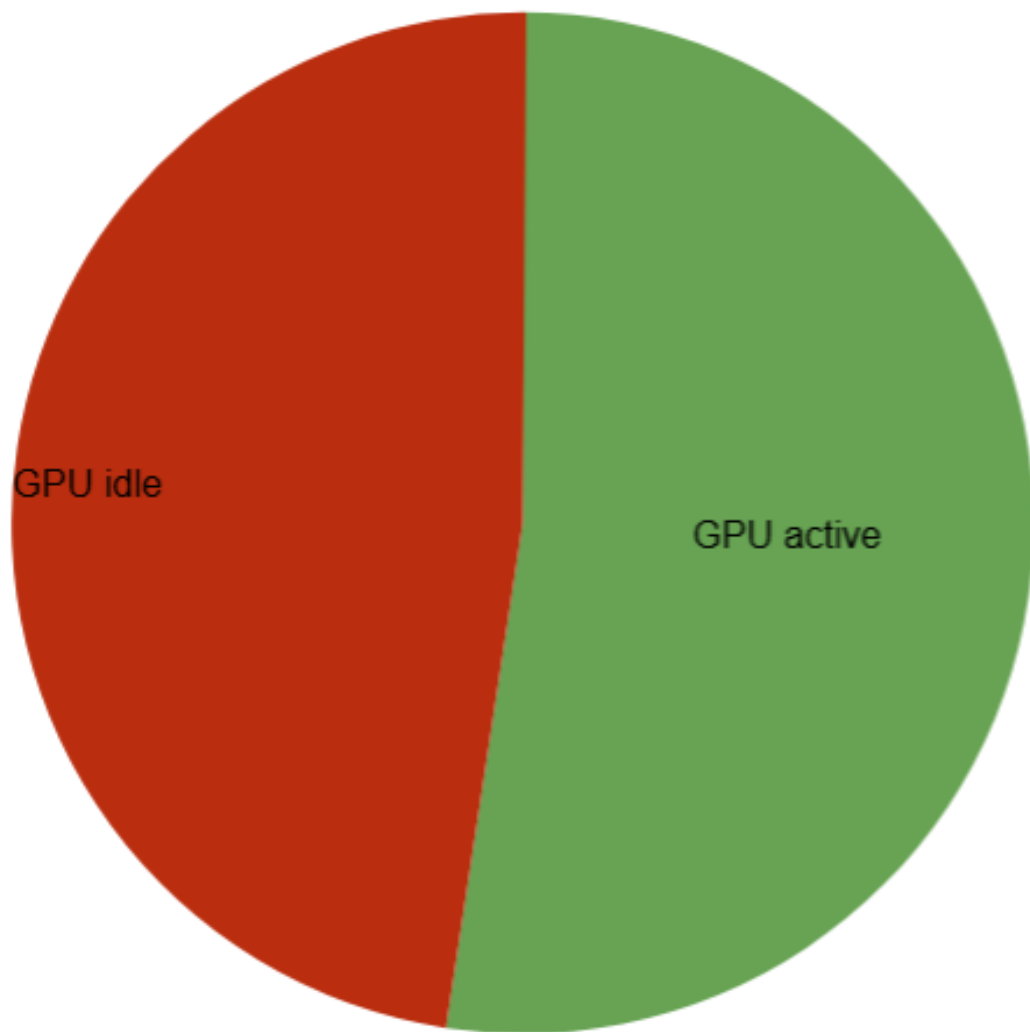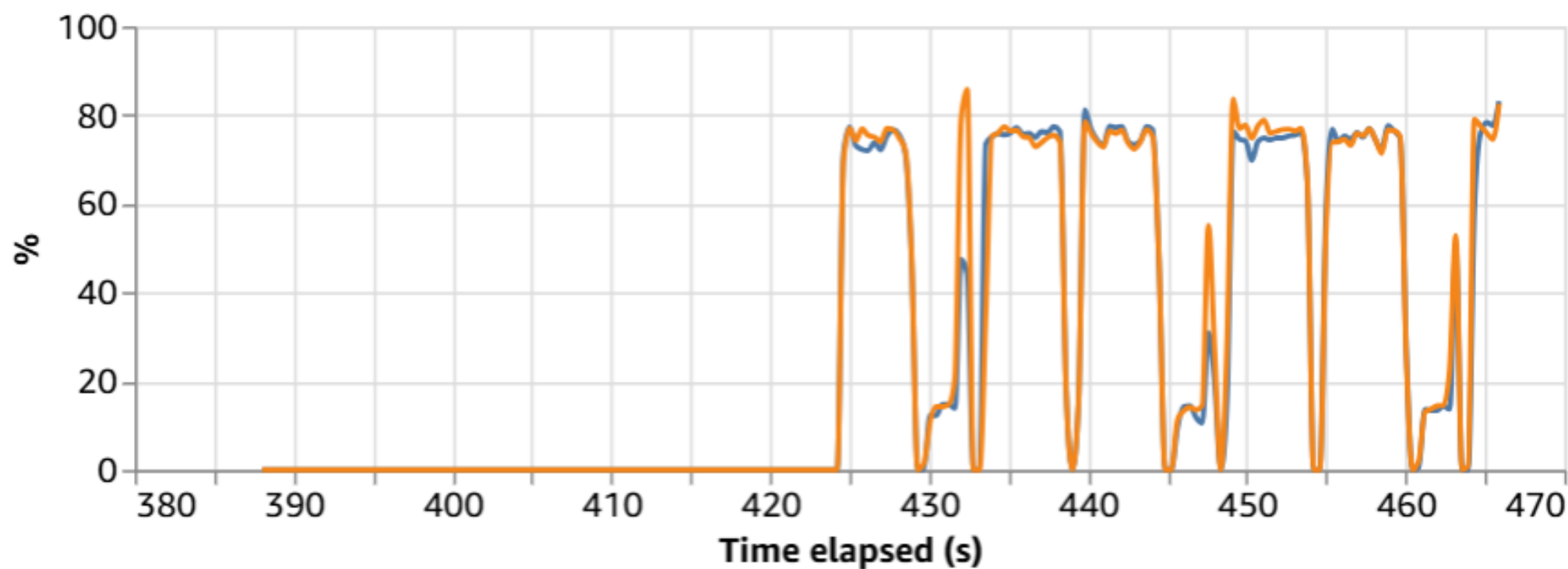# GPU Active Time ❓

