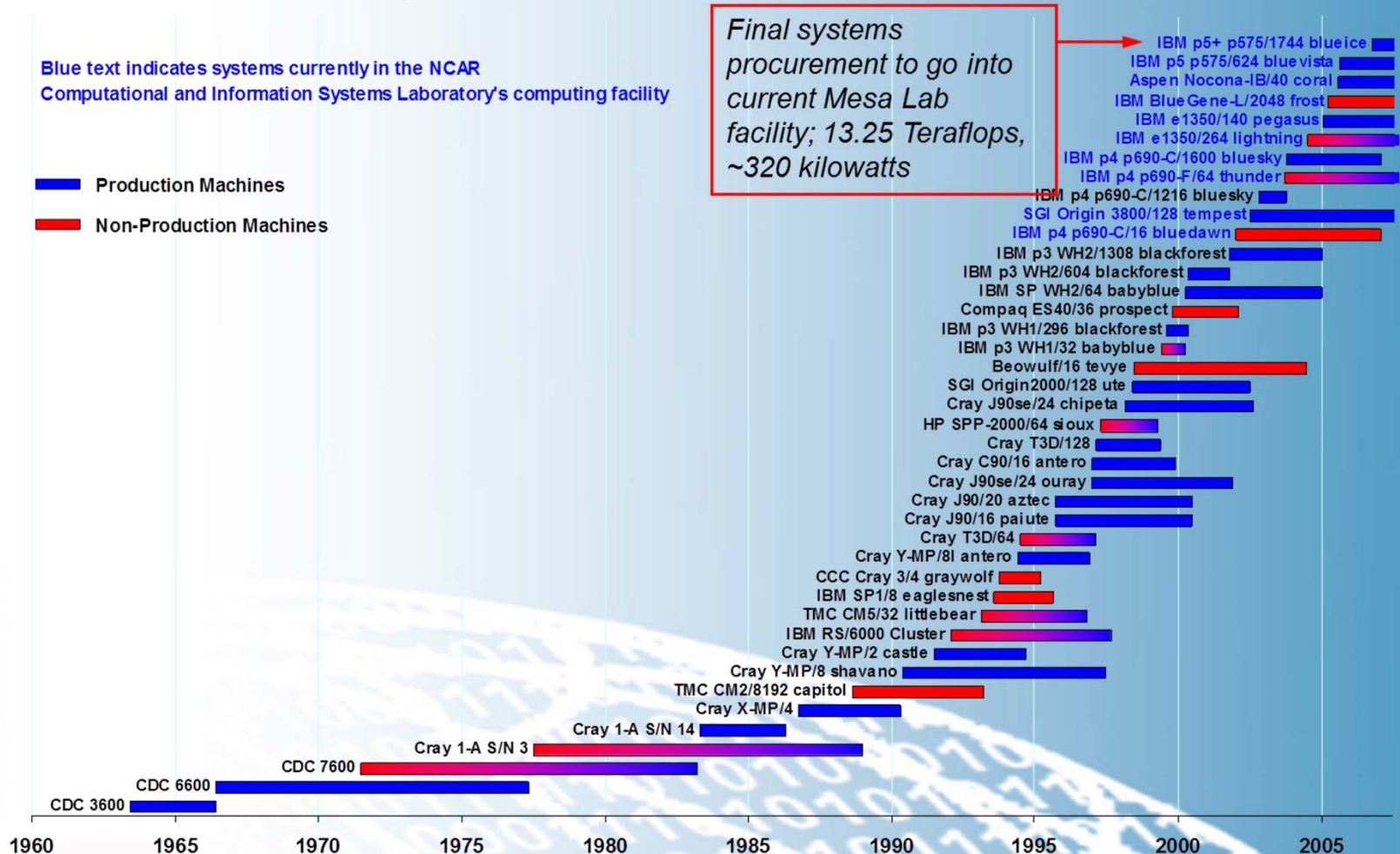


History of Supercomputing at NCAR

Blue text indicates systems currently in the NCAR Computational and Information Systems Laboratory's computing facility

■ Production Machines
■ Non-Production Machines

Final systems procurement to go into current Mesa Lab facility; 13.25 Teraflops, ~320 kilowatts



