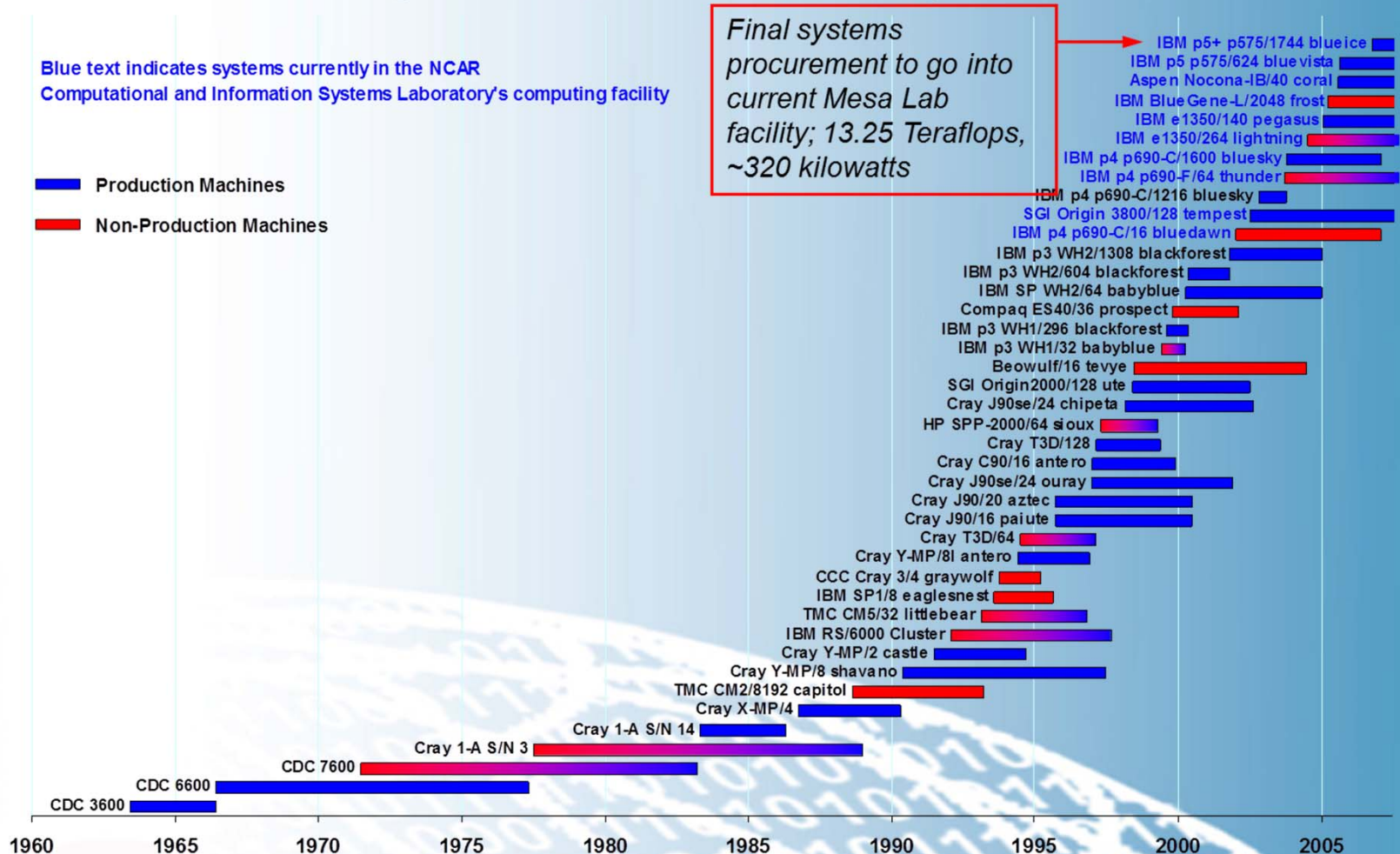


# History of Supercomputing at NCAR

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)

