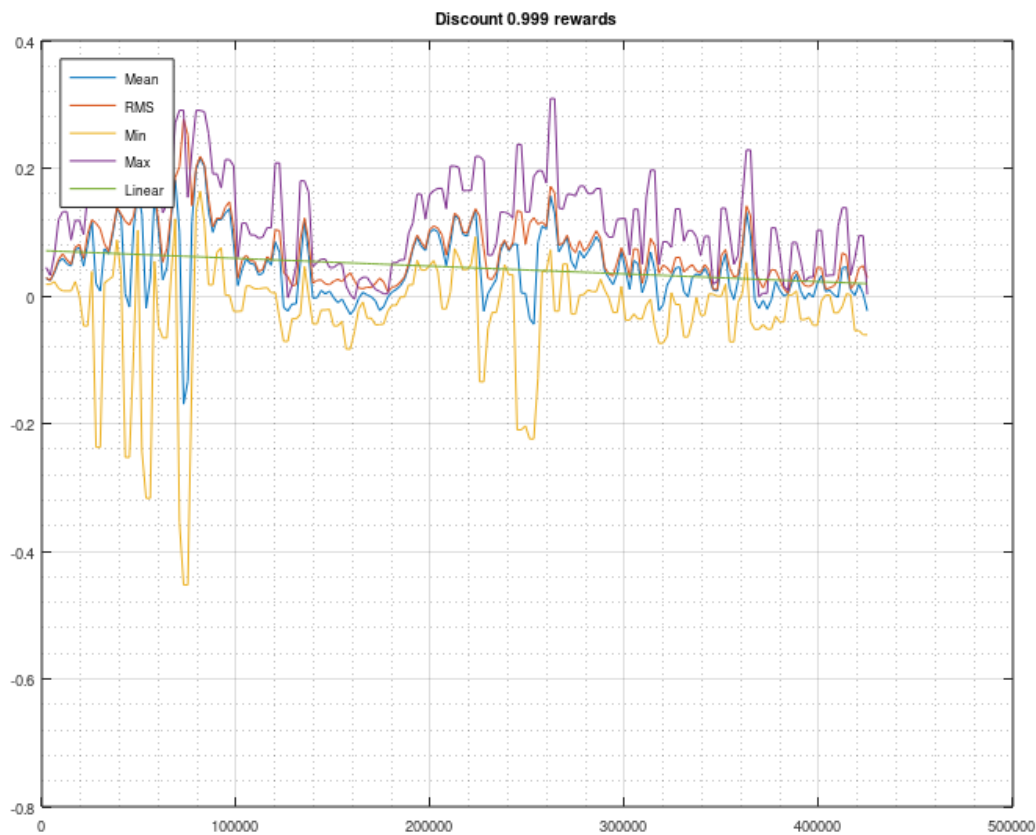
# Discount 0.999 rewards histogram



Discount 0.999 rewards
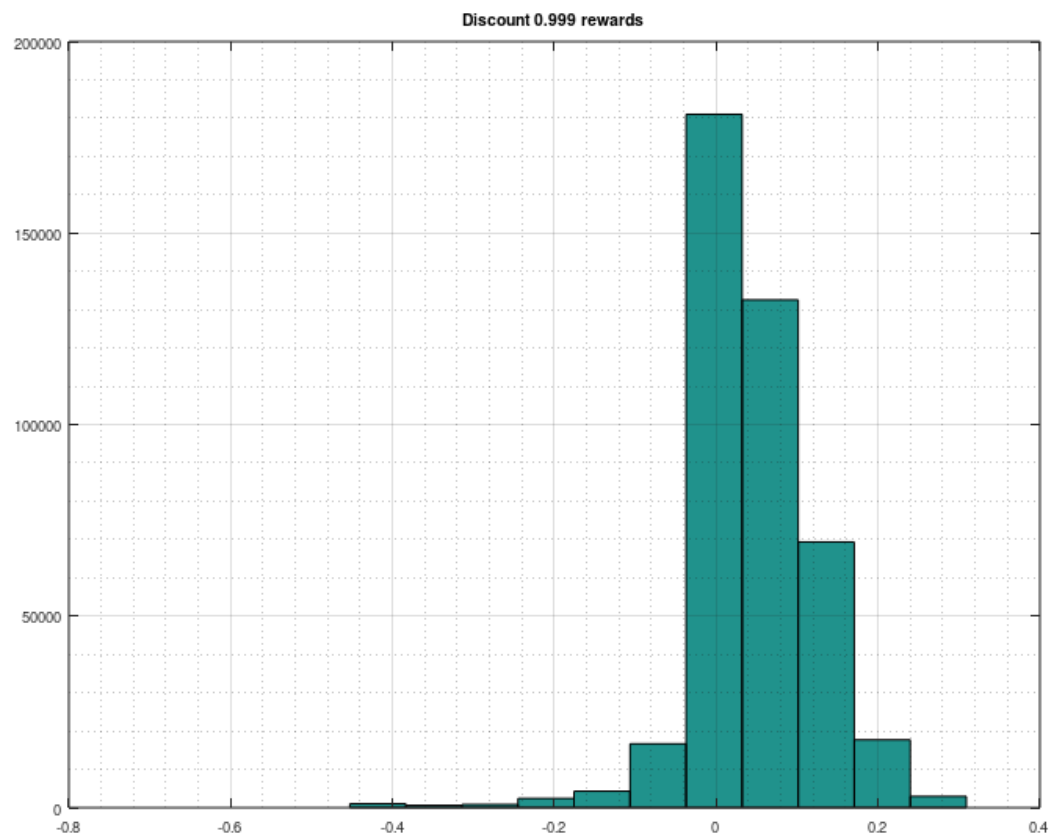
# Direction max prob.

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 0.438 |
| Sigma | 0.0844 |
| RMS | 0.446 |
| Min | 0.04 |
| Median | 0.483 |
| Max | 0.531 |
| Trend | Linear |
| From | 0.341 |
| To | 0.535 |

| 0.0623 | 0.107 | 0.152 | 0.196 | 0.241 | 0.285 | 0.33 | 0.375 | 0.419 | 0.464 | 0.509 |
|---|---|---|---|---|---|---|---|---|---|---|
| 4038 | 3152 | 28 | 1224 | 5204 | 20178 | 42630 | 34134 | 39794 | 80454 | 198448 |

# Direction max prob. notes

[Notes]

