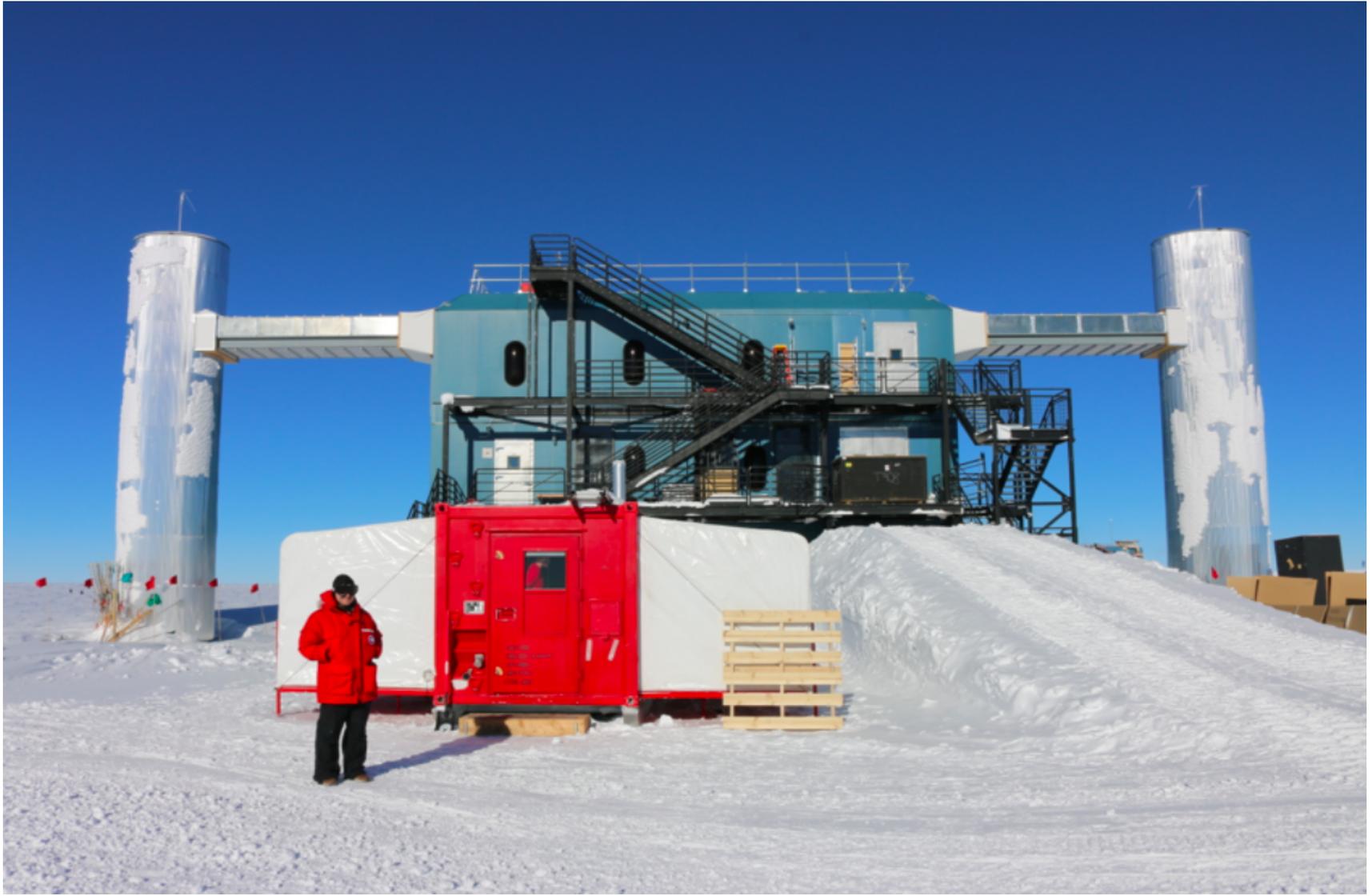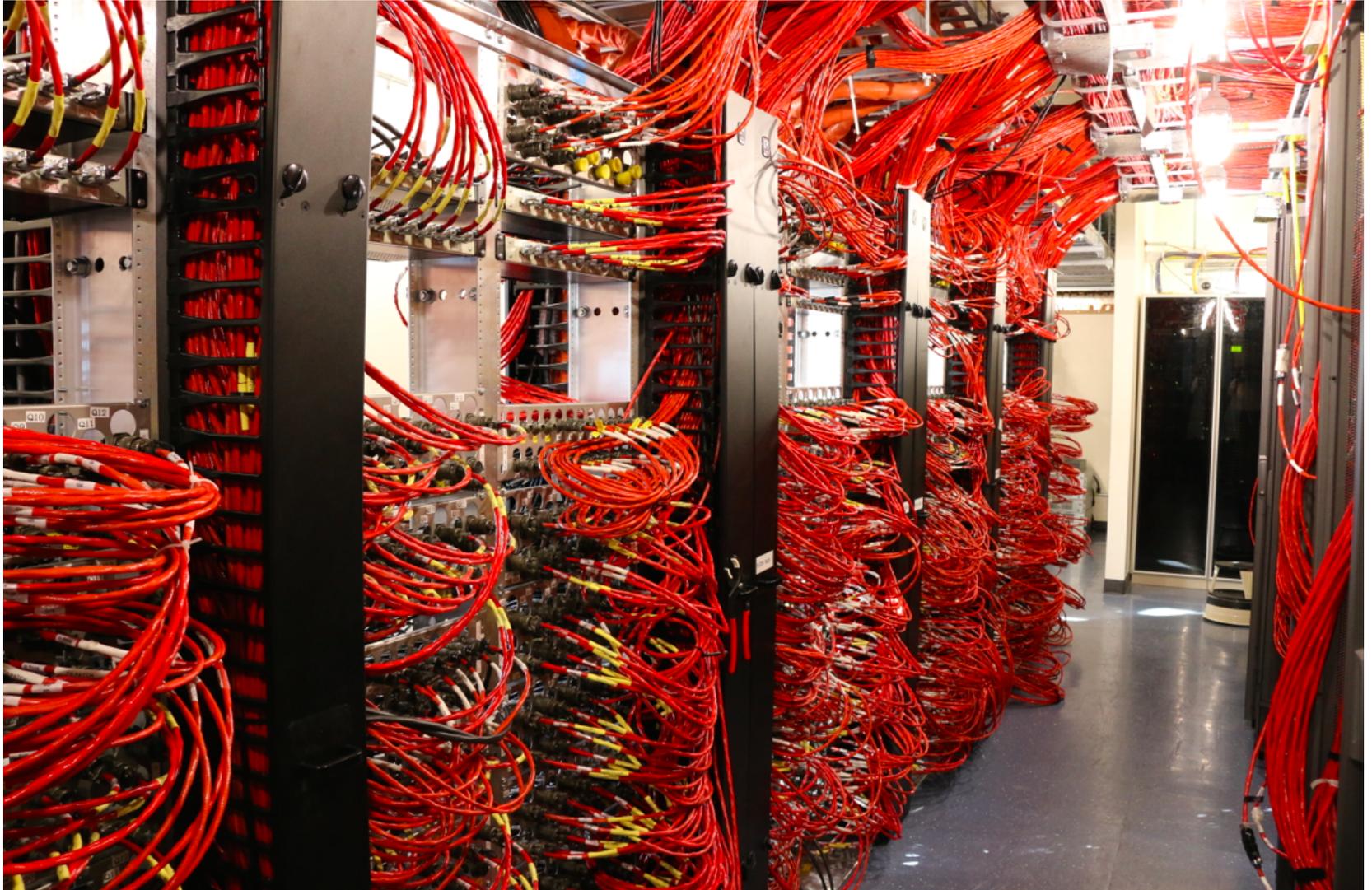# IceCube Computing

