



The CHARA Server

Remote Data Reduction, Remote Observing, and the Database

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The CHARA Server

- Located at GSU Data Center
- 3 Virtual Machines:
 - Database/Archive Machine
 - Data Reduction Machine
 - Remote Observing Machine
 - Active Mode
 - Passive Mode



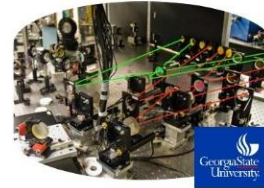


The CHARA Archive

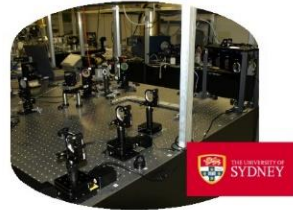
100 TB, with room for more!

Now, data stored by instrument

Classic/CLIMB



PAVO

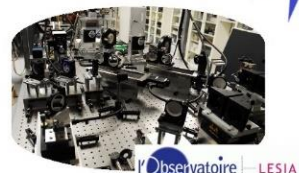


VEGA



Archive at GSU

We are consolidating the data!



JouFLU



MIRCx

CHARA Database Timeline

- Already Done:
 - VEGA metadata on JMMC OIDB
 - Classic/CLIMB metadata (to 2015) on OIDB
 - Raw data on CHARA archive from:
 - Classic/CLIMB/JouFLU
 - PAVO
 - VEGA (2017, some 2016)



JMMC

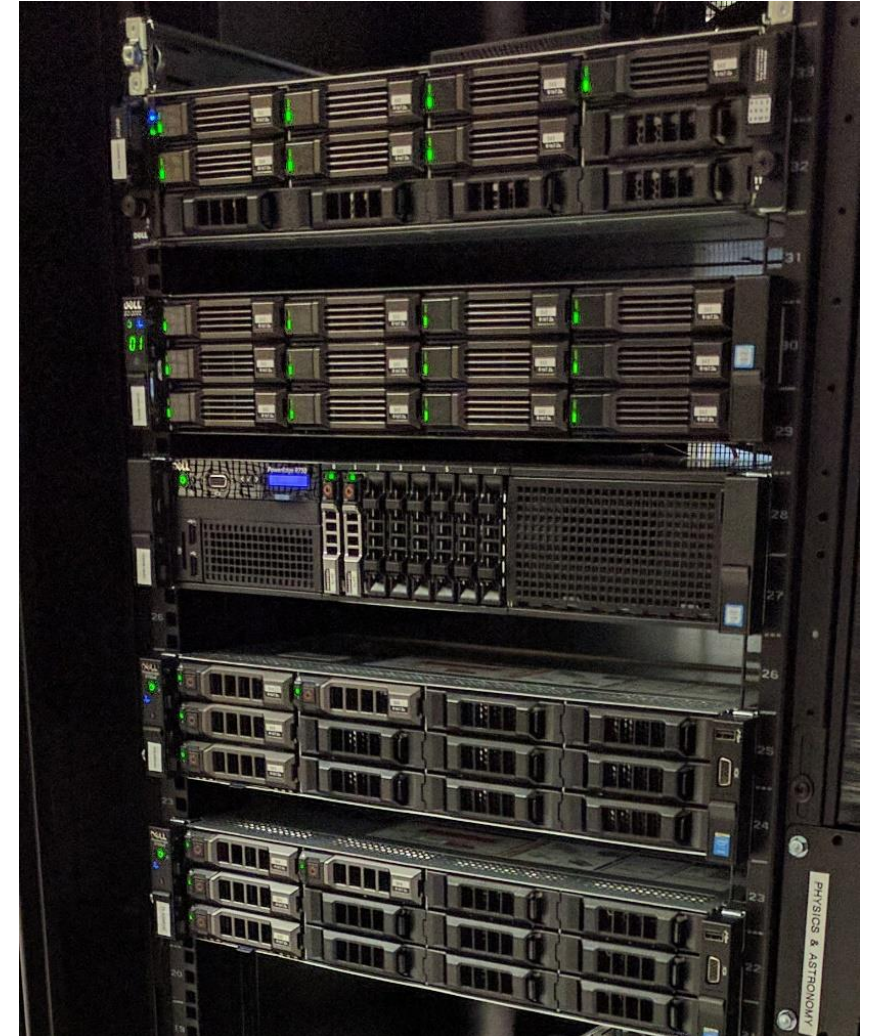


CHARA Database Timeline

- Short Term to do (this year):
 - All raw data on CHARA archive
 - CHARA archive made public
 - Extract metadata from night logs
 - Put all metadata on OIDB
 - Start collecting published data for OIDB



JMMC





Send Me Your Published Data!

