

Best Practices for Archiving Video Data

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- Video is much more complex than images and requires significantly more storage space
- Video is characterized by frame rate (1000fps or more) to frames per few months and frame resolution
 - Hardware for capture depends on application
 - Visible light, Infrared, Ultraviolet, near infrared, US, CMR etc
 - Lenses, Magnets, US devices, Microscopes etc
 - Need to understand hardware to be able to achieve necessary data quality
 - Framerates, frame resolution
 - Avoidance of blurriness and other artifacts
 - Video format (lossy, lossless)

- Video Storage
 - Depends on the frequency of data access
 - For recent GPU applications may require fast databases for frequent access
- Secure storage to avoid malicious attacks (need to collaborate with data storage experts at the Univ.)
- Requires large facilities for storage and maintenance and double at least the storage capacity for proper maintenance
- Depending on complexity and variability of video may need to develop databases for search
- Data sharing agreements and licenses (MIT for free or other agreements)
- Need to collaborate with Tech transfer office if not publicly available datasets
- Need permission from those who provide the data (Medical/biological or other natural world data including humans)