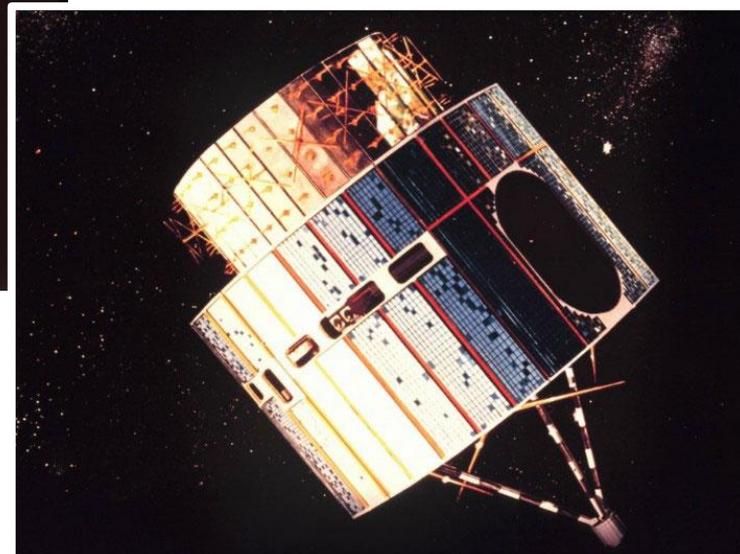## Masterclass May 21, 2014

Gonzalo Merino, UW Madison

IceCube Lab

1 TB/day RAW data

