**GPU RTX 6000**

* 1000^2 (SP) – 2gpu

Kernel 1: 0.077330 seconds

Kernel 2: 0.063316 seconds

Total program time: 0.417195 seconds

A close-up of a planet

Description automatically generated

* 100^2 (SP) – 2gpu
* Kernel execution time: 0.077354 seconds
* Kernel execution time: 0.064791 seconds
* Total program time: 0.409070 seconds

A close-up of a sphere

Description automatically generated

1000^2 DP

Kernel 1: 2.014759

Kernel 2: 4.926259

Total program time: 5.114019 seconds

A close-up of a planet

Description automatically generated

100^2 DP

Kernel execution time: 1.999440 seconds

Kernel execution time: 4.914348 seconds

Total program time: 5.102570 seconds

A close-up of a planet

Description automatically generated

* 1000^2 (SP) – 1gpu

Kernel execution time: 0.141778 seconds

Total program time: 0.225412 seconds

A close-up of a planet

Description automatically generated

100^2 (SP) – 1GPU

Kernel execution time: 0.141785 seconds

Total program time: 0.223605 seconds

A close-up of a sphere

Description automatically generated

* 1000^2 (DP) – 1gpu (512, 5000)

Kernel execution time: 10.115640 seconds

Total program time: 10.189811 seconds

A close-up of a planet

Description automatically generated

* 100^2 (DP) – 1GPU (512, 5000)

Kernel execution time: 10.130528 seconds

Total program time: 10.199634 seconds

A close-up of a sphere

Description automatically generated

**V100**

* V100 (SINGLE, single precision, 10002) (512)

Kernel execution time: 0.164233 seconds

Total program time: 0.277579 seconds

A close-up of a planet

Description automatically generated

* V100 (SINGLE, single precision, 100^2) (512)

Kernel execution time: 0.164227 seconds

Total program time: 0.274454 seconds

A close-up of a white sphere

Description automatically generated

* V100 (double Precision) 1000^2 (512)
* Kernel execution time: 0.798614 seconds
* Total program time: 0.914896 seconds

A close-up of a planet

Description automatically generated

* V100 (double) 100^2

Kernel execution time: 0.798136 seconds

Total program time: 0.908484 seconds

A close-up of a sphere

Description automatically generated

V100 2 GPUs (single precision) 1000^2 (1024)

* Kernel execution time: 0.076149 seconds
* Kernel execution time: 0.034075 seconds
* Total program time: 0.428217 seconds

A close-up of a planet

Description automatically generated

V100 2 GPUs (single precision) 100^2 (1024)

Kernel execution time: 0.076153 seconds

Kernel execution time: 0.034076 seconds

Total program time: 0.489119 seconds

A close-up of a sphere

Description automatically generated

V100 2 GPUs (double precision) 1000^2 (512)

Kernel execution time: 0.372794 seconds

Kernel execution time: 0.148132 seconds

Total program time: 0.870476 seconds

A close-up of a planet

Description automatically generated

V100 2 GPUs (double precision) 100^2 (512)

Kernel execution time: 0.373028 seconds

Kernel execution time: 0.146635 seconds

Total program time: 0.661179 seconds

A close-up of a planet

Description automatically generated

A100 single precision 1000^2

A100 single precision 100^2

A100 double precision 1000^2

A100 double precision 100^2

OMP 48 cores 1000^2 (SP):

Time used: 10.000000 seconds  
A close-up of a white sphere

Description automatically generated

OMP 48 cores 100^2 (SP):

Time used: 10.000000 seconds

A close-up of a planet

Description automatically generated

OMP1, 1000^2 (SP)

Time used: 364.000000 seconds

A close-up of a black and white image

Description automatically generated

OMP 1, 100^2 (SP)

Time used: 362.000000 seconds

A close-up of a white sphere

Description automatically generated

DP:

OMP 1 1000

Time used: 433.664546 seconds

A close-up of a white sphere

Description automatically generated

OMP 1 100

372.920073 seconds

A close-up of a planet

Description automatically generated

OMP 48 1000

OMP 48 100