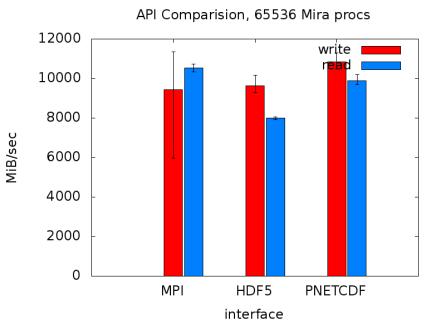
Comparing I/O libraries

- IOR to evaluate HDF5, pnetcdf somewhat artificial
 - HLL typically hold structured data
- HDF5, pnetcdf demonstrate performance parity for these access sizes (6 MiB on Mira)
- I/O libraries deliver benefits with slight (if any) cost to performance







Other High-Level I/O libraries

- NetCDF-4: http://www.unidata.ucar.edu/software/netcdf/netcdf-4/
 - netCDF API with HDF5 back-end
- ADIOS: http://adiosapi.org
 - Configurable (xml) I/O approaches
- SILO: https://wci.llnl.gov/codes/silo/
 - A mesh and field library on top of HDF5 (and others)
- H5part: http://vis.lbl.gov/Research/AcceleratorSAPP/
 - simplified HDF5 API for particle simulations
- GIO: https://svn.pnl.gov/gcrm
 - Targeting geodesic grids as part of GCRM
- PIO:
 - climate-oriented I/O library; supports raw binary, parallel-netcdf, or serial-netcdf (from master)
- Many more: my point: likely one already exists for your domain