GPU idle

GPU active

Legend
- ⭕ GPU active
- ⭕ GPU idle

GPU Utilization Over Time ❓

legend

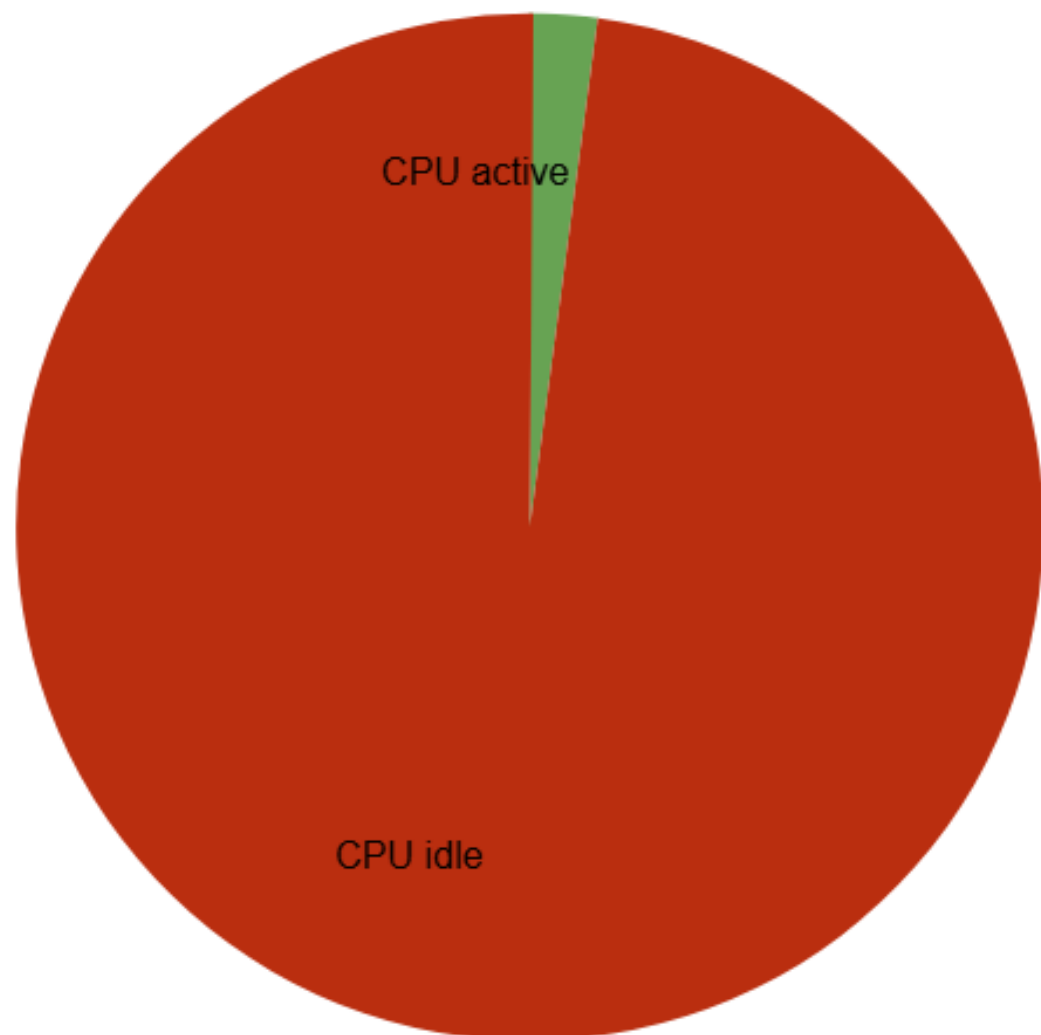— algo-1 — algo-2

Group utilization by   Host ▾

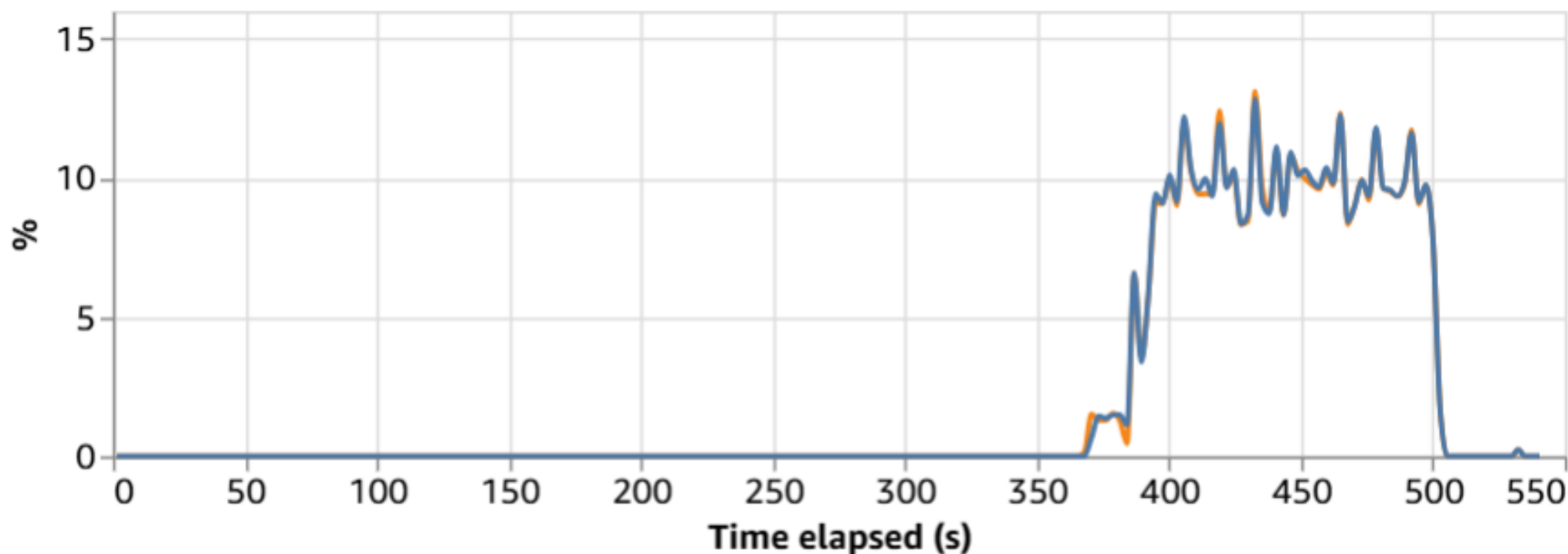| Open in Timeline | Reset to default | Zoom into selected range | Set current range for CPU |

