

ZipF

Marisangila Alves

19 January, 2022

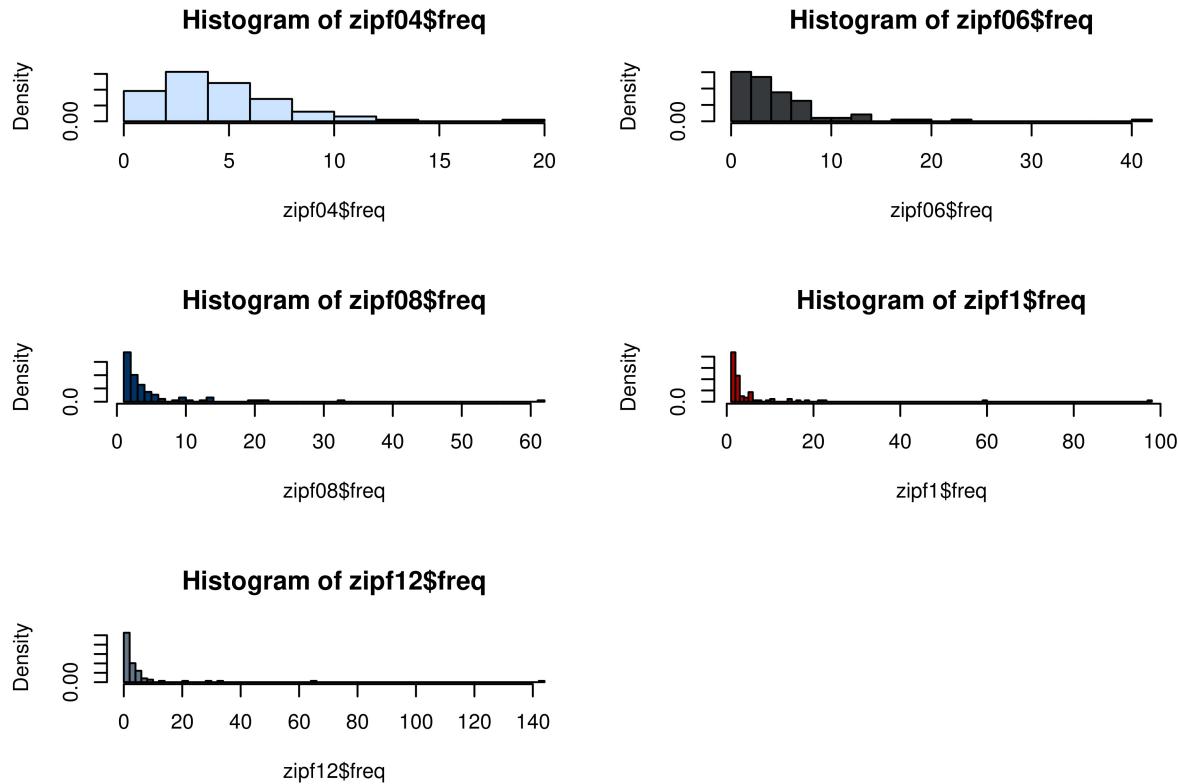
Parâmetros

Parâmetros	Valores
alfa zipf	0.4, 0.6, 0.8, 1, 1.2
lambda	5
n	100
beta	0.2
BS	32
Cache	100
UE	200
Storage	MBS 20GB SBS 4GB
Coverage	MBS 300 SBS 70
RTT inicial	CS/MBS 0.001s(1ms) MBS/MBS 0.001s(1ms) MBS/SBS 0.001s(1ms) SBS/UE 0.001s(1ms)
Tempo da Requisição	10 eventos
Mobilidade	10m

Informações da Aplicação.

Vazão Mínima	Tamanho da Cache	Buffer
100 Mbps	2GB/2000MB	48Mb
100 Mbps	4GB/4000MB	48Mb
100 Mbps	8GB/8000MB	48Mb

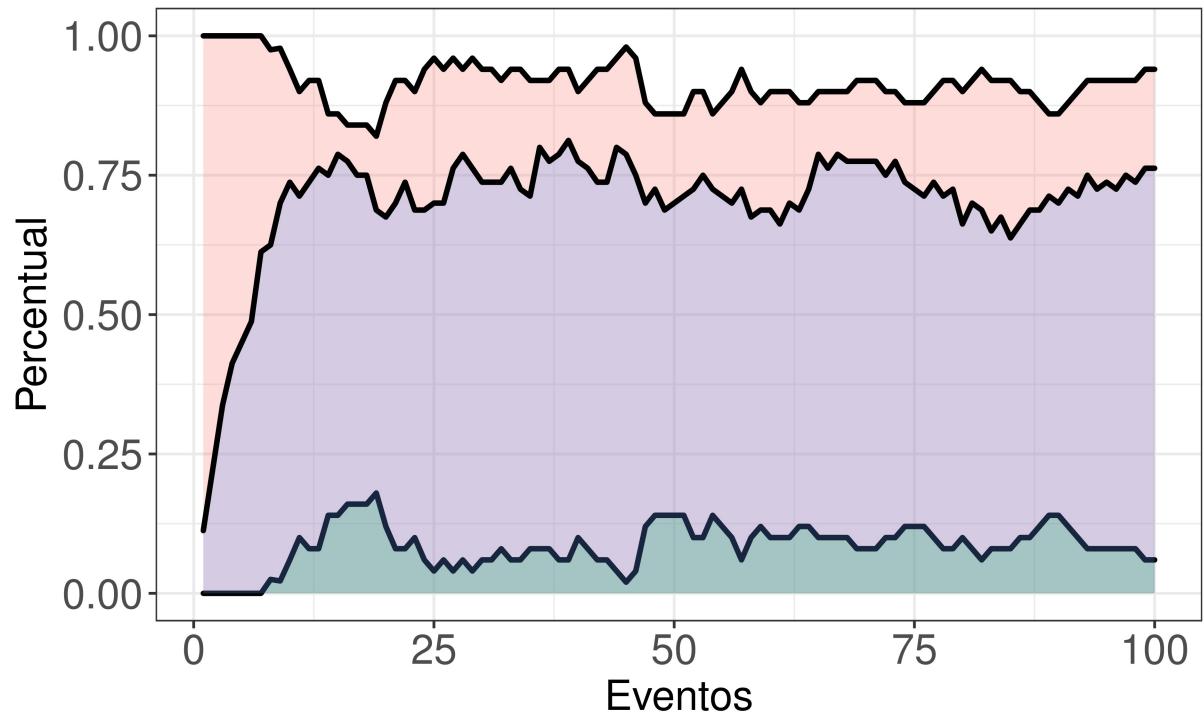
Distribuição de popularidade do conteúdo solicitado.



