

# **AMoDeus Simulation Report**

#### **Simulation Information**

User: root

Timestamp: 2018/11/25 - 01:04:39

Iterations: 1 ,i.e., 0 in matsim config.

AV File AV\_Config File

Dispatcher: AidoDispatcherHost

Rebalancing Period: -00:00:01
Redispatching Period: 00:00:10

Network: null\_prepared

Virtual Nodes: no virtual network found

Population: 500

Number of Vehicles: 20 Number of Requests 500

## **Aggregated Results**

Distance Ratio: 62.48%
Occupancy Ratio: 17.86 %

#### **Distances**

Total: 13113.62 km

Rebalancing: 0.00 km (0.00%)

Pickup: 4919.64 km (37.52%)

With Customer: 8193.98 km (62.48%)

Average Trip Distance: 16.39 km

#### **Total Distance Distribution**

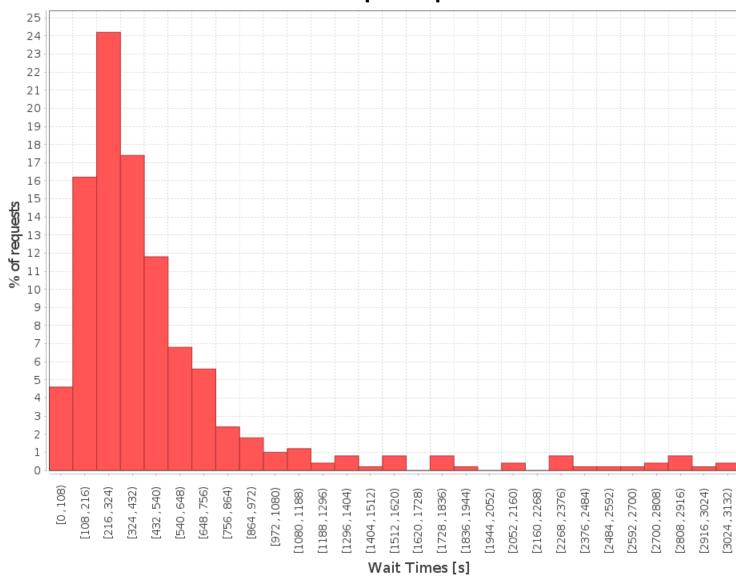
■ With Customer ■ Pickup ■ Rebalancing

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

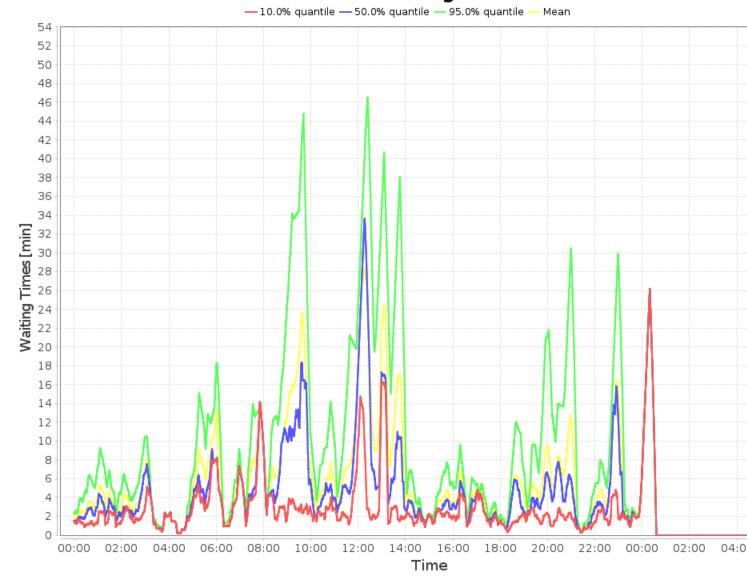
#### **Wait Times**

| 10.0% quantile | 00:02:24 |
|----------------|----------|
| 50.0% quantile | 00:05:51 |
| 95.0% quantile | 00:26:41 |
| Mean           | 00:08:25 |
| Maximum:       | 00:54:04 |