CPU Active Time ⍰

CPU active

CPU idle

Legend
- ⭘ CPU active
- ⭘ CPU idle

CPU Utilization Over Time ❓

legend
— algo-1 — algo-2

| Open in Timeline | Reset to default | Zoom into selected range |

Time Spent By All GPU Kernels ❓

Legend

- ⬤ ncclKernel_AllReduce_Rl...
- ⬤ ncclKernel_AllReduce_T...
- ⬤ void at::native::(anonym...
- ⬤ void at::native::unrolled_...
- ⬤ void cudnn::ops::nchwTo...
- ⬤ void at::native::(anonym...
- ⬤ void at::native::(anonym...
- ⬤ void at::native::(anonym...
- ⬤ DtoD
- ⬤ sm75_xmma_fprop_imp...
- ⬤ void at::native::vectorize...
- ⬤ void at::native::(anonym...
- ⬤ void at::native::(anonym...
- ⬤ void at::native::(anonym...
- ⬤ void at::native::(anonym...
- ⬤ Others
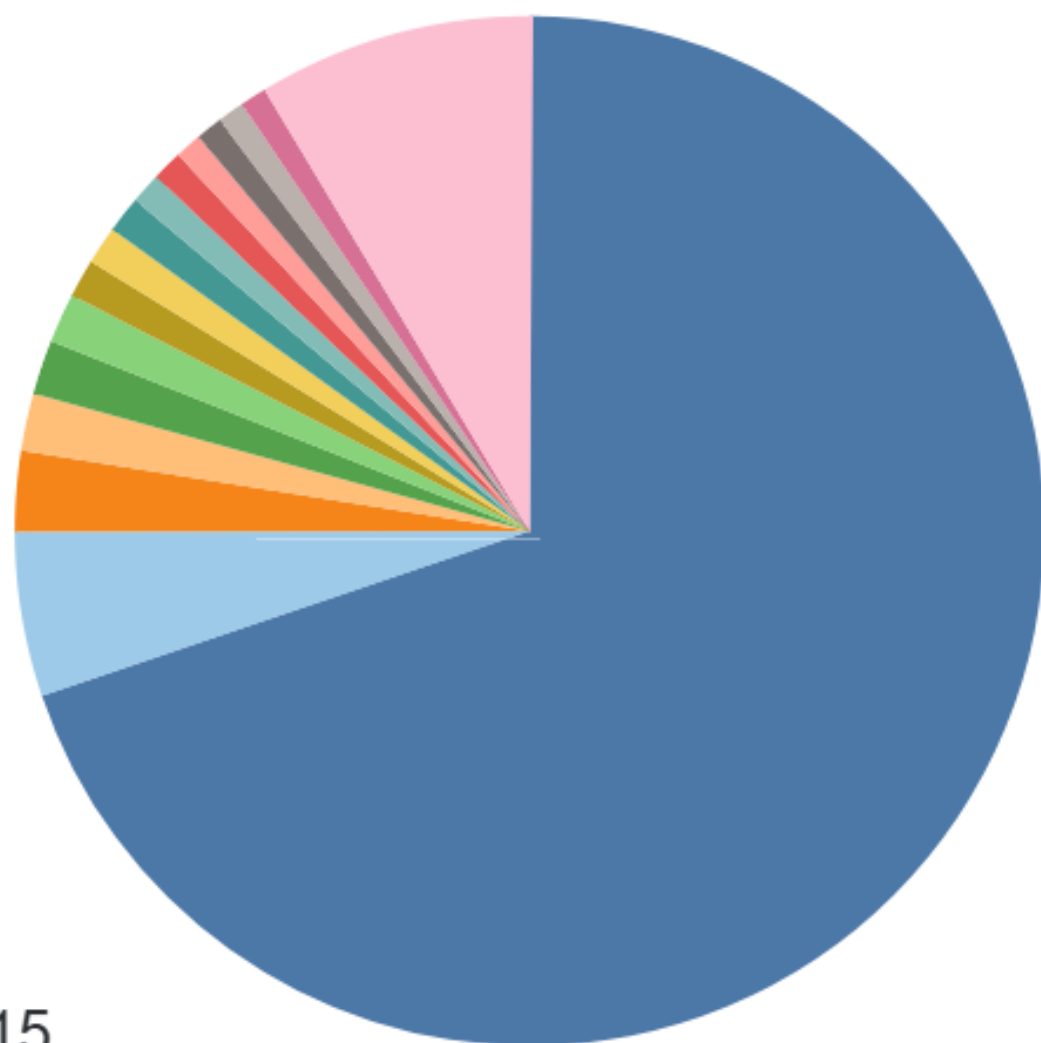
k 15