Yellowstone – the Supercomputer

- **Yellowstone is an IBM iDataPlex supercomputer**
 - 75,000 processor cores
 - 1.6 petaflops in speed 1.6 quadrillion calculations per second (221,000 calculations per second for all 7 billion people on the planet)

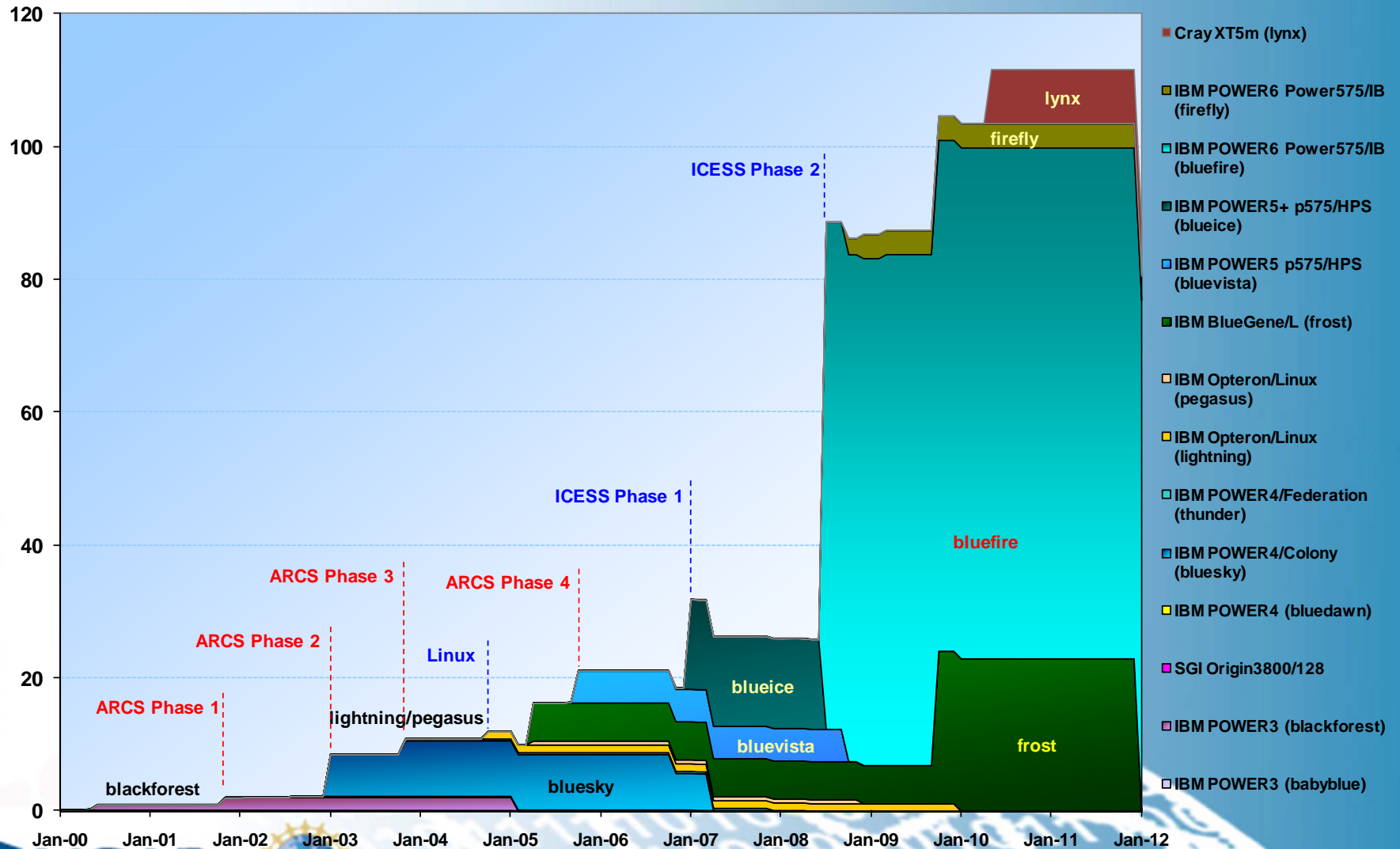
Geyser and Caldera are the storage systems