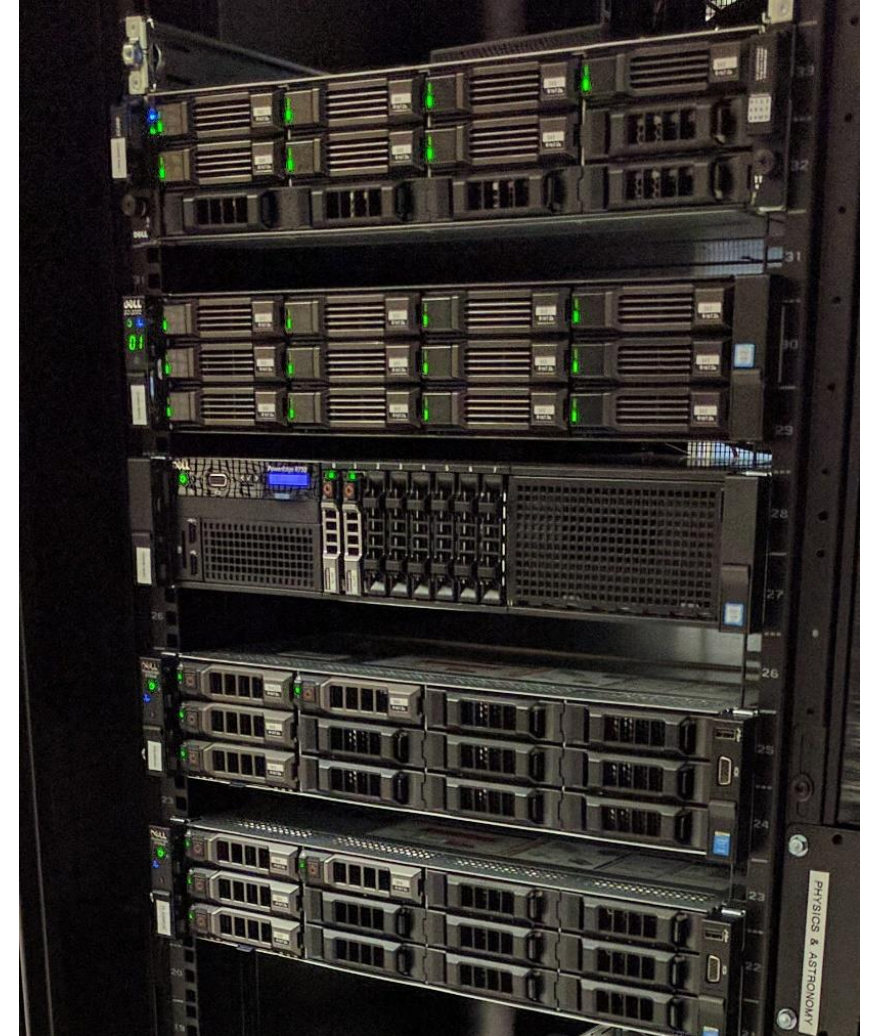
For the CHARA Archive & the JMMC OIBD

OIFITS only!

jones@chara.gsu.edu

CHARA Database Timeline

- Long Term to do:
 - Reduce all raw data
 - Put reduced data on the OADB
 - Create online CHARA archive portal