Time Spent By Top 15 GPU Kernels ❓
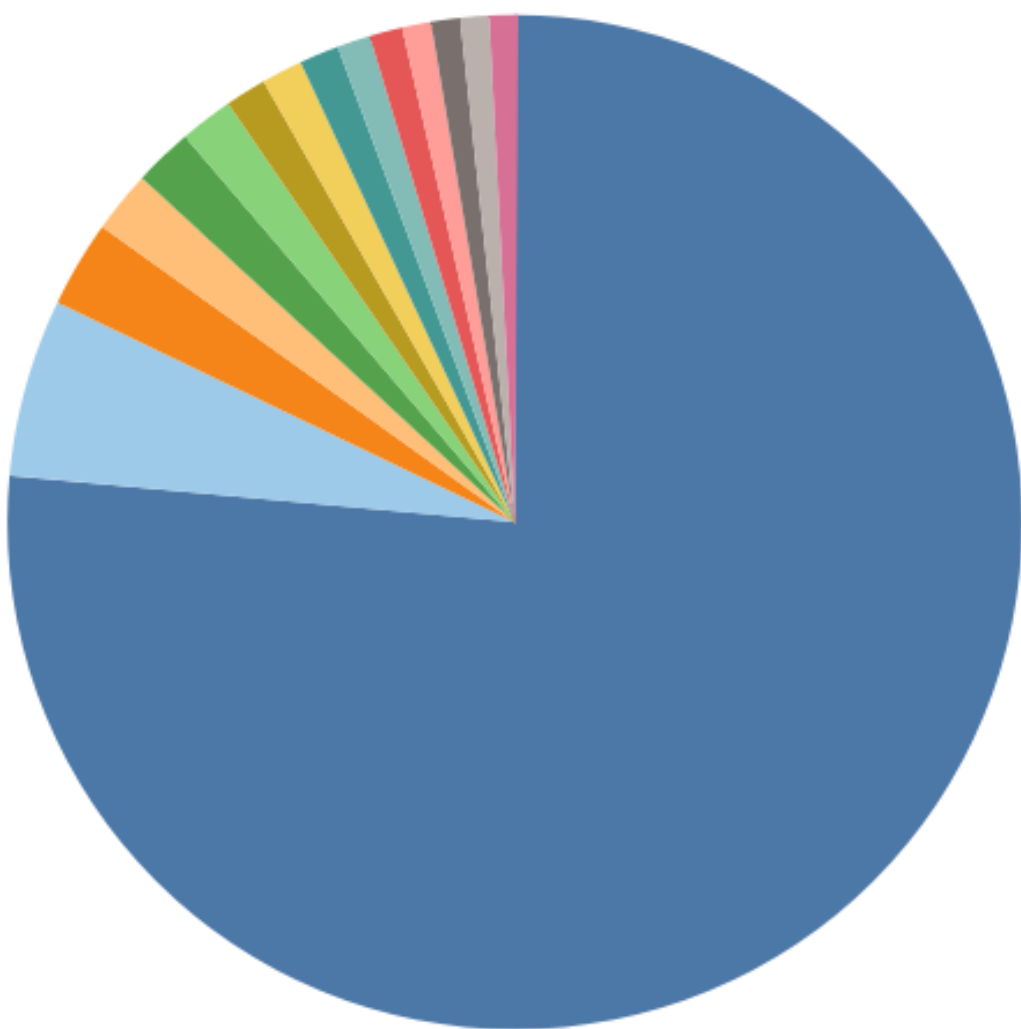
Legend

