

# GCI Impact on OpenFaaS - SDPROJ

David Ferreira Quaresma ([david.quaresma@ccc.ufcg.edu.br](mailto:david.quaresma@ccc.ufcg.edu.br))

Paulo Felipe Feitosa ([paulofelipe.feitosa@gmail.com](mailto:paulofelipe.feitosa@gmail.com))

november, 2019

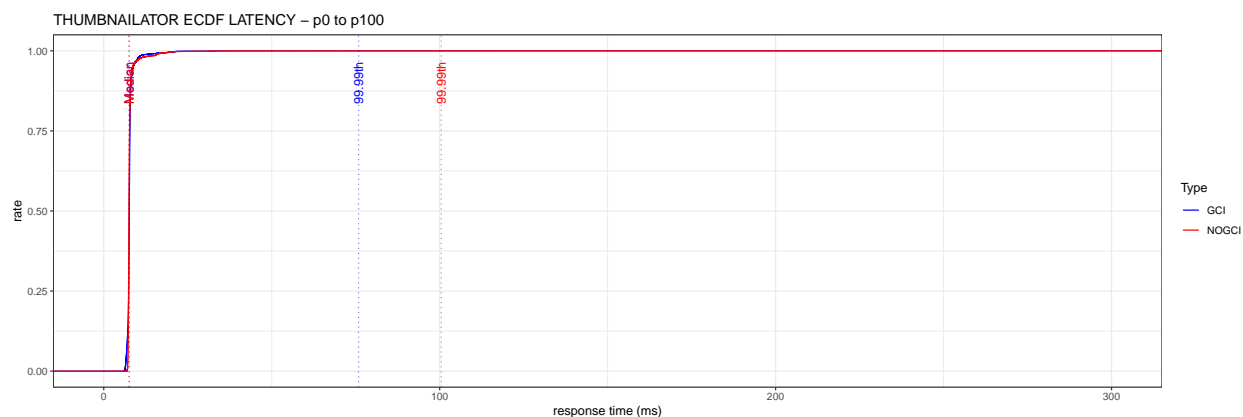
## GCI vs NOGCI

```
## Warning: package 'dplyr' was built under R version 3.6.1
```

```
## Warning: package 'ggplot2' was built under R version 3.6.1
```

### ECDF for response time (with coldstart)

```
## Warning: Removed 1 rows containing non-finite values (stat_ecdf).
```