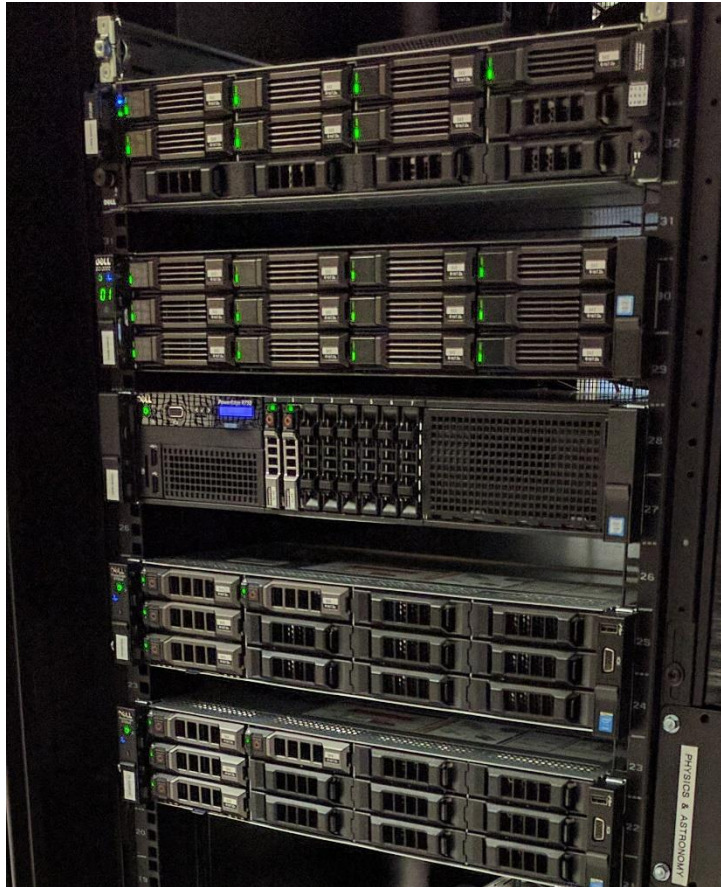
JMMC

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The CHARA Data Reducer



- Centralizing the data reduction process
- Consistently up-to-date reduction software
- No need to download data
 - Direct access to archive
- Classic, CLIMB, JouFLU, and PAVO reduction software installed currently
- Will be public “soon”