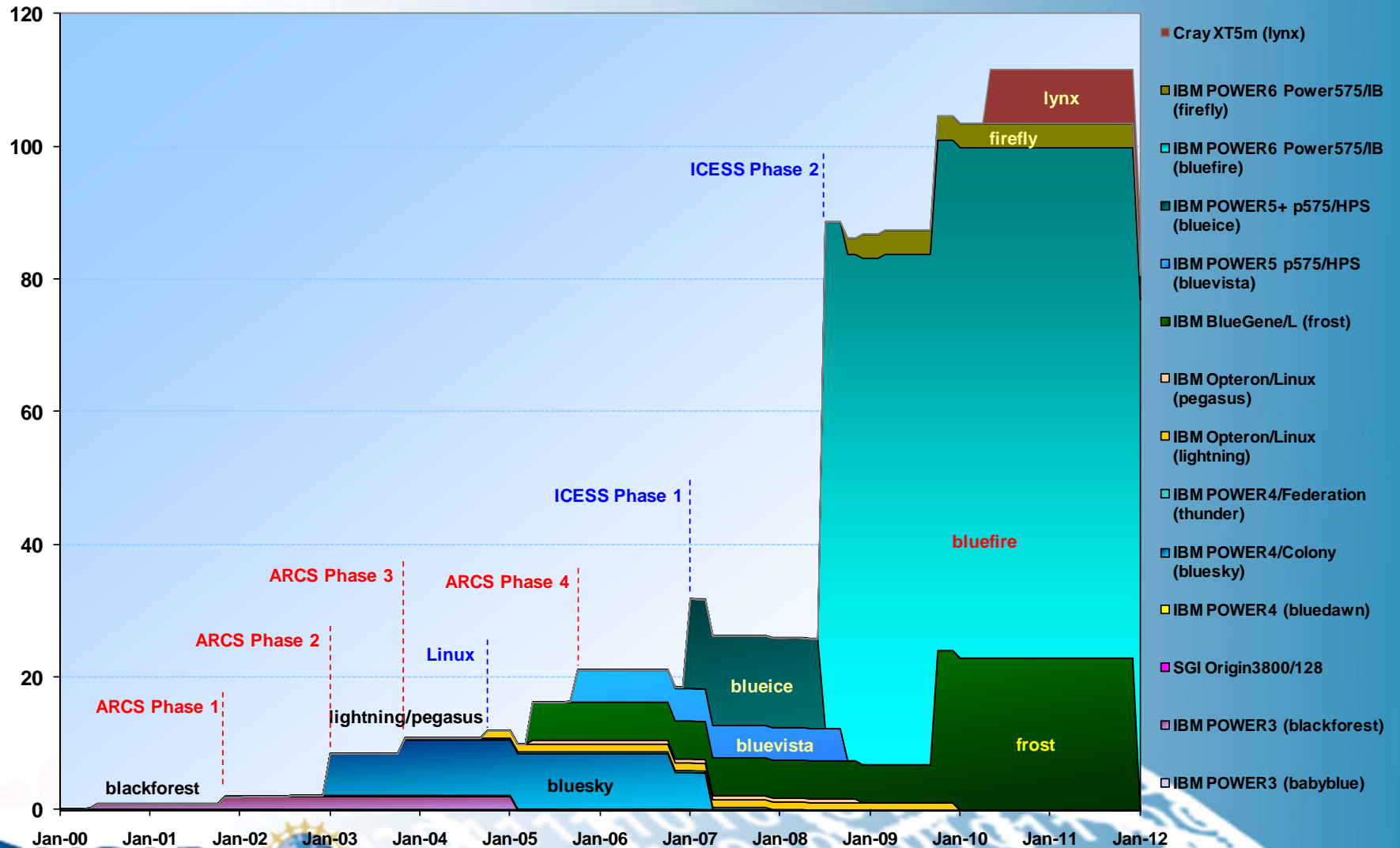
## **Geyser and Caldera are the storage systems**