○ ncclKernel_AllReduce_Rl...
○ ncclKernel_AllReduce_T...
○ void at::native::(anonym...
○ void at::native::unrolled_...
○ void cudnn::ops::nchwTo...
○ void at::native::(anonym...
○ void at::native::(anonym...
○ void at::native::(anonym...
○ DtoD
○ sm75_xmma_fprop_imp...
○ void at::native::vectorize...
○ void at::native::(anonym...
○ void at::native::(anonym...
○ void at::native::(anonym...
○ void at::native::(anonym...
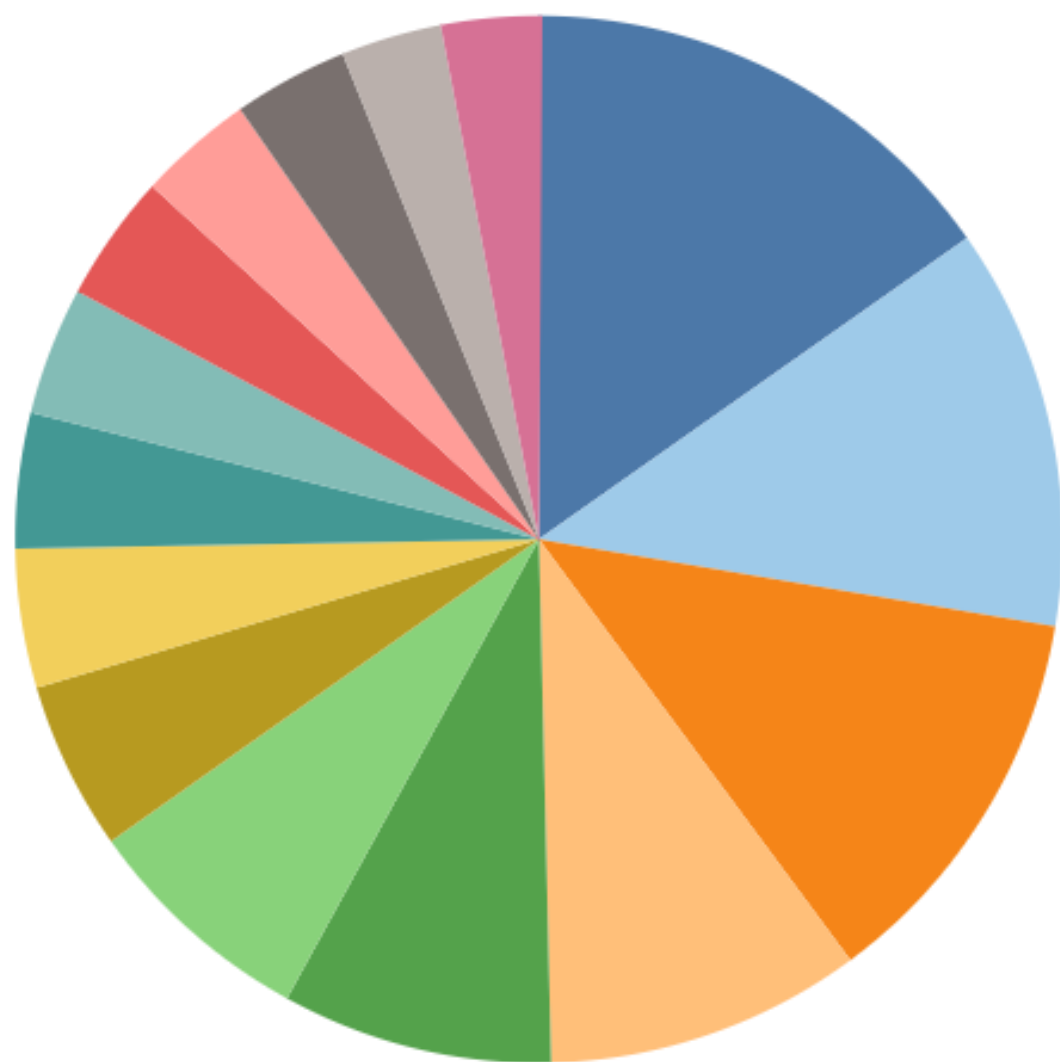
Launch Counts Of All GPU Kernels ❓
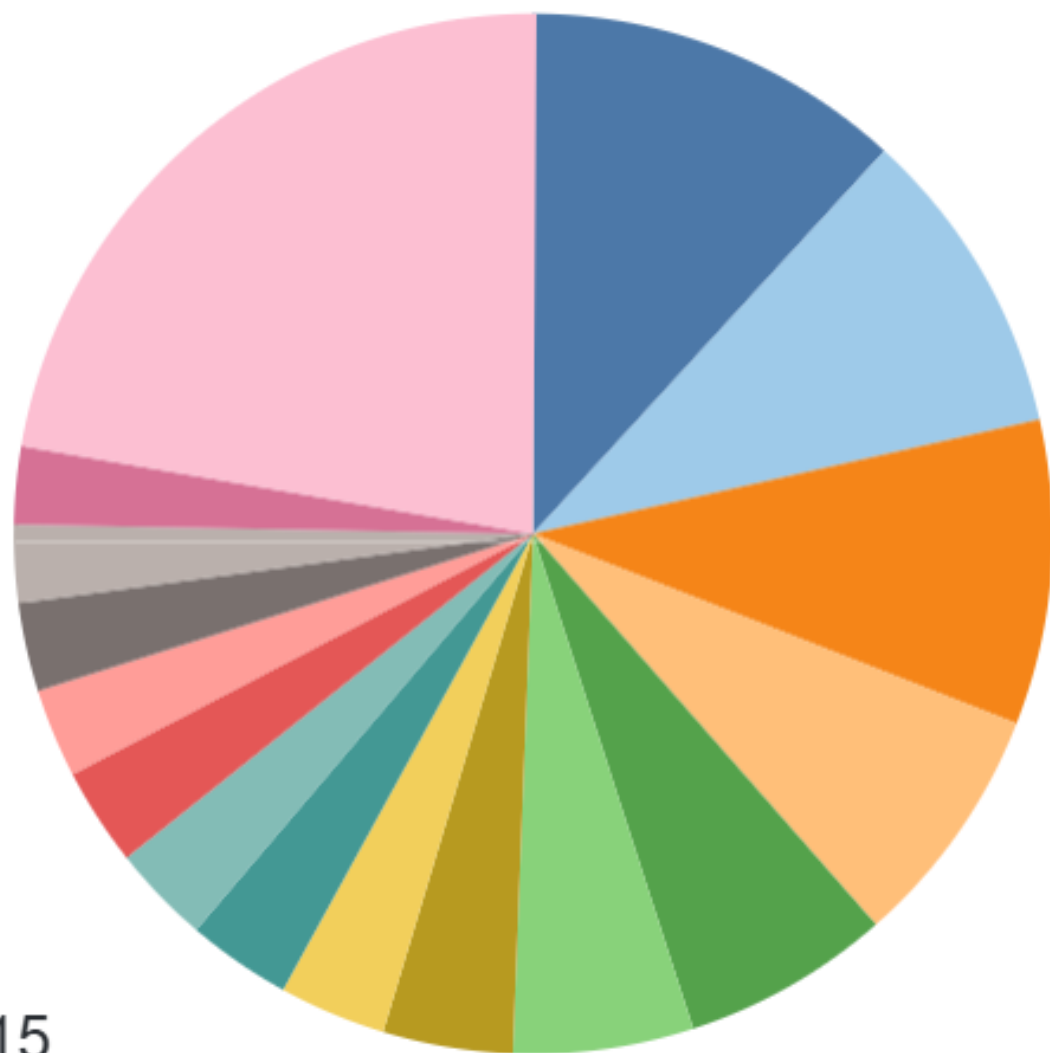
Legend

- ○ void cudnn::ops::nchwTo...
- ○ void at::native::vectorize...
- ○ DtoD
- ○ void at::native::unrolled_...
- ○ void at::native::vectorize...
- ○ void cudnn::ops::nhwcTo...
- ○ void cudnn::bn_fw_inf_1...
- ○ void at::native::unrolled_...
- ○ void at::native::vectorize...
- ○ void at::native::vectorize...
- ○ sm75_xmma_fprop_imp...
- ○ Memset
- ○ void at::native::vectorize...
- ○ void cudnn::bn_fw_tr_1C...
- ○ void cudnn::bn_bw_1C1...
- ○ Others

