

# Experiment Report

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## Experiment Configuration

Advanced algorand with concurrency constant **7**

Dataset name is **2020-12-20\_16:37:03**

Number of machines is **20**

Bandwidth limit per process using Trickle: **tc rules with 4 cities**

tc Delay on outgoing channel: **none**

## Node Configuration

```
##
## Attaching package: 'jsonlite'
##
## The following object is masked from 'package:purrr':
##
##   flatten
##
## {
##   "NodeCount": 500,
##   "BAStar": {
##     "UserMoney": 10,
##     "ThresholdProposer": 26,
##     "TSmallStep": 200,
##     "TBigStep": 0.68,
##     "TBigFinal": 1000,
##     "TSmallFinal": 0.74,
##     "LamdaPriority": 5,
##     "LamdaBlock": 60,
##     "LamdaStep": 20,
##     "LamdaStepVar": 5,
##     "ConcurrencyConstant": 7
##   },
##   "Blockchain": {
##     "BlockPayloadSize": 1000000,
##     "StopOnRound": 20
##   },
##   "Network": {
##     "GossipNodeMessageBufferSize": 100,
##     "PeerCount": 4
##   },
##   "Logger": {
##     "EnableAgreementLogging": true,
##     "EnableMemoryPoolLogging": true,
##     "EnableBlockchainLogging": true,
##     "EnableGossipNodeLogging": false
##   },
##   "Validation": {
##     "ValidateBlock": true,
##     "ValidateVote": true
##   }
## }
```

## Sanity Check

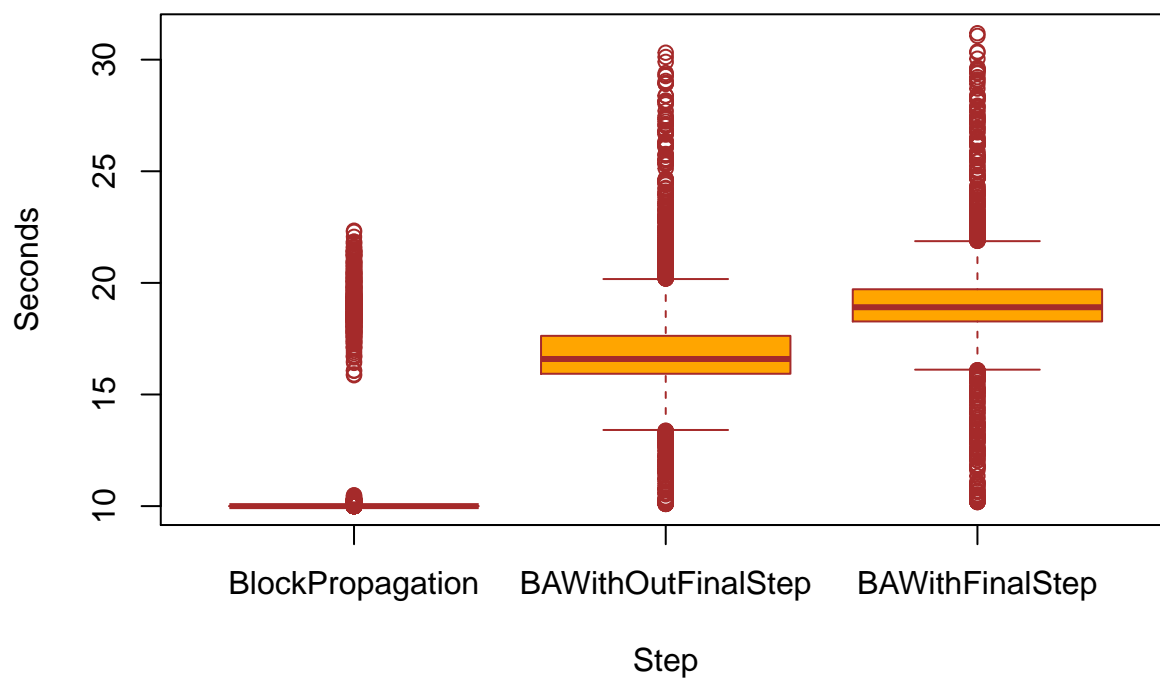
```
## `summarise()` ungrouping output (override with `.groups` argument)

## # A tibble: 20 x 6
##   FileName      count mean_bp mean_ba_wo_final mean_ba_w_final max_round
##   <chr>         <int>   <dbl>         <dbl>         <dbl>         <int>
## 1 nuc10.maas.stat  475    10.6           17.6           19.1           19
## 2 nuc14.maas.stat  475    10.0           16.4           19.0           19
## 3 nuc15.maas.stat  475    11.1           17.2           19.0           19
## 4 nuc16.maas.stat  475    10.1           16.5           19.0           19
## 5 nuc18.maas.stat  475    10.1           17.3           19.0           19
## 6 nuc19.maas.stat  475    10.0           16.6           19.0           19
## 7 nuc2.maas.stat   475    11.9           17.0           19.0           19
## 8 nuc20.maas.stat  475    10.0           16.5           19.0           19
## 9 nuc21.maas.stat  475    10.5           17.2           19.0           19
## 10 nuc22.maas.stat 475    10.1           16.5           19.0           19
## 11 nuc23.maas.stat 475    11.2           17.4           19.0           19
## 12 nuc24.maas.stat 475    10.0           16.5           19.0           19
## 13 nuc27.maas.stat 475    10.2           17.3           19.0           19
## 14 nuc3.maas.stat  475    10.0           16.4           19.0           19
## 15 nuc4.maas.stat  475    11.3           17.2           19.1           19
## 16 nuc5.maas.stat  475    10.0           16.5           19.0           19
## 17 nuc6.maas.stat  475    10.3           17.3           19.1           19
## 18 nuc7.maas.stat  475    10.1           16.6           19.0           19
## 19 nuc8.maas.stat  475    11.2           17.2           19.1           19
## 20 nuc9.maas.stat  475    10.2           16.5           19.0           19
```

