

# Data Archiving

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How to archive (back-up) your data

*Updated June 2005*

# Archival Media

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## Tape

- Sequential Access
- ✓ Large Capacity
- ✓ Several Choices
- Indirect Processing

## Disc

- ✓ Random Access
- Limited Capacity
- Limited Choice
- ✓ Direct Processing

# Tape

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## Choices:

- DDS and LTO
- DDS3, DDS4, & DDS5 (12-36 GB) (~\$ 5-20)
- LTO1 (100-200 GB) (~\$ 30)



**DDS4**



**LTO 1**

# Tape

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## DAT72

- Drives: \$1,000
- Transfer speed:  
12 GB/h

## LTO Ultrium1

- Drives: \$3,000
- Transfer speed:  
60 GB/h

DAT72



LTO 1

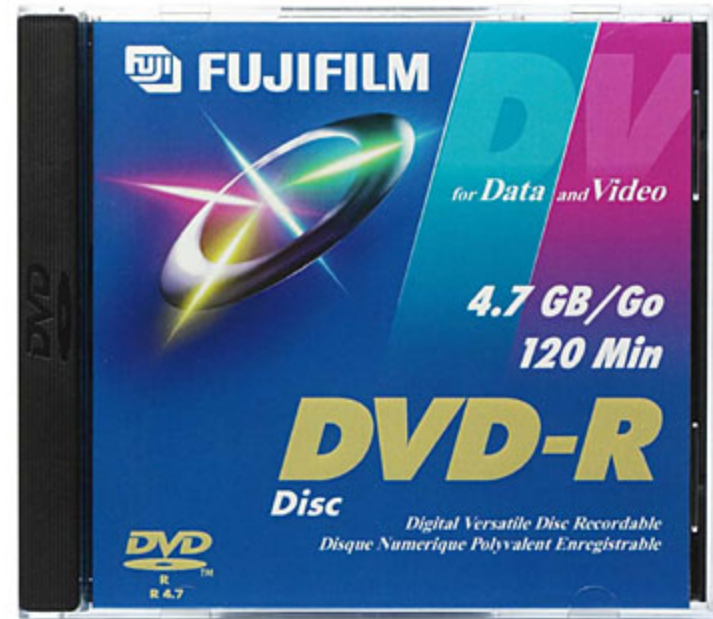


# DISC

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## Choice

- DVD-R or +R
- DVD-R (~4.5 GB)(\$1)
- Drives: \$200
- Transfer speed: 4.5 GB/h



**DVD-R**

# Tape Drives in X-Ray Facility

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## DDS3, 4, & 5 Drives

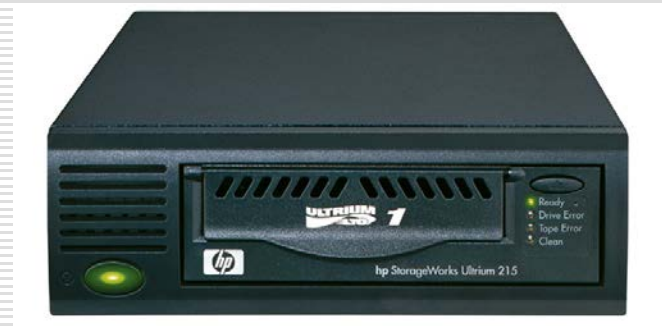
- ❑ Neptune & Raccoon
- ❑ Anaconda & Spruce

## LTO Ultrium 1 Drive

- ❑ Radio



**DDS 4**



**LTO Ultrium1**

# Disc Drives in X-Ray Facility

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## FireWire DVD-R Drive

- ❑ Neptune & Raccoon
- ❑ Anaconda (XP o/s)



# Tape Archiving

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## Linux/UNIX

- ❑ To create: `tar cvf /dev/st0 my_dir/my_data`
- ❑ To extract: `tar xvf /dev/st0 my_data`
- ❑ To check: `tar tvf /dev/st0`
- ❑ Command: `tar |c=create; v=verbose; f=f/s; x=extract; t=list`
- ❑ Device: `/dev/st0`
- ❑ Data: `my_dir/my_data`



# DVD Archiving

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## Linux

- ❑ First create an ISO-image
- ❑ Second burn the disc
- ❑ To create: `mkisofs -l -v -R -o mydata.iso my_dir/my_data`
- ❑ To burn: `dvdrecord -v -dao -speed=1 -dev=0,0,1 mydata.iso`

# Information

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- <http://www.sb.fsu.edu/~xray/Manuals/LinuxArchiving.html>
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