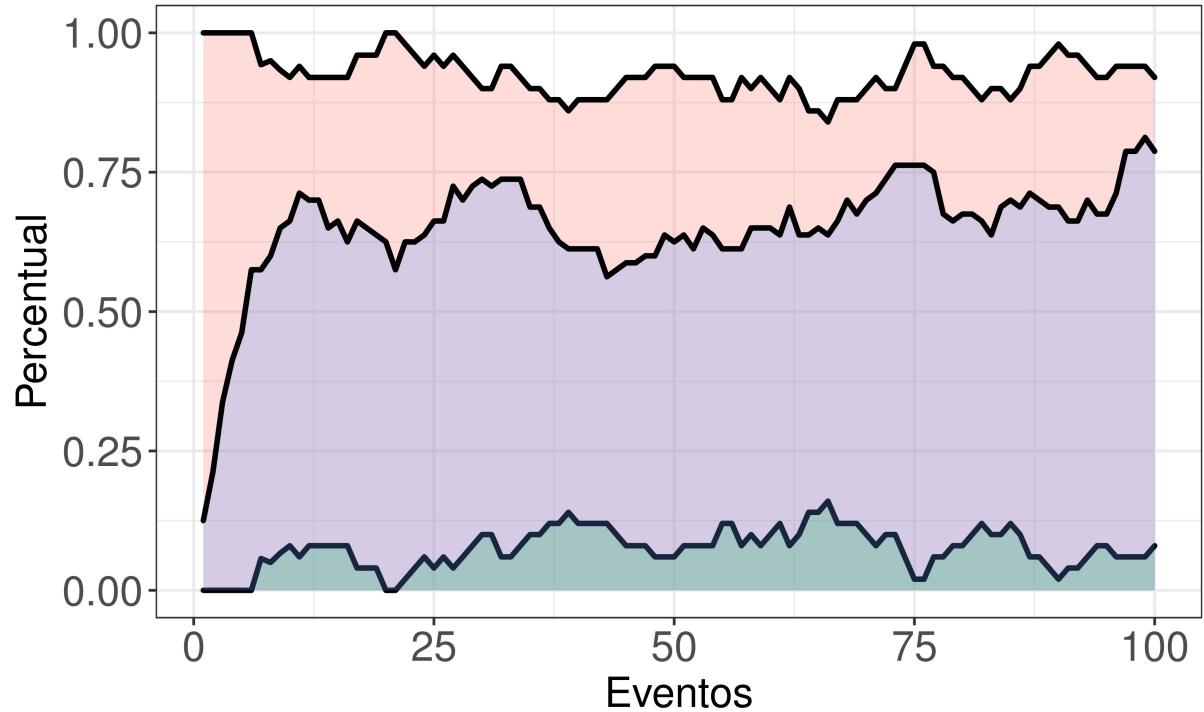
Cache, Cloud e Storage.

```
## Saving 6.5 x 4.5 in image
```

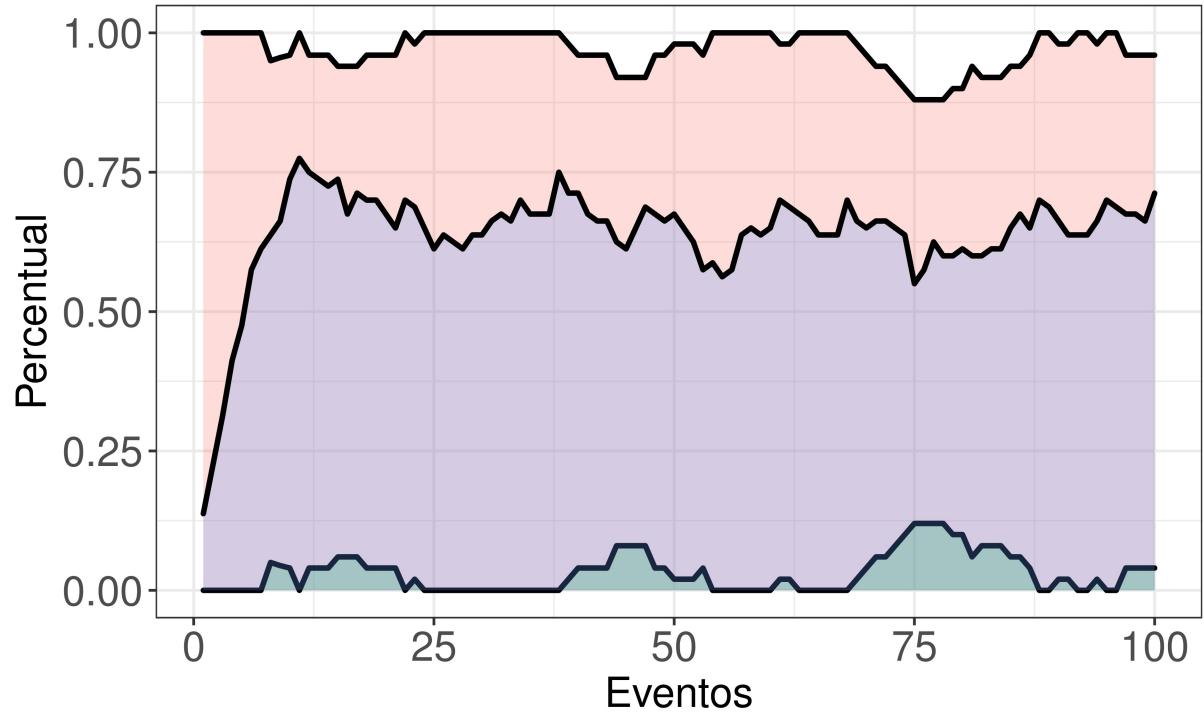
Cache Hit Cache Miss Uso do Armazenamento