# Direction max prob. chart
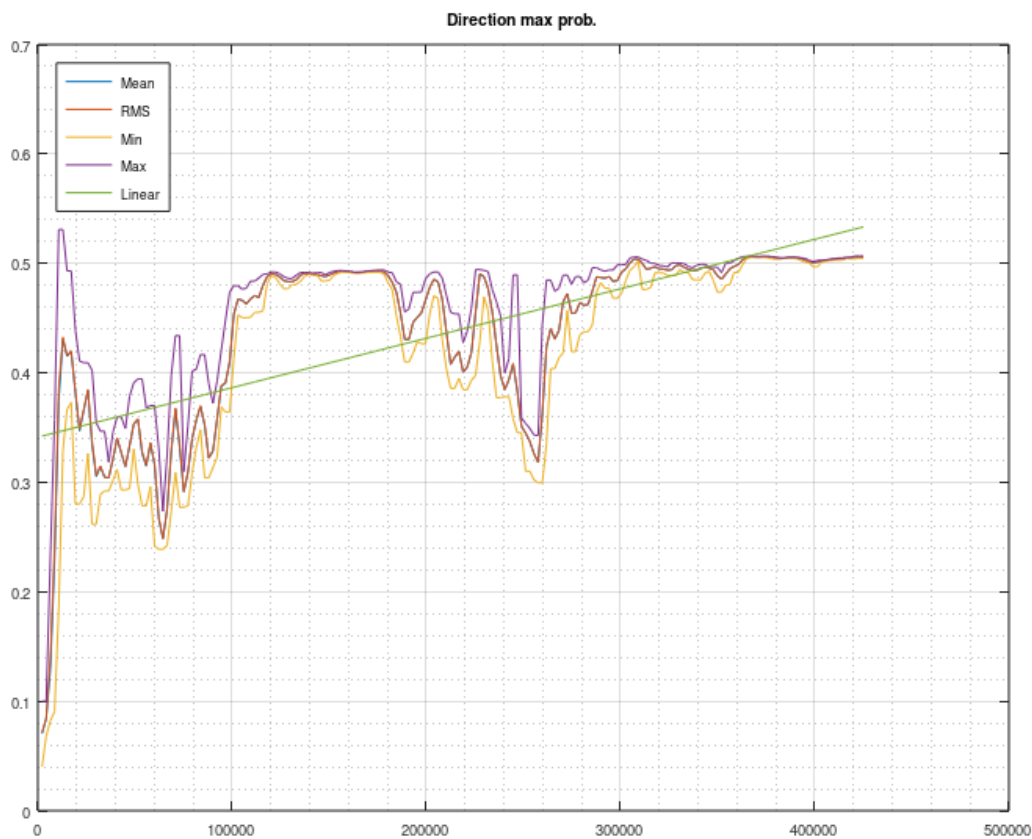
# Direction max prob. histogram
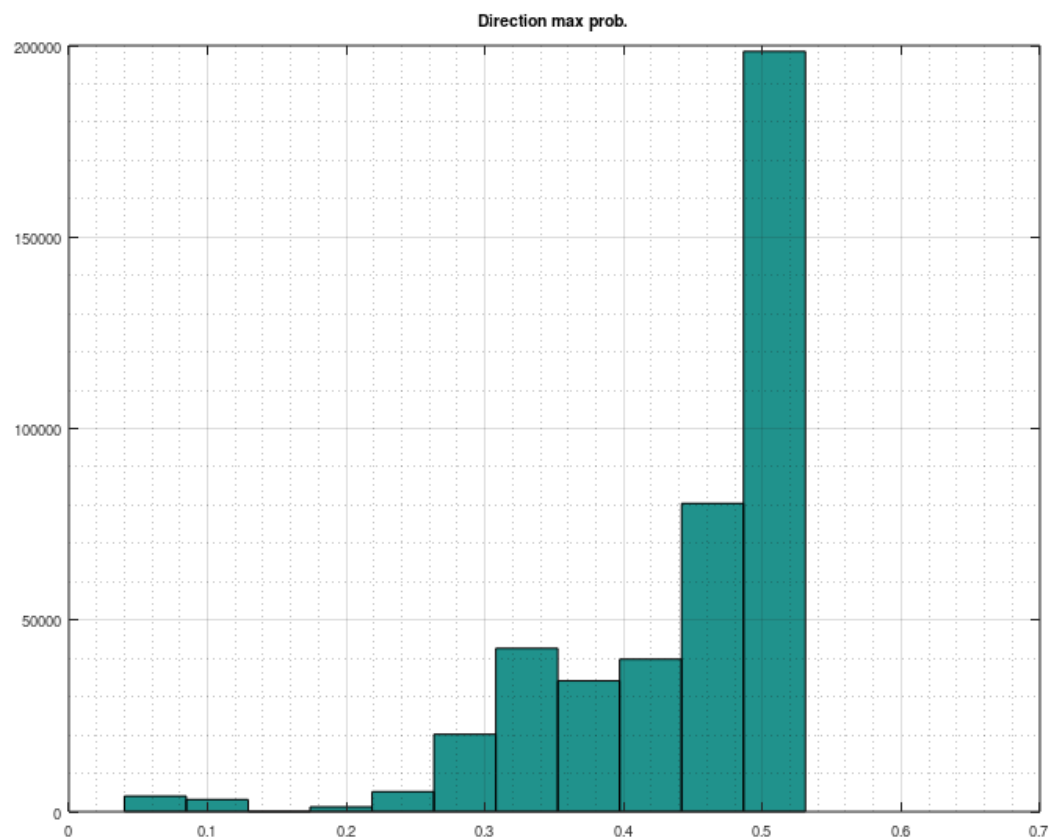


# Speed max prob.

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 0.592 |
| Sigma | 0.158 |
| RMS | 0.613 |
| Min | 0.1 |
| Median | 0.525 |
| Max | 0.969 |
| Trend | Linear |
| From | 0.66 |
| To | 0.525 |

| 0.139 | 0.218 | 0.297 | 0.376 | 0.455 | 0.534 | 0.613 | 0.692 | 0.771 | 0.85 | 0.929 |
|---|---|---|---|---|---|---|---|---|---|---|
| 2472 | 3394 | 1350 | 3128 | 22346 | 253542 | 50594 | 19570 | 10358 | 11710 | 50820 |

# Speed max prob. notes

[Notes]

# Speed max prob. chart
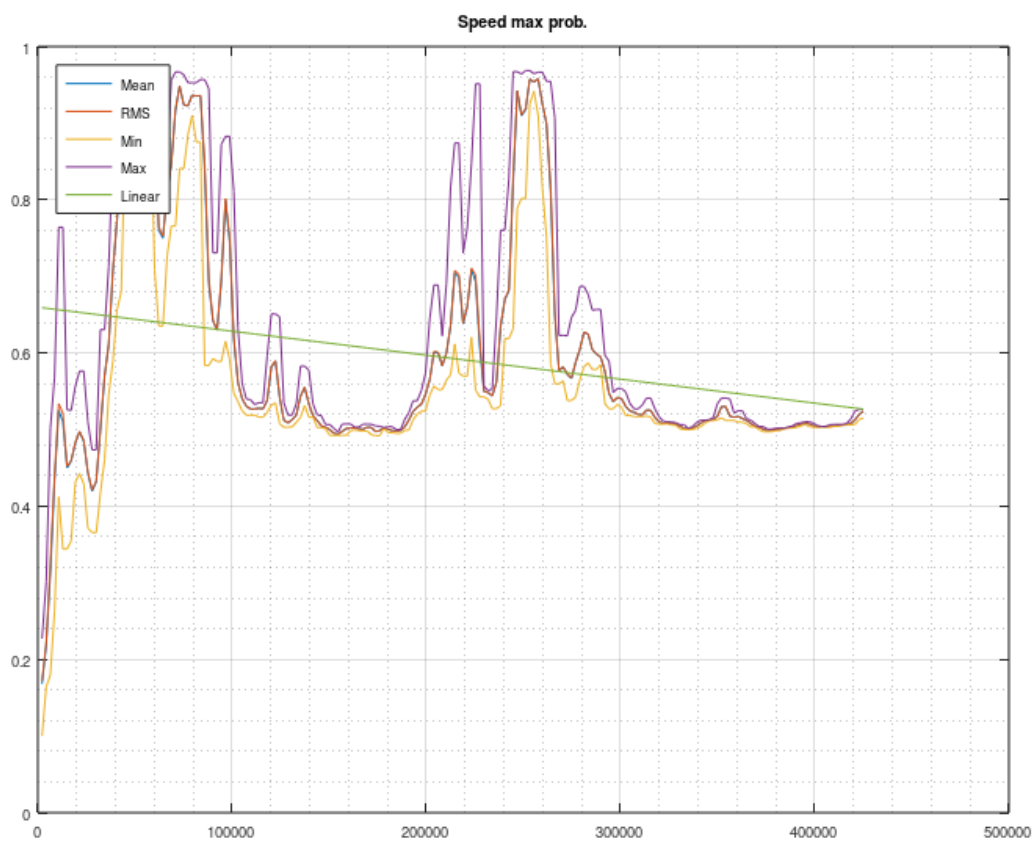
# Speed max prob. histogram
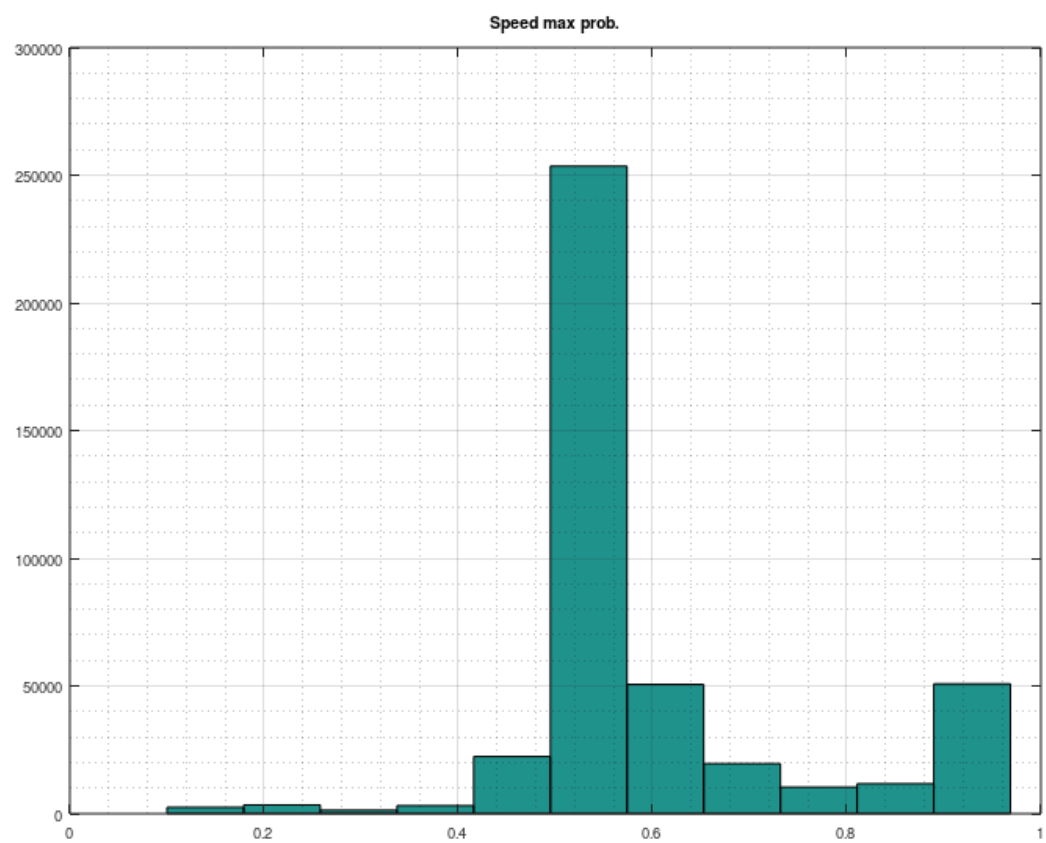


