Mean squared error results

GPS

Stable internet

|  |  |  |  |
| --- | --- | --- | --- |
| Test no. | Wi-Fi positioning RMSE (m) | Particle filter RMSE (m) | Reduction in RMSE (%) |
| 1 | 10.8715 | 5.9842 | 44.9553 |
| 2 | 8.5043 | 4.2816 | 49.6542 |
| 3 | 11.5450 | 5.0252 | 56.4732 |

Unstable

|  |  |  |  |
| --- | --- | --- | --- |
| Test no. | Wi-Fi positioning RMSE (m) | Particle filter RMSE (m) | Reduction in RMSE (%) |
| 1 | 194.8546 | 30.1355 | 84.5344 |
| 2 | 131.4294 | 6.6746 | 94.9216 |
| 3 | 37.7373 | 4.4486 | 88.2117 |
| 4 | 118.0680 | 4.3091 | 96.3503 |

Pure Wi-Fi

Stable

|  |  |  |  |
| --- | --- | --- | --- |
| Test no. | Wi-Fi positioning RMSE (m) | Particle filter RMSE (m) | Reduction in RMSE (%) |
| 1 | 10.8715 | 7.7218 | 28.9719 |
| 2 | 8.5043 | 8.3262 | 2.0950 |
| 3 | 11.5450 | 8.0128 | 30.5953 |

Unstable

|  |  |  |  |
| --- | --- | --- | --- |
| Test no. | Wi-Fi positioning RMSE (m) | Particle filter RMSE (m) | Reduction in RMSE (%) |
| 1 | 194.8546 | 44.5124 | 77.1561 |
| 2 | 131.4294 | 7.2067 | 94.5167 |
| 3 | 37.7373 | 6.5554 | 82.6287 |
| 4 | 118.0680 | 3.7977 | 96.7835 |