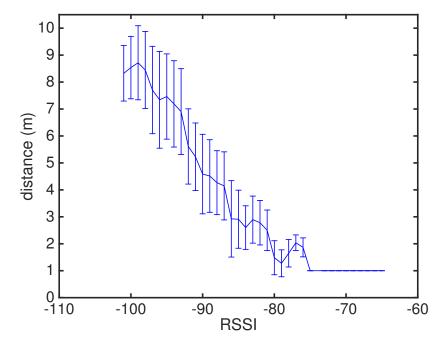
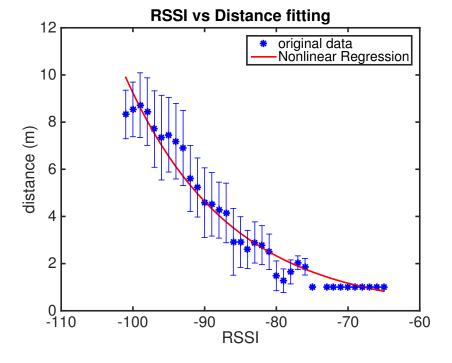
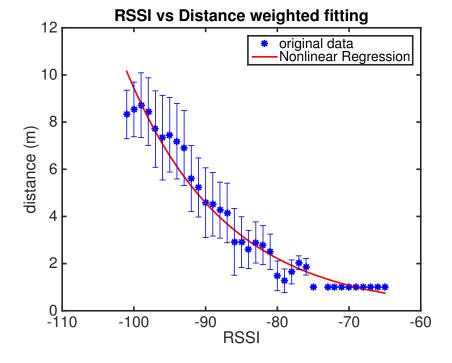


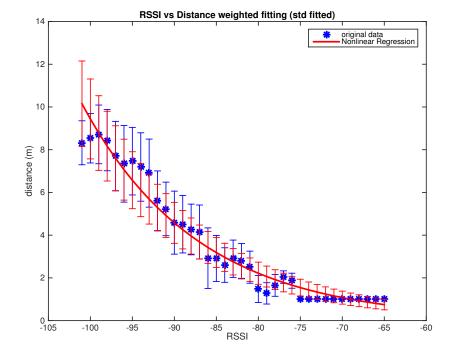
## Three mapping methods

- rssi distance direct mapping
- rssi distance fitting
- rssi distance weighted fitting

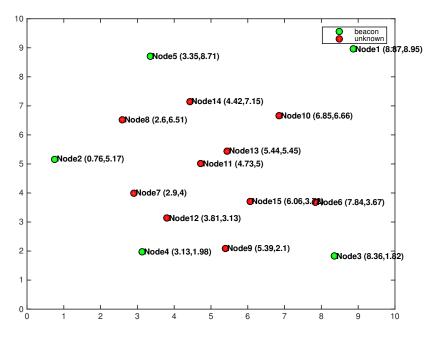








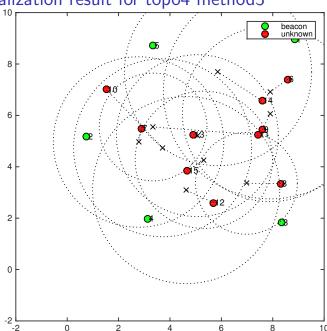




## localization errors for kickloc

|          | RSSI to Distance mapping model |         |                  |  |  |
|----------|--------------------------------|---------|------------------|--|--|
| Topology | direct                         | fitting | weighted fitting |  |  |
| 1        | 2.7585                         | 2.3372  | 2.3672           |  |  |
| 2        | 2.1123                         | 2.1512  | 2.1573           |  |  |
| 3        | 2.2952                         | 2.2325  | 2.2487           |  |  |
| 4        | 1.5604                         | 1.4542  | 1.4762           |  |  |
| 5        | 1.9285                         | 1.8977  | 1.9164           |  |  |
| average  | 2.1310                         | 2.0146  | 2.0332           |  |  |

localization result for topo4 method3



localization result for topo4 method3 beacon unknown 

## average localization errors for different algorithms

|                  | RSSI to Distance mapping model |         |                  |  |
|------------------|--------------------------------|---------|------------------|--|
| Algorithm        | direct                         | fitting | weighted fitting |  |
| KickLoc          | 2.1310                         | 2.0146  | 2.0332           |  |
| KickLoc Kalman   | 1.7901                         | 1.6591  | 1.6491           |  |
| KK2              | 2.0013                         | 1.8996  | 1.9066           |  |
| DV-distance      | 2.7187                         | 2.5311  | 2.5992           |  |
| Min-Max          | 2.1845                         | 2.0676  | 2.0704           |  |
| N-hop Lateration | 3.0825                         | 2.8399  | 2.8816           |  |
| IWLSE            | 1.8280                         | 1.6993  | 1.7238           |  |