Transition to Linux

- Workstations
- Servers
- Problems
- Projections
Workstations

- 8 Workstations Running Red Hat 9
  - 3 DMAC Users
  - 5 Science Staff Users
- Single or Duel 2.4 GHz Processors
- 2-4 Gb RAM
- 250Gb-1Tb Local Disk
Sundance Servers

- 5 Servers Running Fedora Core 3
- Time Distance and Cross Correlations Running on Sundance Servers
- 4 Servers Each with 3.5Tb External Disk
- Dual 3.2 GHz Processors Each
- 5th Server Availiable for Emergency Backup
Hardware Problems

• Memory problem with the 2.4 Linux Kernel (Red Hat 9) and the LSI 2 Gb Fiber Channel Card.
  – Fixed by upgrading to 2.6 Kernel via Fedora Core 3.

• External raid units don't support partitions larger than 2 Tb in Linux.
  – Implemented Logical Volume Manager to form 3.5 Tb partitions.

• Data corruption on one external raid unit.
  – External raid chassis was faulty and replaced.
Software Problems

• Byte Ordering (Endian) differences
  – Rice, Time Distance

• Precision Differences
  – Farside, IRAF/Grasp

• Fortran Compilers
  – Solved by using IFORT – Intel Fortran Compiler.
What's Next?

• Move Pipeline Data from Tarat to Sundance Servers.

• Solve or Accept the Precision Problems
  – Once resolved, the pipelines will be able to run in production mode on Linux processors.

• Proceed with the Hardware Plan.