DATA COLLECTION

Transfer data from memory card to alternative storage in the field

Storage options:

- SD card, personal workstation, external hard drive

Recommendation: Visually check your data on a laptop while still in the field

SHORT-TERM STORAGE

This is working storage used while processing data

If available, place data where multiple users can access its storage

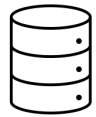
Consider how to share data internally with collaborators

Storage options:

- Local (e.g., personal workstation, external hard drive)
- In-house network (e.g., network attached storage, lab cluster)
- Research Computing active storage
- External cloud active storage (e.g., Cyverse, Amazon S3)

Recommendation: Use the 3-2-1 backup rule

LONG-TERM STORAGE



Consider what data levels to store

Catalogue data with established metadata and file-naming conventions, as this is the authoritative copy

Document data provenance

Storage options:

- Research Computing archive storage
- External cloud archive storage (see Public-facing)

Recommendation: After returning from field, immediately store L0 data in long-term storage

DATA PROCESSING

Server options:

- Local (e.g., in-house network, local workstation)
- Research Computing (e.g., High Performance Computing server)
- External cloud computing (e.g., Cyverse, AWS, Azure, Agisoft cloud)

Recommendation: Create code locally and test on a subset of data, then send to research or cloud computing to process entire dataset

PUBLIC-FACING

Create DOI anchor to public-facing archive

Consider what data level products to make available with publication

Storage options:

- Public archive (e.g., Open Science Framework, DataOne, Cyverse, NASA Distributed Active Archive Centers, Open Topography, Amazon Glacier)

Recommendation: Some public-facing storage lasts as long as its funding, so it is recommended to have an alternative long-term storage option in addition