# Sensor direction max prob.

| KPI | |
|---|---|
| Steps | 429284 |
| Mean | 0.881 |
| Sigma | 0.213 |
| RMS | 0.906 |
| Min | 0.143 |
| Median | 0.982 |
| Max | 0.985 |
| Trend | Linear |
| From | 0.63 |
| To | 1.13 |

| 0.181 | 0.258 | 0.334 | 0.411 | 0.487 | 0.564 | 0.641 | 0.717 | 0.794 | 0.87 | 0.947 |
|---|---|---|---|---|---|---|---|---|---|---|
| 2310 | 2562 | 23382 | 14768 | 10442 | 14766 | 8900 | 5080 | 2476 | 1602 | 342996 |

# Sensor direction max prob. notes

[Notes]

# Sensor direction max prob. chart

# Sensor direction max prob. histogram



Sensor direction max prob.
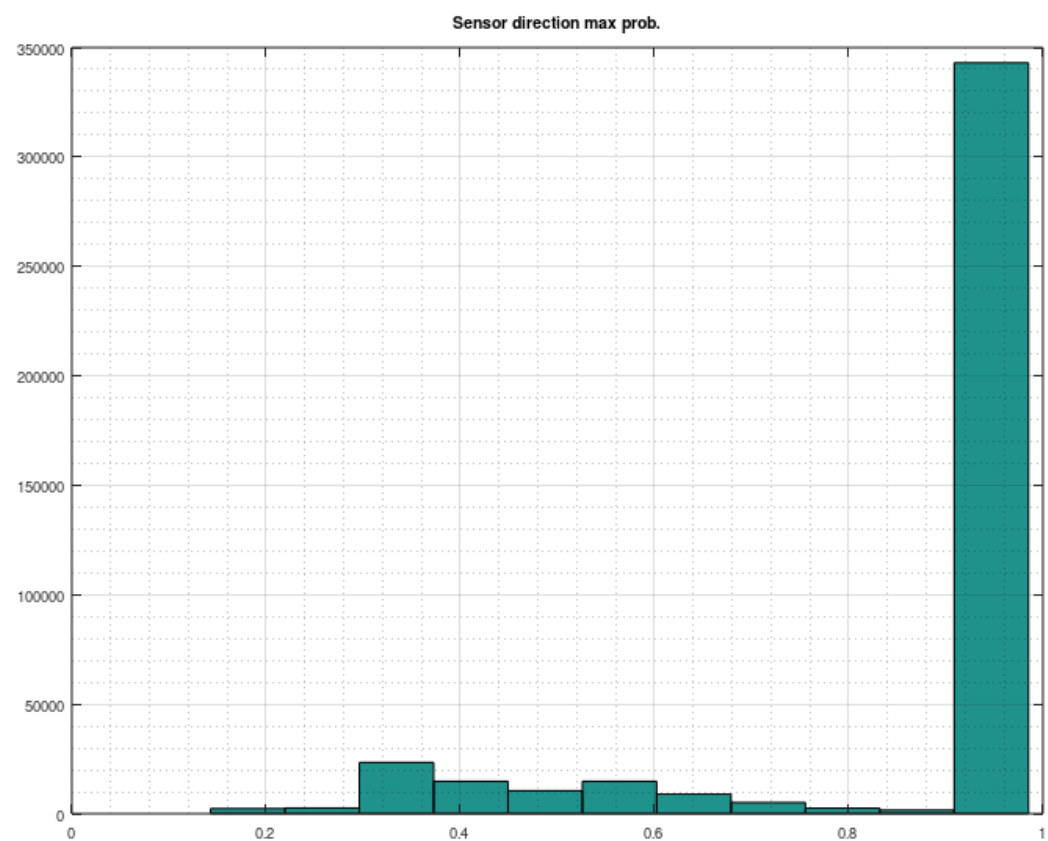
# Delta direction prob.

| KPI | |
|---|---|
| Steps | 429284 |
| Mean | 4.11e-06 |
| Sigma | 0.000768 |
| RMS | 0.000768 |
| Min | -0.0205 |
| Median | 2.3e-09 |
| Max | 0.0288 |
| Trend | Linear |
| From | 1.81e-05 |
| To | -9.89e-06 |

| -0.0182 | -0.0137 | -0.00927 | -0.00479 | -0.000311 | 0.00417 | 0.00864 | 0.0131 | 0.0176 | 0.0221 | 0.0266 |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 38 | 244 | 2728 | 418504 | 7414 | 292 | 54 | 0 | 2 | 2 |

# Delta direction prob. notes

[Notes]