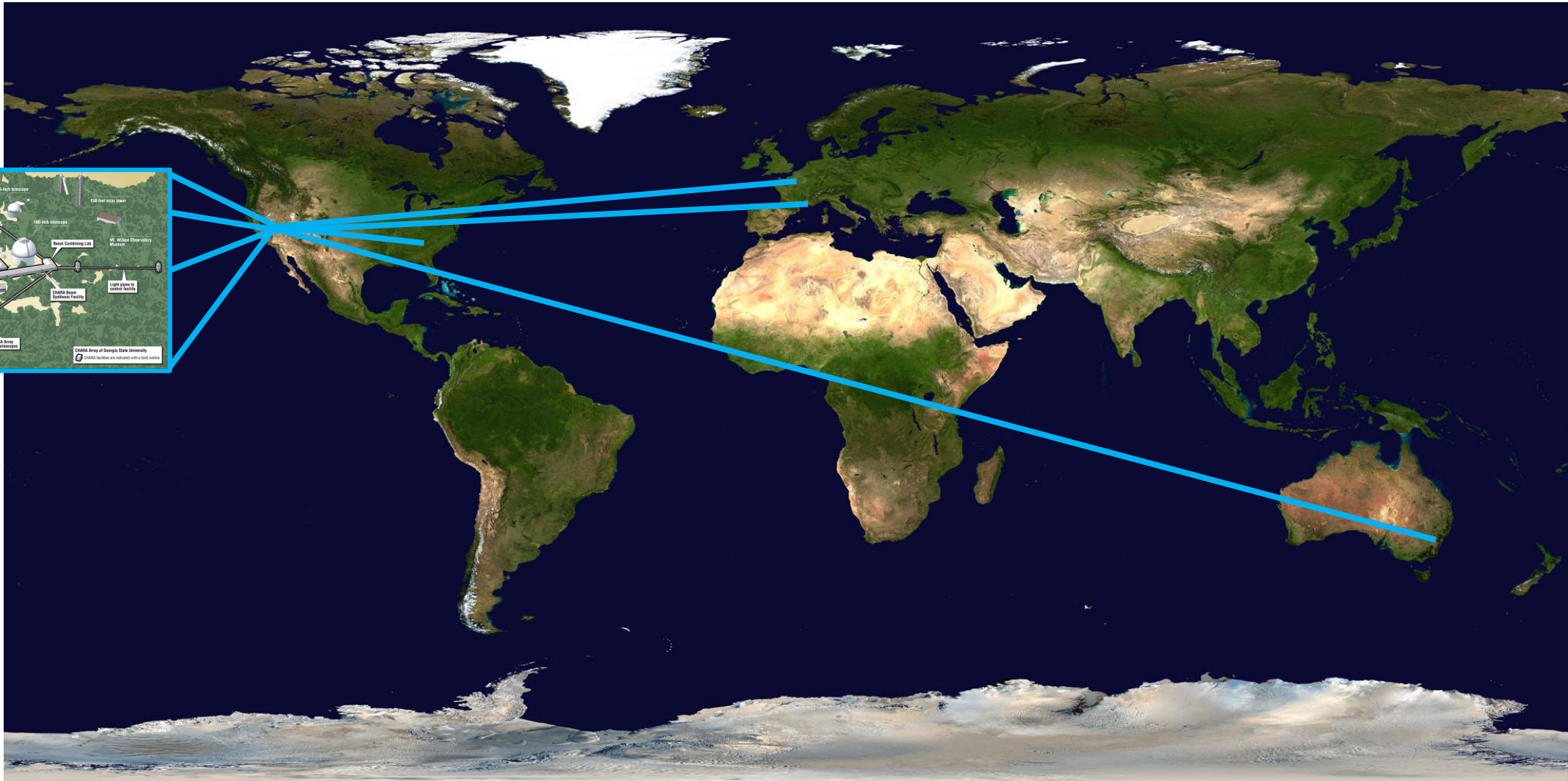


The CHARA Server

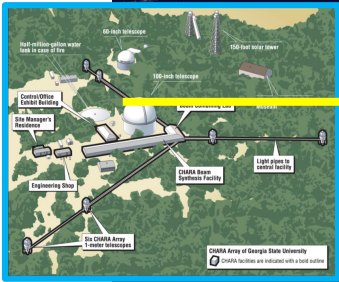
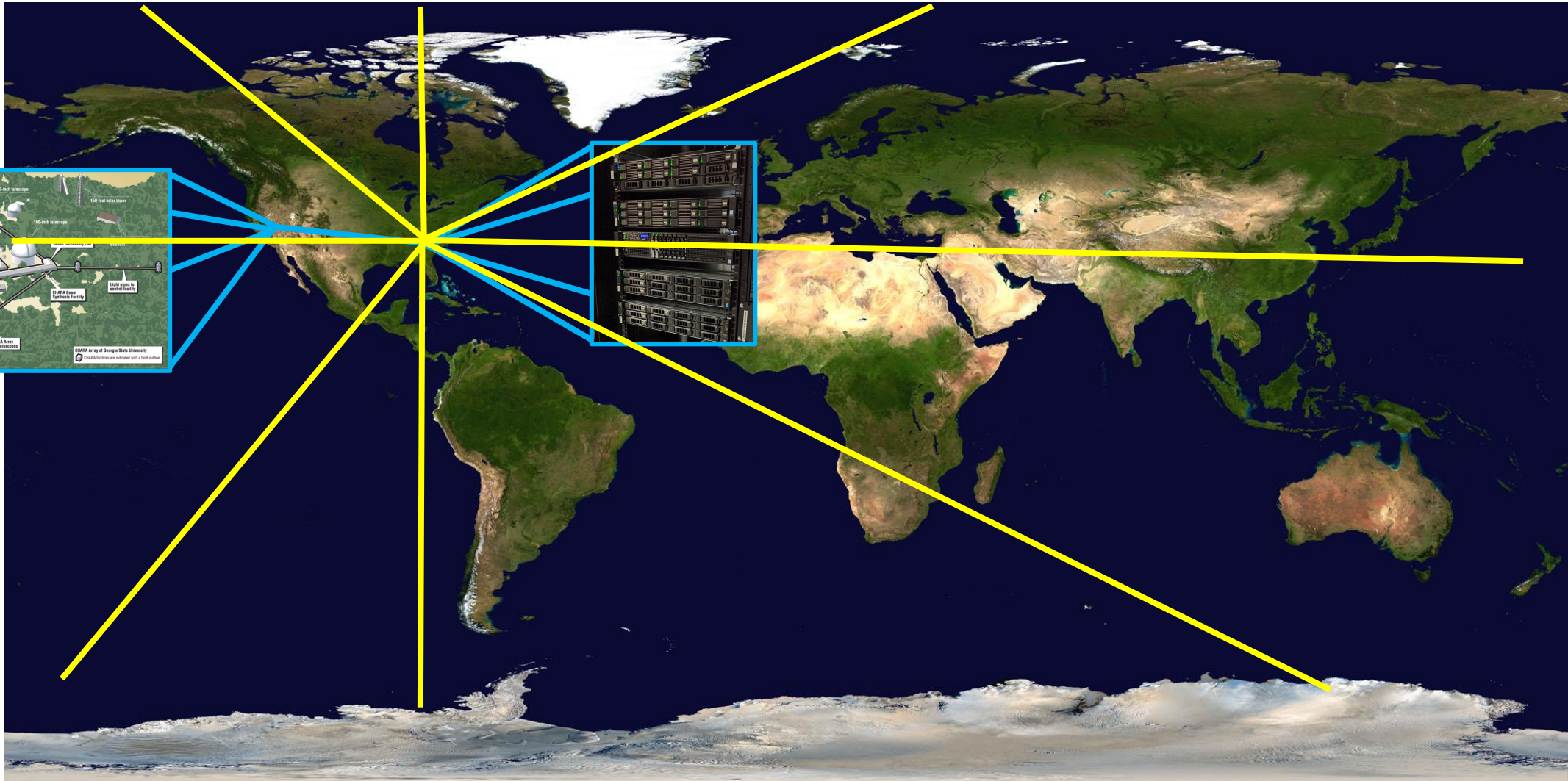
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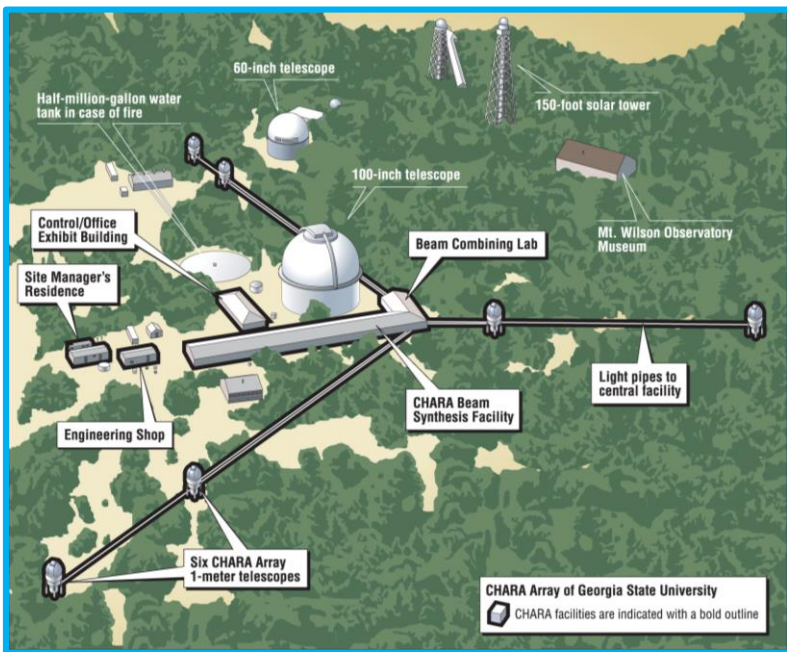
Remote Observing with CHARA



