



Access to DTU GPU nodes

- Get a guest-account from Peter (active until end of April 2021)
- Access via either
 - ThinLinc https://thinlinc.gbar.dtu.dk/main/
 - ssh to login2.hpc.dtu.dk)
- https://www.hpc.dtu.dk/?page_id=2129 has information on interactive nodes, choose one, e.g.
 - voltash -X
- Load McStas 3.0-dev from Peter's account by running ~pkwi/McStas/mcstas/3.0-dev/environment

(! On first access, please write a local mostas config by morun --write-user-config!)

- Load the Nvidia compilers module load nvhpc
- Optionally you can also load mpi via module load mpi/4.0.1-gcc-8.3.0 (! not plug+play wrt OpenACC, needs manual addition of lib and include path in above config!)

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Running an instrument on GPU

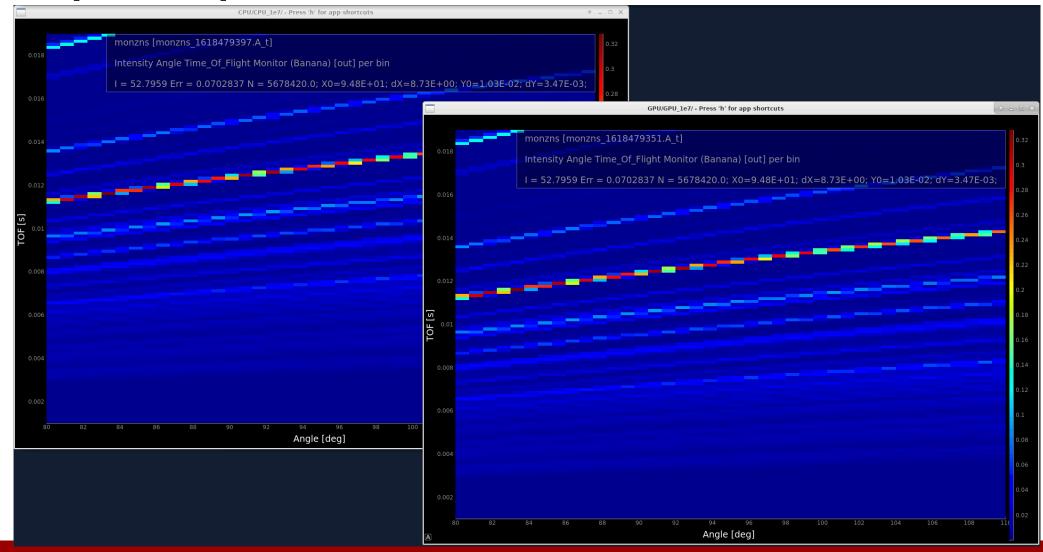
- Copy an instrument in cp \$MCSTAS/examples/ISIS_GEM.instr .
- Compile for GPU mcrun -c --openacc ISIS_GEM.instr -n0
- Run as usual, gives e.g.
- GPU 1e7, -s1000 :
 Detector: monzns_I=52.7959 monzns_ERR=0.0702837 monzns_N=5.67842e+06
 "monzns_1618479351.A_t"
 Finally [ISIS_GEM: GPU_1e7]. Time: 6 [s]
- CPU 1e7, -s1000 :
 Detector: monzns_I=52.7959 monzns_ERR=0.0702837 monzns_N=5.67842e+06
 "monzns_1618479397.A_t"
 Finally [ISIS_GEM: CPU_1e7]. Time: 1.08333 [min]

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mcplot output



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