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

# NCAR Computing: What has been

## Peak TFLOPs at NCAR

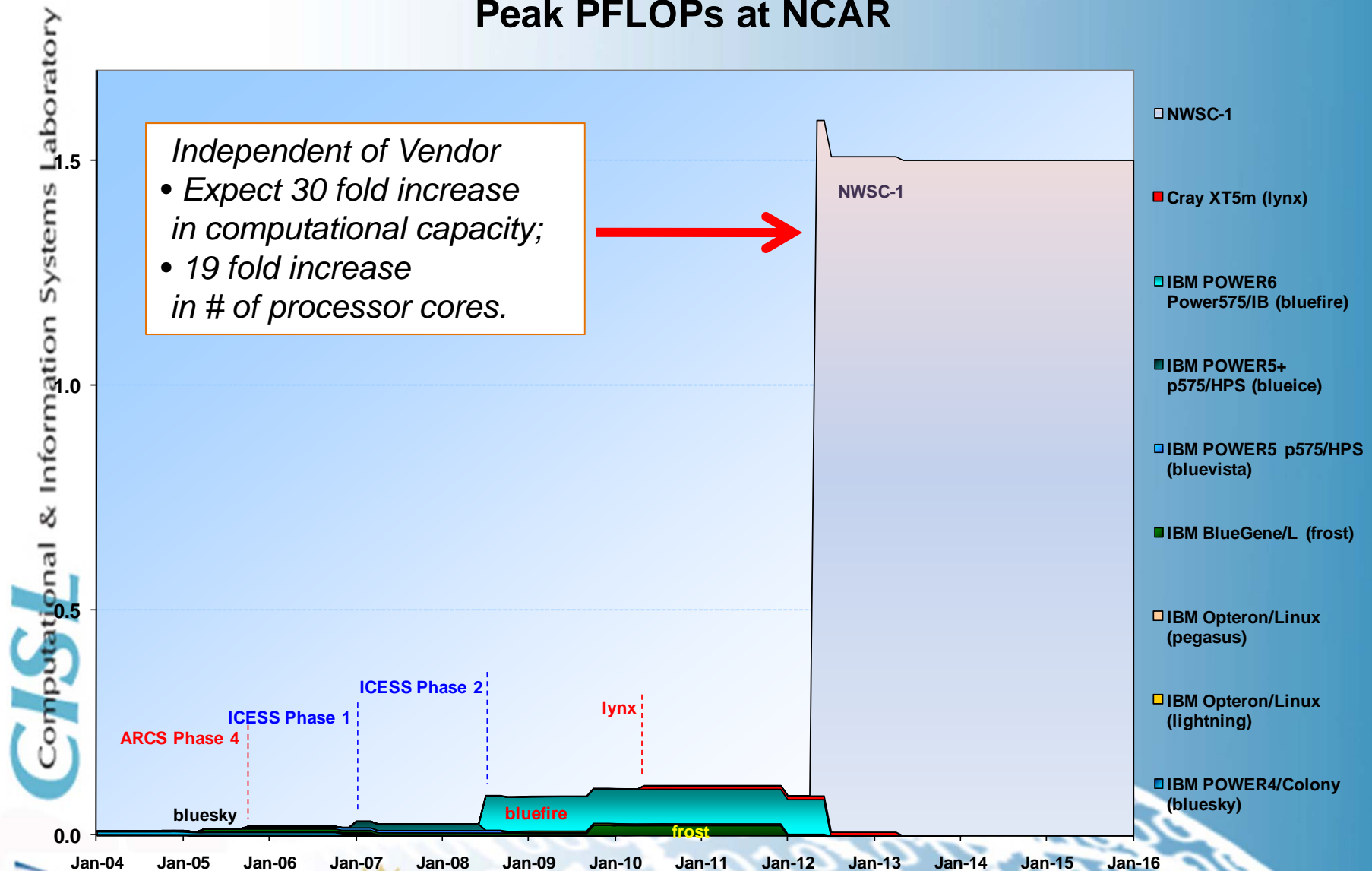
Computational & Information Systems Laboratory  
CISL