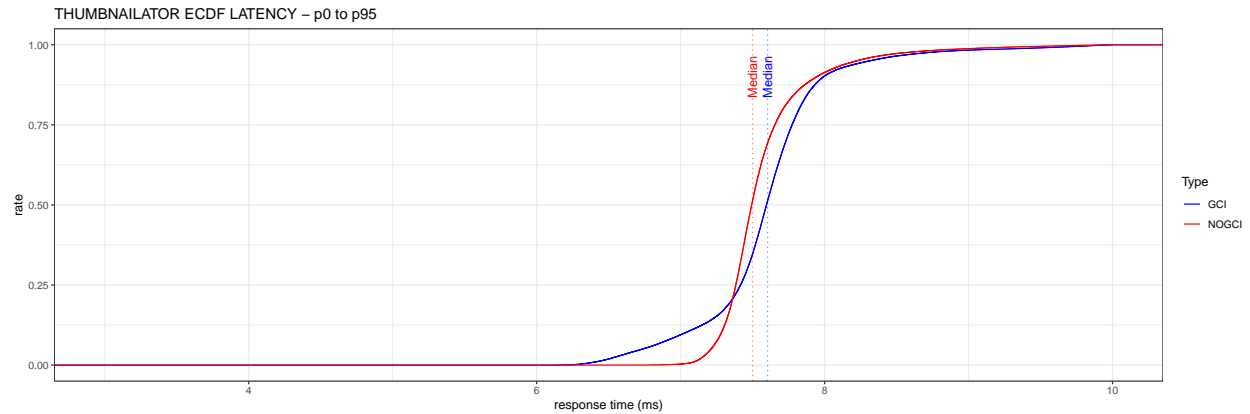
```
## Warning: Removed 5600 rows containing non-finite values (stat_ecdf).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```



## Warning: Removed 194439 rows containing non-finite values (stat\_ecdf).

## Warning: Removed 1 rows containing missing values (geom\_text).

## Warning: Removed 1 rows containing missing values (geom\_vline).

## Warning: Removed 1 rows containing missing values (geom\_text).

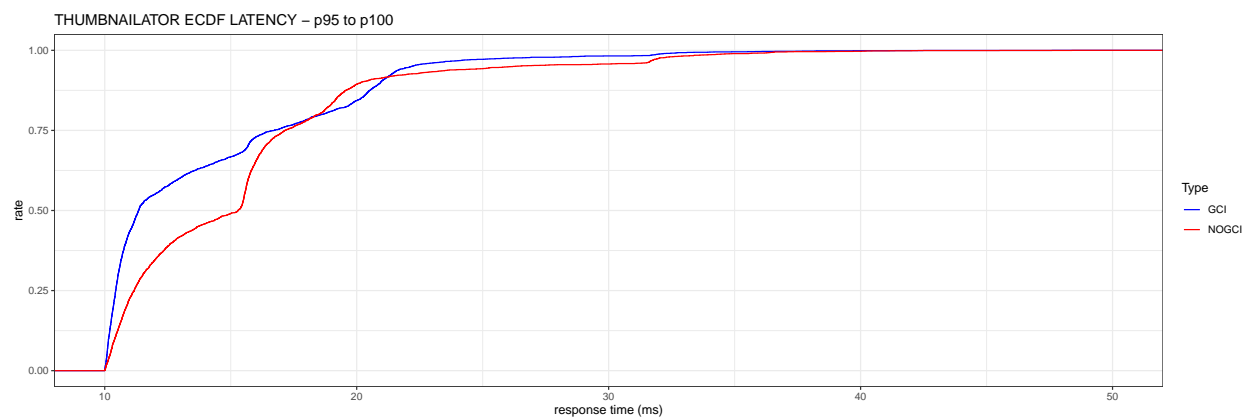
## Warning: Removed 1 rows containing missing values (geom\_vline).

## Warning: Removed 1 rows containing missing values (geom\_text).

## Warning: Removed 1 rows containing missing values (geom\_vline).

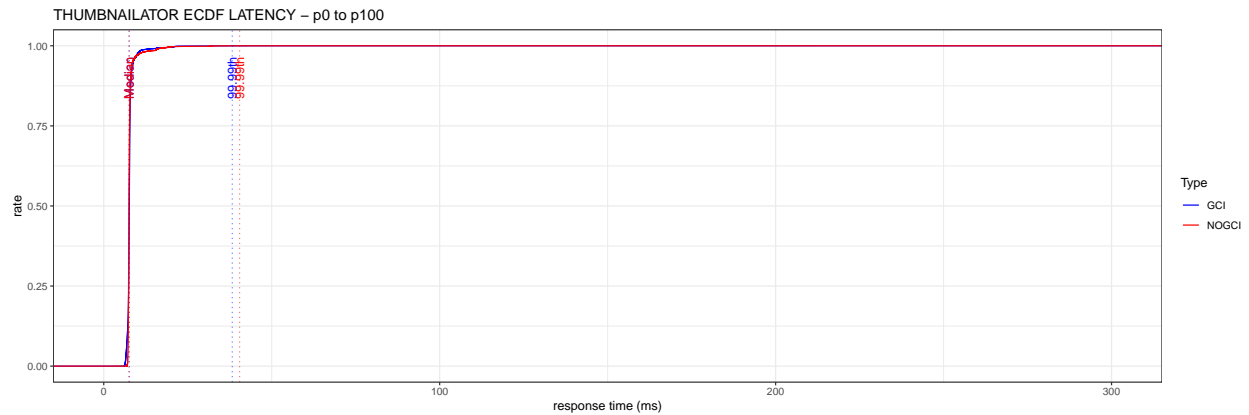
## Warning: Removed 1 rows containing missing values (geom\_text).

## Warning: Removed 1 rows containing missing values (geom\_vline).



## ECDF for response time (no coldstart)