# Delta direction prob. chart
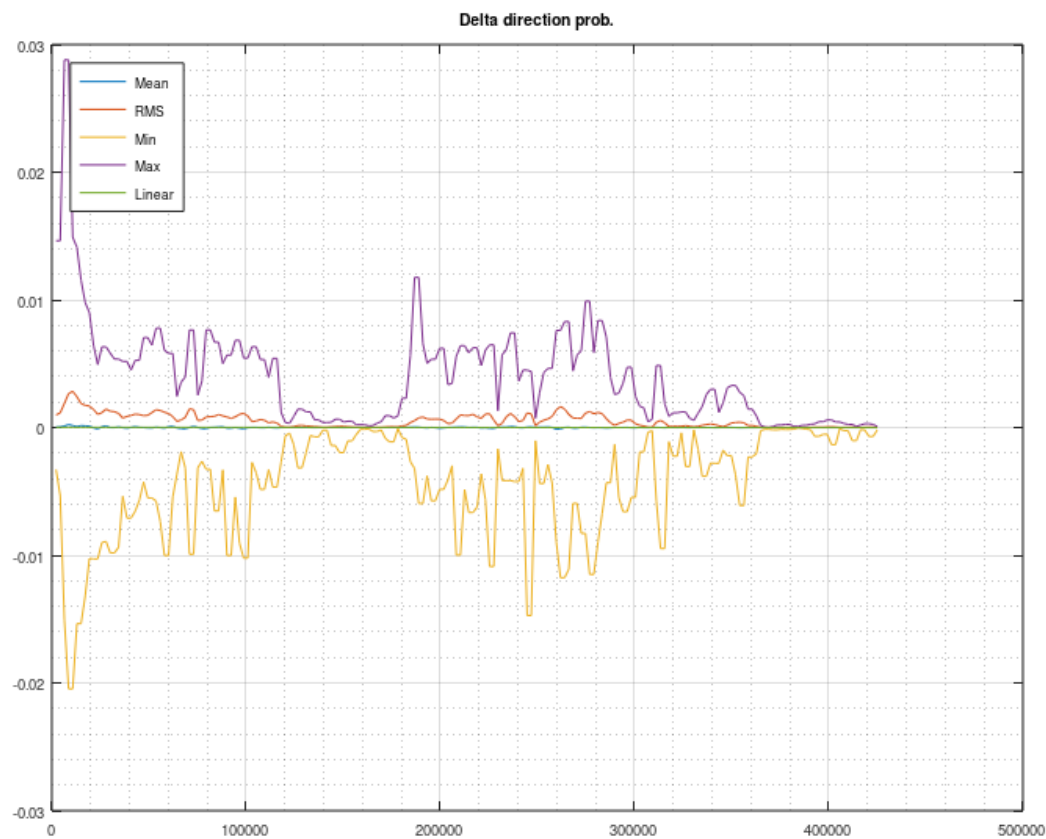
# Delta direction prob. histogram



Delta direction prob.
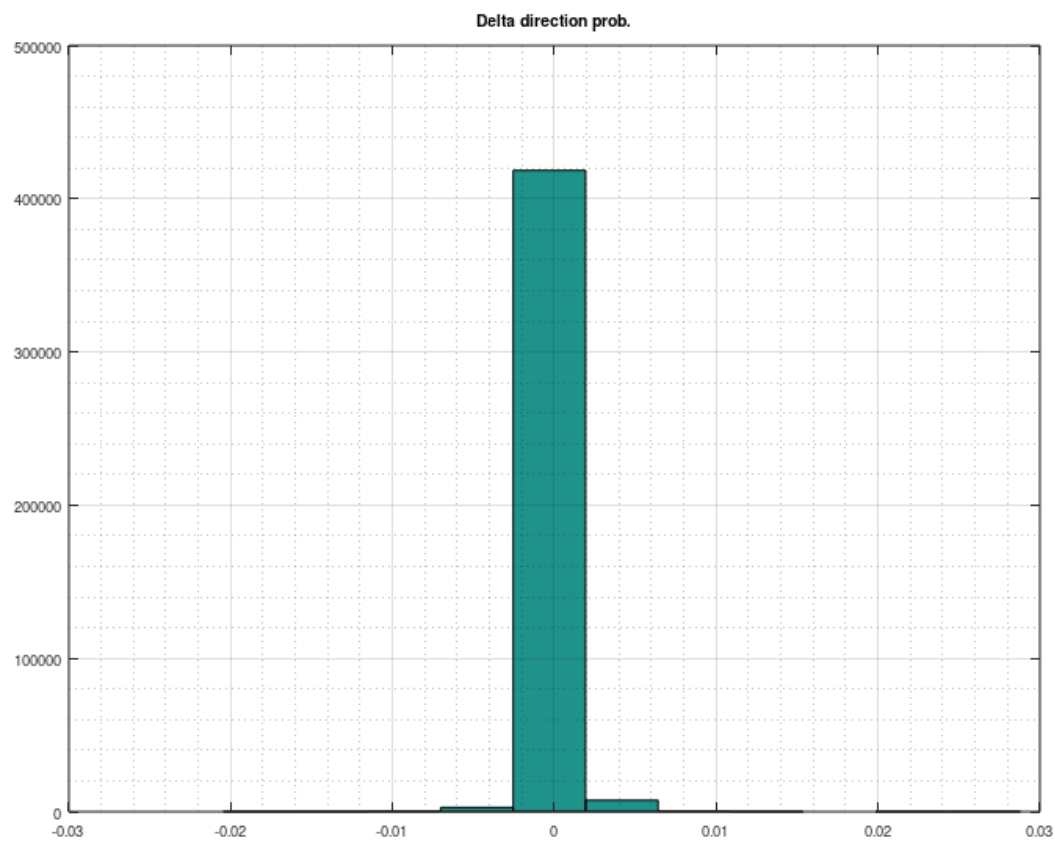
# Delta speed prob.

| KPI | |
|---|---|
| Steps | 429284 |
| Mean | 8.95e-07 |
| Sigma | 0.00104 |
| RMS | 0.00104 |
| Min | -0.0348 |
| Median | -5e-08 |
| Max | 0.029 |
| Trend | Linear |
| From | 9.37e-07 |
| To | 8.53e-07 |

| -0.0319 | -0.0261 | -0.0203 | -0.0145 | -0.00868 | -0.00288 | 0.00291 | 0.00871 | 0.0145 | 0.0203 | 0.0261 |
|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 10 | 48 | 142 | 798 | 320154 | 106408 | 1524 | 158 | 26 | 8 |

# Delta speed prob. notes

[Notes]

# Delta speed prob. chart
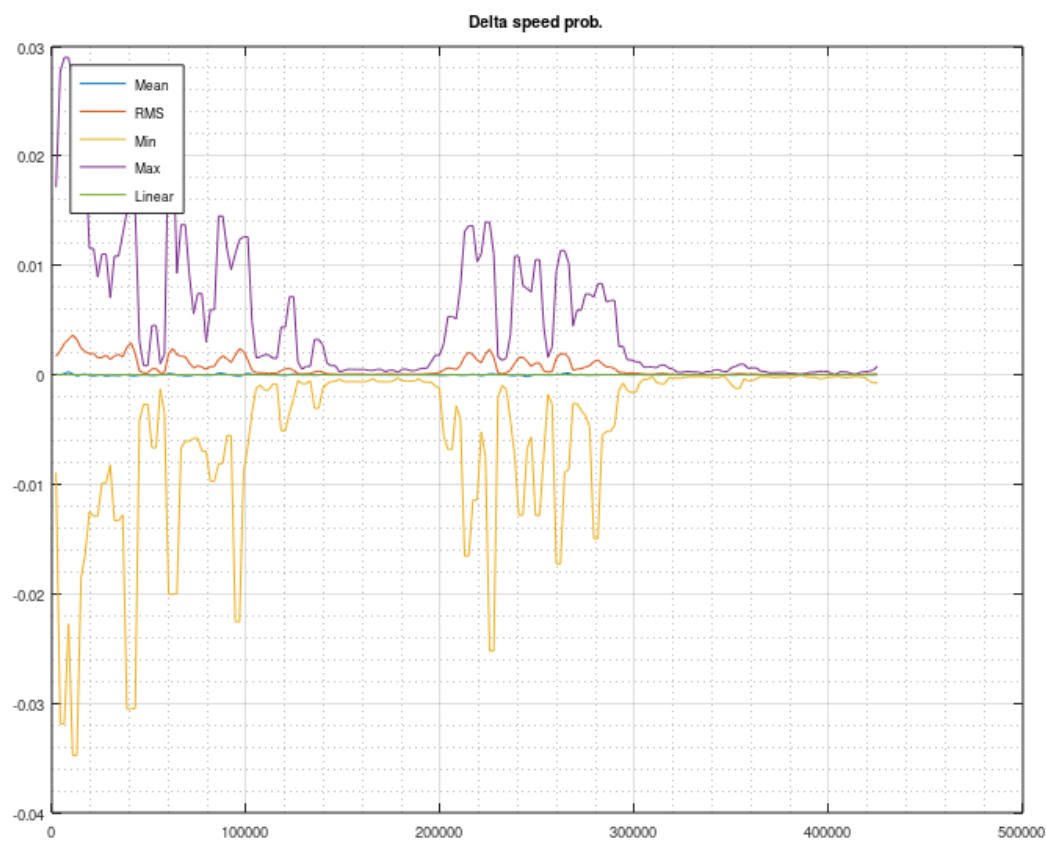
# Delta speed prob. histogram
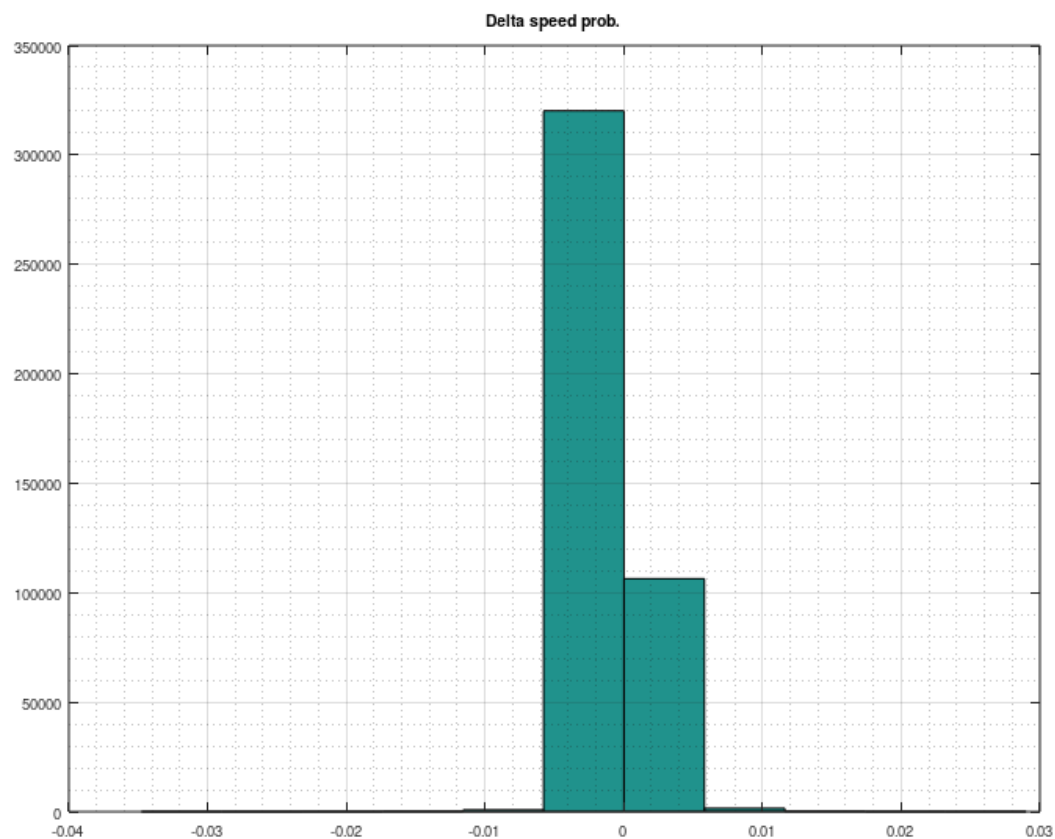


# Delta sensor direction prob.

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 2.12e-06 |
| Sigma | 0.000822 |
| RMS | 0.000822 |
| Min | -0.0351 |
| Median | -2.5e-09 |
| Max | 0.0384 |
| Trend | Linear |
| From | 1.02e-05 |
| To | -5.92e-06 |

| -0.0318 | -0.0251 | -0.0184 | -0.0117 | -0.00505 | 0.00164 | 0.00832 | 0.015 | 0.0217 | 0.0284 | 0.035 |
|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 20 | 54 | 232 | 4806 | 423092 | 904 | 116 | 34 | 10 | 8 |