UNIVERSITY OF WYOMING

# NWSC-1: petascale computing

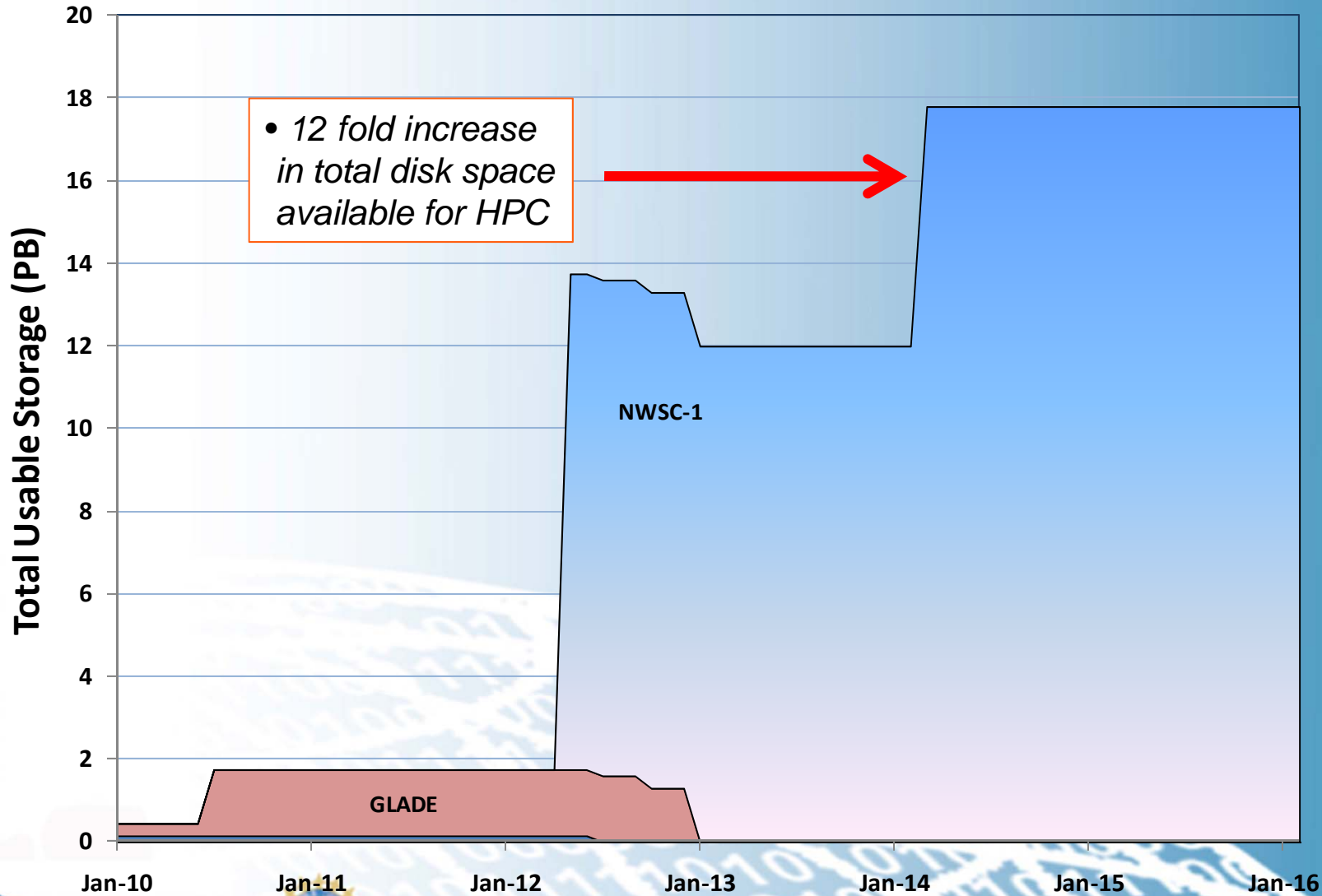
## Peak PFLOPs at NCAR



# NWSC-1: petascale central disk storage

Total Centralized Filesystem Storage (PB)