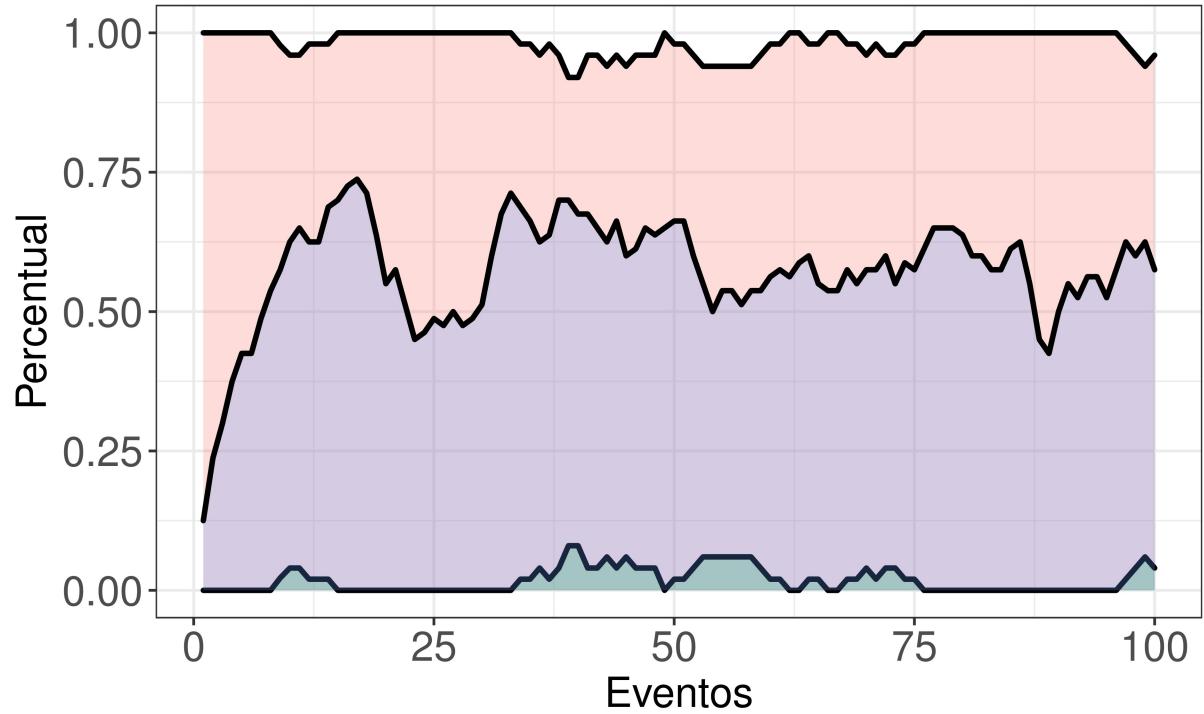
Cache Hit Cache Miss Uso do Armazenamento



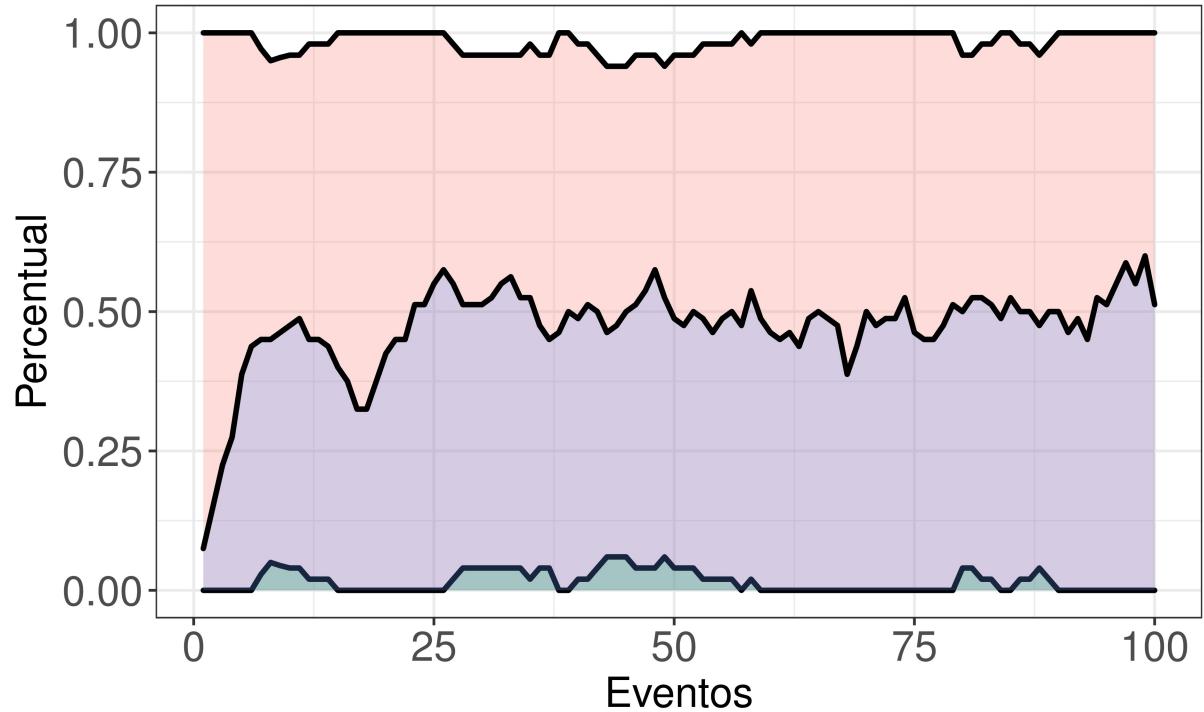
Cache Hit Cache Miss Uso do Armazenamento

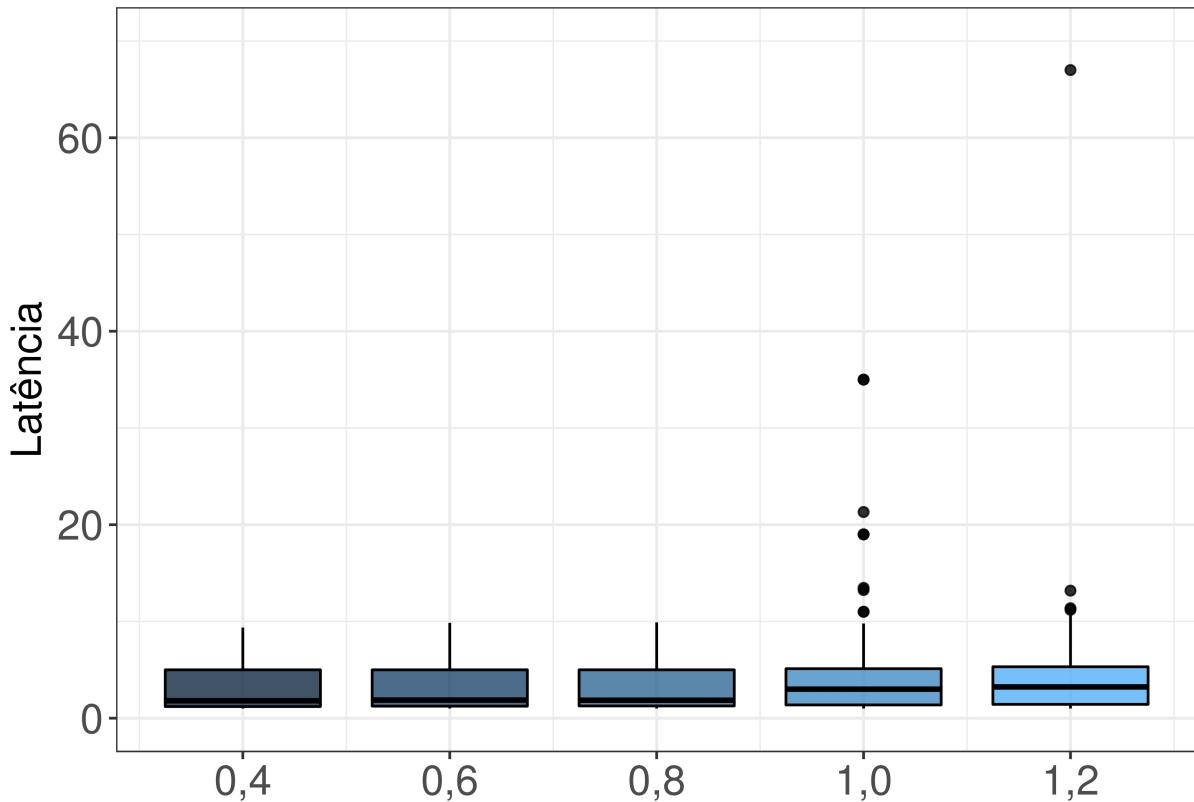


Cache Hit Cache Miss Uso do Armazenamento



Cache Hit Cache Miss Uso do Armazenamento





```
## Saving 6.5 x 4.5 in image
## Saving 6.5 x 4.5 in image
```

