

A decorative graphic consisting of a thin orange circle. A thick black left square bracket is positioned on the left side of the circle, and a thick orange right square bracket is on the right side. A horizontal bar with a light-to-dark green gradient is placed across the middle of the circle, containing the main title text.

Astronomical Data: How to Manage and
Archive Scientific Data/Records? The
MOST Project

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[Introduction]

- MOST?

<http://www.astro.ubc.ca/MOST/>

- Microvariability & Oscillation of STars

- small collaborative research project

- ‘archiving issues’

[Issues of Interest]

- small research project
 - exemplary for other research projects
- huge amounts of files
- lack of clear RM rules
 - archiving issues
- custom made software
 - issues ...

[Overview]

- Business process
 - where are records created?
- researchers' understanding of authenticity, reliability and accuracy
 - implications for records?
- Preservation issues
- Concluding remarks

[Business process]

Phase 1: Space

- Satellite with camera
- Pictures processed in satellite
- SDS files packaged
- Files sent to ground stations

[SDS: Science Data Stream]

[Business process]

Phase 2: Ground station

- Files received
- Files broken apart
- Files sent to central repository at UTIAS, Toronto

[UTIAS: University of Toronto Institute for Aerospace Studies]

[Business process]

Phase 3: UBC, Vancouver

- processing of raw data
- creation of FITS files
 - based on: SDS files
 - other sources

[UBC: University of British Columbia][FITS: Flexible Image Transport System]

[Business process]

Phase 4

- creation of reductions
- creation of light curves

[Authenticity, reliability & accuracy]

- Authenticity & reliability ensured by checks and control mechanisms
- Accuracy ensured by check sums in files

Preservation issues

- SDS and FITS files are preserved
- Software and versions of programs are preserved
- FITS files are publicly available (after registration with CADC)

<http://www.astro.ubc.ca/MOST/data/data.html>

- Publications available in pdf-format

[CADC: Canadian Astronomical Data Centre]

[Preservation issues]

- Issues with reading DVD's
- Issues with hard drive

[Concluding remarks]

- MOST researchers did not have RM or archival experience
- 'Archiving issues' are more or less under control
- Most issues are technological in nature