□ NWSC-1   □ GLADE   □ bluefire



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

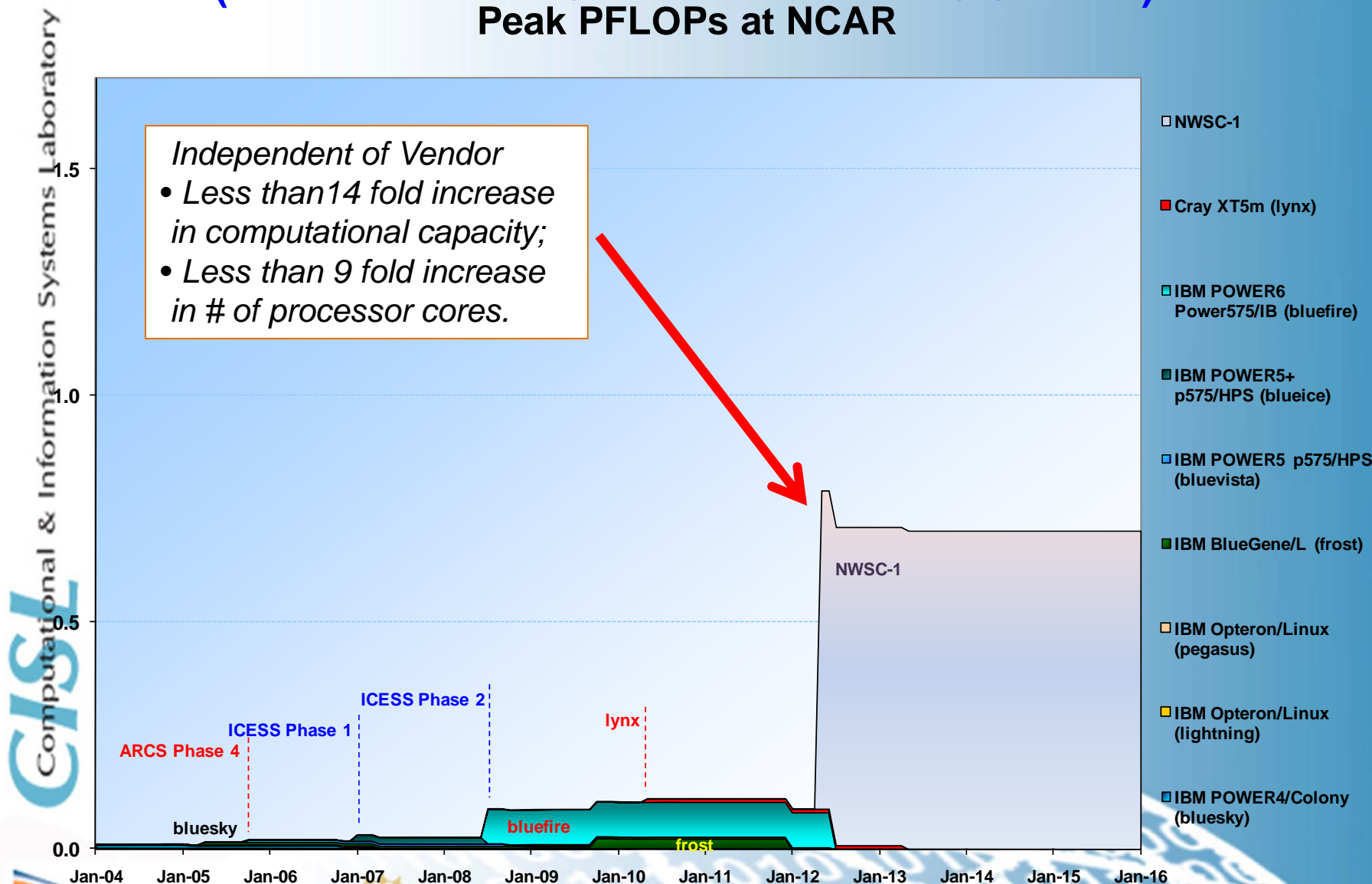
- On the latest (6/11) Top500 list of fastest supercomputers, Wyoming's share on NWSC-1 alone *would be...*
  - The 28<sup>th</sup> fastest computer in the world
  - The 14<sup>th</sup> largest supercomputer in the US
  - The largest system in an EPSCoR state outside of Department of Energy facilities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