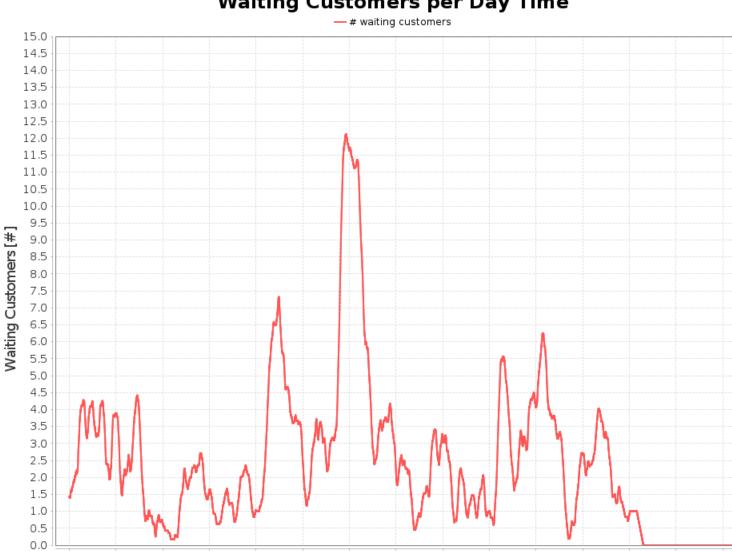
### Number of Requests per Wait Time



#### **Binned Waiting Times**



### Waiting Customers per Day Time



22:00

02:00

00:00

#### **Drive Times**

00:00

04:00

06:00

08:00

10:00

12:00

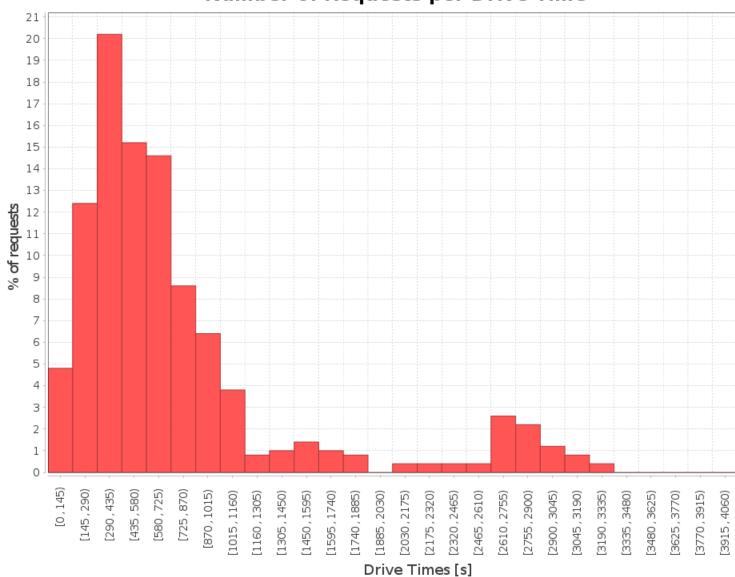
14:00

Time

16:00 18:00 20:00

| 10.0% quantile | 00:03:30 |
|----------------|----------|
| 50.0% quantile | 00:09:10 |
| 95.0% quantile | 00:45:30 |
| Mean           | 00:12:51 |
| Maximum:       | 01:12:20 |