# Delta sensor direction prob. notes

[Notes]

# Delta sensor direction prob. chart
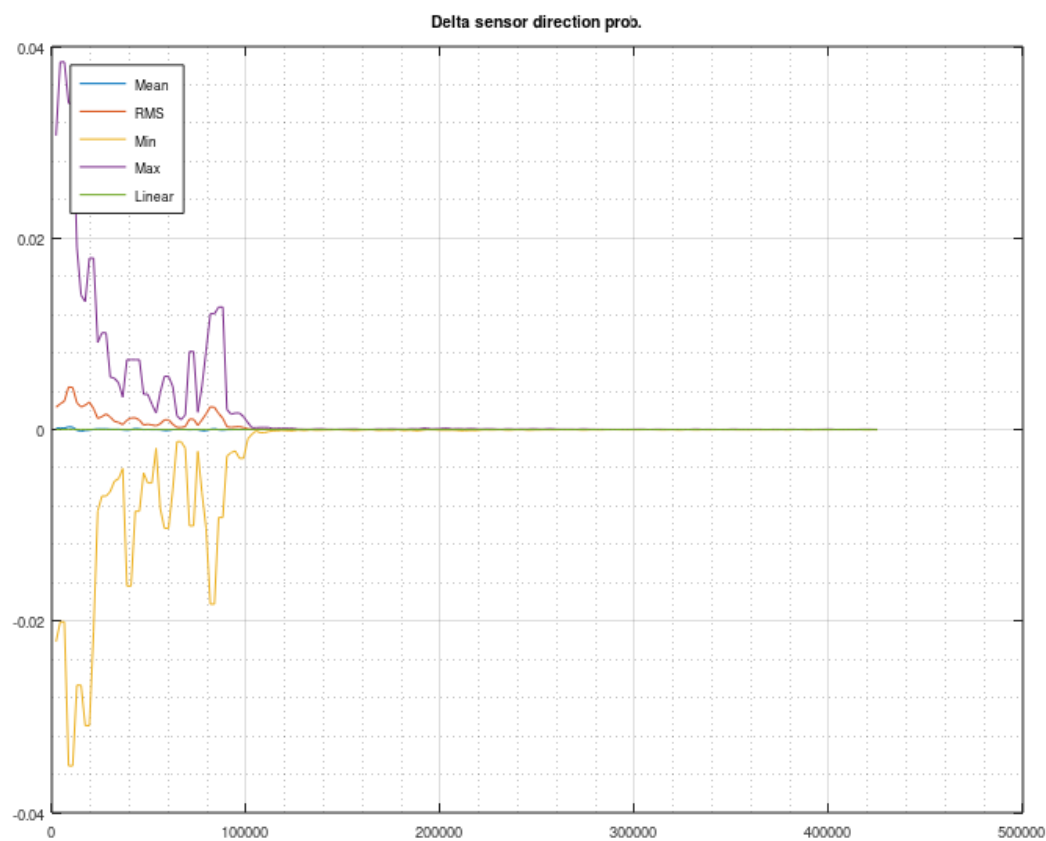
# Delta sensor direction prob. histogram
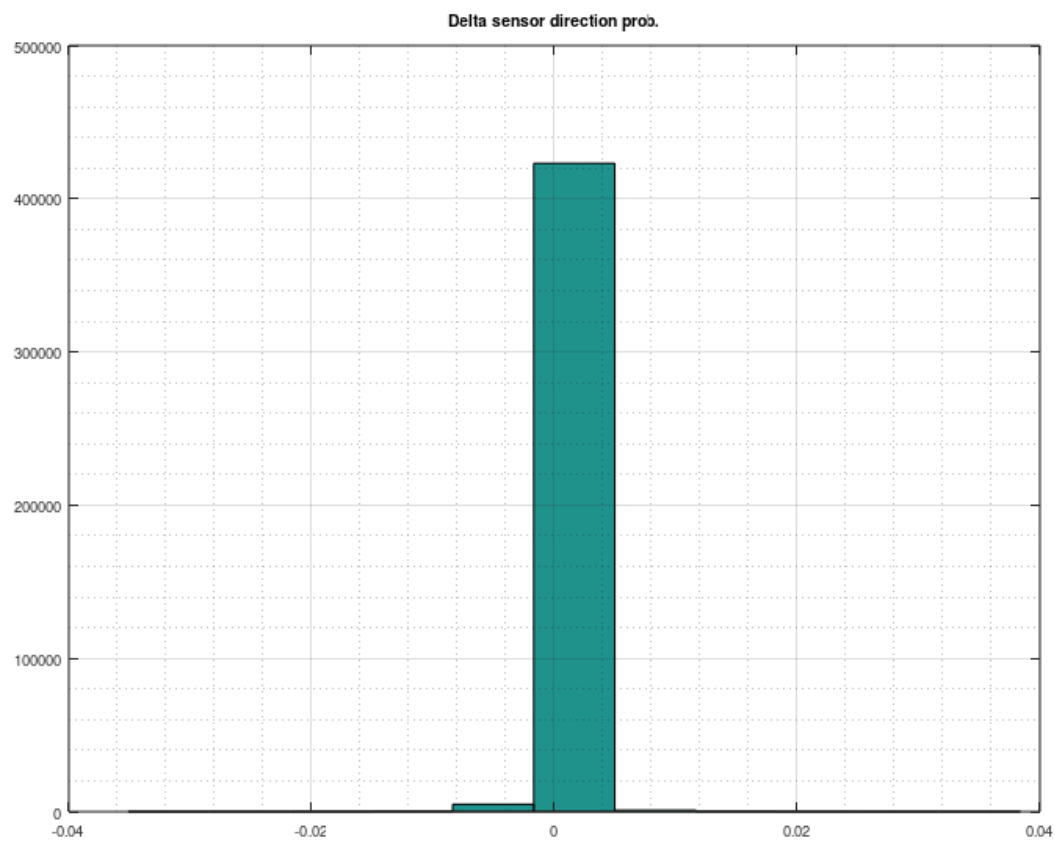


Delta sensor direction prob.

# Advantage residual estimation (critic)

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 2.76 |
| Sigma | 0.461 |
| RMS | 2.8 |
| Min | -2.25 |
| Median | 2.88 |
| Max | 2.92 |
| Trend | Linear |
| From | 2.38 |
| To | 3.13 |

| -2.01 | -1.54 | -1.07 | -0.602 | -0.132 | 0.338 | 0.808 | 1.28 | 1.75 | 2.22 | 2.69 |
|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|
| 262 | 144 | 188 | 222 | 382 | 6786 | 2906 | 4746 | 4882 | 9952 | 398814 |

# Advantage residual estimation (critic) notes

[Notes]

# Advantage residual estimation (critic) chart
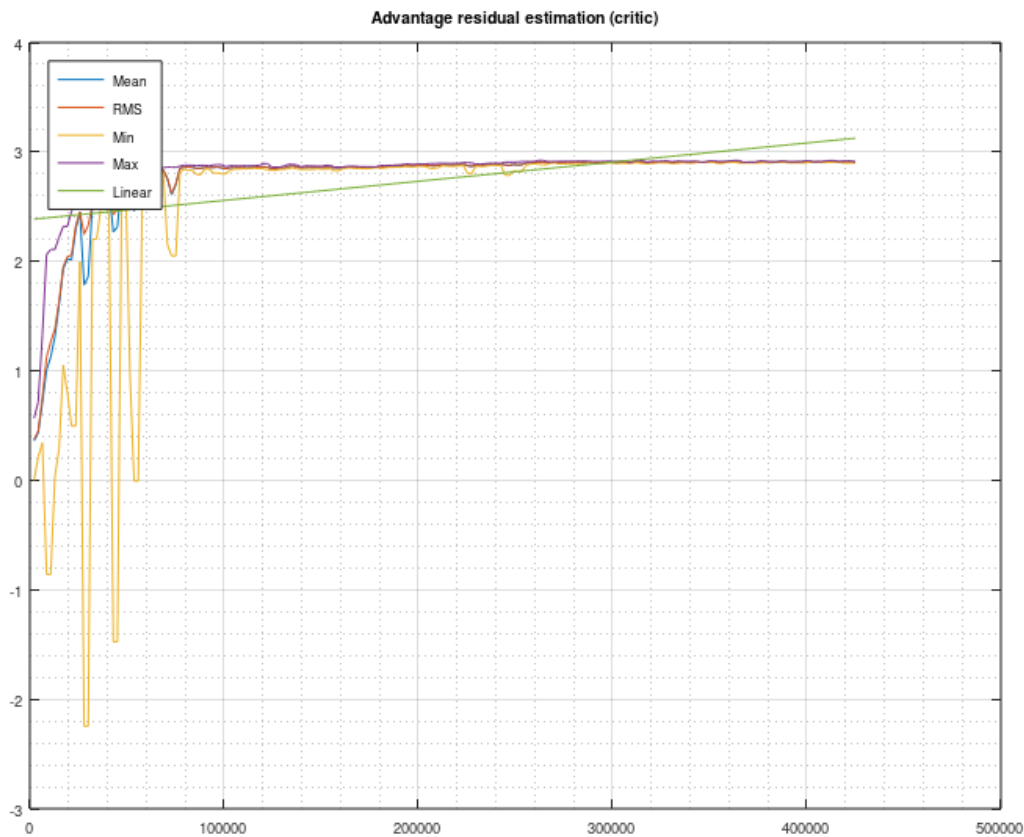
# Advantage residual estimation (critic) histogram