Correlação entre proporções e variação de α

```
## [1] "Storage Load"
## [1] NA
## [1] "Cache Hit"
## [1] 0.6461641
## [1] "Cache Miss"
## [1] -0.6461641
```

Correlação entre a latência e variação de α

```
## [1] 0.1206276
##      Min. 1st Qu. Median   Mean 3rd Qu.   Max.
## 1.000   1.200   1.800   2.802  5.000   9.371
```

```

##      0%    25%    50%    75%   100%
## 1.000 1.200 1.800 5.000 9.371

## 95%
## 5.943

##      Min. 1st Qu. Median     Mean 3rd Qu.   Max.
## 1.000    1.243   1.871   2.983   5.000  9.857

##      0%    25%    50%    75%   100%
## 1.000 1.243 1.871 5.000 9.857

## 95%
## 7

##      Min. 1st Qu. Median     Mean 3rd Qu.   Max.
## 1.000    1.264   1.857   2.951   5.000  9.900

##      0%    25%    50%    75%   100%
## 1.000 1.264 1.857 5.000 9.900

## 95%
## 7

##      Min. 1st Qu. Median     Mean 3rd Qu.   Max.
## 1.000    1.371   3.000   3.286   5.114 35.000

##      0%    25%    50%    75%   100%
## 1.000 1.371 3.000 5.114 35.000

## 95%
## 7

##      Min. 1st Qu. Median     Mean 3rd Qu.   Max.
## 1.000    1.429   3.229   3.564   5.314 67.000

##      0%    25%    50%    75%   100%
## 1.000 1.429 3.229 5.314 67.000

## 95%
## 7.214