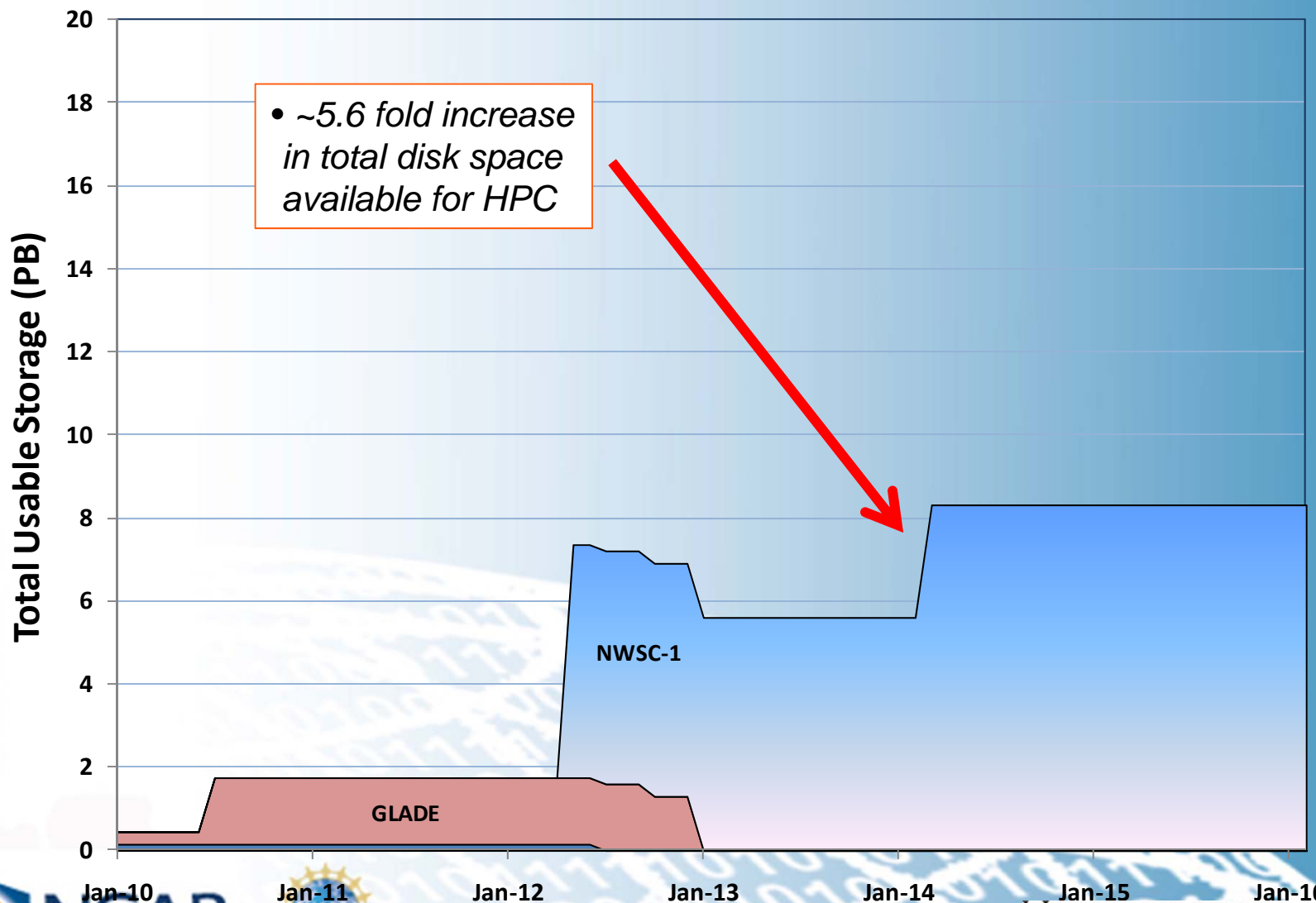


# NWSC-1: storage

(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