- **The mass storage systems are equally large**
 - 17 petabytes of disk storage

NCAR Computing: What has been

Peak TFLOPs at NCAR

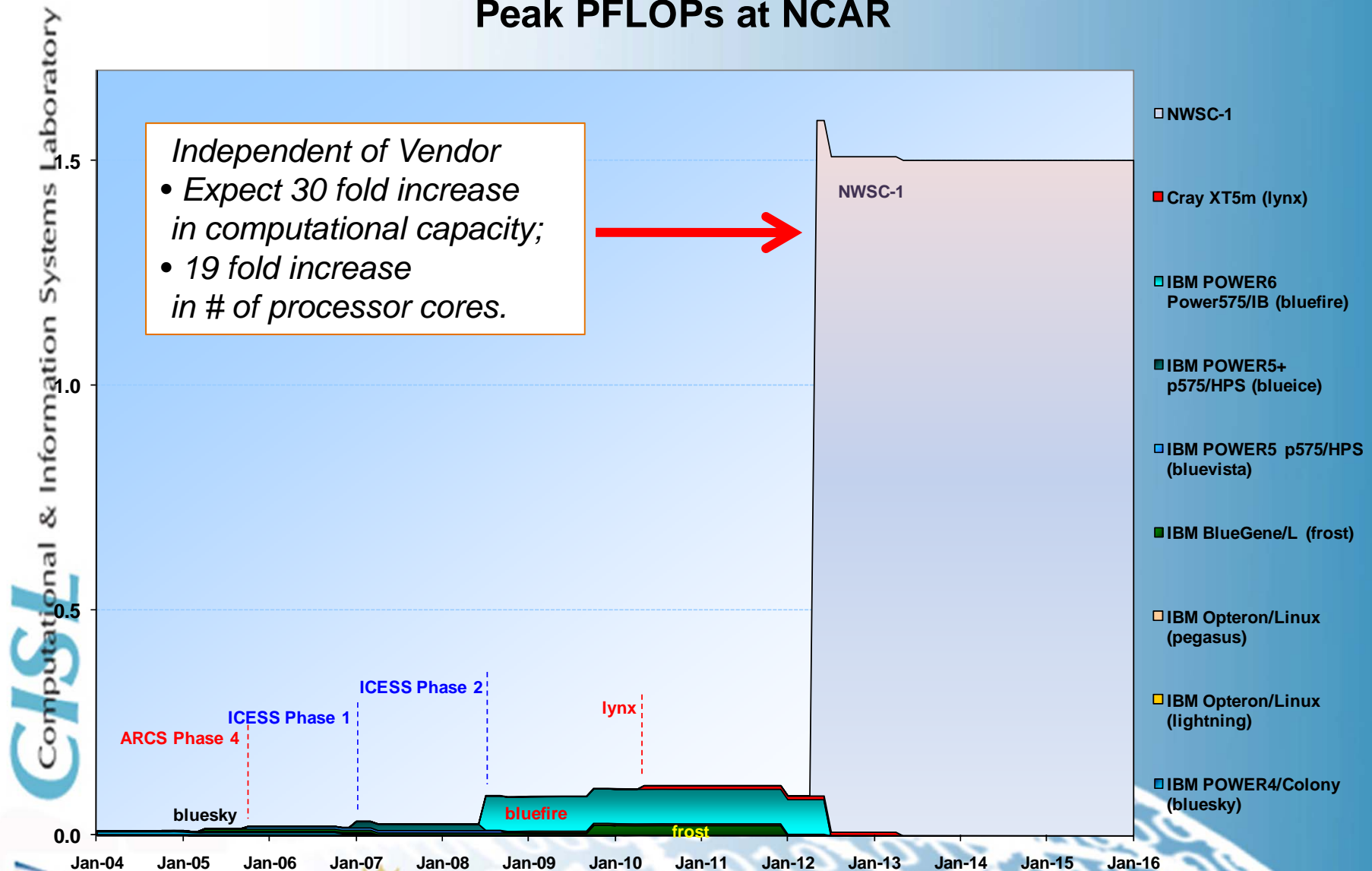
Computational & Information Systems Laboratory
CISL