```
## Warning: Removed 1 rows containing non-finite values (stat_ecdf).
```



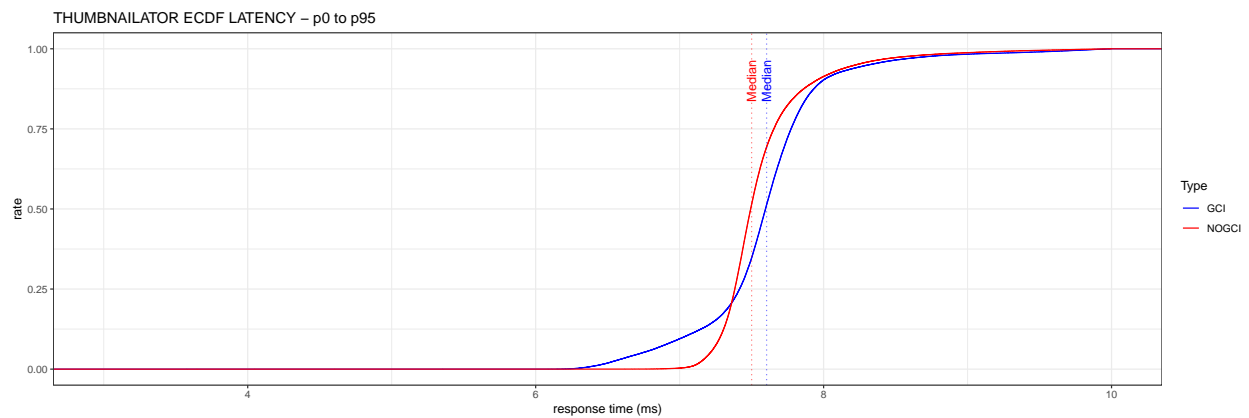
```
## Warning: Removed 5570 rows containing non-finite values (stat_ecdf).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```



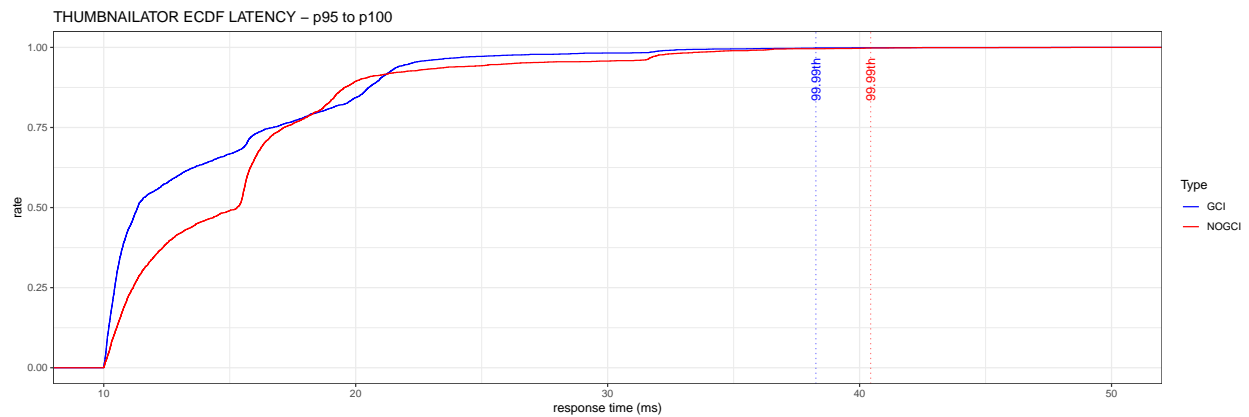
```
## Warning: Removed 194409 rows containing non-finite values (stat_ecdf).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```



summary table of confidence interval for response time, both in milliseconds (with coldstart)

```
##      stats gci.cii gci.cis nogci.cii nogci.cis
## 1    avg    7.800  7.800    7.800    7.900
## 2    p50    7.603  7.606    7.499    7.502
## 3    p95    8.693  8.761    8.610    8.684
## 4    p99   13.100 14.510   15.940   16.230
## 5   p999   23.490 28.100   31.630   32.250
## 6  p9999   65.430 82.110   45.190  118.600
## 7 p99999  83.150 300.600  121.300 1730.000
## 8   dist   75.550 293.000   113.800 1722.000
```

summary table of confidence interval for response time, both in milliseconds (no Coldstart)

```
##      stats gci.cii gci.cis nogci.cii nogci.cis
## 1    avg    7.800  7.800    7.800    7.800
## 2    p50    7.602  7.606    7.499    7.502
## 3    p95    8.687  8.758    8.607    8.680
## 4    p99   12.940 14.310   15.900   16.210
## 5   p999   22.550 24.770   31.450   31.960
## 6  p9999   35.780 62.340   38.500   59.830
## 7 p99999  63.980 300.600   66.900  1729.000
## 8   dist   56.380 293.000   59.400  1722.000
```