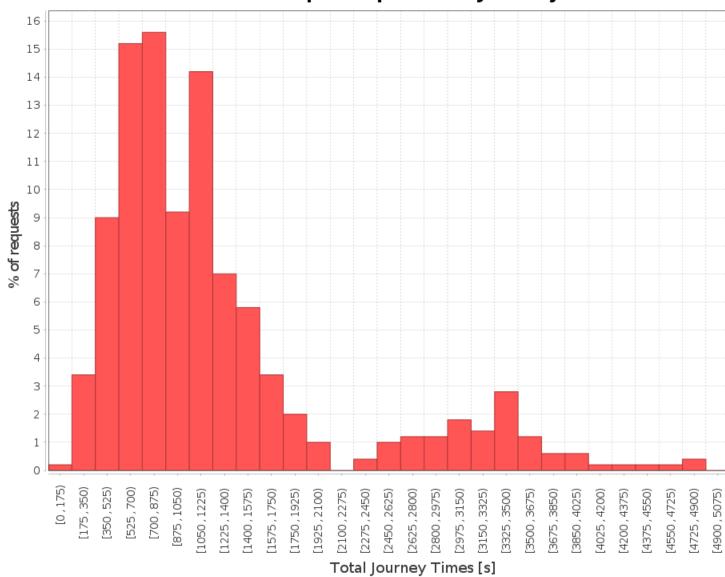
### Number of Requests per Drive Time



#### **Total Journey Times**

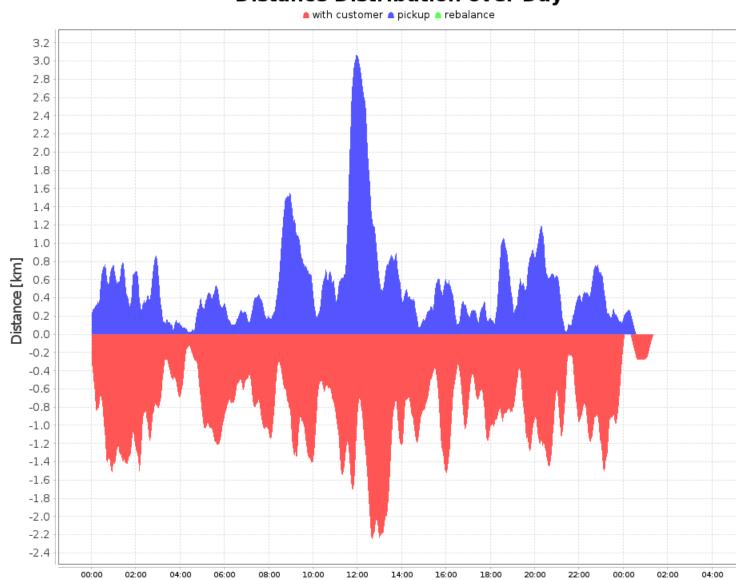
| 10.0% quantile | 00:08:14 |
|----------------|----------|
| 50.0% quantile | 00:16:33 |
| 95.0% quantile | 00:56:46 |
| Mean           | 00:21:16 |
| Maximum:       | 01:27:43 |