```

Máximos

```

## [1] 0.18

## [1] 0.82

## [1] 0.8125

```

```
## [1] 0.06

## [1] 0.94

## [1] 0.6

## [1] 0.84

## [1] 0.88

## [1] 0.16

## [1] 0.12

## [1] "Media e SD:"

## [1] 0.084872

## [1] 0.03949072

## [1] 0.01543

## [1] 0.01914349

## [1] 0.704

## [1] 0.1062724

## [1] 0.473375

## [1] 0.0784488

## [1] "zipf médios"

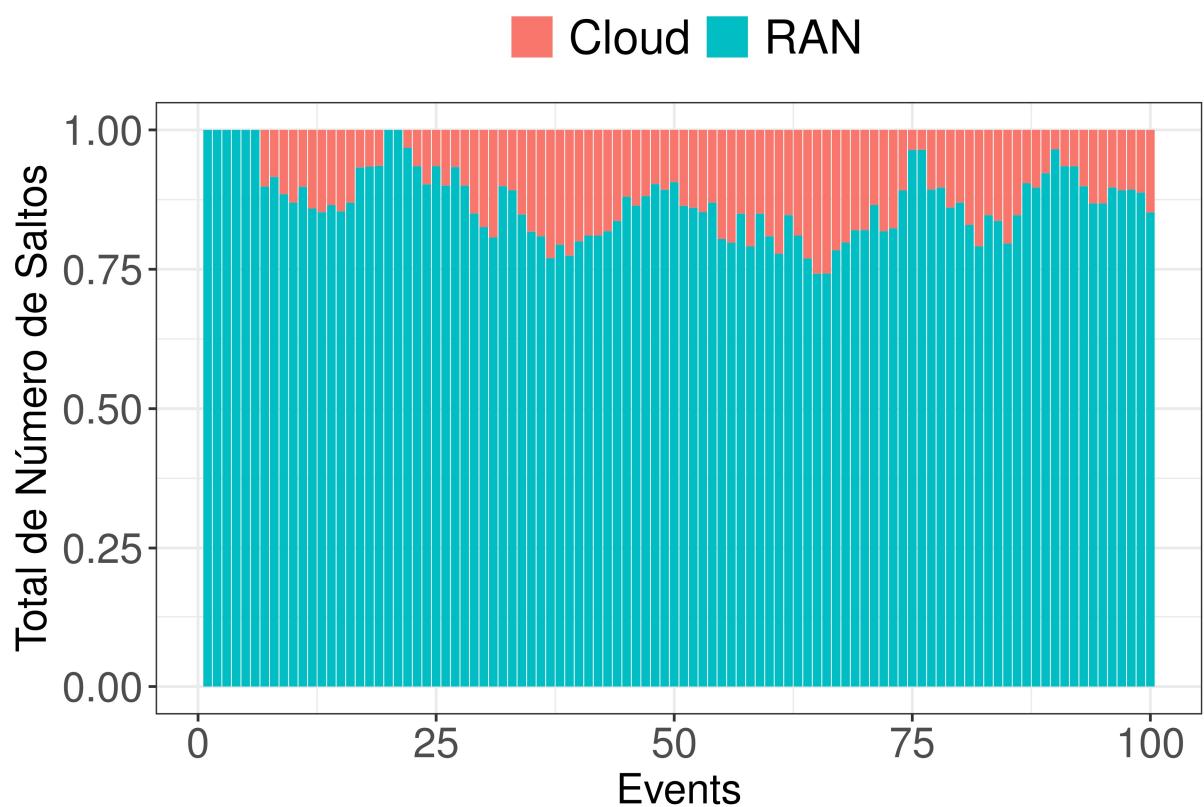
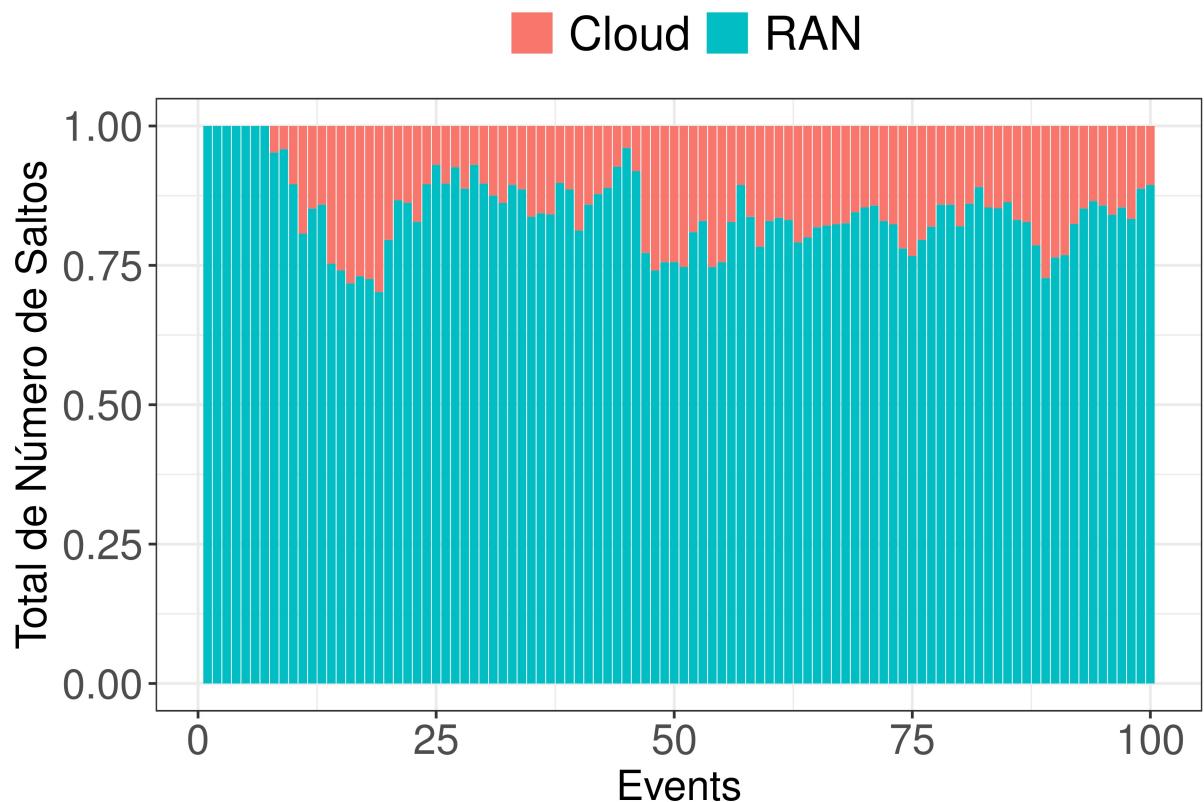
## [1] 0.16

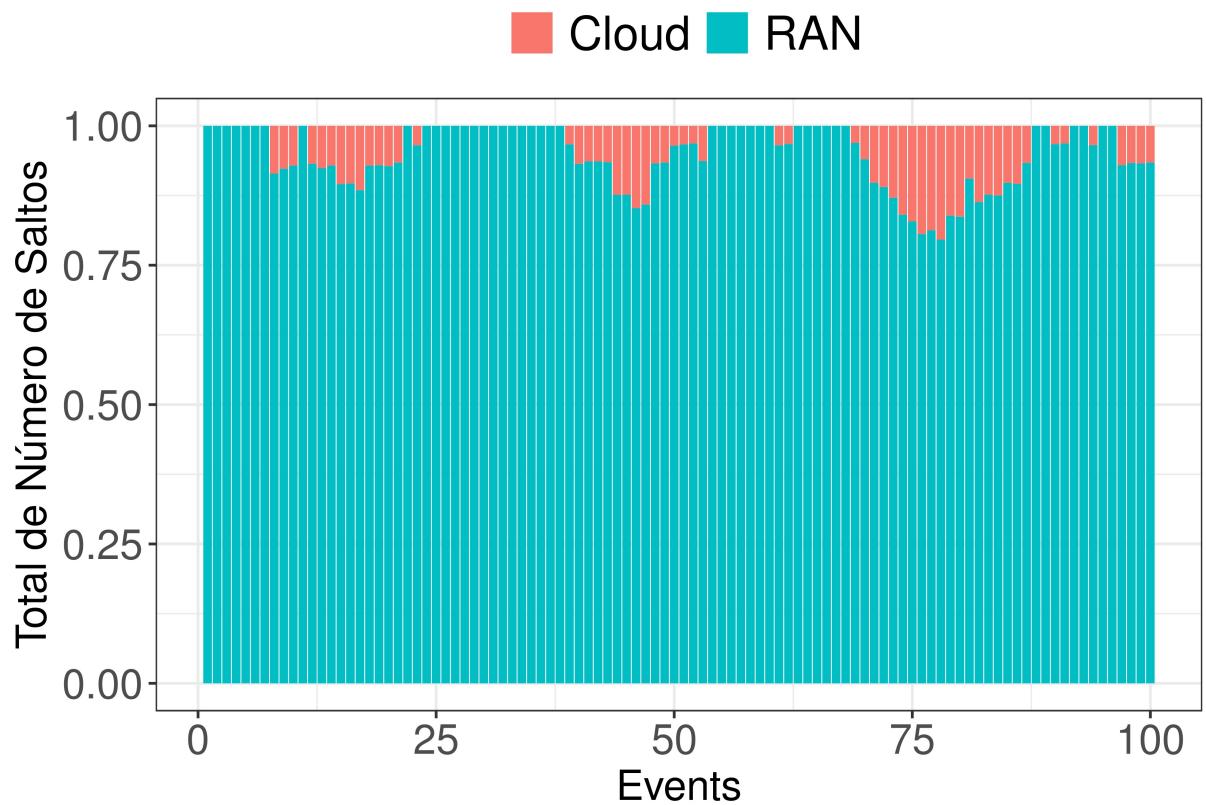
## [1] 0.84

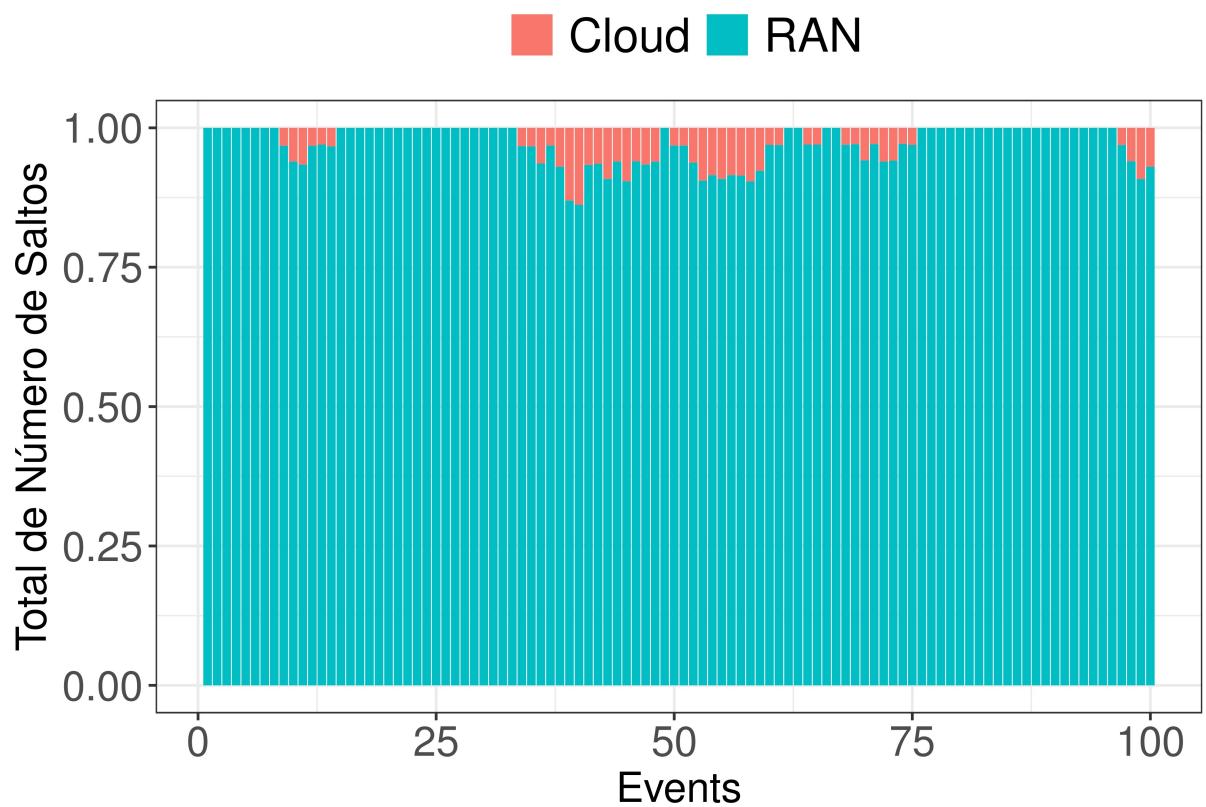
## [1] 0.12

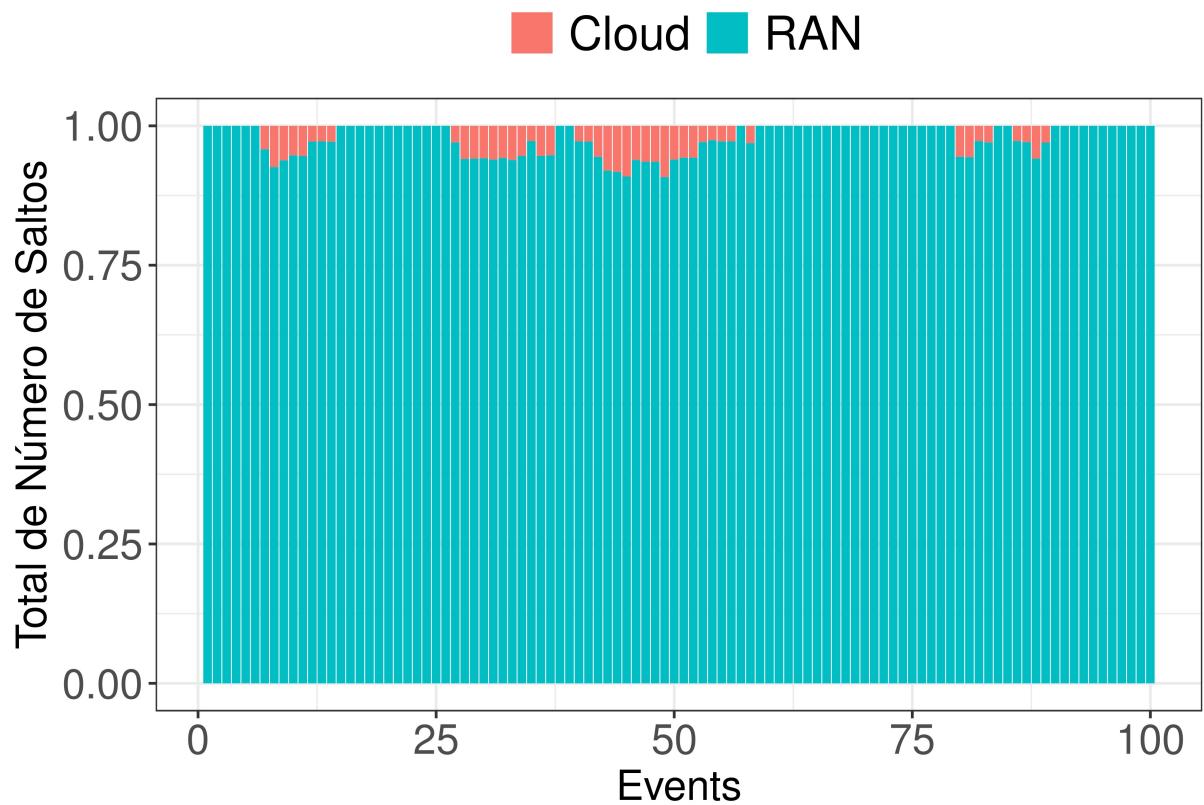
## [1] 0.88
```