UNIVERSITY OF WYOMING

NWSC-1: petascale computing

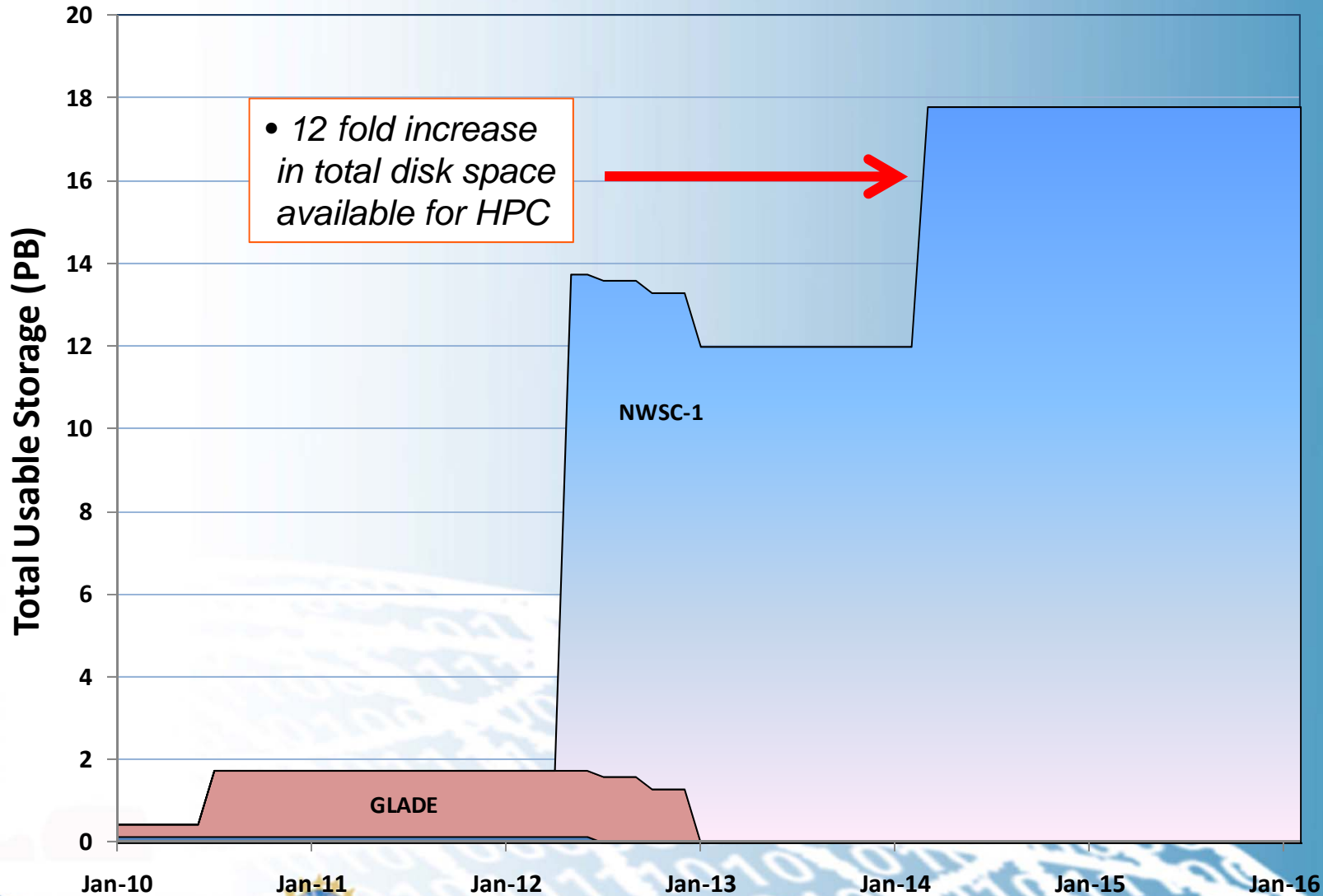
Peak PFLOPs at NCAR



NWSC-1: petascale central disk storage

Total Centralized Filesystem Storage (PB)