### Number of Requests per Total Journey Time

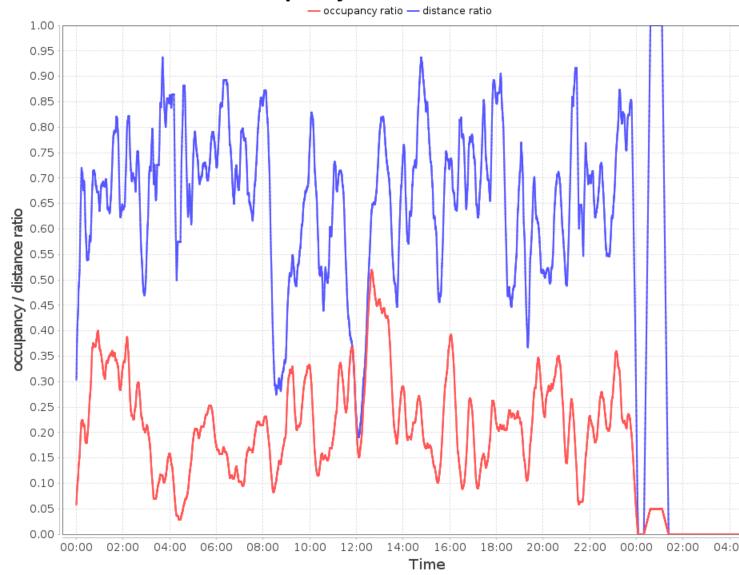


# **Fleet Efficiency**

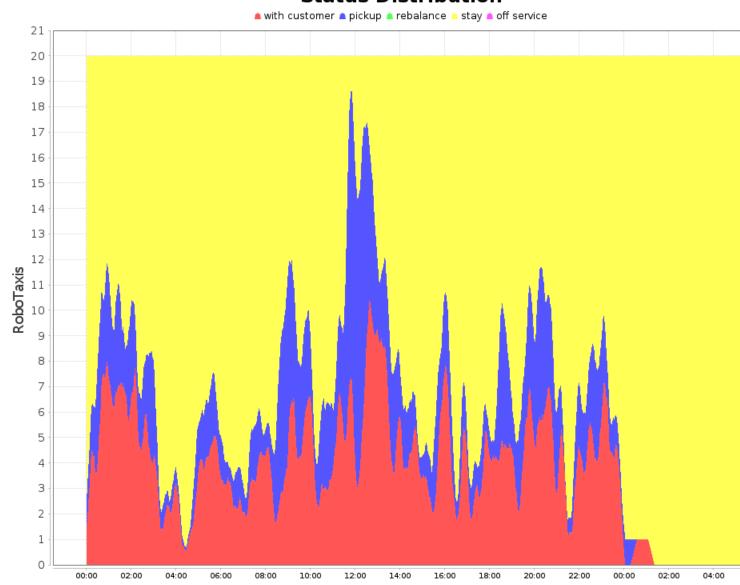
#### **Distance Distribution over Day**



### Occupancy and Distance Ratios



#### **Status Distribution**



### **Aido Scores**

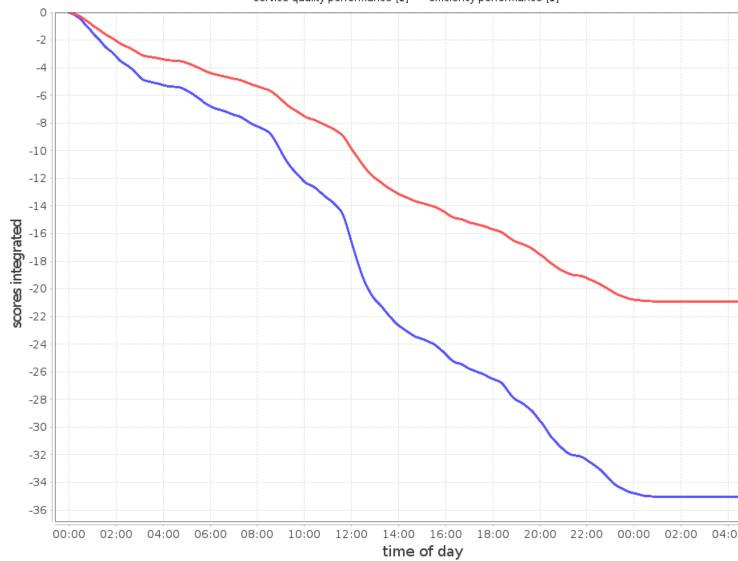
**Scores during Simulation** 

### Service Quality and Efficiency Score Increments



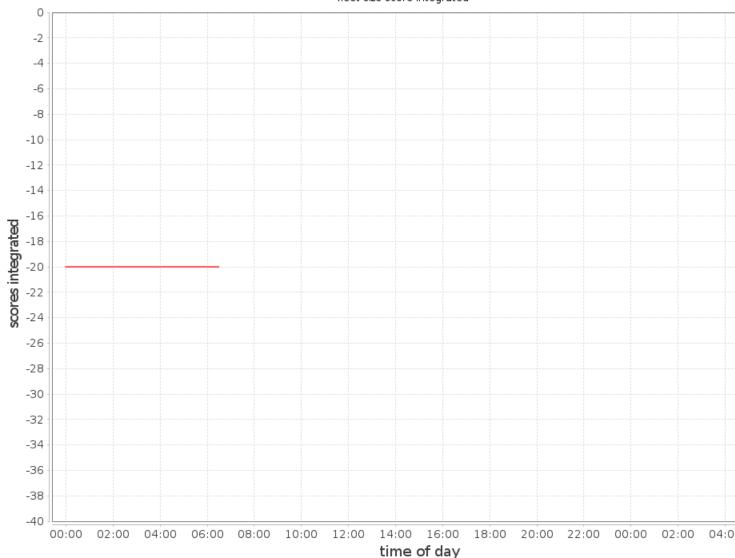
### Service Quality and Efficiency Score Integrated

— service quality performance [1] — efficiency performance [1]



#### Fleet Size Score Integrated

- fleet size score integrated



#### **Final Scores**

final service quality score: -20.936885545904772 final efficiency score: -35.055102183616974

final fleet size score: -Infinity

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