Somatório de Saltos por Evento - Fronthaul vs Backhaul



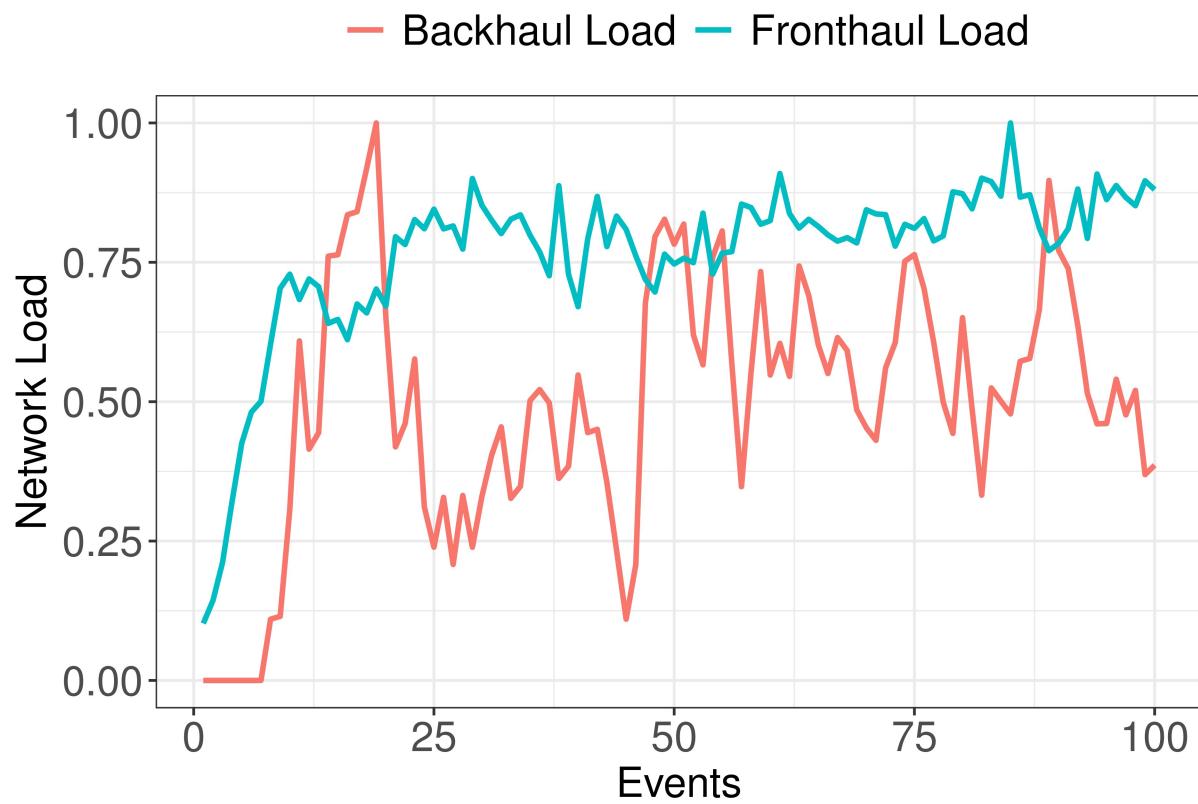




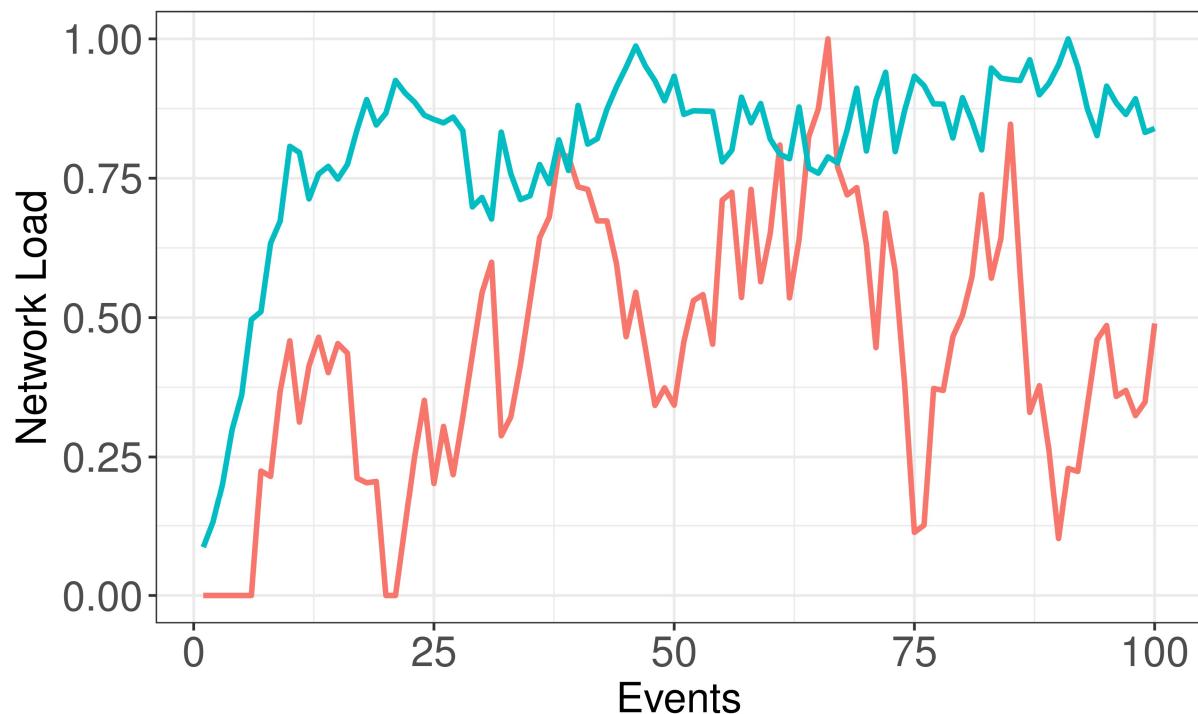


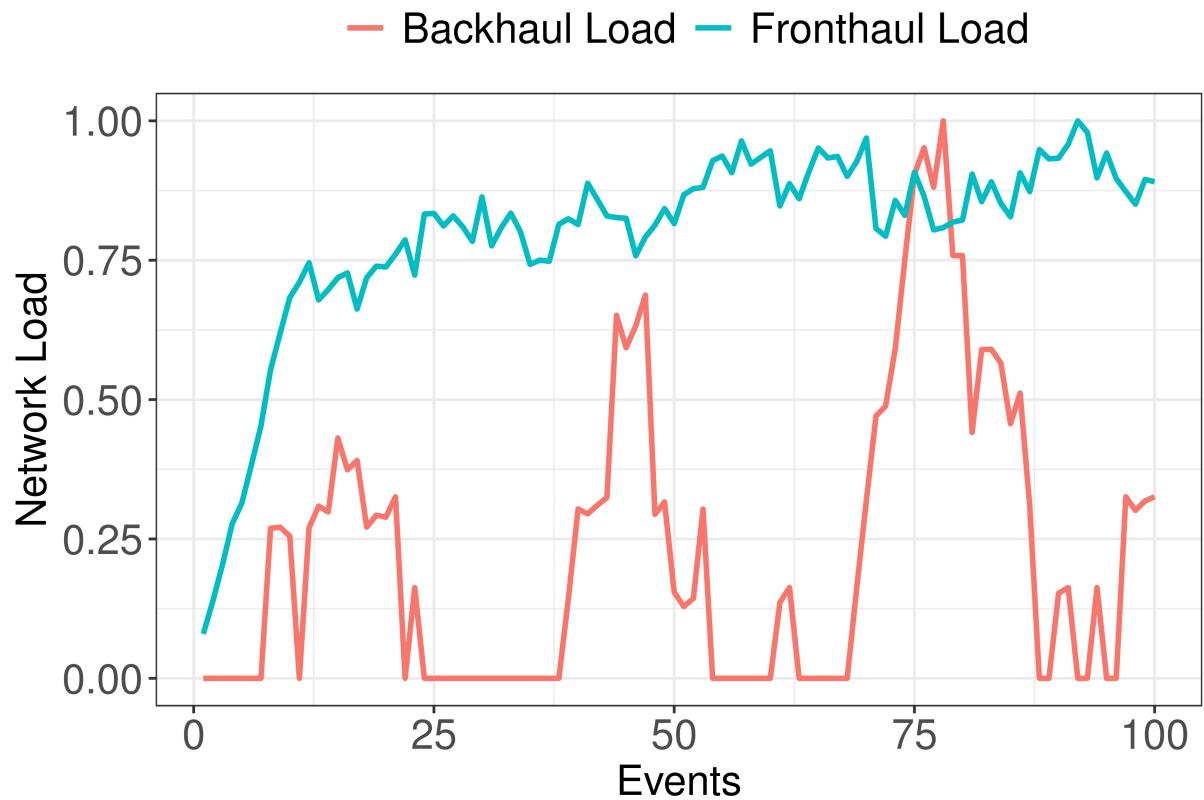
```
## Saving 6.5 x 4.5 in image
```