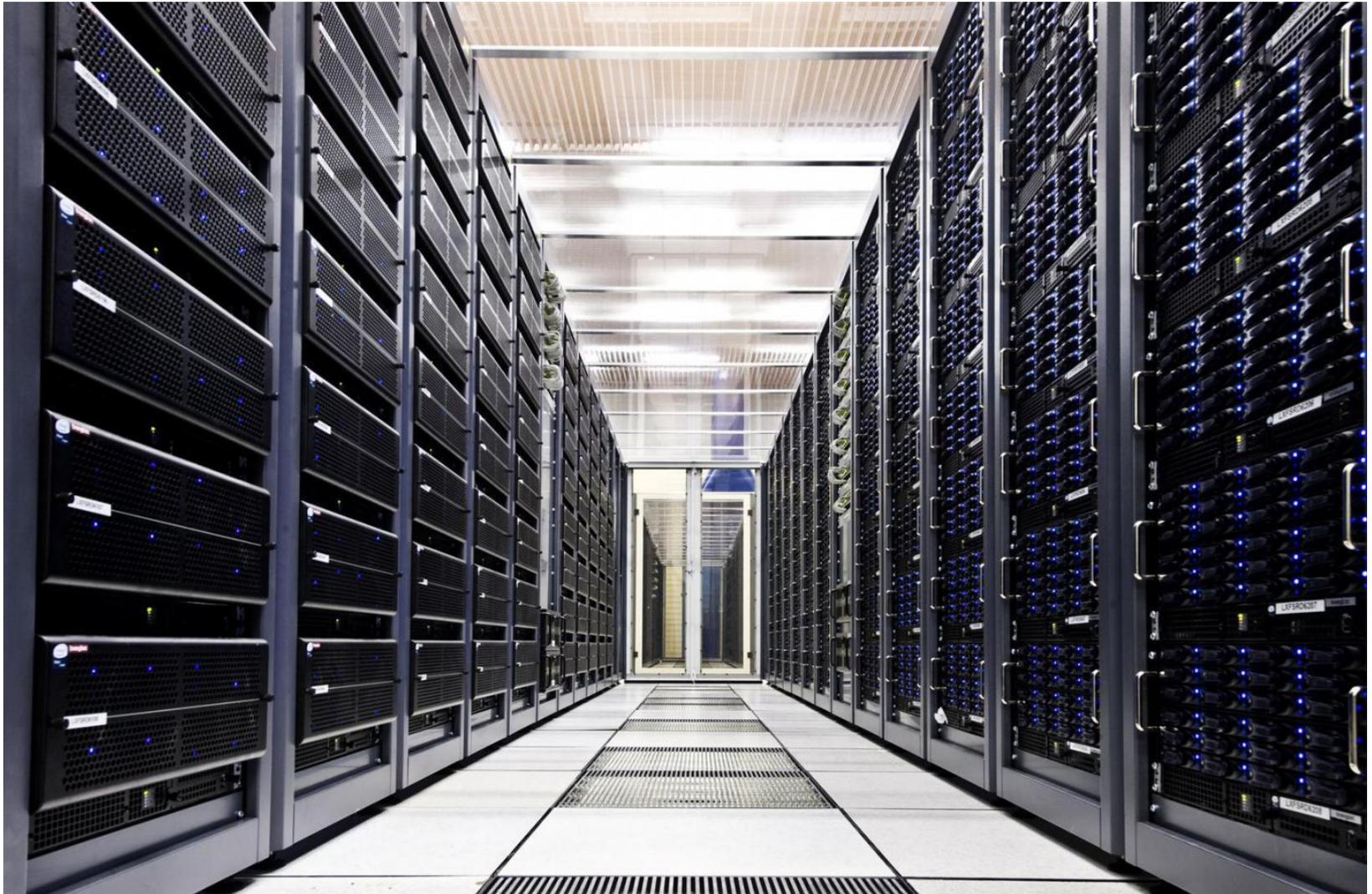# Satellite bandwidth ~100 GB/day

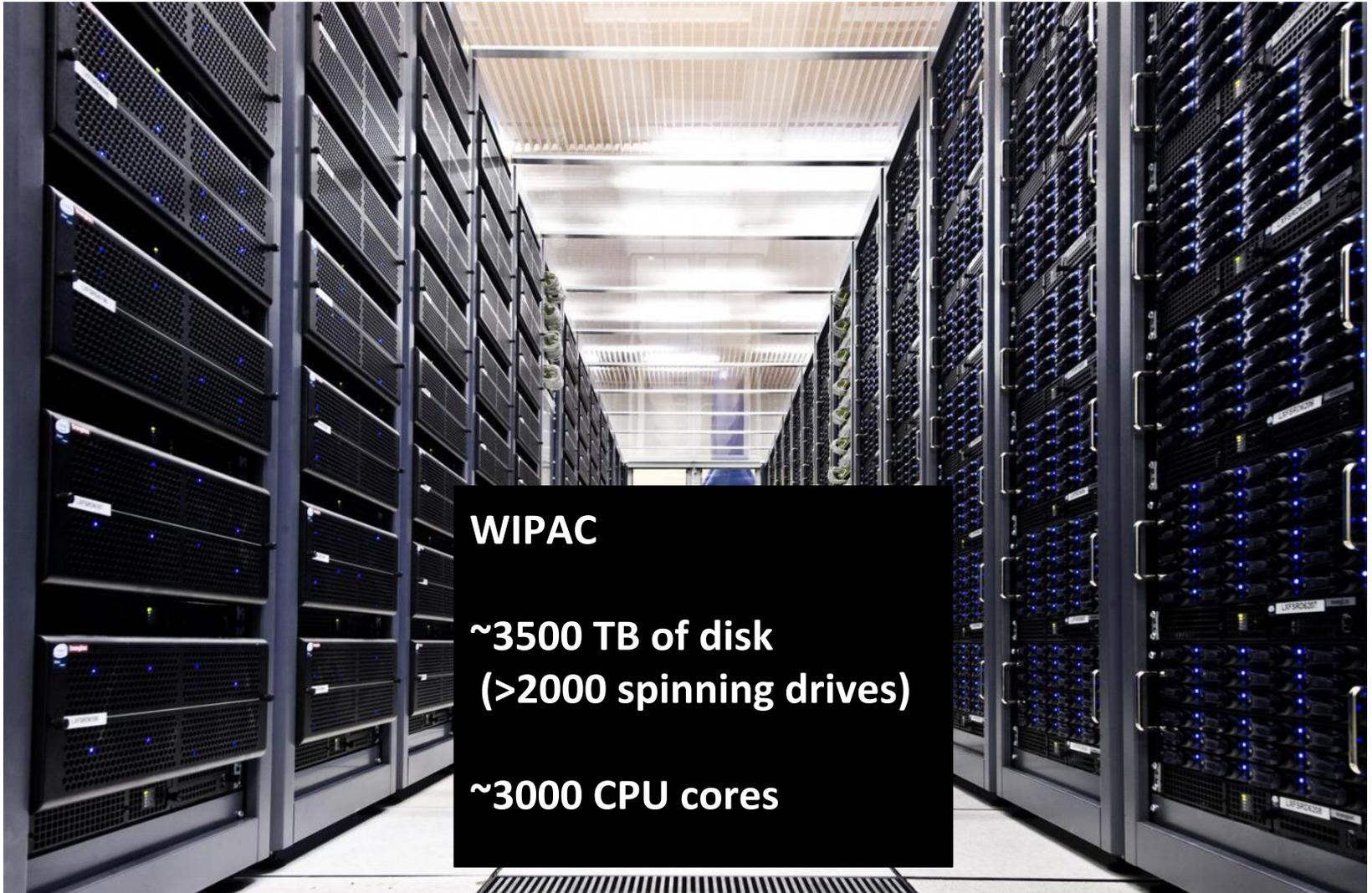# ~50 servers for data taking and filtering