# Delta Advantage residual estimation (critic)
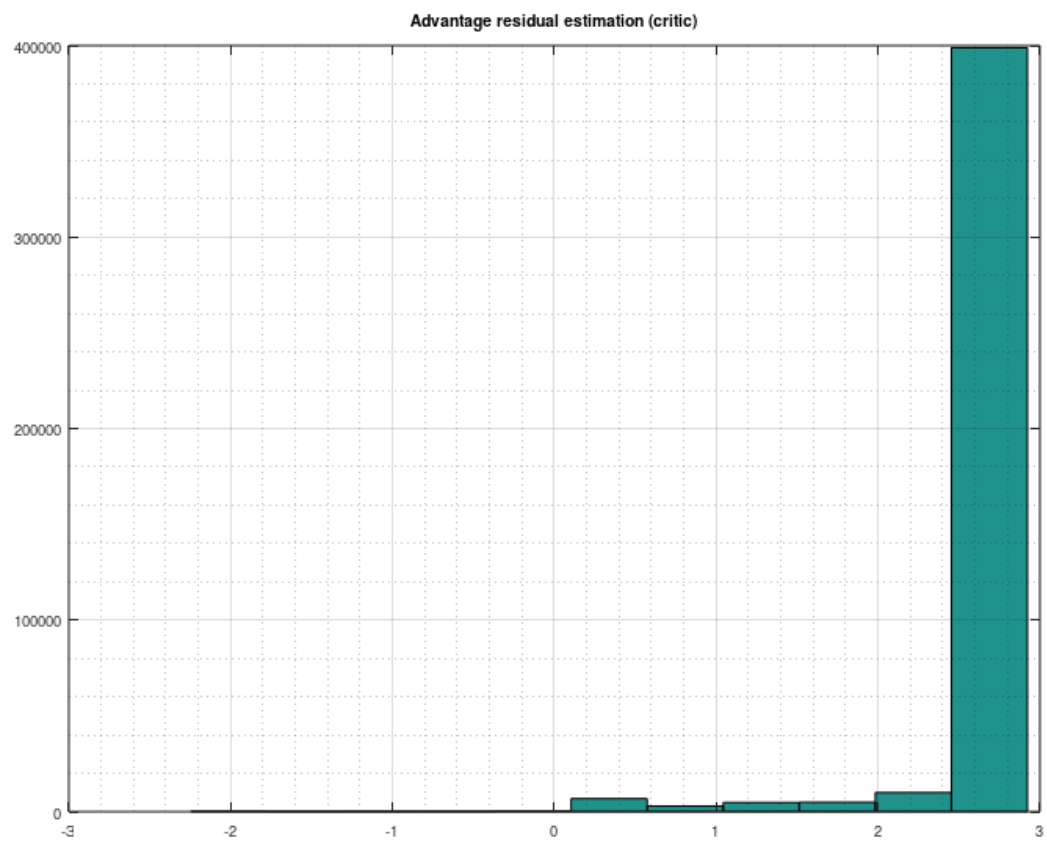
| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 1.38e-05 |
| Sigma | 0.00397 |
| RMS | 0.00397 |
| Min | -0.0851 |
| Median | -2.7e-06 |
| Max | 0.112 |
| Trend | Linear |
| From | 5.08e-05 |
| To | -2.32e-05 |

| -0.0761 | -0.0581 | -0.0402 | -0.0222 | -0.00425 | 0.0137 | 0.0317 | 0.0496 | 0.0676 | 0.0855 | 0.104 |
|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|
| 152 | 380 | 612 | 754 | 420280 | 5680 | 1086 | 216 | 74 | 38 | 12 |

# Delta Advantage residual estimation (critic) notes

[Notes]

# Delta Advantage residual estimation (critic) chart

# Delta Advantage residual estimation (critic) histogram
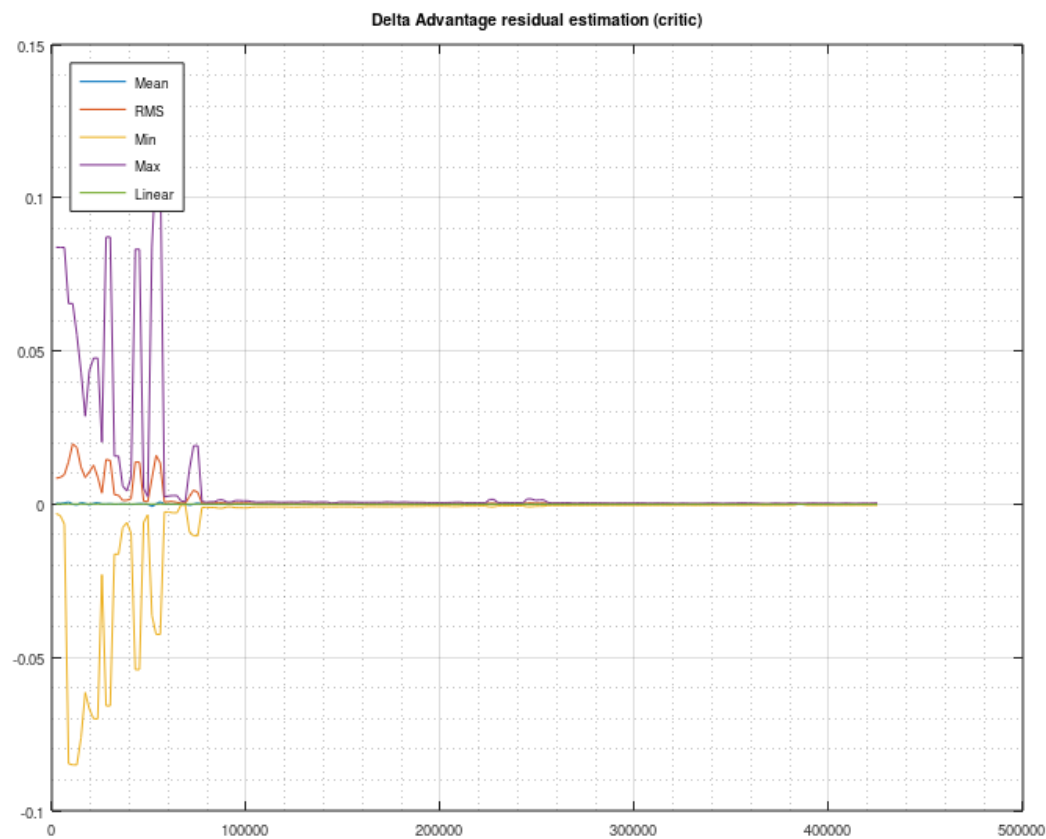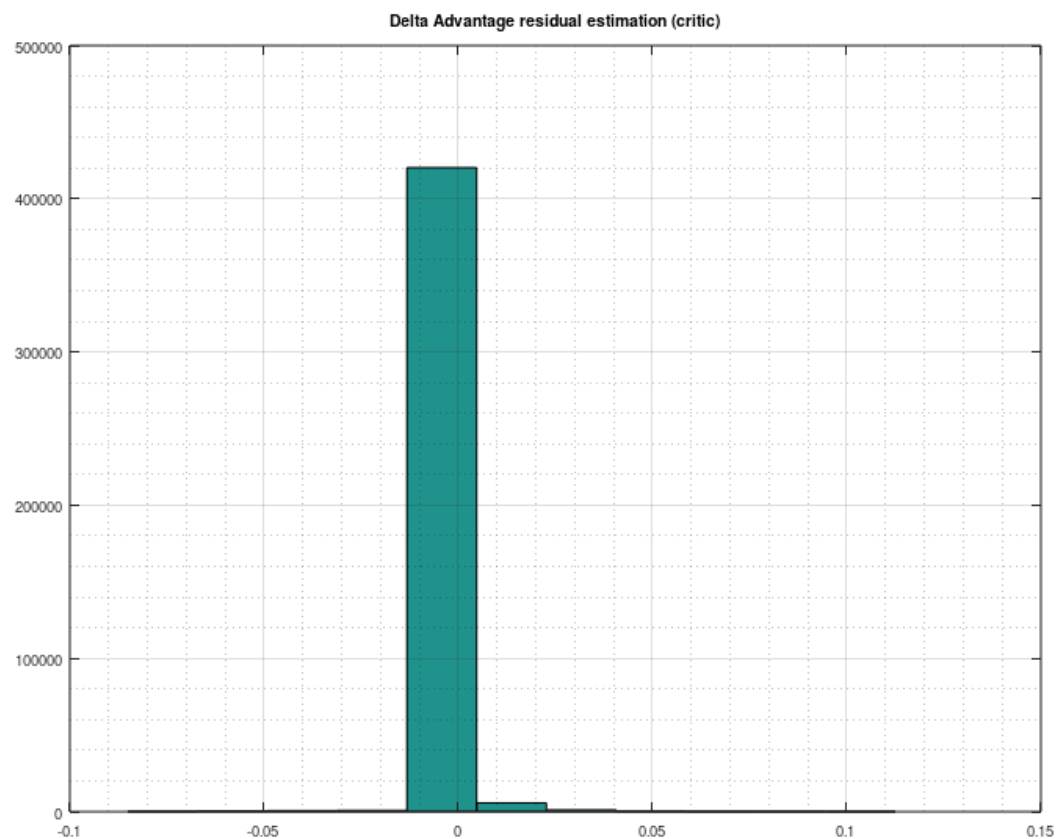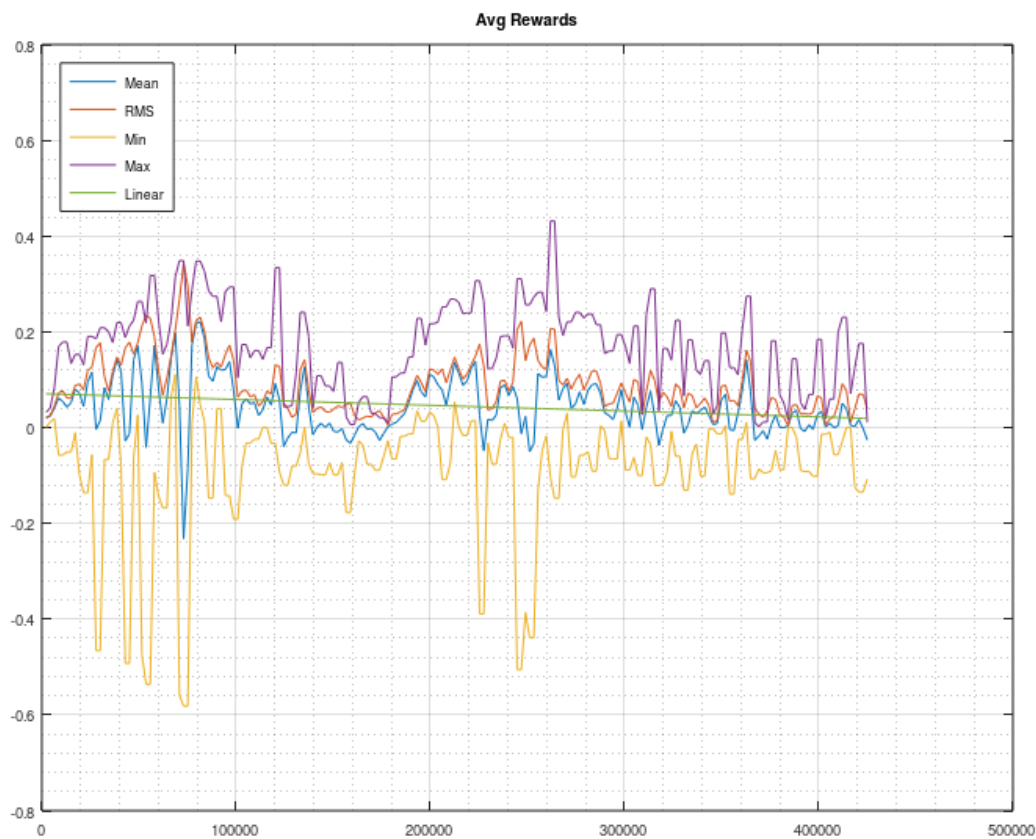