k   15

Launch Counts Of Top 15 GPU Kernels ❓

Legend

- ⭕ void cudnn::ops::nchwTo...
- ⭕ void at::native::vectorize...
- ⭕ DtoD
- ⭕ void at::native::unrolled_...
- ⭕ void at::native::vectorize...
- ⭕ void cudnn::ops::nhwcTo...
- ⭕ void cudnn::bn_fw_inf_1...
- ⭕ void at::native::unrolled_...
- ⭕ void at::native::vectorize...
- ⭕ void at::native::vectorize...
- ⭕ sm75_xmma_fprop_imp...
- ⭕ Memset
- ⭕ void at::native::vectorize...
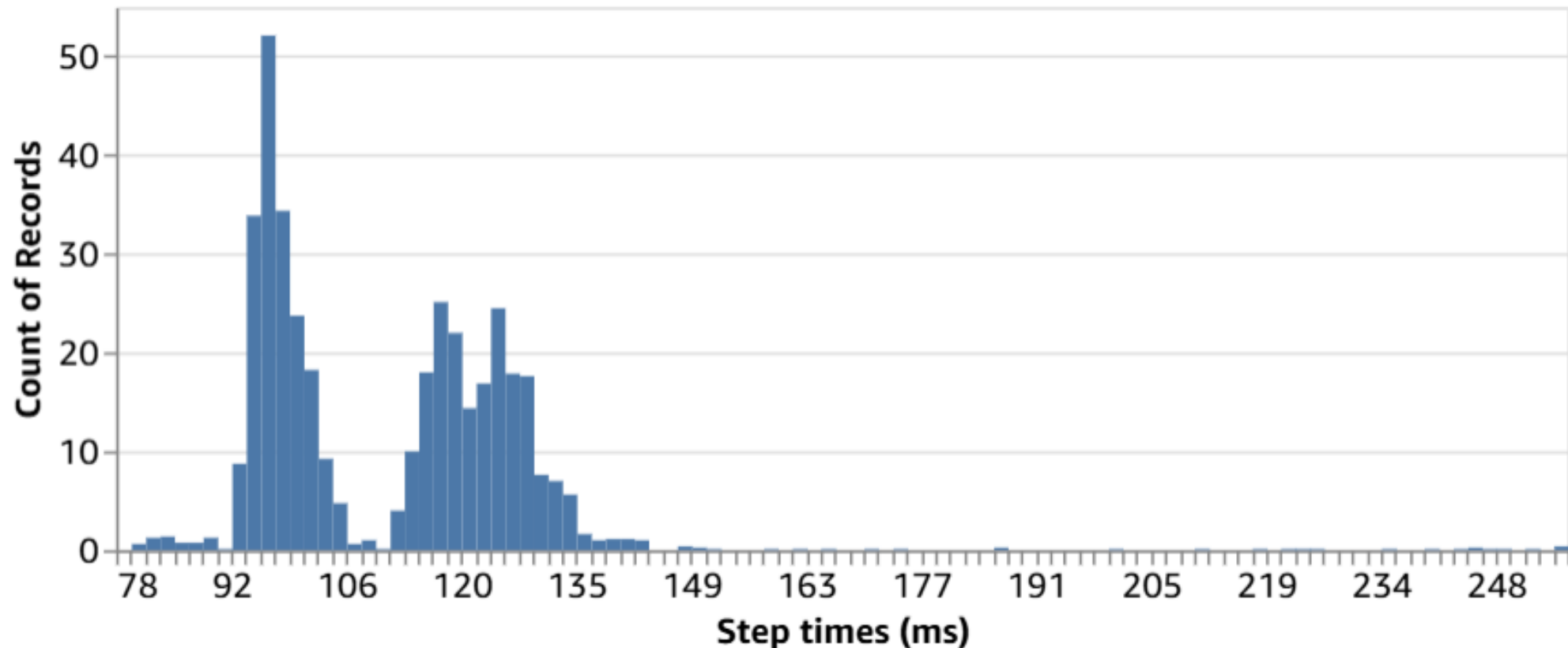- ⭕ void cudnn::bn_fw_tr_1C...
- ⭕ void cudnn::bn_bw_1C1...

Step Time Distribution ❓

nBins	100		Mean	111.23 ms
xStart	79		Integral	3146
xEnd	256		Standard Deviation	16.79 ms
			Underflow count	0
	Remove outliers		Overflow count	62
	logAxis			

Kernel Precision Distribution ?