Boxes coming, boxes going

High Throughput Computing
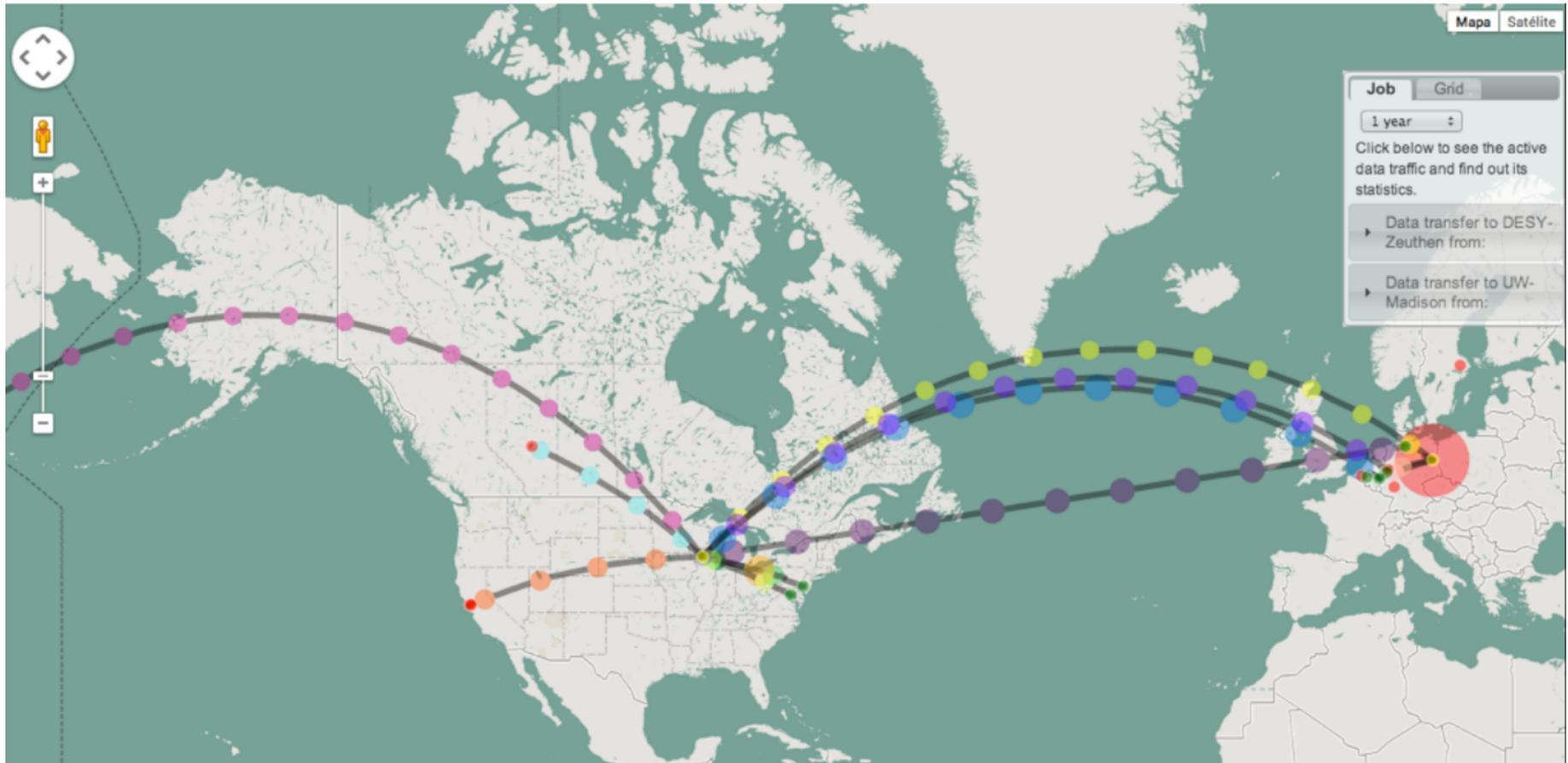