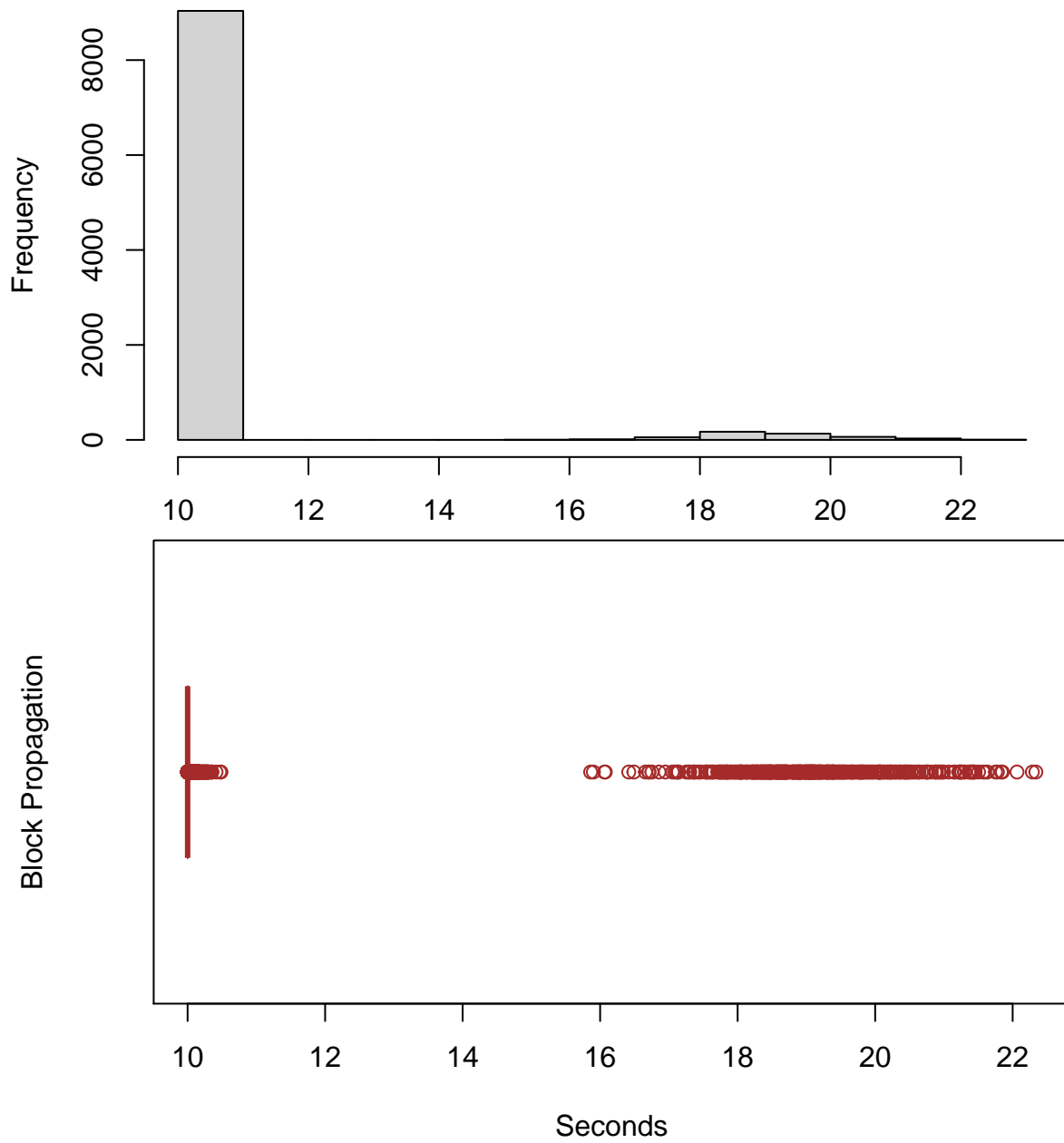
The number of rows in data set is **9500**