Delta Advantage residual estimation (critic)

## Avg Rewards

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 0.0447 |
| Sigma | 0.0984 |
| RMS | 0.108 |
| Min | -0.582 |
| Median | 0.0272 |
| Max | 0.431 |
| Trend | Linear |
| From | 0.0708 |
| To | 0.0187 |

| -0.536 | -0.443 | -0.351 | -0.259 | -0.167 | -0.0751 | 0.017 | 0.109 | 0.201 | 0.293 | 0.385 |
|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|
| 1020 | 1844 | 2006 | 2290 | 3378 | 42184 | 217794 | 105686 | 44898 | 7522 | 662 |

# Avg Rewards notes

[Notes]

# Avg Rewards chart

# Avg Rewards histogram
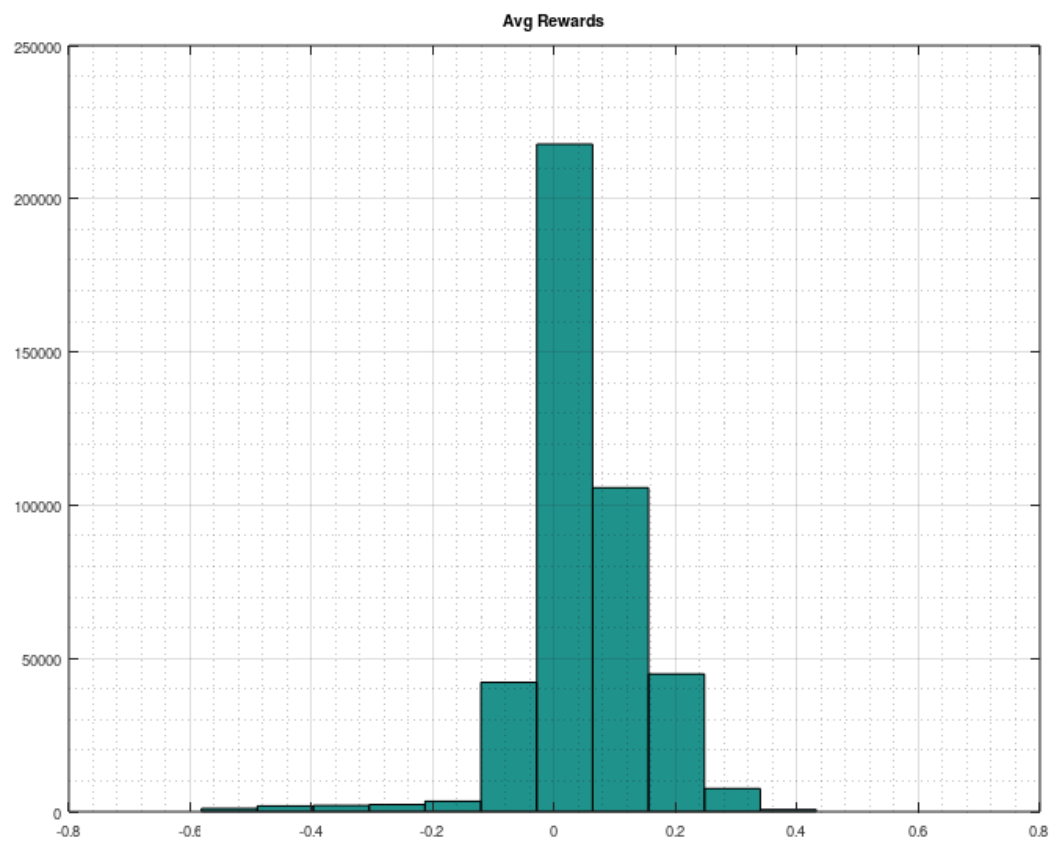


# Direction gradient

| KPI | |
|---|---|
| Steps | 429284 |
| Mean | 24.2 |
| Sigma | 173 |
| RMS | 175 |
| Min | 1.88 |
| Median | 2.14 |
| Max | 3.67e+03 |
| Trend | Linear |
| From | 24.5 |
| To | 23.9 |

| 169 | 502 | 836 | 1.17e+03 | 1.5e+03 | 1.84e+03 | 2.17e+03 | 2.5e+03 | 2.84e+03 | 3.17e+03 | 3.51e+03 |
|---|---|---|---|---|---|---|---|---|---|---|
| 422810 | 1182 | 1376 | 1212 | 1010 | 890 | 328 | 326 | 120 | 18 | 12 |

# Direction gradient notes

[Notes]