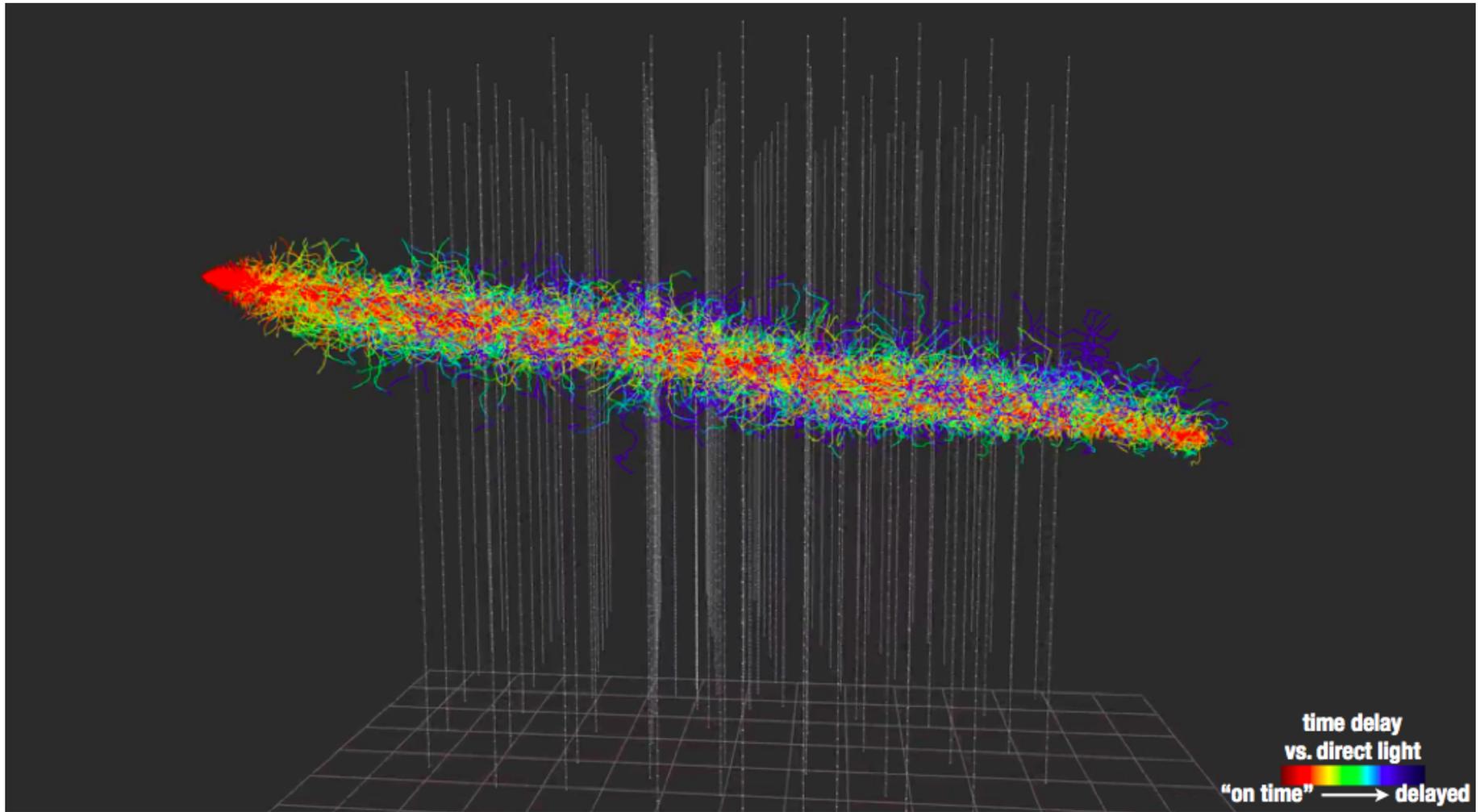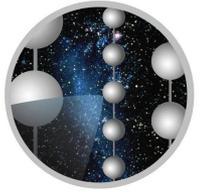
High Throughput Computing