□ NWSC-1 □ GLADE □ bluefire



Wyoming's 20% Share of NWSC-1 is Big

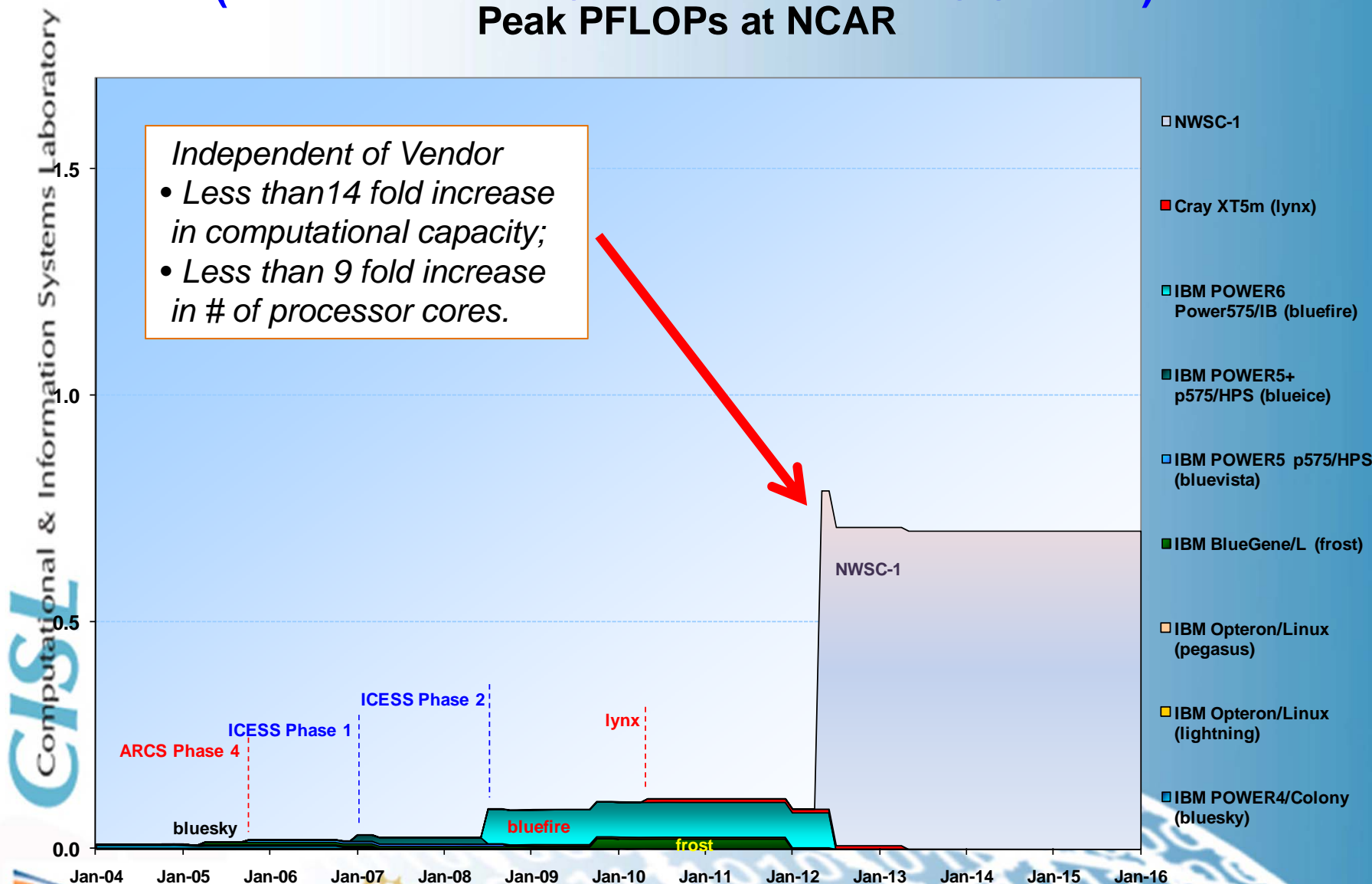
- On the latest (6/11) Top500 list of fastest supercomputers, Wyoming's share on NWSC-1 alone *would be...*
 - The 28th fastest computer in the world
 - The 14th largest supercomputer in the US
 - The largest system in an EPSCoR state outside of Department of Energy facilities
 - The largest resource controlled by a university in the US