Legend
- ○ fp16
- ○ fp32
- ○ int32
- ○ unknown
- ○ int8
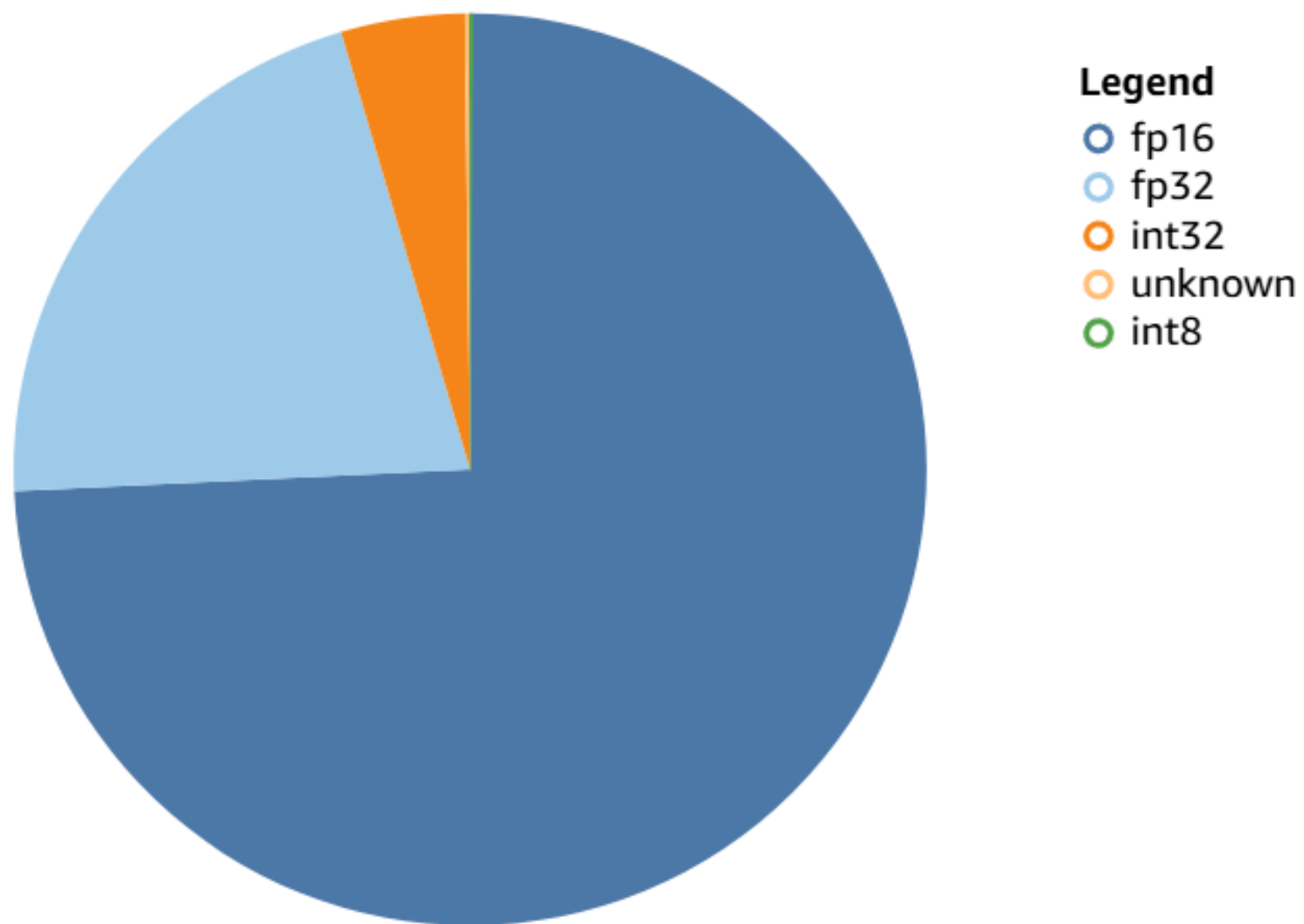
GPU Activity Distribution ?
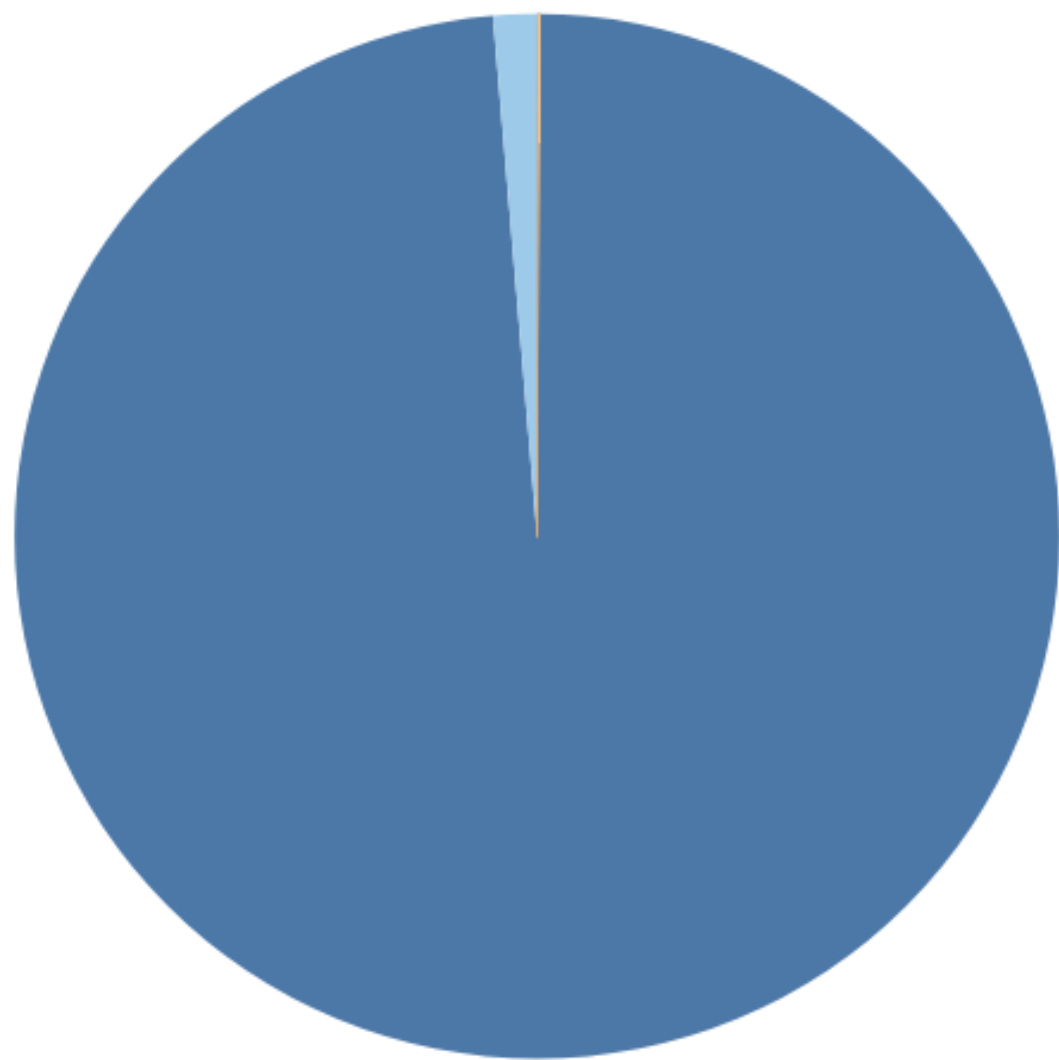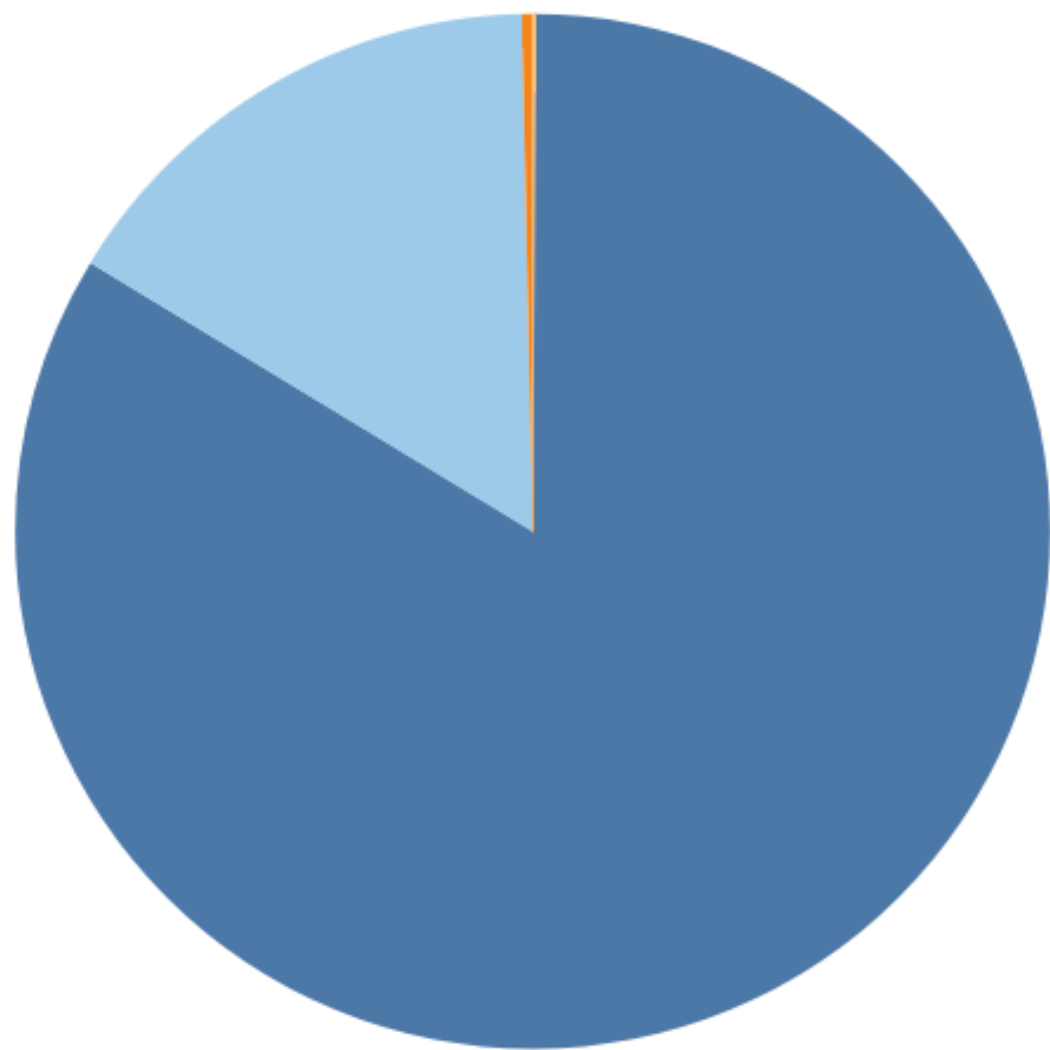
Legend
- ○ kernel
- ○ memcopy
- ○ memset
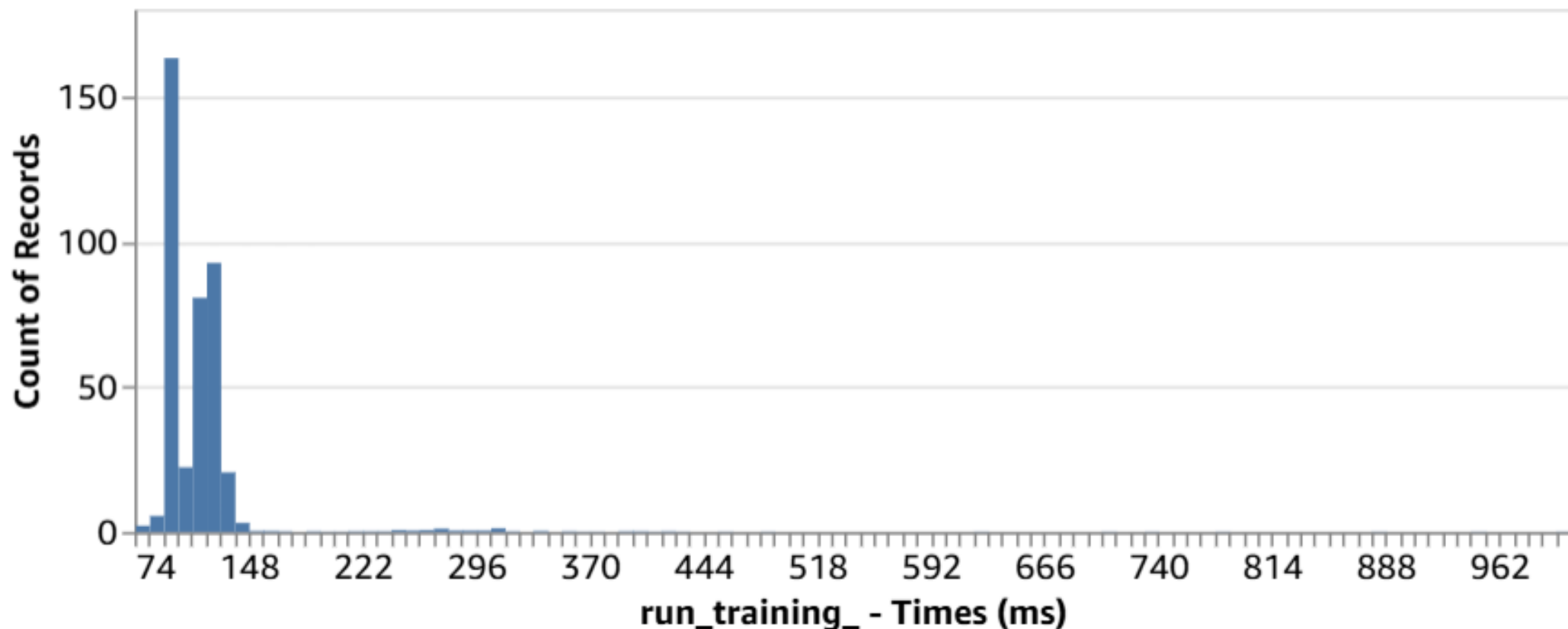- ○ sync

GPU Memory Operations Distribution ❓

Legend
- ⭕ DtoD.device.device
- ⭕ HtoD.pageable.device
- ⭕ DtoH.device.pageable
- ⭕ HtoD.pinned.device

Time distribution for: run_training

run_training_ - Times (ms)

nBins	100	
xStart	79	
xEnd	1004	

Mean	116.12 ms
Integral	3208
Standard Deviation	46.53 ms
Underflow count	0
Overflow count	40

- Remove outliers
- logAxis