WIPAC

~3500 TB of disk
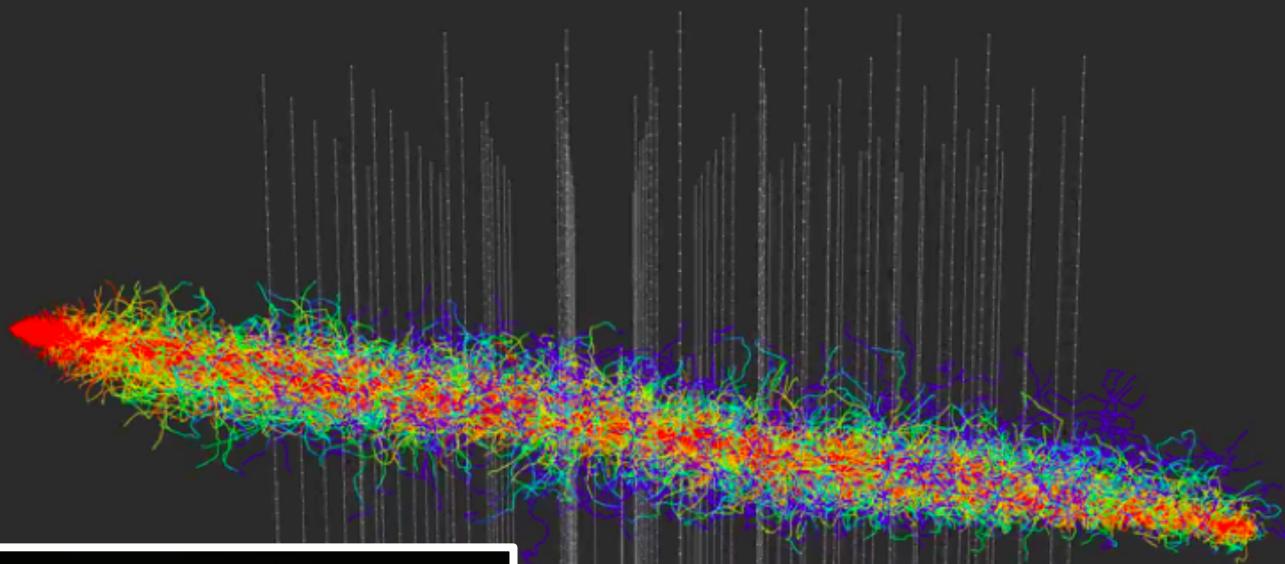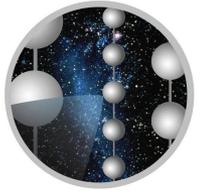**(>2000 spinning drives)**

~3000 CPU cores

IceCube Computing Sites

Simulation: light propagation on ice

time delay
vs. direct light
"on time" ———→ delayed

Simulation: light propagation on ice
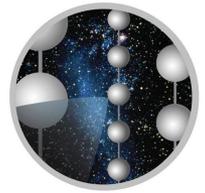
time delay
vs. direct light
"on time" ⟶ delayed

