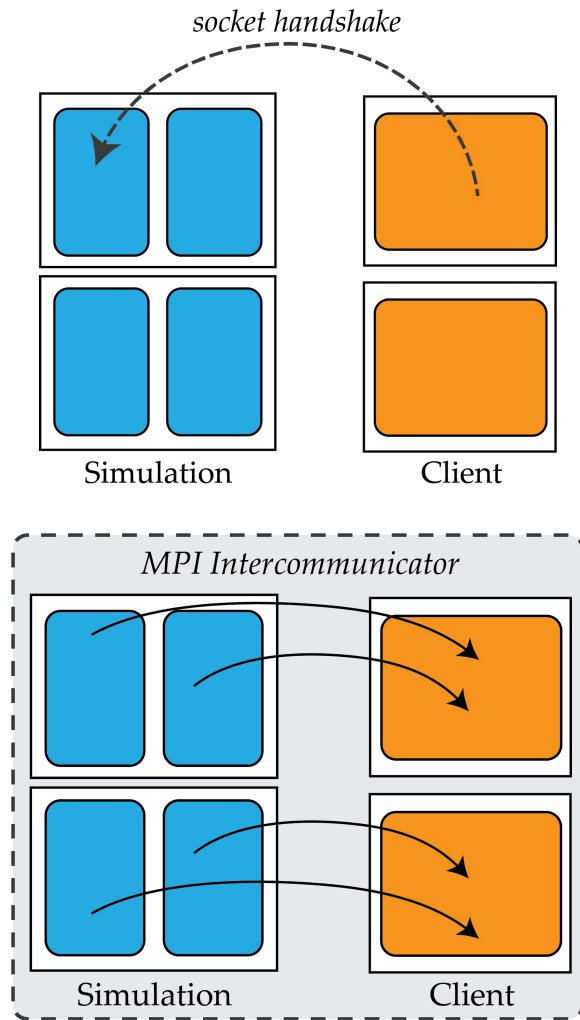# IXPUG libIS + DNS

Hyungman Park, Will Usher

libIS

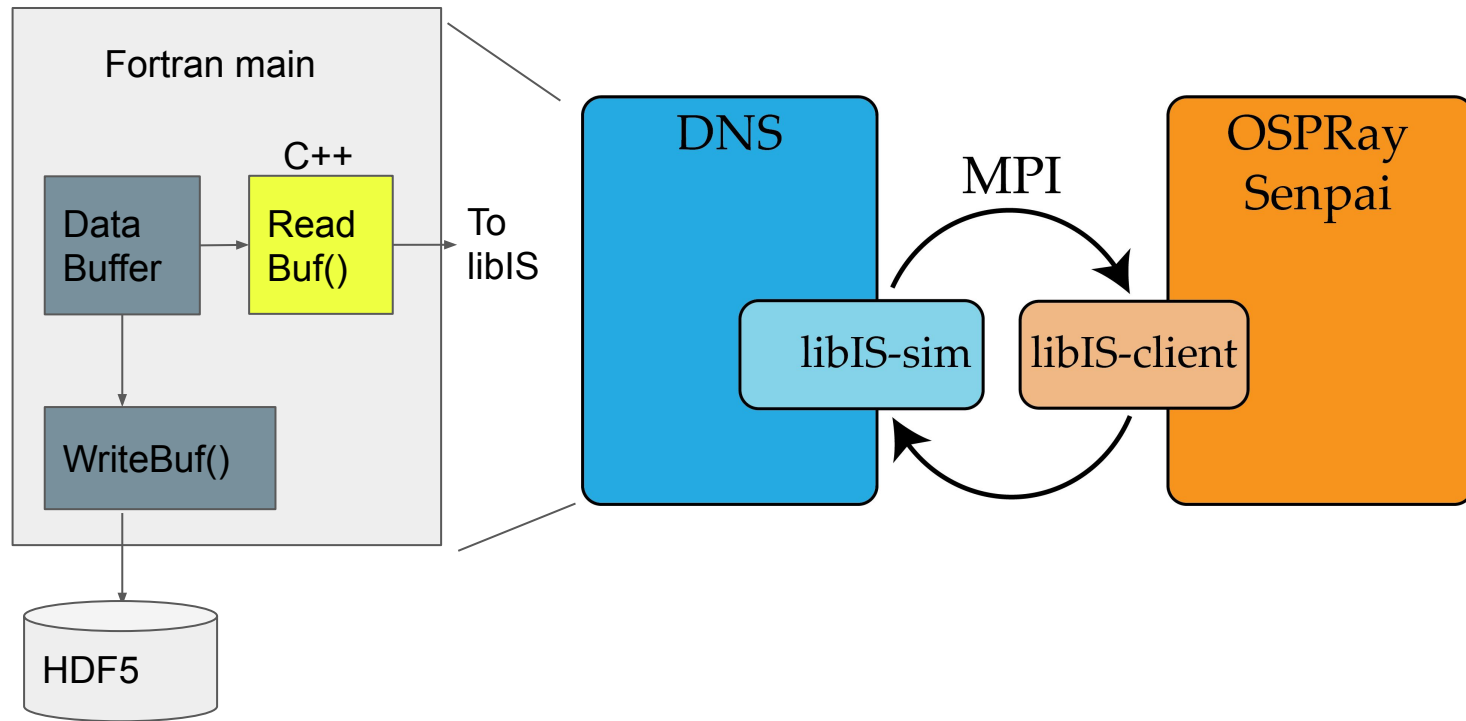Lightweight flexible library for in transit visualization