Remote Observing with CHARA



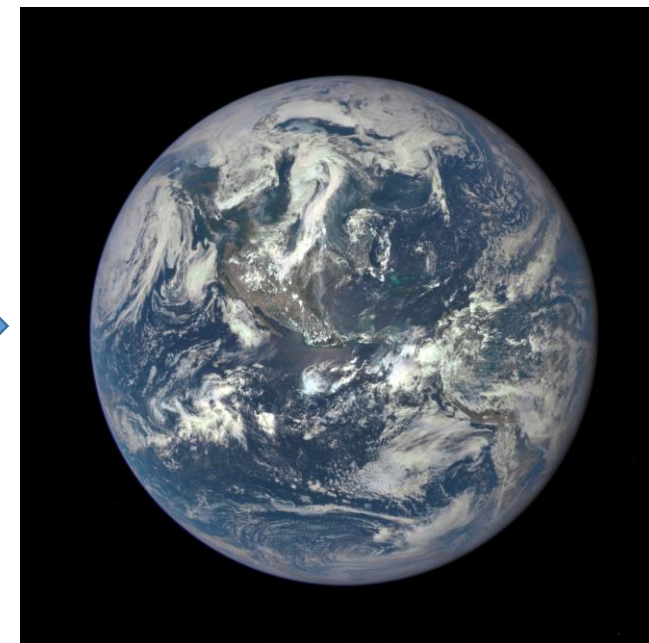
Remote Observing with CHARA



ssh tunnel
↔
aka
ssh port
forwarding



VNC
↔



Demo Time!

...

Hopefully

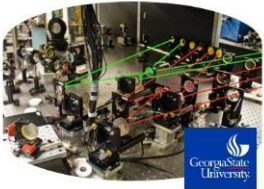


Current Operational Status



Working

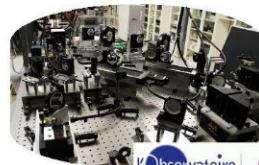
Classic/CLIMB



PAVO



Installed



JouFLU
l'Observatoire de Paris | LESIA

Not Installed



MIRCx
UNIVERSITY OF MICHIGAN



VEGA



Untested

Current Operational Status

The Archive: **Lots of Raw Data**

The Data Reducer: **Some pipelines**

The Remote Observer: **It works!**

for those combiners that have been installed/tested



@CHARAArray