JCSDA Supercomputing Infrastructure

JIBB and S4: Resources for JCSDA Scientists and Researchers

JIBB System Resources

3,456 processing cores at 2.8Ghz

6.75 TB RAM

320 TB Storage

QDR Infiniband Interconnect

S4 System Resources

3,072 processing cores at 2.2GHz

8.2 TB RAM

520 TB Storage

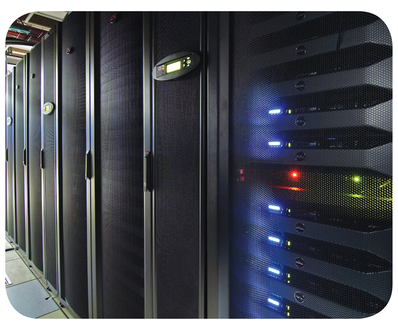
QDR Infiniband Interconnect

Key Benefits

- A working environment for scientists on projects that will ultimately improve NWP operational data assimilation system.
- Comprehensive end-to-end testing system: from a testbed dataset to an impact assessment tool
- Improve the transition from research into operations

JIBB

Provided by the JCSDA, the Joint Center in a Big Box (JIBB) is designed to accommodate projects likely to provide an almost immediate benefit to operational Numerical Weather Prediction.



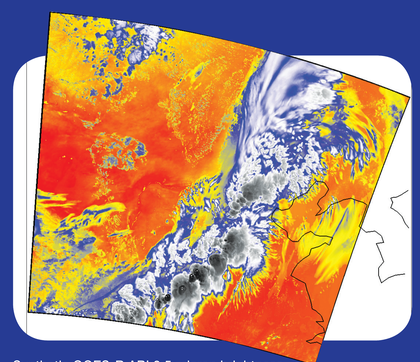
S4

A collaboration between NESDIS and CIMSS, the Supercomputer for Satellite Simulations and data assimilation Studies (S4) is designed for the broader scientific community to foster the development of ideas that may be further from NWP operations.

Science Software

available on both systems:

- NCEP Model Libraries
- CRTM
- WRF (WRF-DA, WRF-NMM)
- HWRF
- NMM-B
- GDAS/GFS
- MIRS
- VSDM



Synthetic GOES-R ABI 8.5 micron brightness temperature imagery produced using output from a high-resolution (2-km) WRF model simulation of a destructive flood event over Beijing, China on 21 July 2012. (UW/CIMSS)