Maximum round number is **19**

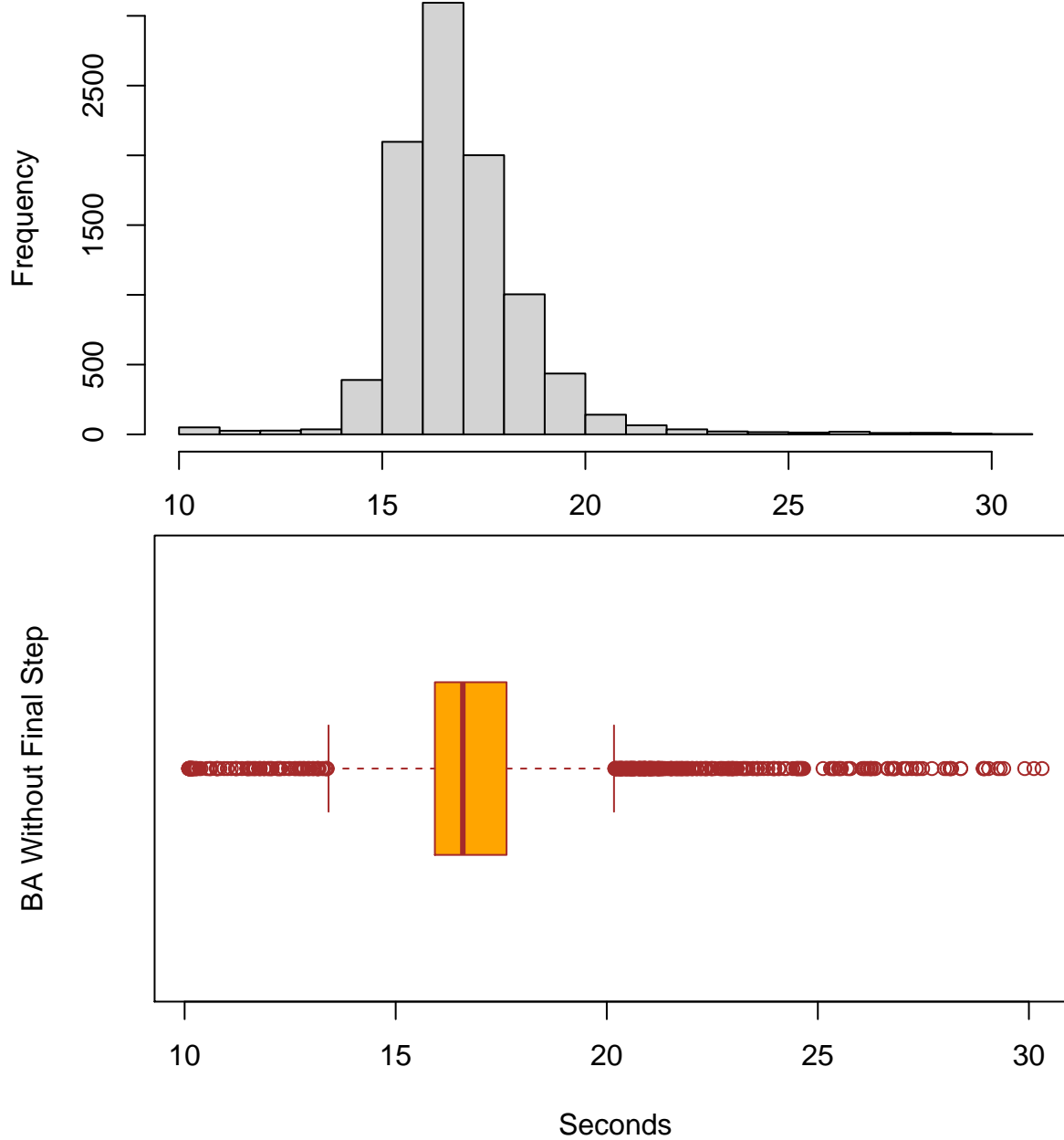
## Overall Results



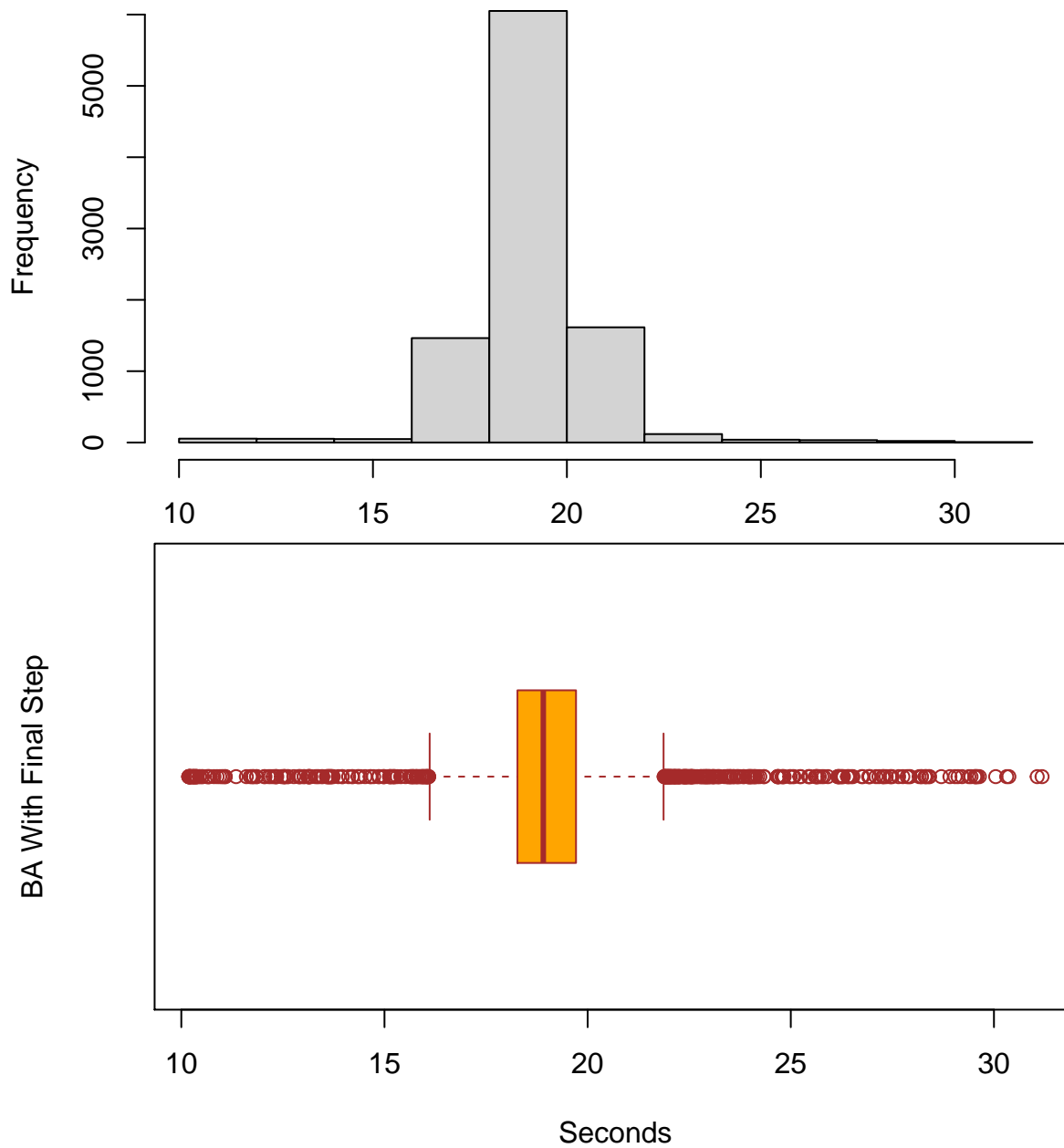
## Block Propagation Statistics



## BA Elapsed Time Without Final Step Statistics



## BA Elapsed Time With Final Step Statistics



## Forwarded Message Counts Per Round