<http://www.top500.org>

END

NWSC-1: computing

(if no additional NCAR investment in CISL base)
Peak PFLOPs at NCAR

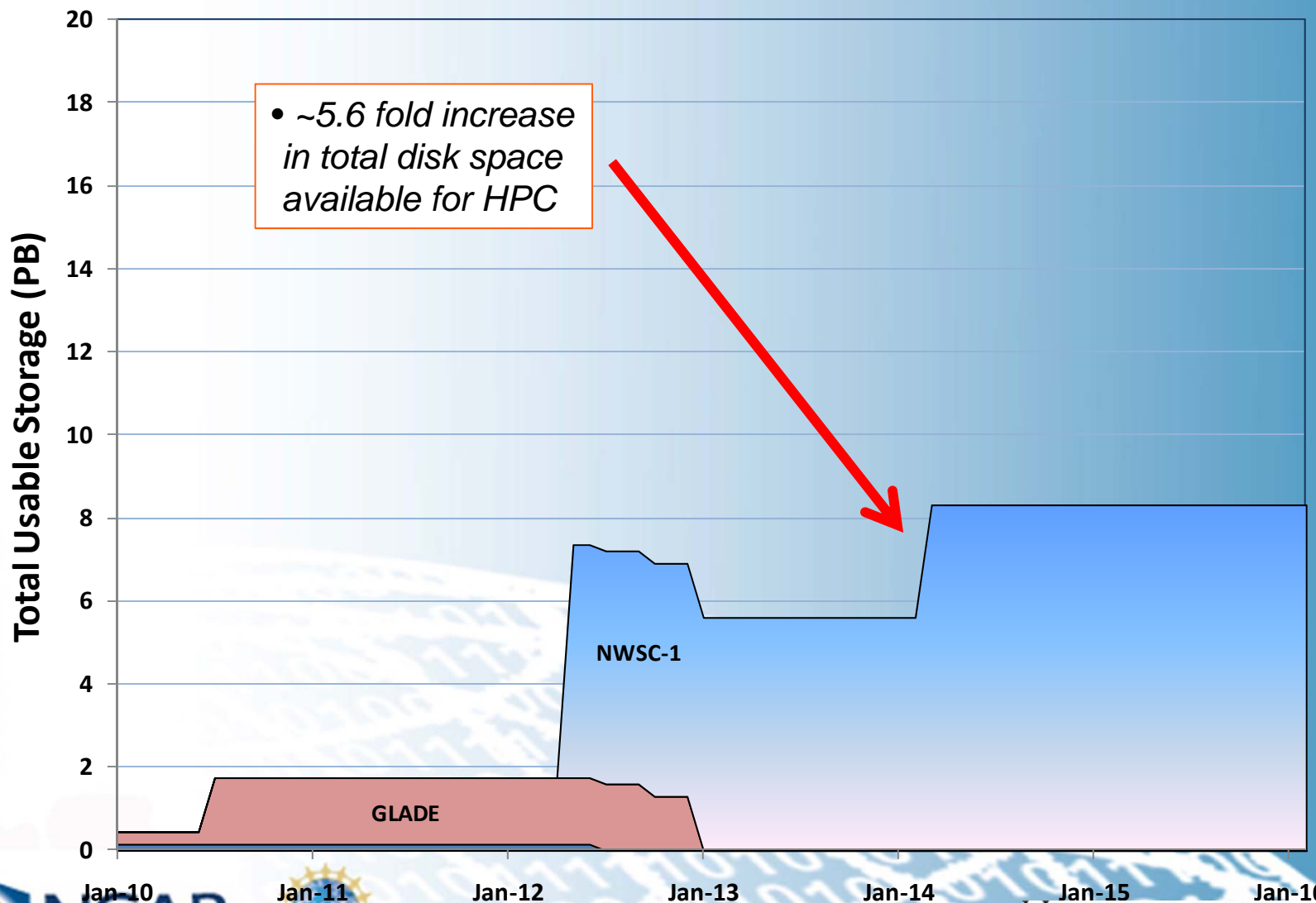


NWSC-1: storage

(if no addition NCAR Investment in CISL base)

Total Centralized Filesystem Storage (PB)

□ NWSC-1 □ GLADE □ bluefire



NWSC-1 Resource Allocation by Cost

■ HPC ■ CFDS ■ DAV ■ Maintenance