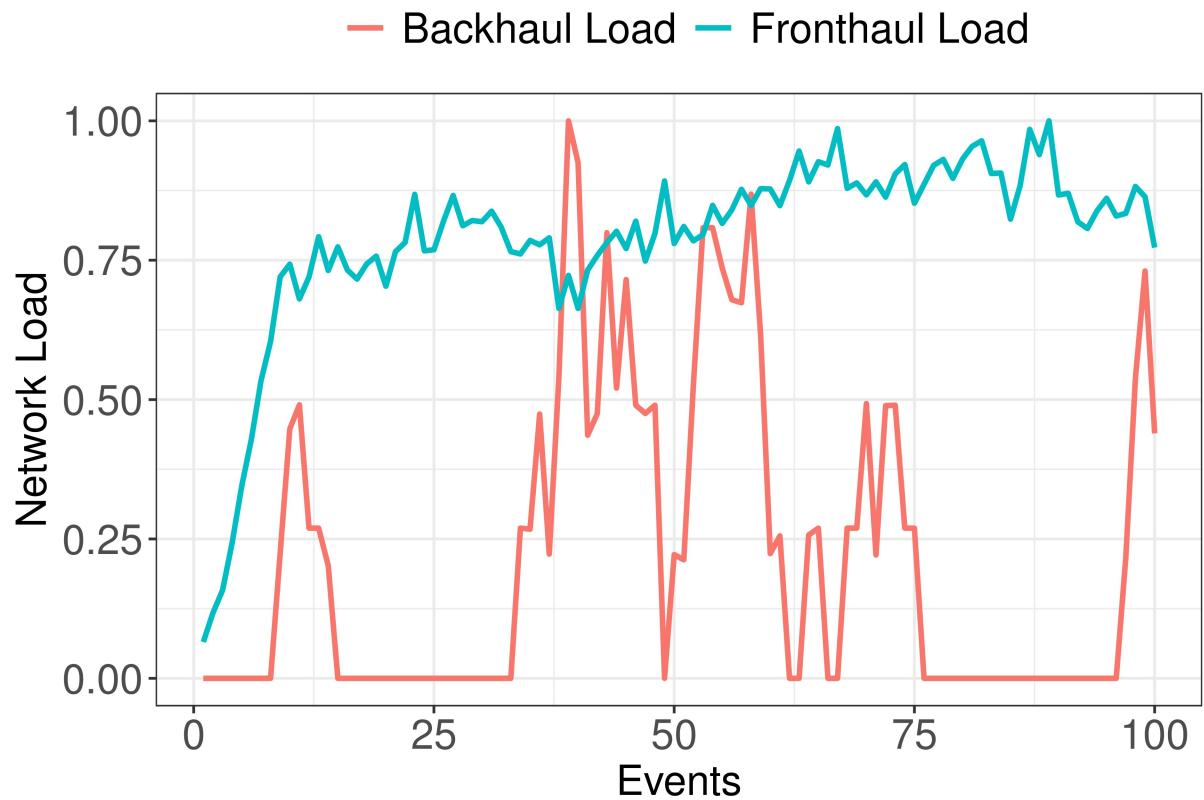
Network Load - Fronthaul vs Backhaul

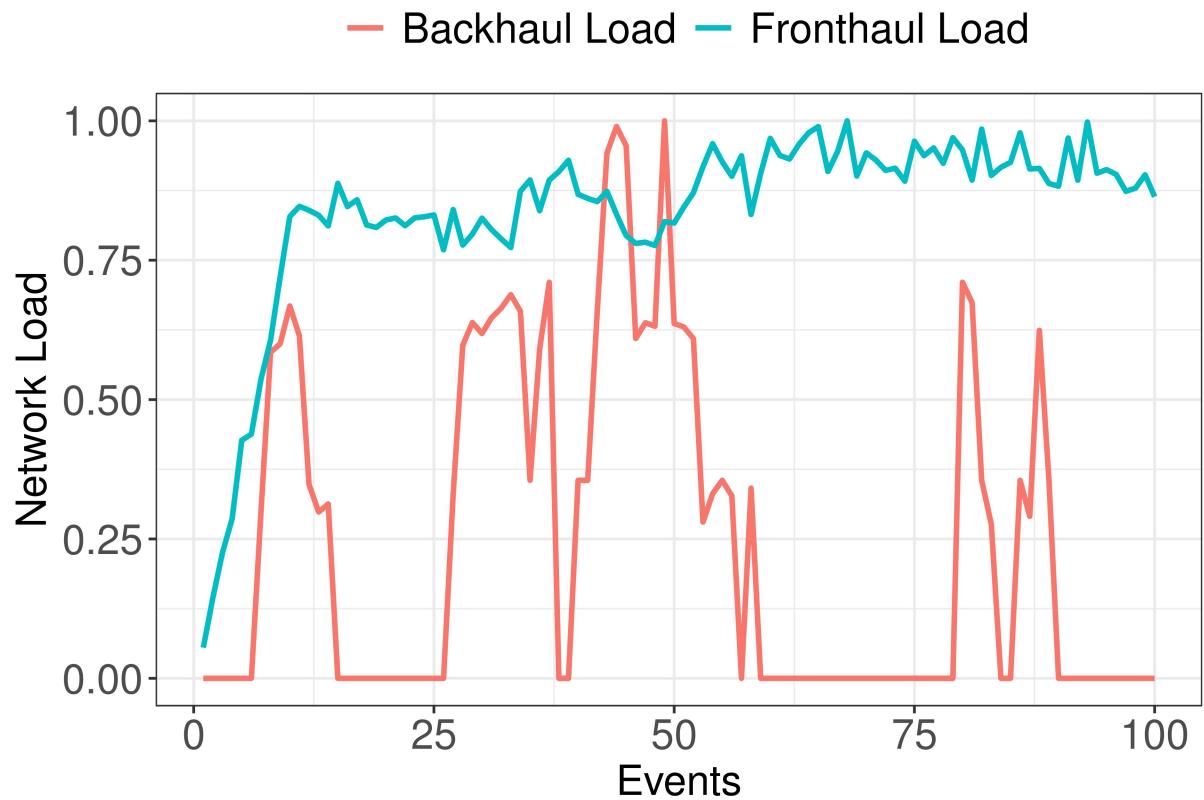


Network Load - Fronthaul vs Backhaul









```
## Saving 6.5 x 4.5 in image
```