High Throughput Computing
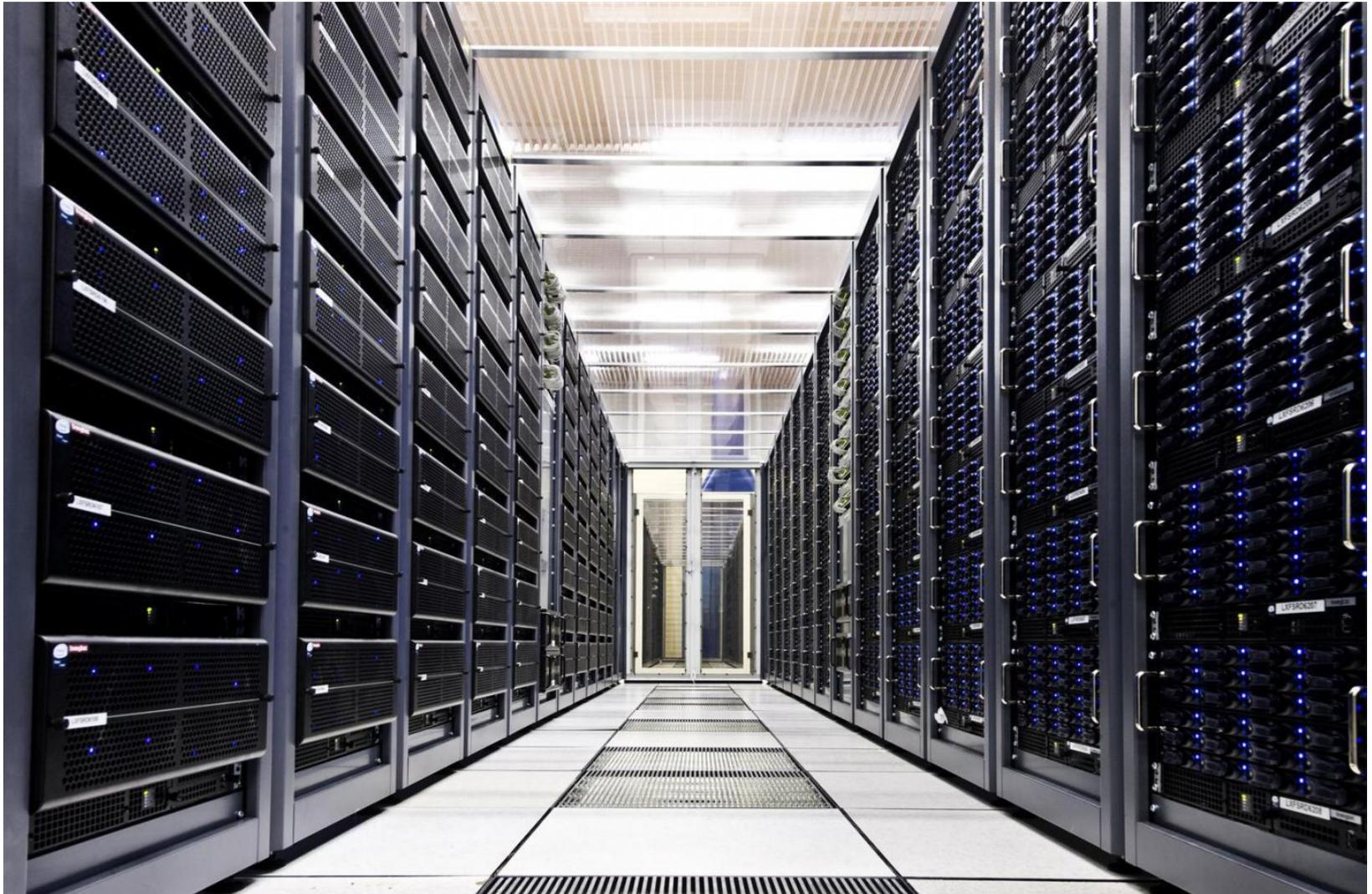
High Throughput Computing