# Direction gradient chart



Direction gradient

# Direction gradient histogram
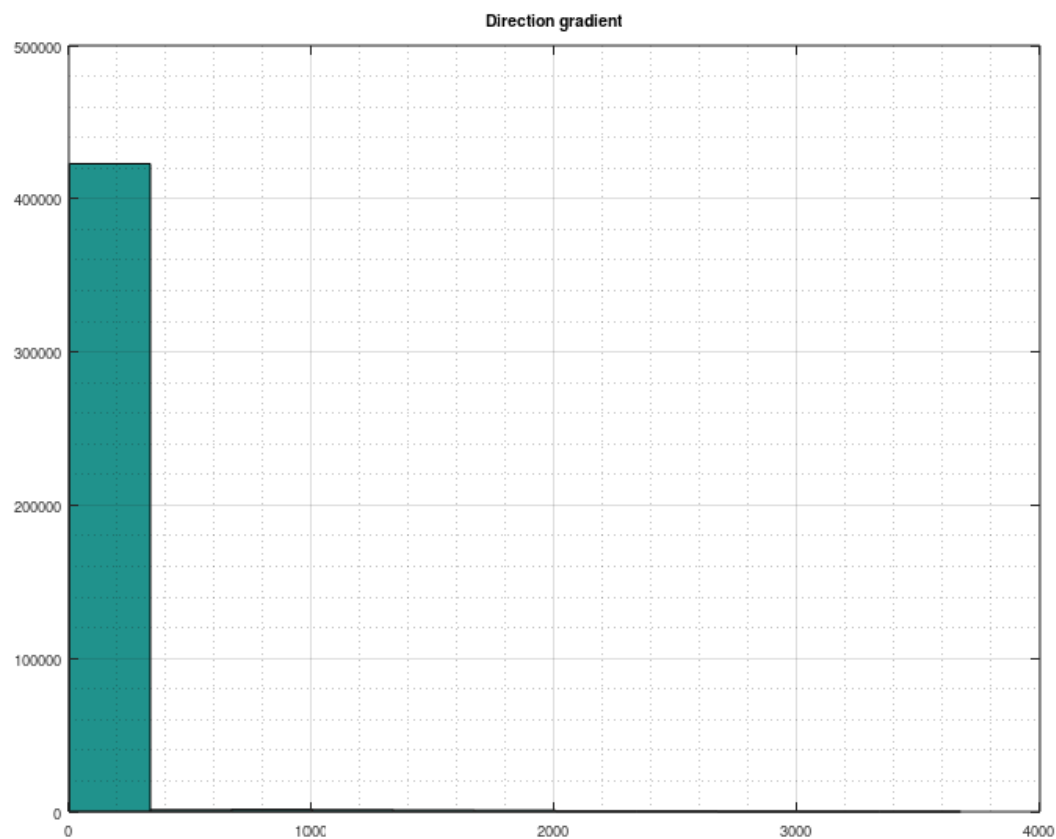


## Speed gradient

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 10.1 |
| Sigma | 65.9 |
| RMS | 66.7 |
| Min | 1.03 |
| Median | 1.99 |
| Max | 1.05e+03 |
| Trend | Linear |
| From | 9.81 |
| To | 10.4 |

| 48.6 | 144 | 239 | 334 | 430 | 525 | 620 | 715 | 810 | 906 | 1e+03 |
|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|
| 422180 | 938 | 1008 | 978 | 956 | 908 | 728 | 696 | 646 | 98 | 148 |

# Speed gradient notes

[Notes]

# Speed gradient chart
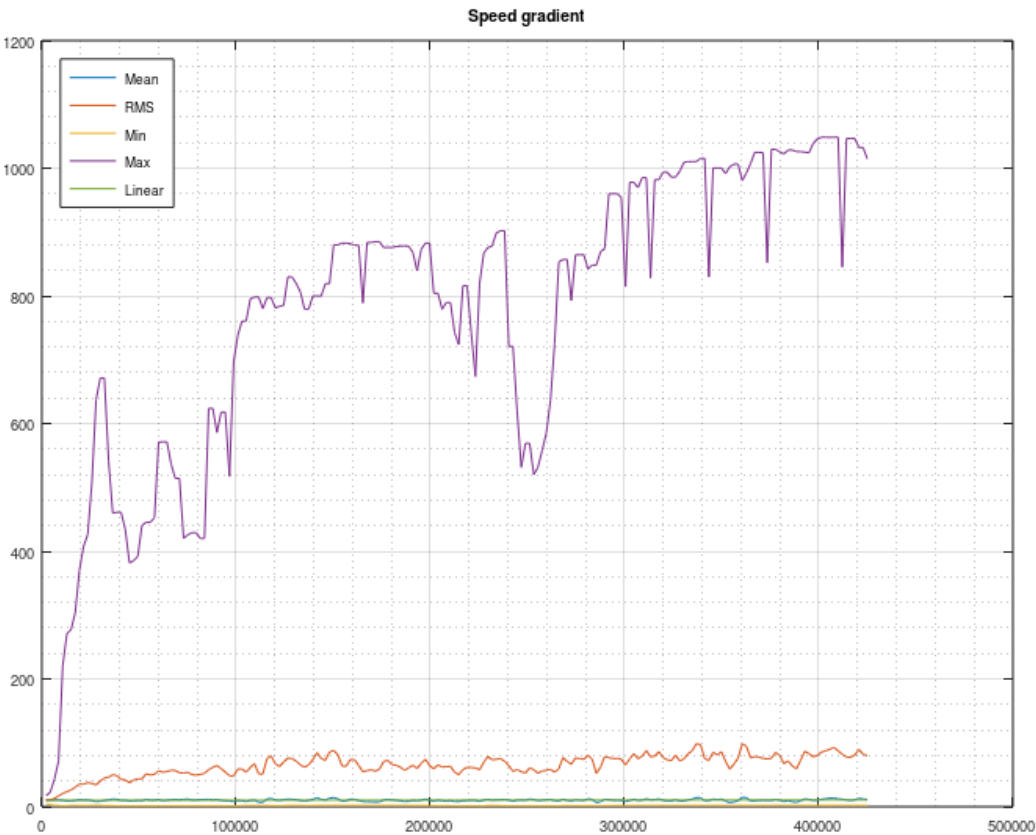


Speed gradient

# Speed gradient histogram
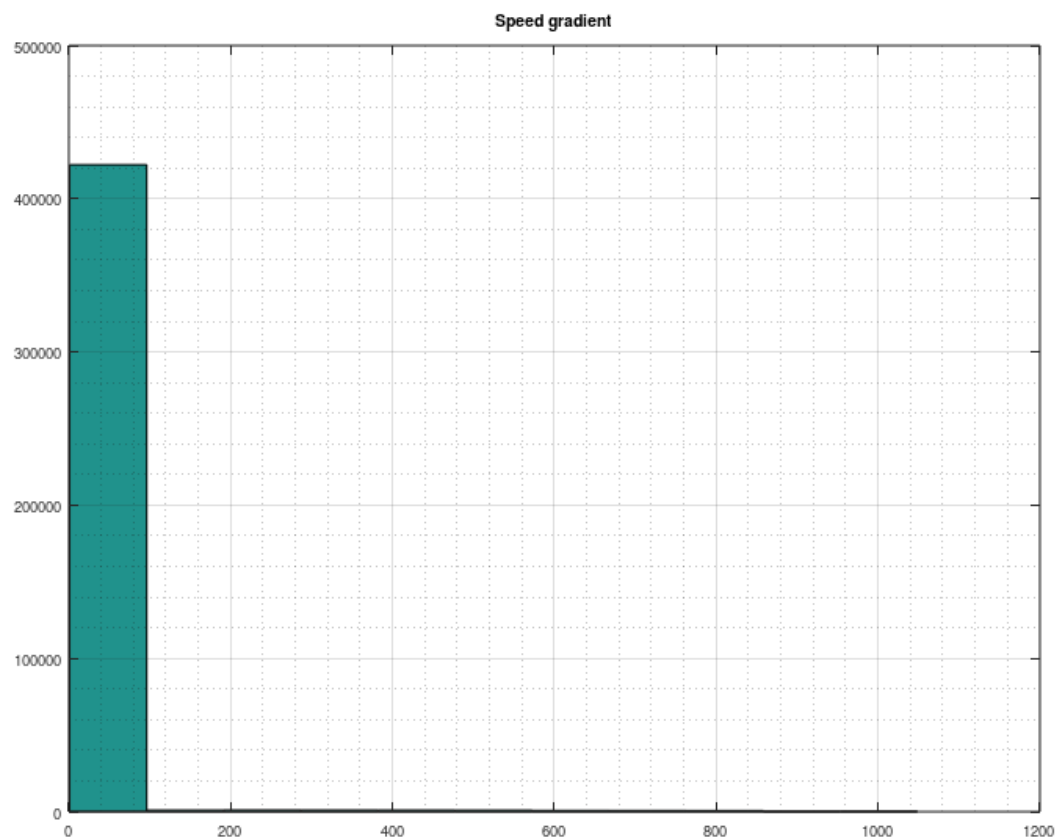


# Sensor direction gradient

| KPI | |
|---|---:|
| Steps | 429284 |
| Mean | 6.88 |
| Sigma | 43.5 |
| RMS | 44.1 |
| Min | 1.02 |
| Median | 1.02 |
| Max | 822 |
| Trend | Linear |
| From | 6.77 |
| To | 7 |

| 38.3 | 113 | 188 | 262 | 337 | 412 | 486 | 561 | 636 | 710 | 785 |
|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|---:|
| 422268 | 828 | 396 | 954 | 2154 | 2528 | 64 | 18 | 26 | 20 | 28 |

# Sensor direction gradient notes

[Notes]

# Sensor direction gradient chart

# Sensor direction gradient histogram



Sensor direction gradient