No dependencies, good for prototyping and portability

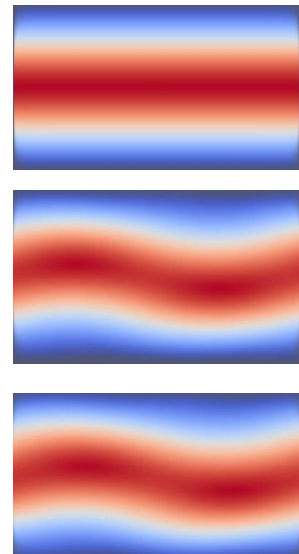Configurations: same nodes, separate nodes, same MPI run

Simulation acts as "data server" queried by the client

socket handshake

Simulation   Client

MPI Intercommunicator

Simulation   Client

DNS In Situ Viewer
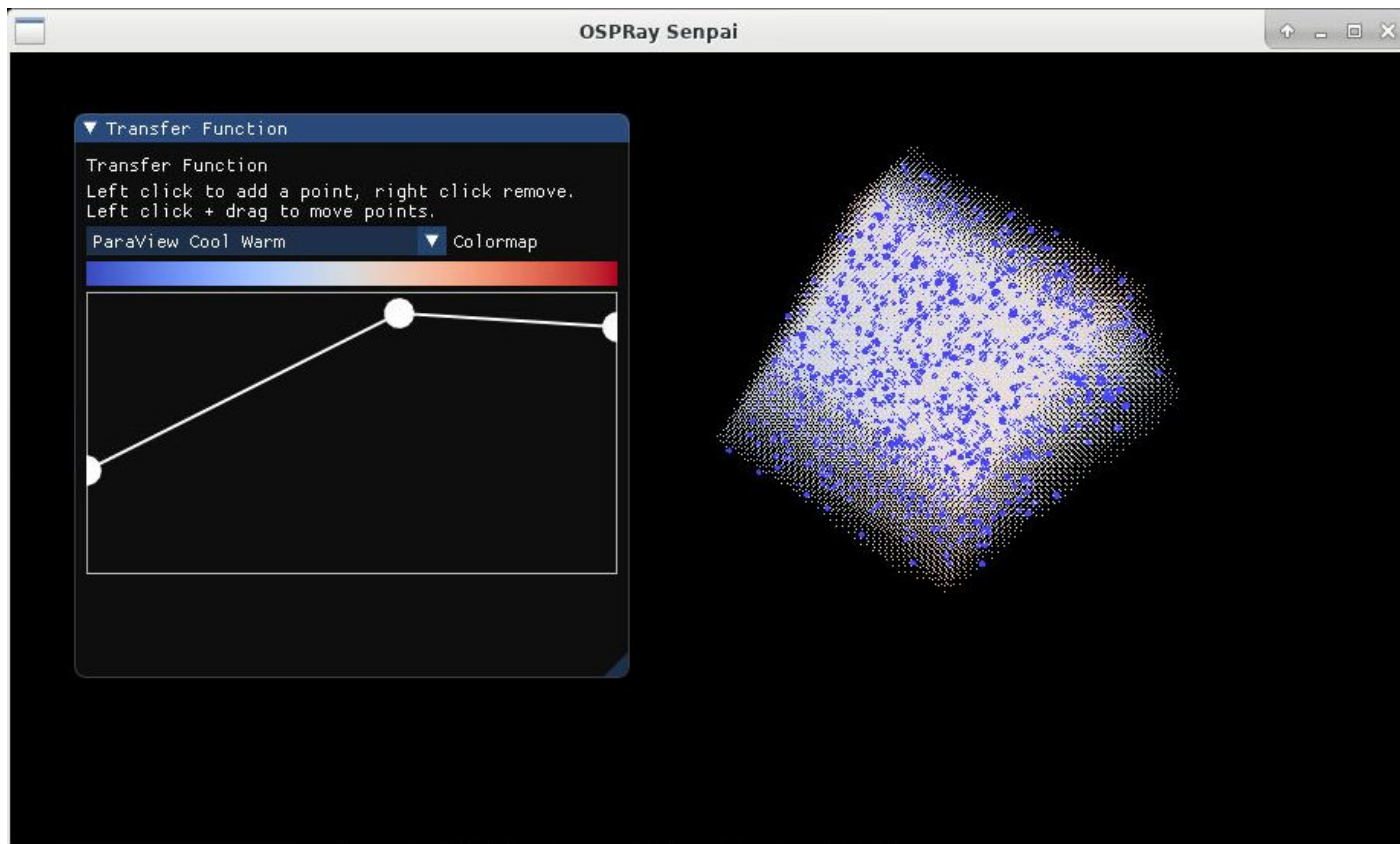
During the Workshop

Converted DNS data from frequency space to time space

Working on Fortran wrapper for libIS to get data from DNS

Added example OSPRay viewer client using for libIS

Connected viewer to the libIS example simulation on Stampede2 for interactive visualization

Viewer Connected to libIS Test Simulation

Future work

Finish writing buffer transfer and testing interfaces to libIS

In situ visualization in various server-client configurations

Test with other renderers