Lots of data, in many fields

Genome sequencing centres ~5 TB/day

LHC ~50 TB/day

SKA ~100 TB/day
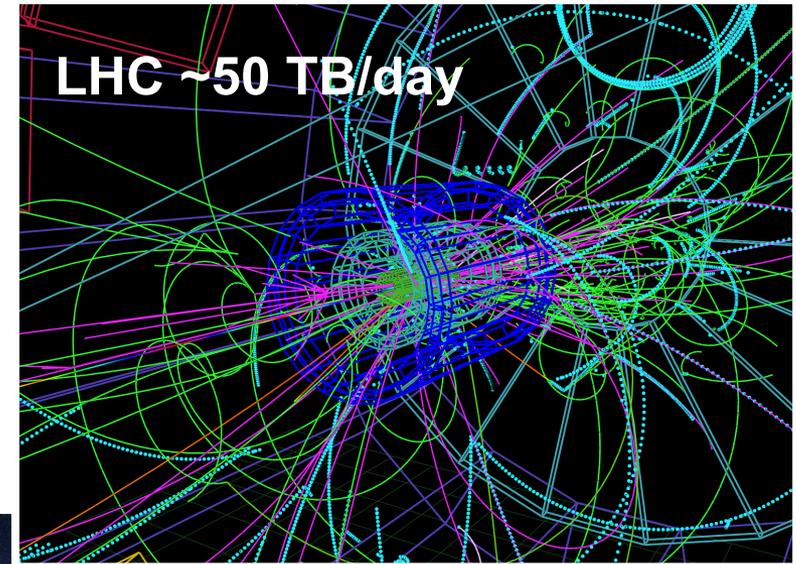
Running jobs: 236092
Transfer rate: 11.41 GiB/sec
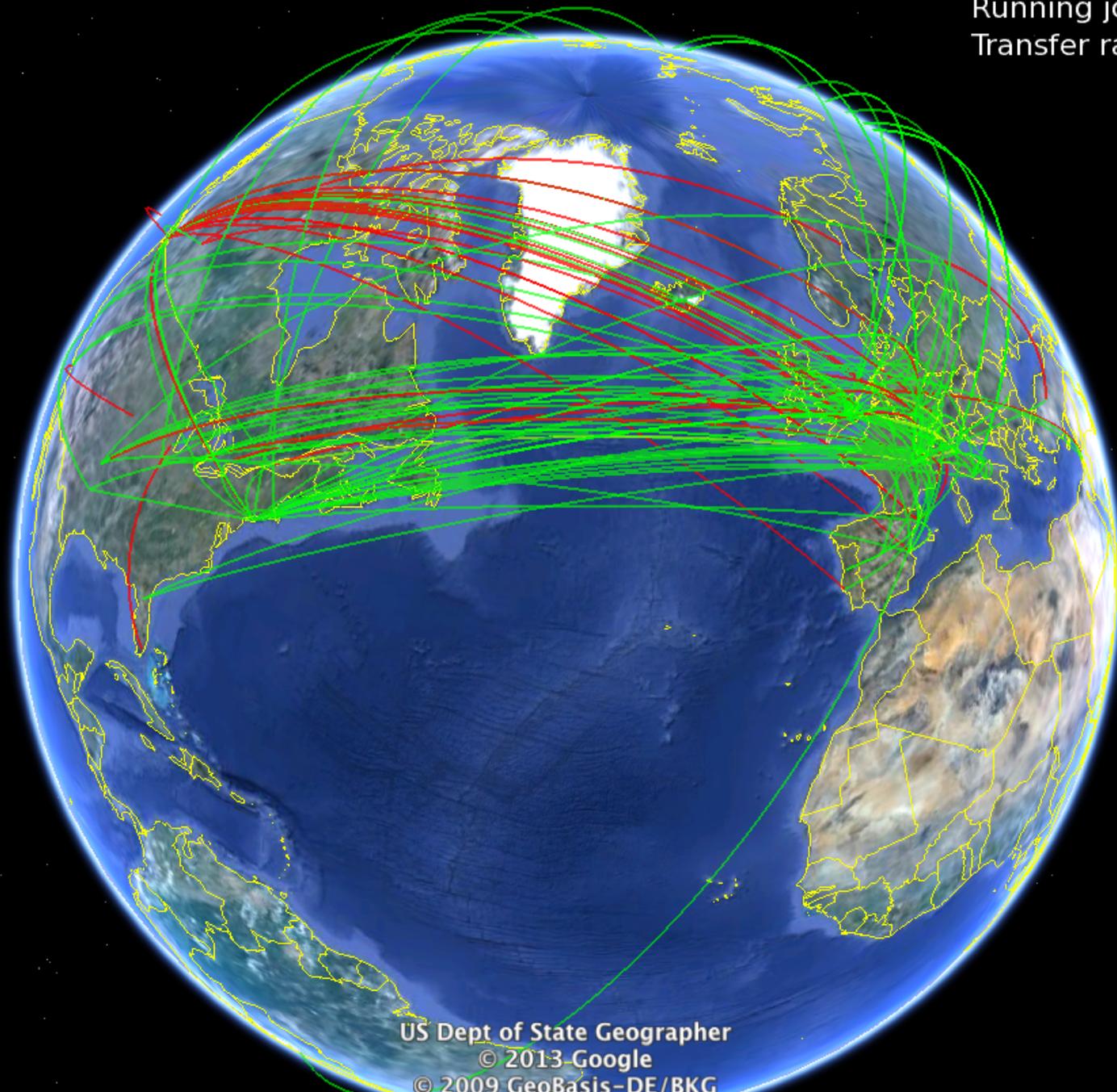
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